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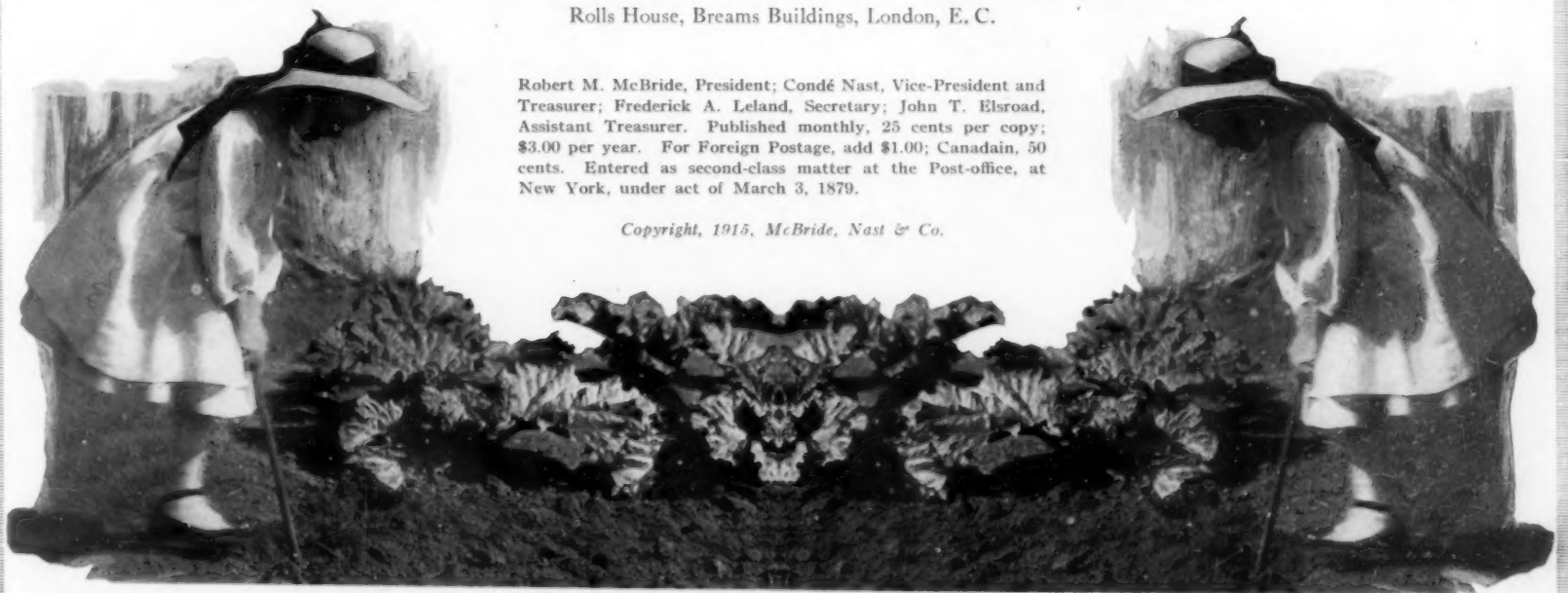
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The average farmhouse has to contend with the interminable reaches of the surrounding fields. Hence some sort of enclosure—preferably a wall of field stone—can keep the house lands apart, making the house and its gardens a distinctive unit. Even better is it to have a fore-court, as here, where the approach to the house is gradual. A pool or fountain, naturalistic planting, and a garden settee in a shaded spot, make the fore-court an achievement.



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In the design of a vacation house the type of construction and the consequent style of architecture will be greatly influenced by the surroundings. In this house, by using materials near at hand, the architect has approximated the spirit of the adjacent land. It is a product of its environment

CHOOSING THE SITE AND FITTING THE HOUSE TO IT—THE HOUSE THAT IS A PRODUCT OF ITS ENVIRONMENT—THE TYPES FOR SEASHORE, COUNTRY AND MOUNTAINS—ESSENTIALS IN SUMMER HOUSE PLANNING AND DECORATION

JOHN T. FALLON

TO really enjoy a summer's vacation one must own one's own house or camp in the country or mountains. Living at the summer hotel, now rapidly passing out of favor, or even in a house rented for the season, is unsatisfactory when compared to the delights of possessing even a simple camp or shack, which may be improved or changed from year to year to suit the owner's individual tastes, and where the memories of happy summers may accumulate.

Probably the first step towards acquiring a home for vacation use will be in the deciding of the general question of where to go. The choice may be made of one of four locations, the mountains or woods, the seashore or the country. It is true that in this decision personal inclinations will doubtless prevail, but each locality demands a different type of house whose merits and advantages must first be thought over.

Mountain life appeals particularly to those who seek a strenuous and rough vacation with complete isolation from the city and the outer world, and who are able to get along with fewer comforts and conveniences in their houses or camps. Conveniences are trappings of civilization whose cost greatly increases when they are transported to the mountain camp. The seashore home will be selected by those who are fond of sailing, boating and swimming. The invigorating effect of the salt air and the monotonous booming of the surf have, too, a wonderful thera-

peutic value to tired and jagged nerves. In deciding upon a seashore site, however, it must be remembered that the season is relatively short.

The great majority of vacation homes will be found in the country. Sites are here usually much more accessible than either in the woods or at the seashores, and there are a greater number of roads that may be used by the motor. It is a safer place for children, who need here little watching to keep them out of danger, while milk, butter and fresh vegetables are easier to be had. The season is longer, for the autumn is quite as beautiful and comfortable as the summer. The inconveniences of city life, such as the telephone and the railroad, are apt to be much nearer at hand.

The selection of a building site in the country is comparatively easy. The ideal site will have a few large trees to cast their cooling shade upon the house, a well-drained soil with sufficient fertility to produce at least a few hardy perennials and garden vegetables, and possibly an outcropping of rocks where a wild garden could be induced to grow. It would be accessible to the high road, so that continued rains would not necessitate motor-ing through hub-deep mud. Farmers should be near enough to bring dairy products and fresh vegetables for the table, while its nearness to a village or town would mean shorter hauls and consequently cheaper material when the time for building came. If a lake or stream was within convenient distance it would add



If the house is well sheltered, there is little necessity for a roofed porch; a lattice such as this is sufficient covering for the terrace



Distinctly a type for a pastoral region—an inexpensive farmhouse of good lines, with plenty of room indoors and on the porches. Alfred Hopkins, architect



will be greatly influenced by the surroundings. Just as the protective coloring of animals blends in with the character of the country in which they live, so the house should reflect in its materials the tone and color of its surroundings. The use of the materials at hand has been equally operative in producing the mountain log cabin and the adobe house on the

the pleasures of boating and swimming.

The more practical considerations of water supply and sanitation will, after all, be often the actual deciding factors in the choice of such a site. Many an old farm house that is now occupied may be had for a nominal sum and with little remodeling turned into an attractive vacation home. There is a personality about some of these remodeled farm houses that new houses seldom attain to, while their original builders were very practical people, and what they lack in picturesqueness of view is often made up for by their convenience to high road or village.

The ideal mountain site is much more difficult to find. From a practical standpoint it must be, first of all, accessible for the procuring of supplies, while the first cost of building will depend largely upon this factor. The most picturesque locations and those with the finest outlooks are often prohibitive because of their inaccessibility. A situation near a stream or lake helps greatly to solve those vital and ever-present problems of water supply and sanitation. The inclusion of a cleared space gives an opportunity for a small garden, but cultivated flowers are an intrusion upon the boundless supply provided by Nature. A desirable site for the seashore home would be near a good bathing beach and, of course, a harbor or inlet for the anchorage of boats. Other and more practical qualifications that have been outlined before may be applied here with equal force.

In the design of the vacation house the type of construction and the consequent style of architecture, if we may call it such,



This dining-room is full of suggestions for the treatment of summer homes. Notice the unstained woodwork, the simple hangings and decorations. It looks cool, doesn't it?

sandy plains of Arizona. In the same way the former will always be the most appropriate type of house for the woods, while the latter is being used more and more as a prototype for seashore homes.

A great latitude of choice is allowed the home builder in a pastoral country, although the Colonial farm houses built of wood or stone come so instinctively to mind that it is difficult to escape entirely their suggestion or to wish to do something widely divergent in style. Indeed, so many old farm houses have been reclaimed of late years for vacation homes that they have almost begun to establish a type. Then, too, the Colonial



The type of moderate-priced house for the seashore, where the environment is that of sand beaches, pine woods and, in immediate surroundings, a well-developed locale. Frank R. Watson, architect

forms are so essentially adapted to the terms of simple construction that it is only in the more elaborate summer homes that a wide departure is made towards English or French prototypes.

Whether the construction be of wood, brick or stone will



The mountain home can be either of stone or logs, or a combination of the two, thus taking on the protective coloring of its surroundings



Porches are necessities. Fit them up so that you can live on them and eat and sleep if you will. They are the panacea for the rainy day

depend upon local labor conditions. Wood is always the cheapest structural material, but every year the proportion of brick and stone houses increases as the need for more permanent and substantial types of houses is more keenly felt. It is only in remote districts, where labor is cheap and abundant, and some is to be had on the building site, that this form of construction bears great chance of being used. But the charming old stone farm houses of Colonial days are far too exquisite not to wish that more of our modern houses were built like them.

In planning the vacation home the vital need to be kept in

mind is for fresh air, and every breeze that blows must be taken advantage of. The living-room sacrifices its importance to the porch, which cannot be too spacious or too carefully placed in relation to the prevailing winds and the finest views. Practically every phase of porch development is interesting to the summer home builder; the spreading and luxurious porches of the East Indian bungalow, the two-storied porches of old Southern mansions, the rainy-day porch with its protection from the wet, the dining-porch where the *al fresco* meal is an unalloyed pleasure.

In the summer home the need for privacy is less felt than in the more formal suburban house. To be able to plan one's porch where the utmost of air and view may be obtained without having to consider the formality of afternoon calls or the intrusion of unwelcome guests, makes greatly for the comfort of the house. So in the summer

home there is more opportunity to adopt the bungalow type with its wide and spacious porches. Verandas that encircle the house have many advantages. Their different sides make them comfortable at all hours of the day, according to the direction of the breeze and the position of the sun. Where the family is of good size or there is much entertaining there is usually a desire on the part of some to seek seclusion from the noise or gossip without going indoors, and with this type it is only necessary to withdraw to another part of the porch.

The second-floor porch is now-a-days generally used for a

sleeping porch and is planned to open directly from the bedroom. To be thoroughly comfortable for sleeping it should be screened, while casement sash are almost a necessity to protect one from sudden showers. My experience with country sleeping porches has been that the enjoyment they afford is largely dependent upon how carefully these facts were considered.

The rainy-day porch is not ordinarily made a part of summer homes, and in consequence a wet day is usually a gloomy one spent indoors. It could, however, be made very attractive if a little thought were put upon its planning and construction. Often one end of the living-room can be utilized. With a succession of broad windows or, if desired, casements opening to the floor, that would give a wide view of the landscape (for a rainy day discloses many beauties in the country that the bright sunlight fails to bring out), this feature might be attractive on both wet days and dry.

Dining on the porch is seldom possible, except in well-screened enclosures. Care should be taken to select a position protected from the rays of the setting sun, which are even more objectionable here than in an indoor dining-room. When screened

porches are mentioned the first pictures that rise to one's mind are the temporary and often hideous makeshift affairs that one sees so frequently, but there is no reason why the screening of the porch should detract from its appearance. Demountable

screens designed in well-proportioned panels with carefully fitted doors should be planned in connection with not only the dining-porch but in all places where screens are a necessity.

One fortunate feature of the summer home is its unstudied informality. In place of the dozen separate interests of the city house, there is a spirit of communal life that does away with the necessity for complicated planning. The living-room should be made large enough to serve the needs of the family as sitting-room, library, reception room, and even in many cases as dining-room. A huge and broad fireplace provides a fitting keynote for the decorative scheme and

in its lines may be made to express open hospitality and the lack of set conventionality. Its practical value will be appreciated most on damp days and evenings and in chilly weather, when its fire will be sufficient to dispel the interior dampness of the whole

(Continued on page 444)



The lack of a far-reaching outlook from the house can often be compensated by developing the garden—which is the foreground of one's view



This group includes the desirable features for a moderate-priced home in the country—a house commodious enough to accommodate a small family and its guests—a garden and a garage. The sight, moreover, is ideal, being removed from main road, having large trees to shade the house, and sufficient grounds for the children to play in





The garden living-room is the go-between of the house and garden, and consequently should harmonize broadly in style with both. In a setting of this kind a tea house of this half-rustic, half-formal style harmonizes perfectly

Furnishing the Outdoor Living-Room

THE DESIRABLE EFFECTS OF SECLUSION AND SHADOW—
TREATMENTS FOR ARBORS, PERGOLAS, TEA HOUSES AND
PORCHES—SUMMER HANGINGS AND CUSHIONS

MARY LIVINGSTON

MORE and more are Americans coming to realize the charm of life *al fresco*. This is due partly to experiences of delightful summers abroad, and partly to the wane in popularity of the wasp-waisted damsel, in lieu of whom we find broad-chested, tennis-playing, golfing girls of manly virtues. And it is the women who

to get away from four walls when the days grow long and the evenings are soft. Romance lurks in the corner of a garden, and we have a little of the same sense of adventure we had as children under the propped-up sheet in the backyard.

The variety of outdoor living-rooms suits every purpose and pocket. There are the gardens of Italian and French formal planning, beautiful things to look upon and walk through; and old-fashioned flower



To hang on porch, or tea house wall, decorative flower baskets



Some of the baskets are decorated with gaily-colored birds



The wall decoration here is a combination of lattice and rough plaster, the latter frescoed with flower wreaths and the furniture decorated with the same designs

gardens of a joyous riot of color. It is from the vantage point of the garden living-room that these are most enjoyed. For the garden living-room is the go-between of the house and the garden, and consequently should harmonize broadly in style with both.

Those that are constructed as part of the house—the porch, the piazza, the sunporch, the outside living- or dining-room—may be furnished in almost the same style as the living-room itself. The

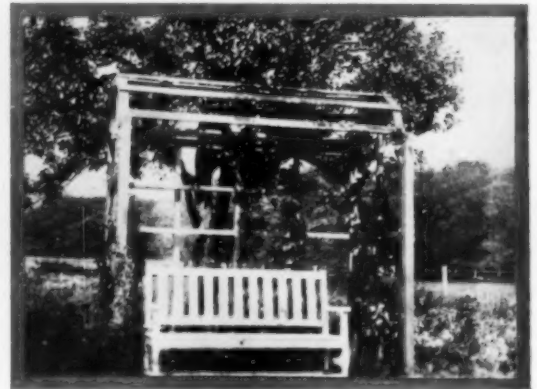
fruits on the table between meals; the insects besiege it, and also it is unpalatable when warm. Artificial fruits may be used as a good substitute.

Lattice walls bring within much of the outdoors. The lattice

itself should be kept very simple, letting the vines do the decorating. The box in which the vines are planted should be the same color as the lattice and should not be featured, but made part of the background itself. Lattice laid at all angles and cut in all forms gives an undesirable ginger-bread effect.

A good color scheme for a lattice porch, if one desires to get away from the usual green, is to paint the lattice a blue-green, blue enough to harmonize with the green in the foliage. For hangings or covers use a dull orange. The furniture may be enameled in blue-green with stripings of dull orange. By placing in this room an orange bowl or a blue-green wicker basket the colors are accented.

The day of green chairs and Turkey-red cushions has gone by. Sun-fast materials in every tone have filled with much success a longfelt want. Wicker willow, reed and rattan are now the accepted kinds of furniture. In a partly-enclosed porch wooden furniture with rush seats may be used, as there the wear of the weather has not to be taken into account.



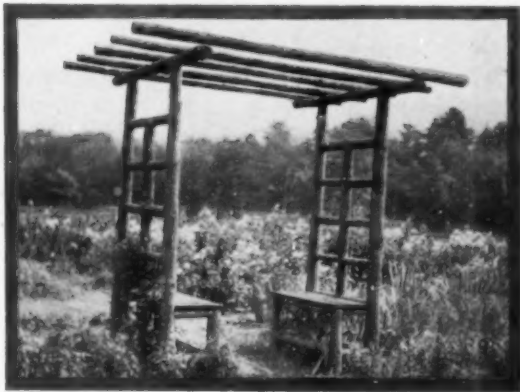
A bench and a bower will make a sufficient garden living-room for the small place if properly placed, shaded and amid flowers



Before planning the permanent pavilion see to its outlook and its background. These are the essentials. The form of structure and decoration will grow out of them as expressions of personal taste

The second group of outdoor living-rooms comprise the detached tea house, the marquee, the little canopied pavilion, the terrace and the pergola. These bear more relation to the garden than to the house. Much care should be taken as to their situation. Choose the spot where the cool summer breezes may blow through and where there is some background of trees or shrubbery. Pavilions set in the middle of the lawn lose their *raison d'être*—seclusion and shadow.

A tea house may be very pretentious—of concrete or brick, or simple and inexpensive—of wood or awning. Its background may be the garden wall; in fact, there is no better place than the corner of the garden,



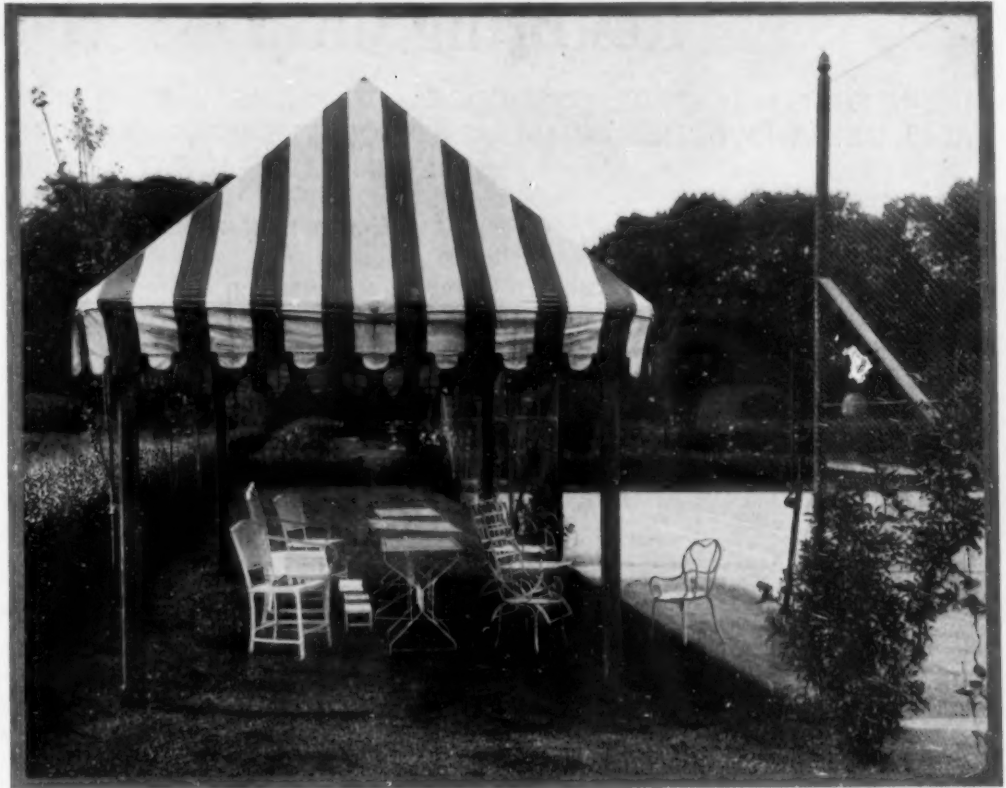
When covered with vines, a rustic seat such as this can serve as a little outdoor living spot that will be welcome in warm weather

rough brick let the furniture be of the same rough nature. The old-fashioned hickory furniture, while durable, is neither comfortable nor easily moved about. It finds its best place in the midst of flowers and shrubs, for it seems then to be a part of them. Natural oak or cypress is the best furniture for the tea house, as it withstands the weather and takes on a lovely gray tint, contrasting well against the red background of brick.

Another suggestion for the tea house is painted iron furniture of the kind so often met with on the Continent. This can be finished in a hard, durable enamel and decorated with some pretty French peasant designs. The tea things may match in design. Using with these some wicker furniture in green, an unusual and serviceable grouping results.

In a tea house it is always advisable to have settees along the back or on either side, to hold the occasional overflow of guests. Too many chairs are in the way and make a chaotic appearance.

On the walls and posts may be hung wall brackets for plants. These come in many attractive designs—a semi-circular base, zinc-lined, and, above, a plain lattice or a lattice decorated with a vari-colored parrot. These lend a note of charm, especially if an ivy is trained up the latticed back. Adding to



Use in the marquee iron or wicker furniture that will withstand rain and dragging about. The grass will be sufficient flooring if stools are provided against the dampness

affording a vista of the grounds. If the walls are of stone or

this Paradise of flower and fragrance could be flower baskets of wicker hung between the posts, or a hanging flower holder of lattice fashioned in the shape of a bird cage with a bird carved in the lattice, or, better still, a bird cage itself of painted wood, gaily decorated.

A marquee with iron uprights and a striped awning is simple
(Continued on page 464)



It is from the vantage point of the outdoor living-room that the garden can be best enjoyed. See that it affords a vista and that it is cool, comfortable and secluded

Restoring in Less than a Year

THE BEFORE-AND-AFTER CONDITIONS OF A SMALL NEW ENGLAND HOUSE AND THE INTERVENING PROCESSES—WHAT THE COMBINATION OF ENERGY, GOOD TASTE AND RESPECT FOR THE PAST CAN ACCOMPLISH—AGING A GARDEN

CAROLINE B. HALE

IF anyone has any doubts whatsoever in regard to restoring an old place in a short time, let him lay them aside with joy and bend his energies to the desired object and work with a will. I know whereof I speak, for it has been my happy privilege to have remade an old house, and made a garden that defies any one as to its age, and all in less than a year.



It was the usual type of New England house—splendidly built, large and roomy, but sorely in need of repairs and restoration

The house had stood many, many years, in an old New England fishing village with apparently no thought given it by its owner or tenants; it was built; that was all that was necessary; no thought of the ravages of time and the elements, and no kind of repairs ever wasted upon it. It was splendidly built, however, and therefore had withstood the wear and tear of almost a century, much of that time being unoccupied. It was large and roomy, many windows of many panes of glass, the floors of broad boards, eighteen or twenty inches wide, beautiful hand-wrought woodwork, a few fine old mantels, simple in design and well suited to the style of the house. The fireplaces, however, had been bricked up and the walls marred by unsightly stovepipe holes. The stairway is quite a feature. The sweep of the wall was really most graceful. The wainscoting is another evidence of old-time joinery, being made of very wide, solid boards extending horizontally along each side of the walls, one board occupying each space, surmounted by a simple hand-wrought moulding as a chair rail. There were many other interesting features, such as little closets in the chimneys, old lustre knobs and a few iridescent ones.

The question of restoring the house was not so serious, as one needed to change only a few things to make it livable. The first and most important change was the opening of two "blind" windows in the front of the house—

one on the first floor and one above it on the second floor.

The installing of bathrooms, lavatories, linen closets, butler's pantry, etc., was then undertaken. This we did by dividing one of the rooms on the second floor—half of which was made into a thoroughly up-to-date bathroom, the other half a closet room, containing a linen closet with protected shelves, a blanket and store closet, and two dress closets. At the rear of the house, over the dining-room and kitchen, was a very large room, a sort of tucked-away place, only half a story high. The roof here was raised, giving us two splendid bedrooms. The original kitchen, not being adequate for our use, was changed to a butler's pantry and a lavatory, the pantry opening into a large new kitchen, which we built, with a splendid cement cellar under it. Opening from the kitchen and pantry was a large porch, cement floor with drain, with an extra sink and laundry tubs, the whole fully screened, thus making service a delight. The old back, or rather side, hall and stairway were impossible for present-day comfort, both being very narrow and dark. Here we took out a partition, throwing the hall into a room, removed the solid boards which closed in the stairway, replacing them with a suitable balustrade; by replacing the narrow door, which had led into the old yard, with a reproduction of the original front door, it changed

the side of the house quite a little, and yet kept the spirit of the old place. At the foot of the three steps leading from this door into the garden we placed an old millstone, which had lain for nearly a century at the back of the house, as a kitchen step—it was a little more than a semi-circle and contained all the little grooves and roughness necessary in the old days, when it had ground the corn for its owner. So with knocking out a



The problems were not so serious: blind windows had to be opened, some of the rooms enlarged, and the lean-to roof raised

partition or two, the addition of three or four windows and the opening of the fireplaces, we about completed the alterations in the house. Then came the beautifying and the decorating—the walls were covered with simple, inexpensive paper, suitable to the Colonial style of architecture, and, with the woodwork painted cream-white, it really was a transformation.

The garden seemed the most hopeless proposition, as, in April, when we began work, the whole place was in such a state of neglect and decay that it would have discouraged the most energetic. The lot is situated at the corner of two lanes. Although one is called a street and boasts of a sidewalk on one side, fortunately there was only a path on our side, which ran along our old broken-down fence, almost buried by a wonderful old woodbine, a valuable asset, we thought, and which later was trained over and almost entirely covered the new fence; the other road is one of those quaint, charming lanes in New England that one reads about, and is known as The Lane. From time to time these lanes had had a generous sprinkling of ashes, gradually raising their level, and the lot became more sunken from the overflow and rains. The question of grading became important: to grade the lot to the level of the street would mean to cover entirely the brick foundation, giving an ugly, squatty appearance to the house and depriving the old cellar of light and air.

The advice of many, who were supposed to know about such things, declared then the only way we could prevent the water overflowing our place was to build a sunken cement wall which would extend a foot above ground and on top of this to build the fence. This was not only a big expense to consider, but would be most unsightly. Finally, after much thought and figuring, we decided on a plan, trusting it would come out right: to build the fence on the street level, which, when finished, was, curious enough, resting on posts two feet above the lot. The next thing was to remove the sod, which was of the poorest; then the rich, black earth that had been accumulating for nearly a century, and was from twelve to eighteen inches deep, was removed to the back of the place for future use; and after filling in with common soil, which had to be bought, and, finding the best grade, the rich earth was

put back, also the sod, which we had been advised to discard, but did not, being thrifty and knowing the price of sod. Along the front we graded to a foot of the street level and filled in under the fence with brick saved from an old chimney that had to come down—not with bricks and mortar, but with bricks piled irregularly on one another, with old Mother Earth filling in the cracks, and making necessary a step down from the street into the yard; in front of the fence was a broad flower bed four feet wide, which was in constant bloom from June to November.

On the Lane side of the lot we graded gradually to meet the street, so there was no perceptible grade, and along the fence (which was a plain, simple, Colonial picket fence with the green top rail) about two and a half feet wide was a sudden rise, or terrace, one might say, about a foot high; in front of this were



The garden had suffered from neglect. It needed grading and fencing in, and the soil had to be enriched before plans were set for flowers

placed large boulders, brought from a nearby beach, and filled in with small stones; this would keep the water from running in from the lane and gave us a broad bed for nasturtiums, which, before July, were trailing over the rocks and fence, absolutely disguising the little terrace and making that part of the garden a thing of beauty and constant bloom. On the outside of the fence we built up from the road to the fence, so that the grade was imperceptible. To this we used ashes, covering them with six inches of good earth and sodded with some of the much-scorned sod from the old place, but good enough for wagons and other vehicles to pass over, and with grass seed sown now and then the lane was none the worse for the operation. With the wonderful growth of scarlet runner and nasturtium peeping through and trailing over the fence it was altogether charming.

We next turned our attention to the laying out of our garden, arranging beds for flowers and sodding around them. We knew nothing about gardening—which flowers require sun and which shade, or how to plant—but being fond of flowers and determined to make the old place beautiful, we left no stone unturned that would help us. With the help of seed books and advice from friends and neighbors we went to work. We did not do the actual spading, as that was too hard work for women,

(Continued on page 445)



And this was the result! A pergola, rambler-covered gate, a seemly fence, a flower-bordered walk—all accomplished between October and June

Simplicity in a Suburban Home

ESTHETIC EFFECTS GAINED BY SIMPLE SURFACES AND STRAIGHT LINES IN THE HOME OF

IT would seem that there are moral as well as esthetic qualities in good building, and the Pattison house is, first of all, good and sincere in its construction. It is of unstained cedar shingles that grow soft-toned with age. The beams of the



There is no fancy detail about the porches or the roof. The beams are left to show and are uncut and untrimmed

FRANK A. PATTISON
AT COLONIA, N. J.

ANTOINETTE REH-
MANN PERRETT

its lack, while, on the other hand, with it you can make brilliant use of the humblest materials.

The Pattison house has a low, broad-stretched look. Part of this is due to its general dimensions, but it has also used other means to obtain this effect, which may well be



The trellised walls of the reception room show the decorative possibilities of the straight and vertical line in that treatment

overhanging roof are left to show and are uncut and untrimmed. The door and window casings are as simple as they can be. The sashes are filled with small panes of ordinary glass. There is no fancy detail about the porch cornices, only the 2-inch strips on the post casings might be called decorative. Inside all the door and window trim all the mullions and transoms are made up of straight wooden strips, and, continued along the walls; they give them their sole decorative treatment.

Some people have come to misunderstand the virtues of simplicity. They try to make a virtue out of mere

plainness. Ugly plainness is just as bad as ugly over-ornamentation. The vital thing is to have an intelligent understanding and feeling for the fundamental laws of design, and then to use them to express your conception of a home idealistically. All that is praiseworthy and interesting in this house has been attained through an esthetic appreciation of the possibilities inherent in simple surfaces and straight lines. That is, after all, the secret of good design in building. No amount of ornamentation, no amount of labor and expenditure, can make up for

suggestive to much smaller houses that are often hard-put to discover ways and means of looking low and in good proportion within the scope of their arbitrarily-fixed dimensions. One of the chief ways of getting this low appearance, aside from the general dimensions, is to have a simple, unbroken roof line without dormers and with deep eaves, as here, where the roof lines come down to a level with the window tops and where the gable ends extend well out. A second way is to have broad and simple fenestration, and still a third is to have a terrace about the house. Here the front terrace is broad and low, like the house itself, but if a simple terrace is not sufficient for a house, a well, a decorative balustrade or low piers connected by hedge plantings will often have an almost delusive way of enlarging and broadening it. The low, unornamented terrace here is in excellent taste and proportion. It is some 15 feet wide with a path across it, and it is just three low steps above the driveway. The steps are as broad as the entrance porch, which adds to the feeling of lowness.



Straight lines give the living-hall an air of simplicity. Here the woodwork is stained brown and the panels are filled with a dull, deep gold, Japanese burlap

They are decorated at each end with a low vase on brick foundation piers.

These vases illustrate not only the spirit of the house, but the social life of the colony. They were made of concrete and Volkmar tiles by a friend of the family, an artist, an amateur at vases. As the friend came from New York for a week-end now and then, the vases were not made in a day, and when they were finally finished, the whole colony, children and grown people, came to celebrate their unveiling. It was called Vase Day.

There were poems on vases, essays on the history and meaning of vases, on ancient vases and modern vases, on tiles and the uses of concrete. Everybody in the colony had studied up vases in one way or another. It fairly seemed as though the two vases had produced a liberal education for themselves and their kind in the entire community. It is good to make much in this way of the spirit of things, to symbolize for both children and grown people with parties and unveilings the work and meaning that we put into our household things and to connect them with the thought and spirit, the art and labor that have always in the whole history of the human race been given them.

As for the plan of the house, there is a hall in the center with a drawing-room on one side and a library and a dining-room on the other. The staircase is not only an important feature in the living-hall, but a more or less decisive factor in the entire plan of the central part of the house. It has been made to run up to form part of a long middle corridor with bedrooms on both sides of it and bathrooms at the ends. In doing this, space was left behind the staircase in the center part of the first floor for two small rooms that are used as a kind of office-study and



Among the many attractive points of the drawing-room are the elevation of the floor and the bow window. The woodwork here is black and the paper a deep green

The office-study is connected with the drawing-room platform, so that when this platform is used as a stage, it makes a convenient entrance way. Its charm, however, lies in the fact that it is a garden room, with two large transformed and mullioned double glass doors leading out upon the low garden porch. The small tele-

telephone room. The staircase, after the first few steps, which leads to a corner landing, runs parallel to the front entrance along the long side of the room. Directly opposite to the front door it forms a second landing, under which there is a passage which connects by glass doors with the office-study beyond. This passage also opens up a fine opportunity of using the space beneath the stairs for a coat closet and lavatory.



The "Madame Butterfly" window looking out from the dining-room over the garden has the characteristic Japanese sliding windows and low platform



The staircase, a decisive factor in the plan of the house, runs up to form part of a long middle corridor, along which, on both sides, are bedrooms

phone room beside it is directly connected with the hall and the dining-room. Beyond the dining-room there is a butler's pantry, which is the only passageway between the main house and the service wing. This wing consists of a kitchen, pantry and laundry on the first floor, two servants' rooms and a bath on the second. The main bedrooms of the house are above the drawing-room and have glass doors leading out upon an uncovered porch.

Although the family numbers only four, from the very plan with its ten bedrooms,

with its special service wing, not to mention the numerous first-floor rooms, the house was clearly designed for generous hospitality. A great many country houses of its size are not at all helpful to the builder of small suburban homes, but this one is full of suggestions; suggestions, too, that do not lead astray into impossible longings, but help to proper characterizations. By a small suburban home we mean a house, let us say, that has to be built on a 50- or 60-foot lot, or that can have not more than 1,600 square feet of floor space for the first floor. These houses are now usually designed with a large, oblong living-room. Ten years ago this large room seemed a step in the right direction, but sometimes it seems to have become stereotyped. A room, let us say, 38 feet x 20 feet—and it is possible to gain it even with a respectable dining-room and kitchen in a floor plan of 38 feet x 38 feet—gives a chance for a remarkably interesting characterization of the family life. A living-room has no right to be uninteresting. Yet ever so many homes are being built to-day with uninteresting oblong rooms with a fireplace and glass doors on one long side, a great opening on the other, and with windows on the front and back. This has now become, in a way, the conventional living-room. Sometimes it is made distinctive through fine furnishing or through good proportions, but where it is uninteresting it has been made so not only through lack of individual architectural treatment, but of any deep and underlying purpose, any imaginative insight and understanding of the lives the owners wish to live there.

In the Pattison house are three rooms that well illustrate three distinctive characterizations of a main living-room. There are other possible characterizations, to be sure, but here are three: the living-hall, the library and the drawing-room.

The main room of even a small house may well be a large living-hall, lighted by a transomed and mullioned glass door that serves as a front entrance, with a decorative flight of stairs occupying one side of the room, under which, in a smaller house, might be a passage into the dining-room, with a fireplace at one end and an artistic window at the other. A living-hall with interesting architectural features, very beautiful in coloring, all gold, with brown woodwork like this, of good proportions, with interesting wall treatment, sparsely furnished, with very little need of pictures and ornaments, can be a very useful and delightful room. It is a room that children can amuse themselves in with impunity and freedom. In Japan children are said never to be naughty, because the houses give them no cause to be. Many men who live active mental lives in their work love this kind of a room to come home to. It is a room where they can sit and smoke by the fire-side without having any shut-in feeling. It is a room that adapts itself readily to dances and all sorts of receptions. It is, too, a room that takes beautifully to all sorts of festive floral decorations.

Then there is the library, whose one wall you can see

through the open door in the photograph of the fireplace, a room with book-lined walls and intimately-loved pictures, of easy chairs, reading lamps, and a low, cozy fireplace. To some people the very idea of home centers in such a book-lined room.

The drawing-room, with its platform for the piano and the interesting spinet, has a very simple and effective suggestion for a living-room that is to be a social room in a family that loves music and the dramatic elements of life. Just two steps up, and yet what an element of interest it adds! The four-sided bay window, with its transoms and casement windows, with its cushioned seat, shows the kind of a bay window that can easily be used with small-paned sash windows in a harmonious relationship. The main room of the house should have some kind of an interesting window, and here it has the best possible position at the very center, so to speak, of the stage.

How many windows there are that look out upon the world like a hole in the wall, stripped of reserve and romance! How many houses there are whose lack of composition and unity in their fenestrations makes the windows seem to be carrying on a civil war upon the walls! The Pattison house has reserve and the discipline of good breeding in its windows on the courtyard driveway, and yet, if you will notice, there is variety even here. Good fenestration does not mean monotony. The front entrance is made up of a transomed and mullioned glass door. On either side of the porch there is a small double casement. There are double windows on the projections of the main house, and on the first floor all the windows have transoms, although the second-floor ones have none. This making the windows higher on the first floor than on the second is quite a pronounced tendency of our recent architecture. When it comes to the garden side of the house, the fenestration is not so reserved. It does not have to be when it faces the garden! Yet, mind you, it has not lost its sense of composition! There is, then, the four-sided bay of the drawing-room at one end of the garden side. Under the garden porch there are two transomed and mullioned double glass doors that make the small office-study almost an outdoor room. The small telephone room has a high-backed settle with double casements above it, while the garden window of the dining-room is a very interesting "Madame Butterfly" window with sliding sashes and a low platform. Here is a window,

suggested by Puccini's opera, full of Japanese tradition, charmingly picturesque, and yet in harmony with the simplicity and the decorative interrelationships of vertical and horizontal lines that make up the panel-like treatment of the walls.

There is little need to explain the decorative effect of these horizontal and vertical strips. It is clearly shown in the photographs of the fireplace and the staircase. Notice, however, that it is this same scheme that holds true in the trellis room, and that the
(Cont. on page 447)



Wicker and willow furniture make the porch a comfortable resting place for the summer day. The tiling of the floor is at once cool and easily kept clean

Your Saturday Afternoon Garden

SOWING SEEDS NOW TO TRANSPLANT NEXT MONTH FOR FALL AND WINTER CROPS—GARDEN PESTS AND HOW TO FIGHT THEM—THE CARE OF CROPS IN JUNE

D. R. EDSON

IT is one thing to hurry home from the office on a balmy spring afternoon, to get in your first planting of beans, and to put in a trellis for the rapidly growing peas that are trying to get away from you. It is quite another to bring yourself to keep up with your garden schedule and to cultivate and plant on a sweltering early summer afternoon.



First process in planting beans and similar crops: prepare the ground finely and mark out with shallow drill

But there are a number of things that must be thought of and attended to now if you expect to enjoy your garden to the full during the autumn and winter, or if you hope to enjoy salads and cauliflower next August and September, and beets and carrots and oyster plant next January and February. During this month, also, the various garden pests, in the form of insects and diseases, will begin to put in their appearance, and you must be on the sharp lookout for them. In most instances fighting them is rather hopeless if once they get a good start.

One of the most important jobs for some Saturday afternoon, late in May or early in June—better put a red circle around May 29 and June 5 on the calendar—is the sowing of seed for plants to transplant next month for fall and winter crops to fill in the spaces that will have been left empty by your early crops of beets, peas, spinach and lettuce. A package each of the following will be sufficient for the average-sized home garden. The varieties mentioned, while perhaps there may be others of similar type as good, will, in my opinion, be found as satisfactory as any: Brussels sprouts—Dalkeith; cabbage—Volga and Savoy; cauliflower—early snowball; endive—broad-leaved Batavia; lettuce, loosehead—Grand Rapids; heading—big Boston.

Select some spot in the garden where the ground can be freshly forked up and prepared in a narrow strip. Usually where the first crop of lettuce has been used will make a good place, and will give about the desired amount of room. Prepare the ground finely, mark out a shallow drill and sow the seed of each sort thinly. These plants will not be transplanted until

the time to set them in their permanent positions and, therefore, require much more space than seedlings sown outdoors in flats, which are transplanted once before being set out. They should be given from 3" to 6" each in the row to make strong, stocky plants. Therefore four or five seeds to the inch will be plenty. If the soil is dry, to make sure of good germination, take your hoe and make a deep furrow the length of the row the day before you expect to plant and fill this with water, letting it soak away over night. This will put the ground in excellent condition for planting and make it moist enough to insure prompt and strong germination. Be sure to tag each thing so used, otherwise you are likely to have things most annoyingly mixed up by transplanting time. With the back of a narrow hoe or with the edge of a short board press the seed down firmly into the drill before you cover it. Then cover with a quarter of an inch or so of moist soil and firm lightly as before. Do not water the surface of the soil after planting. If the ground is so dry that water is necessary, apply as already directed. Watering on the surface is seldom done thoroughly enough to wet the soil to and below the seed.

At this time of the year, in properly prepared soil, germination should take place within a few days, particularly with seeds of cabbage, cauliflower and Brussels sprouts. The little seedlings are apt to be troubled with the flea beetle, a small, hard-shelled black beetle which you will recognize readily. Keep a little tobacco dust on hand and sprinkle the plants lightly with it a few days after they are up until danger from this pest is past. Even where the seed has been sown thinly thinning out will usually be required. This should be done as soon as the second or third leaves appear.

In addition to these crops, which are all to be transplanted later, there are a number of succession sowings which should be made now to keep the garden up through the latter part of the summer.



Second process: sow the seed thinly; with beans see that the eye is down, press the seed down firmly

Third process: cover one-half to two inches, press the soil down gently with board or foot. Avoid surplus moisture



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Watering on the surface is seldom done thoroughly enough to wet the soil to and below the seed.

In addition to these crops, which are all to be transplanted later, there are a number of succession sowings which should be made now to keep the garden up through the latter part of the summer.

(Continued on page 461)



Where the position of the house gives it seclusion and privacy, there is no need for awnings save to keep off the sun



A city roof leveled by a platform and fitted up for outdoor living. A rug, screens, wicker furniture and plenty of flowers and plants lend the country similitude



Venetian blinds used behind screens or glass partitions keep the porch cool and secluded without shutting out all of the outside world

The Porch as a Place for Out-



Wicker and rattan are the most serviceable types of porch furnishings. Coming in a great variety of shapes, their use is equally diversified. Moreover, they need not be stored for winter, since they generally fit well into decorative schemes indoors



Rustic furniture has the spirit of the mountain camp, and for such porches it has no equal. Bamboo screens are also always advantageous in these locations

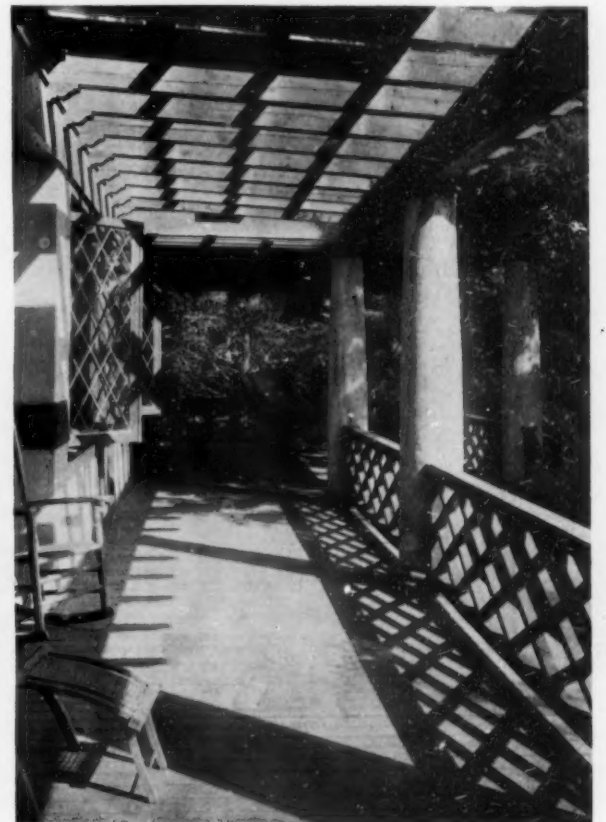
door Living in City and Country



An attractive porch in the making. When the vines have covered the trellis and the shrubbery filled out, the result will be striking



A note of individuality can be lent the porch by upholstery in one fabric. On this porch is shown an indispensable piece of furnishing—the steamer chair



If the porch is large, create a center for living in one corner that is well shaded and can be screened off for privacy



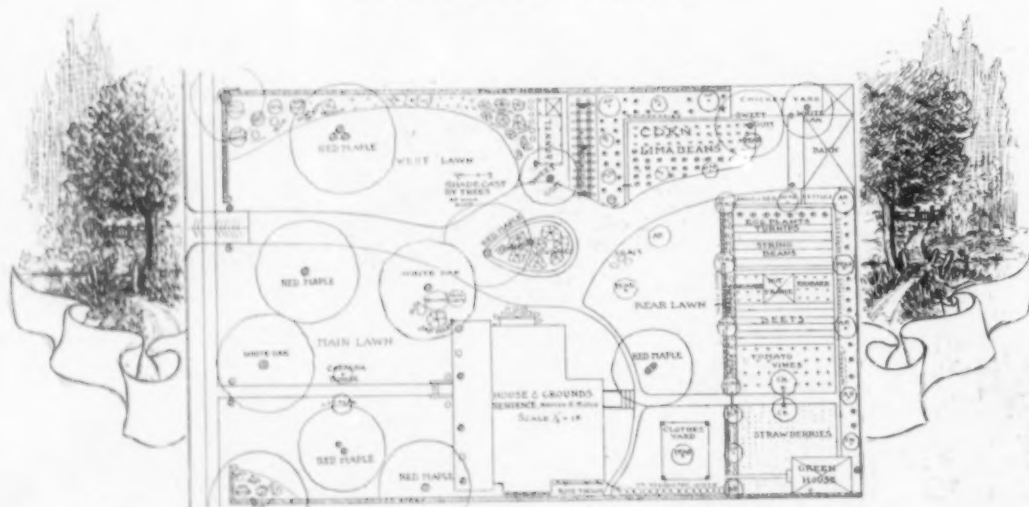
The Dutch Colonial type of house needs a site on some sort of slope. Hence the necessity for grading that would give this house a dignity and imposing massiveness. The drive-in can be seen to advantage, and the beginning shrubbery

My Suburban Garden

HOW THE GRADING WAS DONE—ADDING A BARN—THE PROBLEM OF THE DRIVE—SETTING SHRUBBERY

WARREN H. MILLER

AS you will recall, when we carved out our beauty spot from the raw forest we had everything to build, from the ground up, and this included even the soil for the front and rear lawns. No old field was ours, mellowed and grown to field grasses, needing only turning under and sowing with lawn seed, but the soil itself had to be



This is the completed plan at the end of three years—quite a change from the original young forest. Note the arrangement of the drives and paths

prepared even for grass. There was considerable lawn expanse, altogether some seven thousand square feet of it, and our means would hardly permit more than two inches of top soil spread over the area—at \$1.50 a load! And this was not enough; not nearly enough, with our forest soil underneath, for the leaching action of the rains soon in-

corporated both soils and soured it all, so that the grass died under the first hot dry spell.

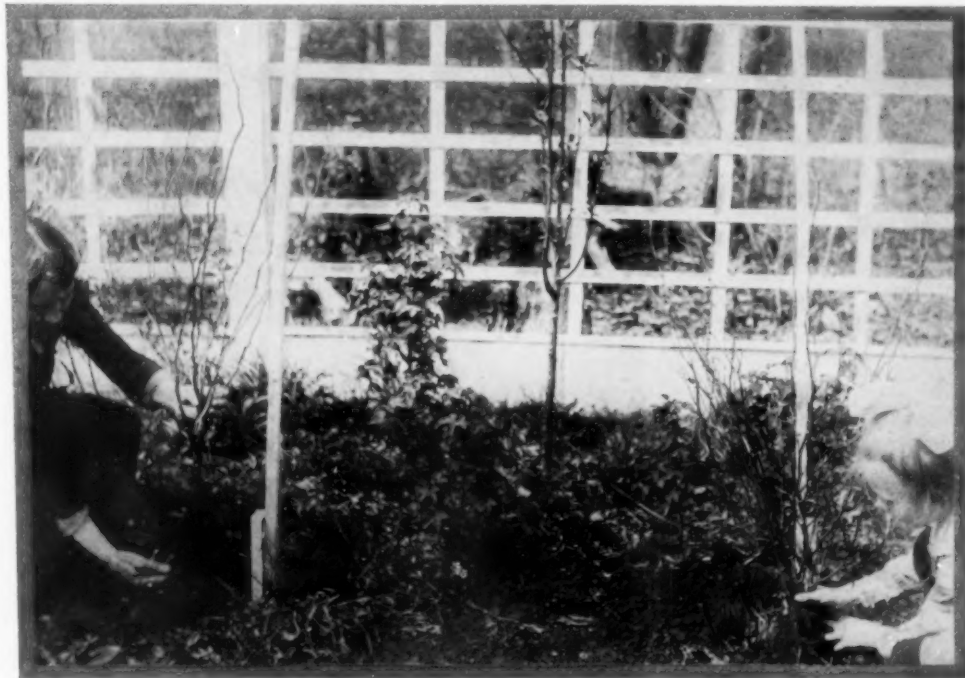
Here the lady who had charge of the lawns and shrubbery made her first mistake, that of spreading a dressing of rotted manure on the lawn as we went into the first winter. She had been careful to use first-quality lawn seed, for poor, cheap stuff is sure to be full of weed seeds and to condemn the unfortunate

it forth to the greatest advantage as a structure of real charm.

As our land was as flat as your hand, we had to make a slope, if only of five or six feet in total rise. To get a high cellar floor the foundations had only been put down a foot or so, and, after surrounding the walls up to the architect's watertable with a fill, and terracing it off in a neat prism, the contractor rested from his labors. We at once pulled it down and eased it off into a mild, long slope, adding fill where needed. It looked at first like a hopeless attempt, requiring at least several hundred loads of fill to make a job of it; but, as the slope should have the same graceful, incurving sweep as the roof, it worked out very nicely with not over seventy loads of fill added. It was at once seeded to stop rain wash, and so came our first lawn into being.

Our next care was the layout of the walks and the driveway. If you will look at the plan of the grounds you will note what places had to be reached by these, for the principal use of a path or a road is to get somewhere with it!

Another feature of the problem for the owner of a small place is how to get all this in and still have a little land left for planting. The main drive must reach the coal hole, and the barn or garage, and also permit the ingoing wagon or car to turn around and come out without either the horses stepping on the surrounding scenery and nibbling off the tops of your new pear trees or the car wheels furrowing up the adjacent lawn. To do this effectually seems to require an acre of ground! The minimum width of drive is eight feet and the minimum



Planting rose bushes at the bases of a hairpin arch. Note roots and tops of these roses as they come from the nursery

sower to a long spell of hand weeding. The grass came up fine and uniform, and in less than two weeks we had a cool, refreshing greensward under the great forest trees that had been left standing for house shade.

The next year I went at it in the fall and put on three hundred pounds of lime, following, a few weeks later, when the lime had leached into the soil, with two hundred pounds of brown bonemeal fertilizer. This takes a whole winter of weathering to become available as plant food.

However, the results were encouraging; our lawns the succeeding summer were weedless and luxuriant and "stayed put." With the help of the hose they weathered every drought, and that discouraging dying off of the grass shoots, due to sour, un nourishing soil which starved the roots underneath, did not appear, except in isolated spots. The way that grass grew under the cosmic urge of spring made me, in addition to being the slave of the wheel-hoe, the unwilling slave of the lawn mower. But I took an unfair advantage of my better half and bought a *very* small mower with the finest of ballbearings, one that she and the children could run with all the ease of a safety-razor—and left them to their own devices!

In a house of the Dutch Colonial type, with great sloping roofs and turned-up eaves to stop snow avalanches (the Dutch never do *anything* without a practical reason behind it) a site on some sort of slope is almost a necessity. Put the same house down in a hollow, with the ground slanting towards the porch, and you at once turn it into a most unprepossessing and belittled farm cottage. But let it occupy a commanding position on a slope, carrying out the sweep of the roof and carrying up the eye to its lofty ridge pole, and the Dutch Colonial at once assumes a dignity and imposing massiveness which set



One of the weeping mulberries along the drive; showing also concrete porch and built-up lawn slope running off from the porch level

radius of your round turn should be twenty feet. Twice twenty is forty feet for the diameter of the central turning bed, an impossible size for a place of only 100 or 150 feet of frontage. We decided on our round turn to be made at a point about opposite the studio chimney, as the coal window was located just beyond it, and a large red maple, left from the original forest

(Continued on page 448)



Master Masons *and* Builders



In pools where you stoop to drink you can see the little cylindrical houses. Above is the mature caddis

The caddis, you will notice, drags his home-made house along the bottom. Every day is moving day to him

BEING THE STORY OF THE CADDIS FLY, THAT IS ITS OWN ARCHITECT AND CONTRACTOR—THE CONSTRUCTION OF ITS HOUSE—WHERE THE HOME IS LOCATED—THE LANDLORD PROBLEM SOLVED

S. H. CHUBB

The American Museum of Natural History

NEARLY everyone, who is in the habit of drinking at a spring in the primitive fashion with neither cup nor glass, has discovered those curious little cylinders, crawling, or rather being dragged, about on the bottom by their occupants and builders, the caddis worms, or, to speak more correctly, the larvæ of the caddis fly. This little creature has solved the landlord problem. The monthly demand comes not to his door!

While most of these structures are of the cylindrical school of architecture, there is a great diversity of treatment displayed by the various species, although the available material has much to do with the appearance of the finished dwelling. Almost anything which can be found at the bottom of streams and ponds may be used. Bits of sticks, tiny seeds, pieces of leaves, grains of sand or small stones are gathered and fastened together with silk-like threads of the builder's own make. The case is also nicely lined with this material, which is spun very much as a silkworm or caterpillar spins its cocoon. The separate threads can be distinguished only when magnified about ten times.

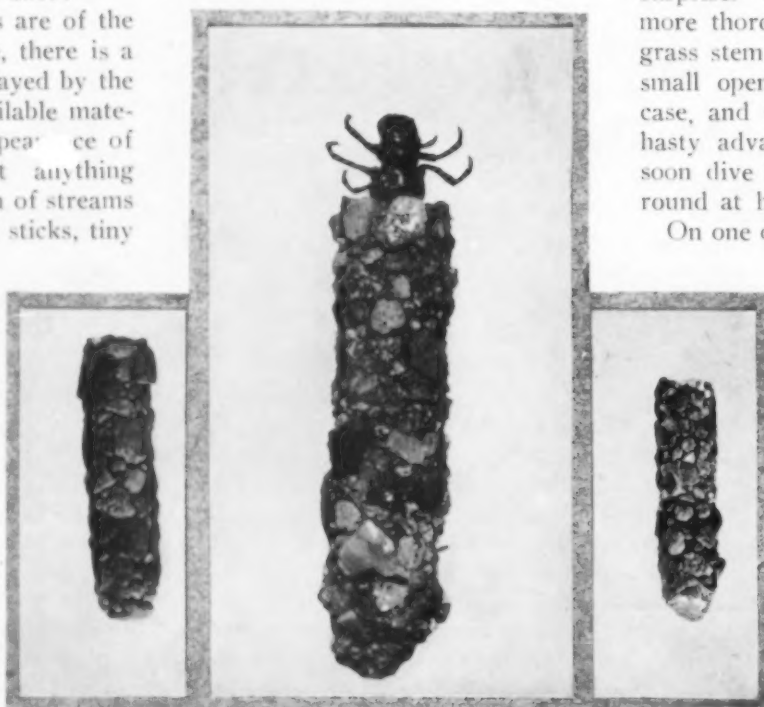
The larva is a soft-bodied little grub, too tempting to escape the sharp eyes of small fishes, were it not for his strange covering. When there seems to be no danger near, the head and legs of the



Diagram of the stone-pile variety shown opposite

hermit protrude at the open end of the cylinder and he will crawl about leisurely, dragging his home with him. At the extreme posterior end of the body there are two hooks with which he holds tenaciously to the inside of the case, and will refuse to be extracted even at peril of being pulled in two. An attack from the rear, however, is so unusual an experience that it takes him quite by surprise. Should you wish to examine him more thoroughly, take a pine-needle or fine grass stem and thrust it gently into the very small opening at the posterior end of the case, and the probability is he will make a hasty advance out the other end, but will soon dive in again head first and then turn round at his leisure.

On one occasion, having a number of caddis larvæ under close observation, I found that by some chance one caddis had been divested of his covering. Instead of adopting the usual course of diligently setting to work to repair the loss, this individual became alarmed and quite demoralized, broke into the back door of one of his neighbors, driving him out the front way. The rightful owner turned round and faced the enemy, but could not prevail. After some manoeuvring he discovered the breach in the rear and drove out the intruder, who then repeated his strategic move. This most



While most of the structures are of the cylindrical school of architecture, a diversity of treatments is displayed. When there is no danger, the head and legs of the grub come out and he walks around dragging his house behind him. Pictures highly magnified

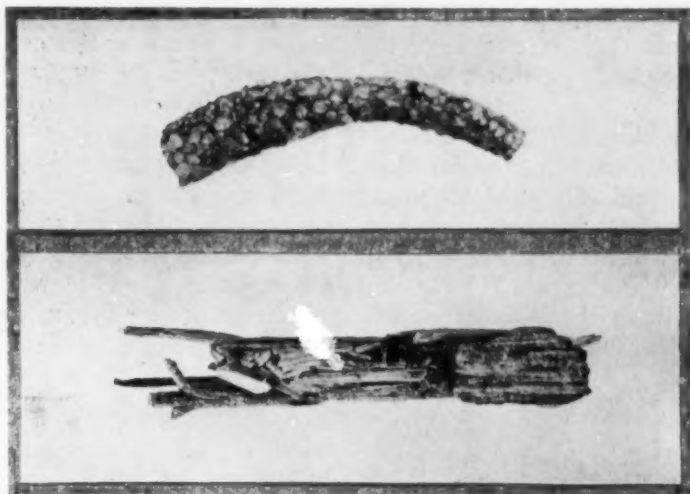
unprofitable "merry-go-round" continued for some time without any evidence of merriment. The final outcome was the hasty building of a new retreat, whether by the interloper or the dispossessed I am, unfortunately, not able to say.

Like most insects, the caddis spends the greater part of its life in the larval stage. Passing through a quiescent period of pupation, it emerges from the water as a delicate, gauzy-winged fly. The pleasures of an aerial life, however, are very brief, for after the eggs are laid the parents die within a few days.

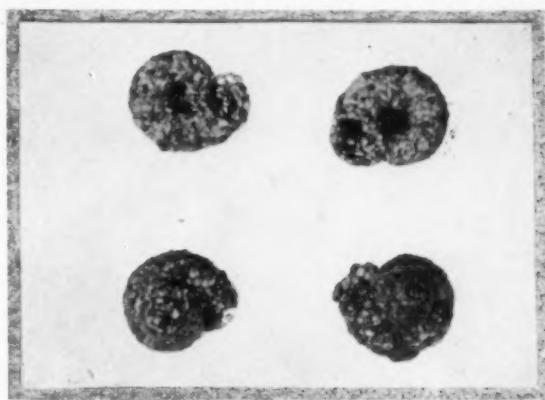
In the Catskills, where most of these observations were made, one of the most common varieties of larval cases is roughly constructed of sticks and stems or bits of bark sufficiently water-soaked to sink to the bottom. The posterior opening is reduced to a mere pinhole, either by fastening in small fragments or by weaving a partition of silk across the end of the cylinder, leaving a very small hole in the center. The larva, by an undulating movement of the body, causes a constant current of water to pass through the case and out this hole, thus furnishing a supply of fresh water for breathing. The respiratory organs, unlike those of higher animals or even fishes, are located along the surface of the body. With such a breathing apparatus as this they must escape all annoyance from coughs, colds and adenoids.

A much more perfectly constructed variety of case is made of tiny stones of various shapes, sizes and colors, nicely fitted together, forming a most beautiful little mosaic. The material is not collected at random, but stones are selected which will give the finished structure a comparatively even surface both inside and out. The posterior end of the case is covered by a single stone, leaving one or more minute openings around its edge for the circulation of water. This is one of the most beautiful varieties found in the Catskills.

For six hundred years or more the mosaic of the Novicella at St. Peter's in Rome has excited wonder and admiration, and yet it is almost appalling to reflect that these lowly little



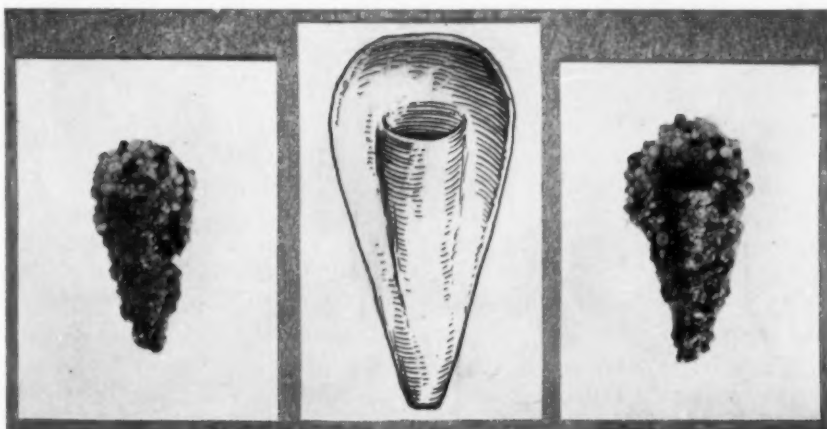
One common variety of larval case is a rough stick and bark structure; another, more perfectly fashioned, is built of carefully-selected stones, curved and tapering. Pictures highly magnified



A caddis' house built after the fashion of a snail's shell. The masonry in these is very remarkable. The original is 3/16 inch in diameter



Three specimens of the stone-pile variety, the first showing the floor and the opening through which the larva feeds



One interesting specimen is shaped like an oyster shell, with a cornucopia-shaped pocket on the upper side. It is half an inch long and moves very energetically

creatures were diligently gathering stones, hewn out by Nature's tools, and fitting them into their mosaic designs with marvelous skill thousands of years before the foundations of St. Peter's were laid; while the arch-stones were resting in their geological beds.

A variety somewhat similar to that just described is composed of fine grains of sand, slightly curved, and tapering toward the rear.

An interesting, though not particularly beautiful shelter, appears at first sight to be merely a little pile of stones. It is, however, designed with some care, for under this dome is a living-room with a floor of fine grains of sand

through which there is an opening, allowing the inmate to feed upon minute vegetable matter without even his head appearing from under cover. This species, unlike the others mentioned, prefers the most swiftly-running places in a stony brook, where they may be found by hundreds clinging to the sloping surfaces of rocks. They move about very little. After the larva has built his tent over him he proceeds to drag it about until a suitable pitching site is found, where he makes fast and remains as long as pastures are green.

Nature, with all her endless resources, now and then seems to fall short of designs, so that we find apparent imitations or repetitions or accidental resemblances between creatures of very widely separated stations in Nature's scale. For instance, the armadillo with its horny shell is very suggestive of a turtle, the former belonging to the great order of mammals and the latter to the reptiles. Stranger still is the pangolin of Africa with its scaly covering, suggesting a pinecone walking on four legs.

The caddis, it would seem, also feels this lack of originality; for once, while scanning the sand very closely at the edge of a Catskill Mountain brook, I found a number of what appeared to be tiny snail-shells three-sixteenths of an inch or less in diameter. Beginning at the apex, though much too small to be seen by the naked eye, the little spirals gradually widened in perfect curves, and curiously enough,

winding in the same direction as the common garden snail. With a magnifying glass it could be seen that they were made of the finest grains of sand fitted together and forming this wonderful copy of a minute snail shell.

Now these little structures had not simply grown like a flower in a mysterious manner which we hardly attempt to understand, but had been manufactured with mechanical skill which we would suppose must take years of experience to acquire. Yet each little caddis, about as soon as he was hatched, set to work to build himself this marvelous home without ever serving a day of apprenticeship. How is it done? We say by instinct; yet this takes nothing from the wonder of it nor offers any very satisfactory explanation.

In the beautiful little stream flowing through Sleepy Hollow, within a stone's throw of the old church which was made famous by Washington Irving, we found hundreds of little creatures, almost microscopic in dimensions, which had saved time and labor by crawling into any little bit of hollow stem available, but, in compliance with the usual caddis habit, had loosely attached a few tiny fragments to the outer surface of their improvised cylinders.

How it must have frightened the wary little creatures when those hoofs went thundering across the bridge over their heads in the dead of night, and they heard the hollow thud of that grewsome pumpkin as it was precipitated upon the cranium of poor Ichabod!

But a New Yorker need not go to the Catskills or even to Sleepy Hollow to find caddis worms. Within sound of Broadway traffic and in sight of the Subway trains, above where they emerge from the tunnel, the little stonemasons may be found in abundance. In a spot no larger than a barrelhead fifty of one of the commoner varieties were counted, and it was here that we found one of the most interesting species.

For lack of something better, let us compare it with a well-rounded oyster shell with the hollow side down and a cornucopia-shaped pocket on the under side. This little shell, only one-half of an inch in length and composed of the grains of sand from the bottom, over which it moves, is almost invisible. The inmate is particularly well protected, too, as he enjoys considerable freedom under his own canopy, coming out of the pocket nearly his full length and reaching about without appearing beyond the edge of the shell. When undisturbed he is much more active than any species I have observed, every move being quick and energetic.

One individual, kept for a time under close observation, became sufficiently domesticated to relish little particles of lettuce leaves, but it must be confessed here that finally he was cruelly robbed of his house. It was needed for the camera. I thought he could probably build another; certainly I could not, but I did furnish him with the very best of material, nice, fine sand composed chiefly of water-worn grains of quartz, somewhat transparent,

so that he might reveal his methods of constructing a home.

The work was soon started by his burying himself just beneath the surface of the sand. With the microscope he could be seen through the quartz diligently "sewing" those grains together which immediately surrounded his head, thus forming a ring. Other grains were added to the forward edge of this ring, forming a slender cone, enlarging as he progressed. Soon he had come quite to the surface of the sand, so that the work could be watched more perfectly. The posterior end of the body now protruded only a little beyond the small end of the cone. Then the edges of the shell were begun, extending out on opposite sides of the cone and gradually widening until the pocket was completed.

The curve of the shell was now continued forward and laterally, the workman reaching out for a grain of sand, then rolling over on his back to place it in position over his head.

The work was carried on with great rapidity. Every grain seemed to be handled in nervous haste, with only an occasional pause, apparently for rest. Through the microscope each grain of sand, which, when compared with the worker, seemed like a stone or great rock, was picked up between the two front feet and tried in a certain space, turned over rapidly once or twice, and then end for end, until it could be made to fit. Frequently, when a fit was found quite impossible, not the stone, but the space, would be discarded for another. The stone, finally fitted, was then made fast with a few silk threads, and all this in a few seconds. The time spent in building this structure, which was not so large as those shown in the illustrations, was about six hours. The larger one of the two illustrated, it may be of interest to know, is made up of no less than fourteen hundred stones all fitted into place one by one.

As a designer, I should say this species is among the most accomplished, but in workmanship not

equal to the simple stone cylinder maker. In the latter the stones are fitted much more perfectly and bound together with hundreds of silk threads, making a very strong structure, whereas the "oyster-shell" variety is so delicate that it must be handled with the greatest care.

The larva is surprisingly small, as compared with the shell, being less than one-third its length and quite slender. Even the inner pocket is so spacious as to give the inmate almost room enough to run about, while with most species house and tenant make a pretty close fit.

How strange that there should be such a diversity of taste shown among these kinsfolk, and what a world of craftsmanship is to be found within these narrow walls! Probably there are no labor troubles among these workers; every man his own employer; every shop a closed shop. But what an example of primitive individualism, walling one's self into a stone cell,

(Continued on page 454)



Oak leaves skeletonized by the caddis worms and a beach leaf taken from the water during the operation. A caddis is shown on the lower border of the leaf, as it would appear in life

Efficiency in The Flower Garden

BULBS AND TUBERS FOR JUNE PLANTING—USING THEM FOR THE BEST EFFECTS—HOW TO SAVE THEM FOR THE NEXT YEAR

F. F. ROCKWELL

AMONG the plants which may be classed as tender bulbs and tubers are some of the most indispensable of the garden's flowers, and a few, such as dahlias, gladioli and cannas, which are universally considered as belonging in the front rank. Besides these there are a number of others not nearly so well known as the fall bulbs, not because they are less useful or beautiful, but simply because the seedsman usually has less room to talk about them in his spring catalogue. Like several other groups of flowers which have been discussed, the summer bulbs have a number of points in their favor. They are adapted for use in many ways, with the exception, of course, of formal design-bedding; but that is, perhaps, an advantage rather than a disadvantage. They have to be planted out every year, for the most part; but, on the other hand, they do not have to be given winter protection, and in many cases it is much easier to take a few bulbs up, store them and put them out again in the spring, than to find the manure or leaves with which to protect them.

For quick, striking and certain results, and for cut flowers that are beautiful and lasting the best of the bulbs in this class are without superiors. Another distinct advantage of this class of flowers is that they are well adapted to the late-made or temporary garden. They can be used in a place one year and, if necessary, moved with the other household goods and chattels to be enjoyed wherever the garden may happen to be made another year. In their dry state they take up very little room, and are easily cared for so long as they are kept away from a freezing temperature. Most of the bulbs in this group are tender, and, as it is not safe to plant them until after danger of frost, but as they grow rapidly when warm weather has set in, they are quite ideal for the garden which must be made late.

Their demands in the way of general care are simple. A well-drained soil, made rich with a well-rotted manure or compost and bone

flour. They are comparatively free from the attacks of insects or diseases. They do require, however, an abundance of moisture, as many of them are of a tropical nature. Liquid manuring, after they are well started, is particularly beneficial. Cow manure, or stable or hen manure, diluted with water until the color of weak tea, will prove a great stimulant and is not likely to be used to excess. The taller growing plants, such as dahlias and gladioli, in exposed position should be staked. Where they are planted in beds it is not necessary to stake each individual plant, as a few stakes driven about the circumference and at intervals through the bed will serve to hold a heavy, loose-woven twine that may be stretched between them in a coarse network. Where support is to be given, give it early; it is a thankless task to

try to tie up plants that have once been beaten down by wind and rain. The cultivation of the surface soil should not, of course, be neglected, and a light mulching where small plantings are to be made in sunny positions is highly effective in maintaining the soil moisture.

Towards the close of the season, before danger of the first frost for the tenderer varieties, such as calla lilies and caladium, and after the first foliage-killing frost for other bulbs, such as cannas and dahlias, the tops should be cut off several inches above the ground, and the bulbs carefully forked up and put where they will dry thoroughly, with plenty of sunshine and air, but safe from the night frost. An old blanket or a few burlap bags thrown over them at night will protect them sufficiently for a week or two after taking them up. Then they should be stored carefully, preferably in sand or sawdust, where the temperature is between 35 degrees and 40 degrees. Caladiums, which are exceptionally tender, should be kept in a temperature between 40 degrees and 50 degrees.

The most popular of the several excellent things in this class are, of course, the dahlias. Their remarkable development during the last decade or so has been one of the sensations of flower history. They

(Continued on page 459)



Towards the close of the season, before danger of the first frost, cut off the tops, fork up the bulbs and dry them out

Awnings and Screens that Decorate

AN EXTERIOR SUMMER DETAIL UPON WHICH DEPENDS MUCH OF THE APPEARANCE OF THE HOUSE—LABOR-SAVING DEVICES IN AWNINGS—VENETIAN BLINDS AND THEIR POSITION—CURTAINS FOR SLEEPING PORCHES

HANNA TACHAU

THE exterior of a house, unlike its interior, is not a purely personal thing. It is free to all who care to see; its charm may be an inspiration to every passer-by, and so we owe it not only to ourselves but to others as well to waive all personal eccentricities and to endeavor to make our homes express that rare sense of proportion and beauty of line, of harmony and individual distinction, that are the evidences of good taste.

It is not of the general plan and style of a house that we have to do here, but of one of its minor decorative features which, though seemingly insignificant, yet, if not carefully treated, is capable of playing havoc with all attempts at creating a harmonious whole. In treating seriously the external decoration of a house, the selection of awnings should not be a casual affair, one to be accomplished with as much despatch and as little effort as possible, but it should be done as painstakingly and thoughtfully as one would choose the size and color of a rug or the color and texture of a wall



The awnings on this city house are the result of an effort to attain the right shade and shape for the type of the house, which is stucco with Spanish grills at each window. Comparing it with the other two houses, one can appreciate the extent to which awnings decorate

covering. There should be evidenced, in their choice, a sense of fitness to the style of architecture they are to adorn, a sincere regard for color and design, and a fine appropriateness that result from a gracious adaptation of the design to the subject.

Simplicity should be the keynote from which to work. The tendency of the past few years has been to introduce ornate awnings—plain materials with skirts embroidered in intricate designs, stenciled and appliquéd patterns applied in contrasting colors, but these effects are rather dangerous when put into use, except in special cases, when a too somber surface needs an accent of color, or a line requires

burned by the pitiless rays of the sun.

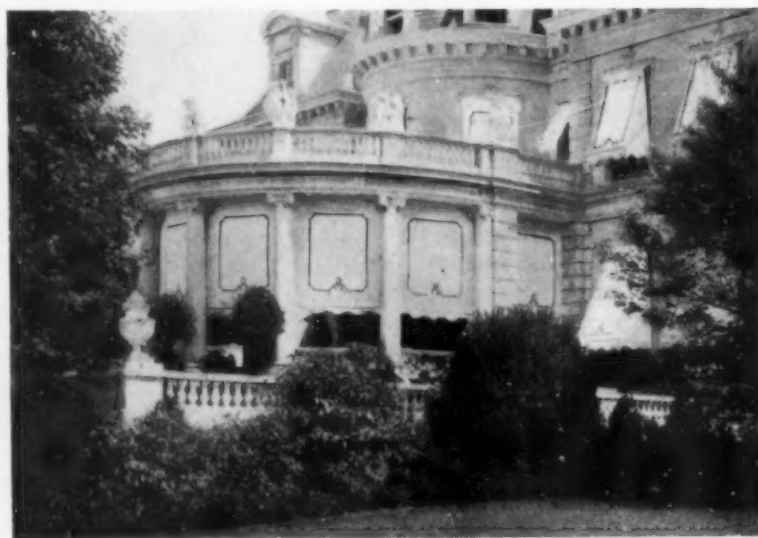
But in the more conservative surroundings of suburbs or rolling

emphasis. Broadly speaking, awnings should sound the same note as any other decorative detail; they should be applied as exterior trimmings and yet should keep their place and become a part of the larger surfaces of the house, but should not in any way transgress the bounds of propriety, flaunting crude colors and conspicuous designs that have nothing to do with the general color-scheme of the house.

Environment also has much to do in shaping the selection of awnings. Against the brilliant blue skies, sparkling water and vivid green that are part of the charm of a seaside resort, awnings may assume the gay hues that harmonize with so happy a background. In such surroundings concrete and stone houses with red tiled roofs may have their color repeated in red and white striped awnings, provided the red of the one co-ordinates with the red of the other. Even yellow and vivid blue can be made to hold their own in such an atmosphere, though the latter will probably not last more than a season or two when



Where the walls are not decorative, the awnings can relieve the sameness



French awnings of white or oyster gray, with a narrow border and scalloped edges, are effective on certain types of houses

countryside, where the air is not stimulating and where color is not so vibrant, we are more restrained in our use of decoration, attempting to secure a certain tempered atmosphere that brings comfort and peace. Green and white striped duck is perhaps the most popular and widely used material for the fashioning of awnings, for it is a combination that lends itself readily to both picturesque and classic forms of architecture and is sufficiently neutral in tone to be adaptable to almost any house. There is a soft gray-green that is indescribably cool looking, and is less crude in color than many of the brighter greens. It can be made to accord perfectly with the red brick or white plaster or clap-board of Colonial houses.

For stucco and brown-trimmed structures brown and white striped duck is excellent, both in texture and wearing capacity. Khaki is wonderfully durable, and bears the heat of the sun without losing its color more successfully than perhaps any other material, but it cannot be used any more indiscriminately than any other fabric. It looks well with brown or natural-colored shingled dwellings or those of stucco, or against neutral walls that are partly vine-covered. A successful way of securing unusual color combinations for awnings is to sew strips of fast-colored duck together, for canvas that is painted to get certain desired tones does not wear well. A two-toned material, called Textol cloth, showing one color on one side with a different tone on the other (it can be had in all shades) is serviceable and often very effective, especially when white awnings are to be used, when the under color is green, softening the white glare and imparting shade that is restful to the eyes.

There are various ways of finishing the skirts of awnings. The different designs are simply bound in braid, or they may be scalloped and then bound; but perhaps the most distinctive models



A terrace may be shaded or left open to the stars if its awning is arranged on an iron piping frame

are those which are finished with heavy fringes. They are particularly decorative, and awnings need no other ornamentation than this effective trimming.

Very few city houses, unless they are individual in conception, are improved in appearance by awnings, and they are only adopted from necessity, so the simpler they are in design, and the less conspicuous in color, the better. Very often, for country houses, awnings can be made to have a distinct decorative value as well as to serve a practical use. Porches and windows need the accentuation that can be gotten by the use of bright color, or, again, they may be toned down and almost hidden, making them keep their places in the general composition.

If you do not care to call upon the services of a decorator, but would rather solve the problem of awnings for yourself, try to study your house from a distance as well as close by, to get a proper perspective. From this vantage you can get a view of the house as a whole, can grasp its color relationship to the surrounding landscape, and can come to a better conclusion as to what is required best to fulfill its needs. The ordinary department store will send you a book of samples to choose from, small slips that can give you no adequate idea of their

designs. It is hardly possible to make a suitable selection in this way, so it is well to see how a larger quantity of material will look before making a final decision.

The utility of awnings must be considered as well as their artistic possibilities, for it has been found that awnings are the most practical of all contrivances for keeping out rain as well as heat, when the windows are open. The simpler their mechanism, the better; a complicated system of pulleys and ropes always ends in disaster. There are various modifications that can be applied to different kinds of windows or can be adapted to difficult porch problems. For high, narrow windows there is a combination awning and blind, the awning projecting over the lower part of the window, the upper sash being protected by close-fitting blind; these work mechanically, and the latter can be lowered when not needed to allow thorough ventilation. There are also ventilating awnings, which are especially adaptable for sleeping apartments, and they are fashioned in two or more sections, thus admitting the air into the room.



The mechanism of inside screens and curtains should be simple and easily worked. This type of curtain can serve both for summer and winter



A corner of an unsheltered terrace is an excellent place for a large umbrella



A modest purple and gold garden in which a border of yellow snapdragons and yellow asters is effectively framed in by a background of gray-foliaged shrubs and trees

AN ALL-SUMMER COLOR SCHEME ADAPTABLE TO BOTH SMALL AND LARGE PLACES—HOW TO CHOOSE THE RIGHT TINTS FROM NATURE'S PALETTE—A TABLE OF SUCCESSIONS TO GUIDE YOU

ELIZABETH LEONARD STRANG

Photographs by Mary H. Northend

THE purple-and-gold garden will be purple and gold from early spring until late fall. And by purple I mean a true royal purple, not a magenta, though some of the flowers are lavender and violet-red. By gold I mean, in this instance, clear, light, soft yellow and a deep, true yellow—not orange or tawny yellow.

Let us suppose in this instance that the owner of a small city lot 50 feet by 120 feet has a mass of shrubs around the boundaries of the property and wishes to assemble in front of them a purple and gold succession of flowers. The foliage of the shrubs might be silvery gray, in order to enhance the brightness of the flowers. These gray shrubs would be *Salix regalis*, or royal willow, really a tree; *Salix rosmarinifolia*, rosemary-leaved willow, a shrub with narrow, gray leaves; *eleagnus*, *Hippophae*, and tamarisk. Other shrubs will contribute directly to the purple-and-gold scheme.

In late March or April will be the yellow blossoms of *Cornus mas*, and a little later the forsythia will contribute a still deeper yellow. At this time purple and gold crocus will be blooming in groups at the base of the shrubs, and purple violets will be in the grass. Later in April will come purple and yellow tulips and the daffodils. The named varieties of these are mentioned in the special list.

In May we will have among the shrubs *Azalea mollis* and the deep purple lilac Charles X. A few yellow and lavender Darwin

tulips and some clear yellow and deep purple iris can be in front of the shrubs.

In June the *Clematis Jackmanni*, deep purple; Harrison's yellow, the yellow tassels of the laburnum, the old-fashioned rose that we all love, yellow columbine and lemon lily, with the lavender *Phlox Arendsii Helene* will be enough to give the color.

In July a *Kohlrauteria* or varnish tree will have a delicate yellow blossom which lasts nearly six weeks; *Anthemis tinctoria* will give a huge cluster of brilliant, yellow, daisy-like flowers on fern-like foliage; and phlox Modesty a rosy purple.

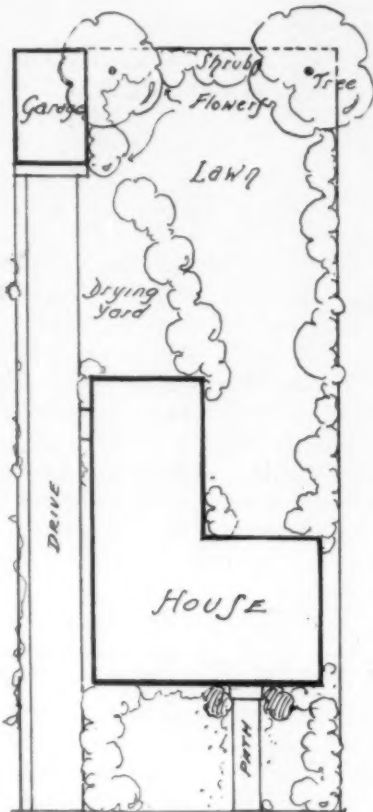
In August *Lilium auratum*, or gold-banded lily, will come into bloom, the anthemis is still attractive, and *Phlox Crepuscule*, with deep purple center and pale lavender edge, will make a softer combination than is found in some of the other months.

In September and October quantities of purple New England asters and the *Helenium autumnale*, a glowing yellow, will form a gorgeous climax for the season, for the tiny yellow-button chrysanthemums in November are merely a cheerful note.

Now let us assume that a more elaborate garden is desired (Fig. 2). This shows a little square garden 25 feet by 25 feet in the sunny angle of the house with a flower border 35 feet long leading from it and terminating in a little statue. The garden might be built without the flower border, or the border should lead directly from one of the rooms



A more pretentious purple and gold garden, where purple and lavender phlox contrast effectively with the rich gold of the *Anthemis tinctoria*



A small city lot would lie bordered with a mass of shrubs, in front of which would grow the purple and gold succession of flowers

of the house into the garden.

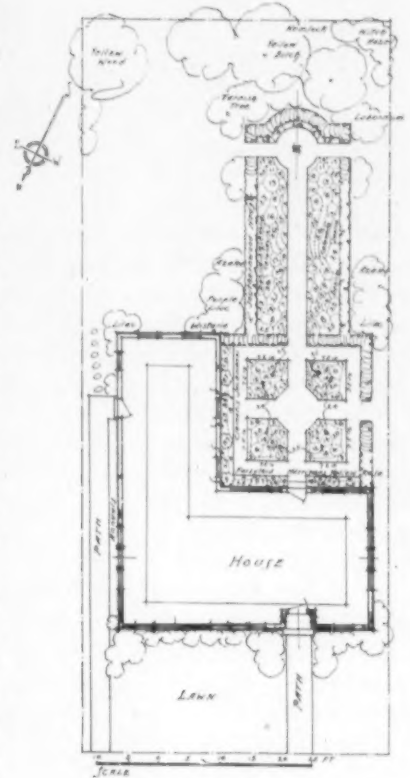
The execution of such a garden could be expensive or inexpensive, as desired. It always pays to prepare the soil well, though, so there should be two feet of good loam, well enriched, in all the beds. It might have brick or gravel walks with narrow box edging and taller box for the outer hedge. This would be expensive, though very attractive, and, besides, box is not entirely hardy in cold climates. A semi-formal look could be given by a walk of field stone laid irregularly. The hedge would be gay in color like the 2-foot hedge of fragrant *artemesia* or southernwood.

Over the stone edge of the walks could creep irregularly the little border plants. These are *aubretia*, rosy purple, deep purple violets, yellow *alyssum saxatile*, and primroses, and the *Viola cornuta*, Purple Queen and the Iceland poppy. *Alyssum saxatile* rounds out the corners of the little square

garden because its gray leaves make an attractive tuft after the plant has finished blooming.

Around the circle in the square garden are purple *aubretias*, back of these purple iris, and back of these again yellow iris. *Baptisia* makes a big round mass in each bed with purple flowers and gray leaves and *anthesis* a strong clump of gold. Around these last two in the centers of the beds are massed phlox in various tones of purple and lavender, both early and late. *Phlox Arendsii Helene* is lavender and comes in June, *Modesty* is an early one of rosy purple, *Mahdi* is a deep bluish purple and *Montagnard* a violet purple. *Crepuscule* is lavender with a deep purple center and *Antonin Mercie* is lilac with a white center. Plenty of early and late tulips are used throughout these center beds and yellow crown imperials.

(Continued on page 455)



On a more pretentious place a special garden could be devoted to this color scheme—a little more formally treated

PLANTS FOR A PURPLE AND GOLD GARDEN

APRIL.	HERBACEOUS PERENNIALS.	SHRUBS.	BULBS.	ANNUALS.
	1. <i>Aubretia deltoidea</i> , violet color. 2. <i>Viola odorata</i> , the Czar, deep purple violet, fragrant. 3. <i>Alyssum saxatile</i> , gold dust, bright yellow. 4. <i>Primula vulgaris</i> , English primrose, soft yellow.	<i>Cornus mas</i> , Cornelian cherry, small yellow bloom. <i>Forsythia suspensa</i> , golden bell, bright yellow.	Crocus, Cloth of Gold, yellow. <i>Purpurea grandiflora</i> , deep purple. <i>Fritillaria imperialis</i> , Crown imperial, single yellow. Early Tulips, Yellow Prince. Wauverman, deep violet. Narcissus, Trumpet maximum, large golden yellow. Trumpet major, deep golden yellow. Von Sion, old fashioned daffodil.	
MAY	5. <i>Iris Germanica</i> , Purple King German iris, deep purple 6. <i>Baptisia australis</i> , false indigo, purplish blue. 7. <i>Viola cornuta</i> , Purple Queen, tufted pansy, deep purple. 8. <i>Lupinus polyphyllus</i> , lupine, purplish blue. 9. <i>Iris Germanica</i> , Aurea German iris, clear yellow. 10. <i>Papaver nudicaule</i> , Iceland poppy, golden yellow 11. <i>Trollius Europaeus</i> , globe flower, bright yellow.	<i>Azalea mollis</i> , Anthony Koster, hybrid azalea, bright yellow. <i>Wistaria Chinensis</i> (vine), purple wistaria. <i>Syringia vulgaris</i> , Charles X, deep purple lilac.	Darwin Tulips, Bouton d'Or, round deep yellow. Ellen Wilmot, yellow. Mrs. Moon, golden yellow. Rev. Ewbank, lavender. Erguste, lavender. Negro, dark purple, almost black. La Tulipe Noir, almost black.	
JUNE	12. <i>Phlox Arendsii</i> , Helene, early lavender dwarf phlox. 13. <i>Hemerocallis</i> , lemon lily, flava, early; <i>Thunbergii</i> , late 14. <i>Anthemis tinctoria</i> , bright yellow daisy-like flower. 15. <i>Aquileg chry antha</i> , pale yellow long spurred columbine.	<i>Laburnum vulgare</i> , golden chain, bright yellow pendant flowers. <i>Clematis Jackmanni</i> (vine), deep purple large flowers. Harrison's yellow rose, old-fashioned sweet scented.	<i>Lilium Hansonii</i> , deep golden yellow lily.	Yellow annual phlox, pale yellow calendulas, pale yellow snapdragons, purple stock, Violet Queen, deep purple verbenas, heliotrope. All these things will last until frost.
JULY.	16. <i>Phlox</i> , Modesty, rosy purple early phlox; <i>Anthemis</i> still in bloom.	<i>Kohlrutaria paniculata</i> , varnish tree delicate yellow blossoms.	Gladioli, Blue Jay, deep purple. Bodenia, lavender. Canary Bird, clear yellow.	
AUGUST	17. <i>Statice latifolia</i> , sea lavender, cloudy lavender. 18. <i>Phlox</i> , Mahdi, deep bluish purple. 19. <i>Phlox</i> , Montagnard, red violet. 20. <i>Phlox</i> , Crepuscule, purple center, lavender gray edge. 21. <i>Phlox</i> , Antonin Mercie, white center bordered lilac. 22. <i>Statice sinuata</i> , pale yellow.	Varnish tree still continues for gray foliage.	<i>Lilium auratum</i> , gold banded lily.	
SEPTEMBER AND OCTOBER.	23. <i>Aster</i> , hardy, Edward VII, deep purple. 24. <i>As er Novae Anglae</i> , New England aster, purple. 25. <i>Helenium autumnale</i> superbum, deep yellow helonium. Iceland poppy and viola bloom again.		<i>Colchium autumnale</i> , autumn crocus, lavender.	
NOVEMBER	26. <i>Chrysanthemums</i> , hardy yellow button Little Pet, deep orange yellow.	<i>Hamamelis Virginiana</i> , with hazel, small bright yellow blossoms.		

The Case for Wall-Board

CUTTING THE COST OF VACATION HOMES—ITS ADVANTAGES AS A SUBSTITUTE FOR LATH AND PLASTER—THE SIMPLE METHODS OF PUTTING IT IN PLACE—ITS DECORATIVE POSSIBILITIES

PHIL M. RILEY

Photographs by Mary H. Northend

THREE pronounced tendencies in building now attract the visitor at our leading summer colonies: The growing popularity of the bungalow, the ideal type of vacation home; the wide adoption of stucco construction to every architectural style, and the increased use of wall-board for interior linings. At Marblehead Neck, Mass., the summer home of Mr. Robert S. Stone presents a case in point. The work of Putnam & Cox, Boston, it is at once attractive to the eye and well calculated in the arrangement of rooms to give a full measure of pleasure and comfort. One enters from the shore side through an arbor-covered porch, passes through the living-room and out upon the covered verandah overlooking the broad Atlantic. At one side of this outdoor living-room a narrow, winding stairway leads to the large attic chamber above; it is the unique feature of the floor-plan.

Returning indoors, it will be noticed that wall-board has been used for the lining of every room. The choice was made because of inherent merit, its good qualities being less well known than those of the bungalow-type of summer home or of stucco construction, but readily appreciated when convincingly explained.

Wall-board has rightly been termed artificial lumber, and also the substitute for lath and plaster on walls and ceilings. Hard, stiff, homogeneous and durable, the best makes possess every desirable quality of wood, except the minor characteristic of grain, also many besides. It consists of long, tough, wiry wood fibres of spruce, pine and hemlock compressed into boards of uniform thickness, kiln-dried, laminated with fire-and-water-resisting cement and surface-filled or primed by methods of scientific processing. For variety of effect one side is often smooth and the other pebbled, so that either may be chosen. Two thicknesses are available: $3/16$ " and $1/4$ ", the former being more often employed. Made in two widths, 32" and 48", and in lengths of 4' to 16', all average requirements are met with scarcely any waste,

no matter whether the studs are centered at 12", 16" or 24".

Despite their much greater widths, these processed wall-boards are as strong and durable as thicker and much more expensive boards of wood, and can be used in places where the widest obtainable woodboard of similar thickness would be impossible. The sanding, joining and matching of lumber are eliminated in their use, and finishing is rendered much easier.

Wall-board is applied by the carpenter, thereby eliminating considerable waste time, which plasterers require to make ready for their work. Moreover, the cost is never more, and some-

times less, than plaster, and the finished surface more quickly and easily applied, with no more dirt than results from the laying of a hardwood floor. With wall-board you pay only for the surface actually covered, whereas in estimating the cost of plaster openings, such as windows and doors, are not deducted unless larger than standard size. Wall-board requires no period of drying, with danger of impaired health if neglected; the house may be occupied as soon as the board has



By making panels with narrow, stained battens fastened along the edges of the wall-board, the living-room ceiling and walls were very effective. Putnam & Cox, architects

been applied. Delay is inevitable when plastering is attempted. Masons can rarely begin work promptly, suitable weather conditions must often be waited for and each coat must dry before the next is applied; also improper mixing or application, buckling of the laths, shrinking of the studding, settling of the house or vibration of street traffic will often cause plaster to chip, crack and even fall.

Unlike porous plaster, which permits the passage of cold air and dampness, wall-board furnishes a sanitary lining for walls or ceilings, strong, durable, waterproofed, fire-resisting and non-brittle, so that, being nailed to the frame of the house itself, cracking and falling are impossible. It is a better non-conductor of sound, heat and cold, promoting greater house comfort the year around, can be applied three times as fast as plaster, weighs only one-fifth as much, costs no more, and will last as long as

wood or steel, which costs one to three times as much. The finishing of these linings is an important consideration; two coats of paint give a good finish to the best wall-board, whereas three to six are necessary on steel. No priming coat is needed as on wood, and this cuts the cost of painting in two. With washable paints a smooth surface is given, which, unlike wall paper, may be wiped like woodwork and kept absolutely clean; vermin find no place to lodge on wall-board, which is another great advantage.

The fire-and-water-resisting cement forced into wall-board in the course of its processing forms an enveloping film not greatly unlike paint or varnish, which enables it to withstand water from one to four hours. Thus pipe leaks, which cause plaster to bulge and fall, have little or no effect upon wall-board, often not even discoloring it. Whereas plaster withstands a pressure of only fifty to seventy-five pounds per square inch, the best wall-board withstands three hundred pounds, so that a knock which would punch plaster will not damage wall-board. Should an exceptionally severe accident occur, one panel is easily removed and another substituted, obliterating every vestige of the damage. Plaster cannot be patched so that it will not show. Whitewash or paint does not conceal it; only wallpaper will, and on a ceiling it is highly undesirable.

To apply wall-board is a simple carpentry job. Clean, of light weight and easily handled, it cuts with a smooth edge like a piece of soft pine lumber and sands like wood, without fluffing, when a smooth, enamel surface is desired. Being readily worked to odd sizes or shapes with a fine-tooth saw and a sharp knife, no other



In the bedroom the battens and wall-board were painted white. Flowered cretonne at the windows give a touch of color, and the room is restful and sufficiently pleasing for a summer cottage

tools are needed except a hammer and nails. The board is applied directly to the studding of a new house—no lathing being necessary—or over the plaster of an old house being remodeled, and nailed around the edges and through the center with one-inch nails. Flat-headed barbed nails are preferable for the edges, and wedge-head nails for the center, the latter being countersunk and the depressions puttied. For work over old plaster two-inch nails should be substituted. On new

work headers must be inserted where the studs are not properly spaced, so that each panel may be nailed securely on all four sides and through the center. Leave one-eighth inch between panels for possible swelling in damp weather, these spaces being covered by decorative strips or mullions of wood or wall-board. Brick or stone walls may be lined with wall-board when furred as for lathing.

Wall-board naturally takes the form of panels, a scheme of decoration as old as art itself. In this respect it does not differ from the use of wood, steel or certain applications of plaster, particularly decorated plaster. Panels permit great latitude for effective treatment along either conventional or original lines; the possibilities seem to be without limit. Panels of any size or proportion may be employed with a simple cove- and picture-mounding or plate-rail, or in combination with a frieze or wainscot or both, whereas a beamed ceiling lends dignity and refinement to a large, high-studded room. The application of appropriate stencil work to the frieze presents a wide range of possible effects as beautiful as they are unique and distinctive.

Wall-board should be painted before the panel
(Cont. on p. 457)



The various sorts of plaster or composition board are a reasonable and efficient substitute for plaster. They may be applied directly to the studding and, if battens are used over the joints, successful approximate paneling is realized. They are ready for use and need only painting, but the directions for cutting should be carefully followed



A wall constructed of field stone laid dry surrounds the flower garden

The Fore-court and of a Farm House Garden

A NOVEL TREATMENT THAT WILL LEND DIGNITY TO THE SMALL COUNTRY PLACE—THE USE OF ROUGH STONE WALLS—WHAT PLANTING TO USE—ARTHUR A. SHURTLEFF, LANDSCAPE ARCHITECT

ELSA REHMANN

THE house stood in the midst of fields in a small community in Massachusetts not far from Boston. The walled-in fore-court or dooryard great tree with its enormous spread of branches. It dwarfs the house and creates thereby the homey impression so often unconsciously attained in old farm yards through the planting of one large tree near the front door. Here it stands so far from the house that it does not demand the sacrifice of light usual in the older examples.



The hooded, walled-in seat is reminiscent of English cottage gardens

was designed to separate the house grounds from the wide farm lands on every side.

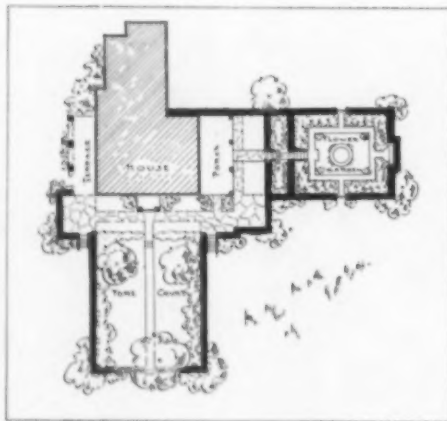
It is an approach or introductory passage from the road to the front door. The drive and roads to the barns are thus separated from the main entrance to the house. It is a well-kept, graded place. The stone walls make a strong dividing line between the smooth lawn within and the sloping rougher ground without. The rough field stones found in the immediate neighborhood, if not actually on the place itself, made a wall which was comparatively cheap as well as one which is in keeping with the farm surroundings. The picket fence in front is harmonious with the Colonial character of the house.



At the entrance gate stands a great tree, with its enormous spread of branches. It dwarfs the house, but does not demand a sacrifice of light

Ampelopsis is growing over the wall to soften the surface. Lilacs are massed at the corners near the road, mock-oranges are grouped near the entrance gate and poplars are placed in two balancing groups just outside of the wall near the corners of the house. These shrubby groups break the stiffness of the wall.

At the entrance gate stands the



The fore-court is an interesting free interpretation of an old Colonial garden form

ing plants whose color will be refreshing against the gray of the stone.

As the front yard is considered merely as an approach—a place to walk through—and not a garden to linger in, it is essential to make it simple enough in arrangement that it can be grasped in its entirety at the first glance.

Groups of lilacs, so familiarly associated with every farm house, are placed upon either



side of the front porch. The hedge along the front of the house on the other side of the path separates the immediate house front from the fore-court proper.

This fore-court, placed there to conform with the Colonial style of the house architecture, is an interesting free interpretation of an old Colonial garden form. The front doorway garden, as it was found in old New England and still very sparingly found in some conservative communities, is a form derived from the English fore-court, of which the English dooryard garden is a humbler, more intimate and less formal expression.

The front fence stood near the road, the side fences extended back to the corners of the house. It was therefore rectangular in shape, taking its dimensions from the width of the house and the distance it was placed back from the road.

At first the enclosure of the Colonial fore-yard had a purely practical reason for existence. It preserved from the inroads of cattle a little clearing where the housewife could grow a few flowers. But soon it became something more. There was an attempt to create a little air of formality for the approach to the front door. There was a nice striving to separate the small orderly garden from the rougher fields and big expanse of surrounding country.

These same reasons inspired the repetition of this Colonial garden form for this country house. In its simple arrangement there is a message to every dweller in rural communities, a suggestion of how to reinstate the farm house to its former dignity by appropriate garden surroundings.

These front gardens are found not only on old New England

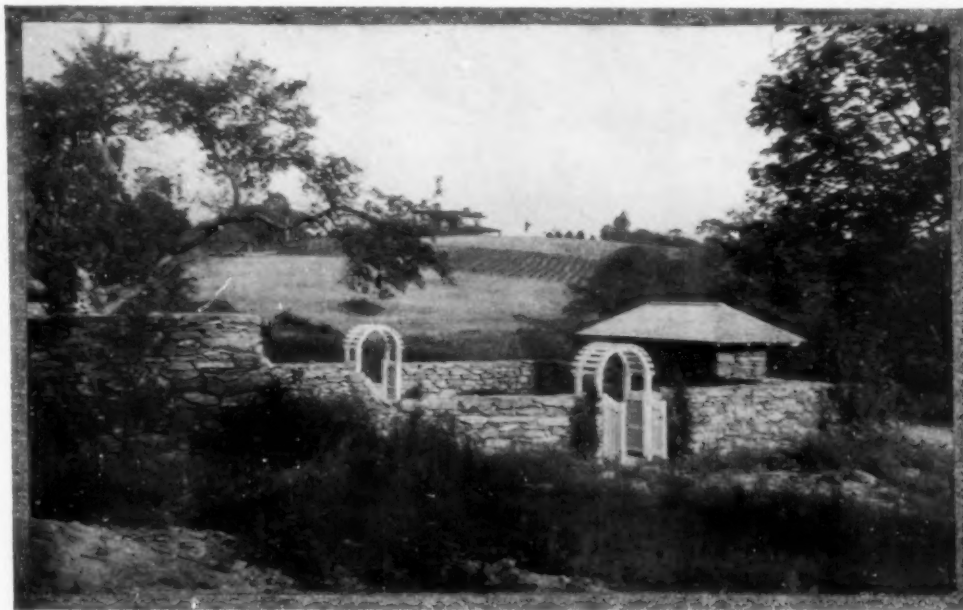
farms, but in old New England villages and towns. This smaller and simpler form has a message for every suburban dweller. It shows how to give the approach to the front door a certain nicety and reserve by separating it from the service walks and drives as well as from the street. The enclosed front garden would regain its former privacy, its separateness from the street, and become again our individual expression of welcome to the house.

To one side of the house the ground slopes off quite steeply, and on this slope a small garden space was won from the surrounding farm lands.

There are three levels. Highest is the terrace just outside the living-room porch. Going down five steep stone steps we stop on a narrow walled strip not more than ten feet wide, where

roses grow and tumble over the wall. Down another five steps, and we stand in the garden proper. It is a very small garden, walled in with the same stone used in the enclosure of the forecourt. The enclosure is one of the main essentials of a garden, for by shutting it in, the garden is relieved from competing with the bigness of the surrounding country and its varied nature.

The trees overarching the wall add much to this enclosure. There is a charming hooded seat built into the wall which reminds one of seats in sheltered corners of English gardens. The two arched gateways make ample provision for getting around the grounds. Without them the garden might seem a little cramped. A round pool stands in the center of the garden. The gentle trickle from the jet of water makes a pleasant
(Cont. on page 458)



By shutting it in, the garden is relieved from competing with the bigness of the surrounding country and its varied nature. The overarching trees add much to this enclosure



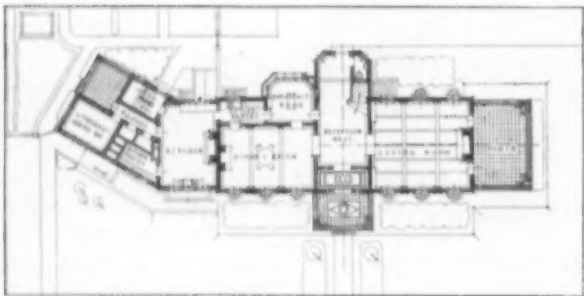
A round pool stands in the center of the garden, with four groups of Japanese iris. At each corner of the grass plot is a *Pinus mugho* specimen



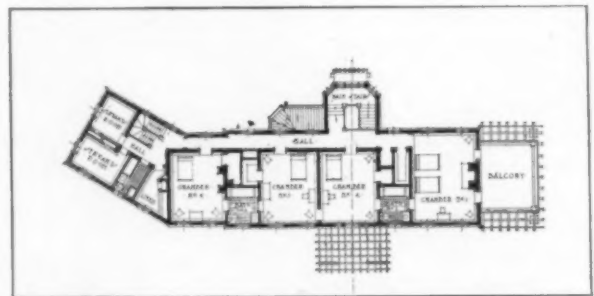


A perfect adaptation to the setting has been attained by making the general lines of the house follow the contour of the surrounding land. The treatment of the grounds has been closely studied, with a consequent enchanting harmony

THE RESIDENCE OF EDWIN H. BROWN, GROSSE POINTE, MICHIGAN



George W. Graves,
architect



Although divided into distinct units, there is an ease of access from one part of the house to the other. The isolation of the service department is well handled

On the second floor the house-length corridor is an attractive feature, especially since it opens directly on the main stairs that are at the rear of the building



Careful study of details has spelled success, as witness the pergola entrance and the trellis on either side which make the entrance a related part of the house



The same study has been applied to the interior, as shown by the living-room mantel and its flanking windows. Gaily-colored cretonnes brighten the room



Good proportions, good light and good paneling characterize the dining-room. The details of furniture and decoration are well chosen and arranged



White enameled furniture is always a safe choice for the breakfast room, especially if, as here, the walls are relieved with a flowered paper



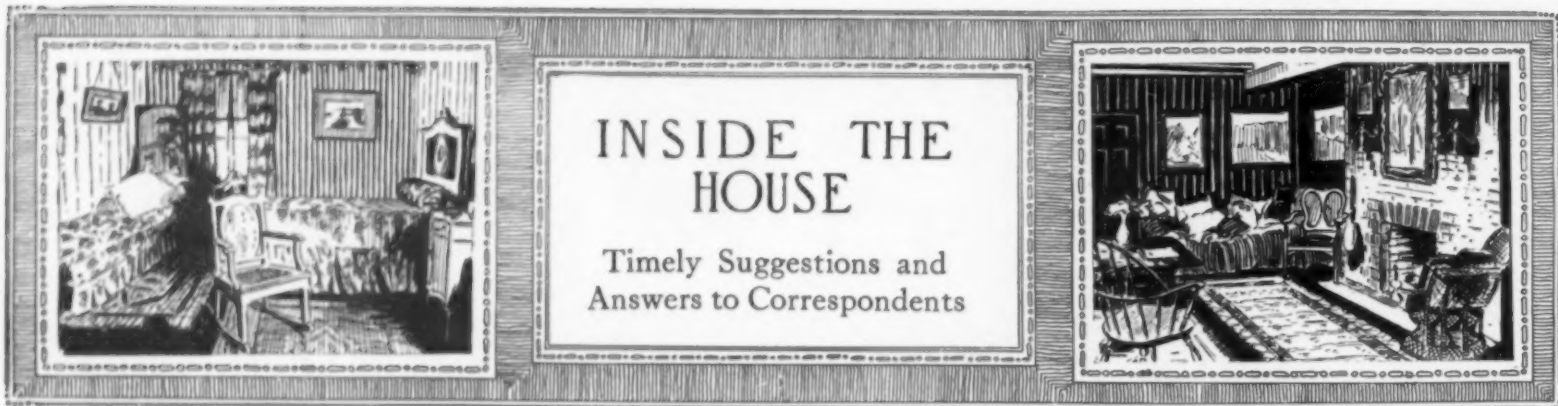
Another view of the dining-room, showing the French doors that give access to the hall. The built-in china closet is an harmonious fitment



The hall runs through to the rear, the arch dividing the stairs and rear entrance from the front, which is a distinct reception hall



The proportions of the drawing-room make the beamed ceiling a distinct success. Moreover, the room is large enough to permit a diversity of furniture arrangement, as shown by the furniture groupings. Here, again, notice the effectiveness of the cretonnes



Up-to-Date Willow Furniture

WILLOW furniture always suggests a welcome, an invitation to stop and rest awhile. And this furniture has wonderfully improved in style of late. Intricate ornamentation and fancy basketry weaves are almost never seen now. Surely this is evidence of a fine artistic sense, that we are glad to get away from over-decoration to the things which suggest simple living.

With her plans for refurnishing the summer home or the year-round home, happily outside the city, the housewife always associates these fittings. Willow has a quiet, reposeful individuality that can take its place along with mahogany or other massive woods. It is charming for a single room and even for an entire cottage if chintz or cretonne cushions and hangings supply the essential splashes of color.

The pieces of willow furniture that are illustrated here are first of all useful, and their lines are artistic, simple and beautiful to the eye. They are distinctly practical in that each piece, separately or with others of like style, can be used in living-room or hall and then moved out to the

veranda when warm summer days bring their call for the outside. Those ease-loving ones who are not lured by the strenuousness of golf, tennis or such activity may just as surely live in the open with their favorite chair, book or sewing basket in a sheltered nook of the outdoor living-room.

Such constant and wholesome use of the veranda was impressed on me by friends who have a commodious summer home in Maine. The unusually spacious veranda, not unlike the old-time "gallery" of Southern mansions, extends around four sides of the house. There are two full-size dining tables, built especially for this outside living-room, one on the north-side veranda and one on the south veranda, so that on whichever side the sun shines too directly or the wind blows too strongly the family may dine at the other table and not lose one bit of outdoor joy. This has always impressed me as being one of the best-laid summer plans I ever knew. Picture the delight of having morning rolls and coffee surrounded by song birds and glistening dew, and the evening meal lighted by the glow of the setting sun!

In a dignified hall containing a few

handsome pieces the introduction of the circular, three-part hall seat, which is here illustrated, would soften the austerity of the heavy, darker wood. The cushions are of gay-flowered chintz. Each separable part is a generously comfortable seat for two and, being very light, is often carried outside when the porch party receives chance additions about tea time. Many prefer to leave the willow unstained when it is used with mahogany. The contrast of the pale yellowish tone with that of the dark wood is far more effective than stained or painted willow in an attempted harmony.

The sweeping curved back of the arm-chair has the comforting width without the heavy looking height of the fireside wing chair. A brightly colored cretonne cushion lines the chair back, and another, deeper and softer, covers the seat. Inch-wide black and white striped linen or cretonne scattered over with bold futurist colored fruit and posies give handsome effects for cushions where the chairs are stained or painted and decided contrasts are desired.

A refreshment taboret is one of the new accoutrements from which a hostess may



The tea wagon is indispensable for porch living. Light in weight and easily moved about, it can be trundled even out on the lawn.



Porch chairs should be wide, deep and well cushioned. They should also be light enough to drag about and upholstered with a gay fabric.



The refreshment taboret is supplied with a stout handle, basket fashion. Stock it in the pantry and it can be readily carried to the veranda.

dispense cheer to her porch guests and to her family as the members assemble toward the close of the day. It is supplied with a stout handle, basket fashion, so that it may be stocked with delicacies in the pantry and easily carried to the veranda. The top of the taboret is divided into compartments for tea glasses or wine bottles (or ginger ale), hence no sliding or spilling, and the lower shelf is reserved for such things as the sandwich plate, wafers, lemon and ice bowl. Somehow this taboret for cooling drinks seems to suggest even less formality than the tea wagon. Perhaps the wickerware and the basket handle make one think of a sort of picnic luncheon. But the tea cart has its own special appeal, and the illustration shows a design in willow that will be a delight as well as a convenience among other summer fittings for the hospitable hostess.

The artistic Chinese bird cages that are seen in various art collections no doubt have been the source of inspiration for the attractive willow cages that American craftsmen are now making. These beautifully wrought bird houses are a gladsome change from the gaudy gilded affairs that sheltered our feathered songsters for so long. Varying degrees of architectural skill are noted among them, and the tall standard from which the cage is often hung contributes to its beauty by bringing it into relief from wall or surrounding objects. The cage and standard here illustrated are of unusually attractive design which adheres to strict simplicity of line. These cages are large and small, to suit the many sizes of birds, and some of the more expensive ones are tinted in shades that exactly blend with those of its feathered occupant.

Answering the need of a table and of a writing desk is the corner table, the desk part being evidenced only by the compartments for stationery. Abundant room is provided for current papers, magazines

and books. This, too, is at home and is harmonious on the porch as well as in living-room or bedroom.

A bowl of gold fish or a vase of flowers, always in clear glass, on the hour-glass taboret gives a delightfully decorative effect because of the thick glass top instead of the usual one of woven wicker. A



The latest form of teapot is so constructed that the tea can be properly brewed and then turned so that the leaves are held in the upper compartment

dainty teacup, in fact any lovely object that is placed upon the lake-like surface, lends additional beauty to the taboret.

Since the Victrola is used so much for dancing, many people buy the less expensive kind without the stand. To supply this need there is the wicker stand on wheels and with compartments for the records. The result is a Victrola and stand for the country cottage or dance room at comparatively little cost.

Arranging Pictures

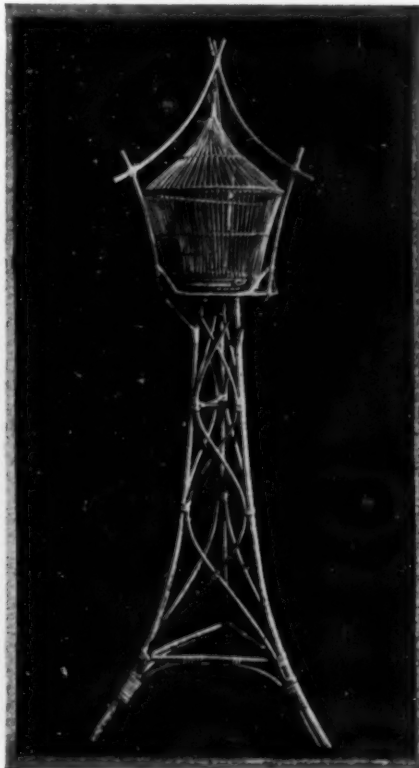
MANY housewives make the mistake of thinking that a good picture will look well in any place and in any style of frame. Others recognize the fact that a fruit piece looks well only in the dining-room, and that pictures of authors belong in the library, or wherever books are kept. Even when the subject of the picture is in accord with the room, such particulars as the angle at which the light will strike the picture, the height to hang it, the background and the kind of frame must be considered. Few pictures can be shown to advantage against a large-flowered, highly colored wall paper. Test out the pictures and see which ones are most effective hung flat against the wall, for tilting destroys the high lights in some pictures. Find out whether the light will make a glare on the picture, making it almost invisible at certain hours of the day. Notice, too, whether shadows in the pictures point away from the light, as would be natural. Two hooks are better than one for hanging, avoiding the break in lines caused by having the wire come to a point on one hook. Many things go to make up the study of picture hanging, but once understood, pictures seem to take on a new meaning and value.

A New Teapot

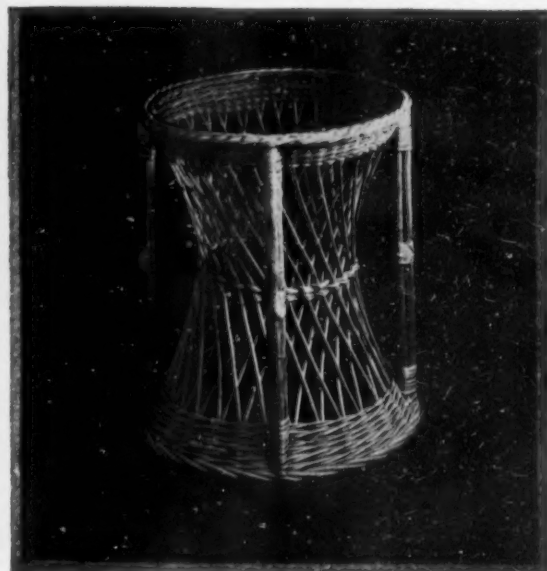
A HOUSEKEEPER'S supply of china and tea things is like the collection of an art connoisseur in that neither is ever complete. And here is illustrated an odd teapot that will put another temptation in her way. There is a perforated compartment at the top for the tea and the water is put in the lower part. Then the pot is tilted over on its back, resting on the tiny legs while the tea draws. When strong enough, the teapot is turned upright again and the tea is drained off the leaves.



A triple seat of wicker is especially attractive in the hallway, where it will be found perfectly congruous with the heavier furniture



Give the bird an airing! For the corner of the porch, what could be more useful and decorative than a cage and stand of wicker



Staunchly built and with a glass top, this wicker stand will prove perfectly serviceable and decorative both inside and out of the house



GARDEN SUGGESTIONS *and* QUERIES

CONDUCTED BY F. F. ROCKWELL



Summer Care of the Lawn

ONE important job which requires weekly attention throughout the summer is the care of the lawn. Many persons make the mistake of keeping the lawn too closely cut, with the result that in dry weather the grass roots are exposed to the baneful influence of the hot sun and of drying winds. Cut your lawn frequently, but do not set the machine too close. To keep the lawn looking clean at all times have a grass-catcher attachment on the mower. A careful watch for weeds on the lawn should, of course, be kept. Cut them out well below the surface with an old knife as soon as they are large enough to be seen. A roller on the lawn is advisable, but it should be used judiciously. Lawns that have been rolled for a long time are likely to become over-rolled; there is "surface cohesion" or close packing of the top of the soil, which prevents the admission of air and healthy root development. The remedy for this condition is the use of the spiked tamper. A home-made one which will answer the purpose may be made by taking a piece of 2" plank some 12" x 12" and inserting 4" spikes an inch and a half or two inches apart. It is better to bore holes a little smaller than the spikes before driving them in to prevent splitting the wood. Perforate the whole surface thoroughly with this, give a top dressing, lightly rake it in and water the whole thoroughly late in the afternoon. For an excellent summer top dressing mix a bushel of good garden soil and a bushel of natural humus. Spread out in a low, flat heap, add a mixed dressing of high-grade lime and mixed fertilizer or of bone with a couple of handfuls of Nitrate of Soda. Mix this thoroughly and let it stand for a few days. Pulverized sheep manure may be used in place of the fertilizer. In this case use several quarts to the two-bushel heap. Mix this thoroughly and let it stand for a week before using. Sprinkle this lightly over the lawn, adding seed to the bare spots, and give a thorough watering, following with a rolling as soon as it has dried off.

Constant tillage during the growing season is also essential; never let your soil

form a hard surface crust, as it prevents the air from penetrating the ground and thereby retards the growth of your plants.

The presence of humus in the soil, in the shape of well-rotted horse manure that has been finely pulverized, is of great assistance in the prevention of surface crusts. The natural manure being largely humus (decayed vegetable matter) is of vital importance in maintaining and increasing the fertility of the soil.

Humus is essential to plant growth, and the action of the soil towards moisture holding, heat, light and penetration of the roots is greatly influenced by it. The mechanical cultivation of the ground is more easily accomplished where humus predominates. All the plant foods—nitrogen, phosphoric acid and potash—are more or less controlled by humus. Well-rotted horse manure is extremely valuable for the available plant foods it contains, including bacteria, those micro-organisms



A window arrangement that will permit access to the flowers and yet prevent insects from entering, can be made in this way from mosquito netting

that have the power to take nitrogen from the air and convert it into an available plant food. Bacteria also store up surplus supplies of nitrogen in the form of nodules on the roots of leguminous plants. It is conceded by all growers that rotted horse manure is invaluable in properly preparing the soil when a garden is contemplated, to insure good results.

Care of the New Asparagus Bed

Do not let your taste for this delicious vegetable tempt you to keep on cutting from the new bed. Though an occasional dish may be had the second and third year after planting, the cutting should be very limited, as the plants have not yet reached maturity and established themselves sufficiently to withstand the strain upon their vitality which is made by continuous cutting throughout May and June. Stop cutting early, and then remember that you now have to begin to grow your crop for next spring. Cultivate between the rows thoroughly; give a good dressing of manure or fertilizer and work it in, and be sure to get all the weeds out from between and around the plants with the hand hoe. The result should be a vigorous growth of beautiful, feathery, green stalks which will shade the ground, so that you will have little trouble with the weeds during the latter part of the season. If the asparagus beetle puts in an appearance, spray thoroughly with Arsenate of Lead. This, if used in time, will be effective.

The same treatment accorded the rhubarb patch, which is usually one of the most neglected spots on the place, will result in your being able to gather next spring stalks which will make you realize what the quality of rhubarb really is when properly grown. The small, stringy stalks from overcrowded, neglected plants, which one generally sees, absolutely fail to do justice to this truly delicious vegetable.

Another summer job which demands attention about the place is pruning. The spring and fall prunings are, of course, the most general, but there are a number of things to be looked after through the summer. The rambler roses, for instance, which are usually well through blooming

towards the end of this month, should be pruned as soon as the blossoms go by. If the plants are beginning to crowd, cut out the oldest canes and trim out some of the others. Such shrubs as flower before mid-summer should also be put into shape as soon as the blossoms go by. The pruning given will depend very largely upon the way in which the plants are being grown, and whether they have been neglected during the past few years or not. Most shrubs which are given attention every season will require very little actual pruning, especially if they are planted close together or in mass. Individual specimens should be cut back and trimmed up so that they will grow in symmetrical shape. The pruning shears can be used to advantage also among many of the flower beds. Such things as dahlias and chrysanthemums, asters and other branching plants which, if left to themselves, are apt to bear a large number of medium-sized flowers. For big blooms cut off more or less of the side growth, and also to obtain the very biggest blossoms disbud the stems on which you want them, leaving only one or two buds to each.

Arrange Now for a New Strawberry Bed

The way to have strawberries to perfection is to set out a new bed each year. If the varieties you have are satisfactory, you can just as well supply your own plants for this purpose. As the old bed ceases bearing, cultivate out between the rows and get the soil into good condition for the new runners to root in. The way to get the best plants is to sink a small pot under each of as many runners as you want to plant, and hold the runner in place over each with a clothes pin or a small stone. As soon as the plant has rooted set out the runner just beyond it and also sever it from the parent plant. Plants grown in this way will be fine, strong and well rooted and can be set out in late July or August.

If the bed has shown any sign of blight

or rust spray any that are to be kept over through the winter, whether they are old or new plants, with Bordeaux mixture. Buy a few of some of the fine new varieties, such as Early Ozark, Chesapeake, Early Jersey Giant and Late Jersey Giant and Fendall. Even if you only get a dozen or so of potted plants they will give you some fruit next season and an abundance of plants to set out next year.

Save the Water in the Soil

During the hot, drying days of June and July the soil moisture evaporates with astonishing rapidity. This is because minute holes or tubes form in it through



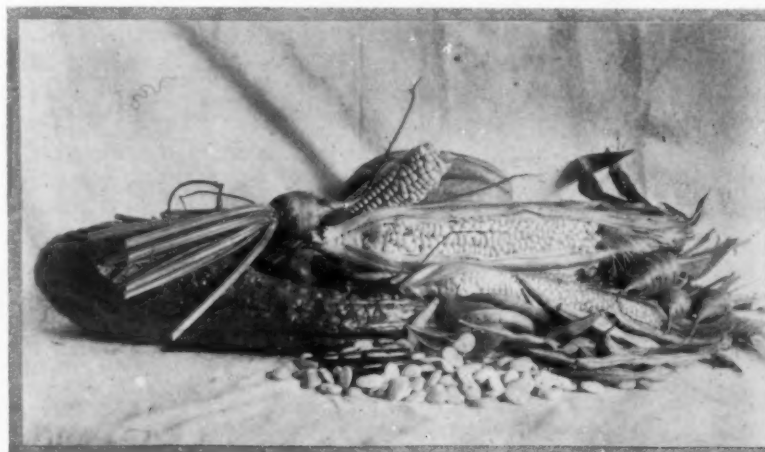
Parsley sowed the second week in June makes a thick bed before the warm weather is over and will thrive until November

which the water is brought up from the lower layers to the surface by capillary attraction. You should plan to get over all of your garden, flower beds and every bare surface in which things are growing as often as possible, at least once in every two weeks—and if you can make it once a week so much the better. Stir the

ground lightly, using the scuffle hoe, wheel-hoe, or hoe, as conditions allow, to keep the surface an inch or so finely pulverized and as dry as possible. This "dust mulch" serves much as a dressing of straw or manure would over the surface in keeping the ground below it moist, and in preventing the waste of water from surface evaporation. For working around plants and flower beds where the wheel-hoe cannot be used there is a hand hoe made which has a number of teeth with broad, flat points instead of a regular hoe blade. This is a very handy and efficient little tool and will prove to be one of your favorites throughout the season. In using the wheel-hoe substitute the hoe attachment or the rakes for the cultivator teeth and work shallow, stirring an inch or so of the top soil. If you have a weeder attachment use that in addition. For crops that have begun to fill up the rows so much that they can no longer be "straddled" by the double wheel-hoe use the single wheel, and when even this cannot be got through the rows without injuring the plants, use the scuffle or push hoe; if no weeds have been allowed to grow you can get over the ground with this almost as fast as you could with a wheel-hoe.

Watering

No phase of gardening has undergone such radical development during the last few years as that of applying water. The old methods of attempting to "water" the garden by hand with an ordinary garden hose was next to impossible and in many instances resulted in actual damage instead of benefit. It not only consumed an endless amount of time in handling the hose nozzle and dragging the hose about, but was extremely wasteful. Three distinct types of apparatus for applying water to a considerable area at a time, almost automatically, have been developed. First, there are several new "sprinklers," each so far ahead of the old lawn sprinklers that they are in a different class. They may be used either singly and moved about, or in a series and kept stationary.



An example of June planting and autumn reaping: squash, corn, beans and carrots all planted early in June



String beans can be planted as late as the second week in June and be ready for picking six weeks later



EDITORIAL



MAINLY ABOUT DOGS

THERE must be something radically wrong with the man who does not like dogs. Probably he has never in his life known and loved a dog, or—and this is worse—probably he has never had a dog know and love him.

Entering upon summer we come to that season in which dogs play a distinct rôle, when the dog looms large in our out-of-doors life. For it must be said, in all fairness to the dog himself, that he rightly belongs to the out-of-doors; to keep him in a city apartment is to keep him in prison. And just because he plays this leading rôle in the life of the house and the garden have the pages of this magazine been opened from time to time to him. In the months to come there will be even more about him, because more and more must we acknowledge that a dog is as much a part of the country house as the furniture, as necessary to the pleasures of children as Uncle Remus and Robinson Crusoe, as indispensable to grownups as chairs to sit in and books to read.

Among the papers found recently in the attic of an old Philadelphia house was a faded account book containing various and sundry entries covering the space of a hundred years. The entries were the names of the pets the family had had in those generations. Here were listed the horses, their names, histories and the dates of their departure from this sphere of activity. There were listed also the pet sheep, a tame crow, several turtles, a few cats, and—most important of all—an imposing array of dogs. Looking over this unique record one could visualize the simple family joys of those ten decades, the contributions of fidelity and watchfulness made by these dumb things that, having served their masters with unswerving faith, were, like their masters, in good time laid to sleep.

Now, save the horses, there was very little mention made of pedigree in that list. And this leads one to marvel at the manner in which human fads and fancies create or destroy the popularity of breeds. One wonders, do the fashionable folk who affect dogs to-day do so because they like dogs, or because they like to be seen with certain breeds of dogs? Do we like dogs for their own sakes or for their pedigrees? Do we cherish them for their fidelity, or for the *rèclame* their owning reflects on us? Meanwhile the dog, with a fine sense of the necessity for keeping his place, continues to look upon his master as his liege lord and god.

In his essay on "Our Friend the Dog," Maeterlinck has said many true and beautiful things. By leading the reader into the thoughts and speculations those kindly creatures may have about their masters and their masters' lives, he has opened many an avenue of pleasant reflection. The thought that remains most vivid after reading the essay is that in which it is said of the dog that he is the sole creature of the lower orders which has striven to bridge, through kindness and courage, the great gulf which lies between man and the dumb beast. Now, that very getting close to dumb creatures is one of the main purposes of country living. We all need it from time to time. In the cities we live with brick walls and paved streets and trolley cars and other men and women. In the country our feet tread a path to a new world and we enter into cities where men do not dwell. Lord mayor of those strange municipalities, the dog flings wide the gateway to us, bids us enter, gives us the freedom of his cities. A guide to another world is that four-footed friend. Perhaps that is why so many of us cherish his friendship.

What the dog thinks of us, can, under our present limitations,

be only a matter of conjecture. What we think of the dog, on the other hand, can be quite a salient factor in our lives. According to the attitude a man holds toward his dog can you judge his attitude toward men and women, for the same loss of temper that would make him cuff a dog would make him cuff his child. The dog then stands as an indicator of our relations with those who, either through age or station, are subject unto us.

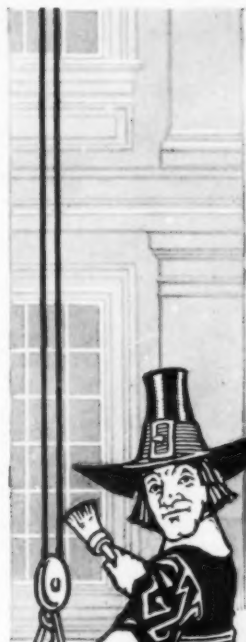
"Love me, love my dog." Never were truer words uttered. The gruffest of men changes face if you love his dog. To some it is even: Love me, love my hero, as could many a wounded soldier attest these days and many a Belgian mitrailleuse crew.

Whether or not dogs have souls—a question often prattled over teacups by otherwise unemployed minds—need never come into one's calculations. That eminent divine John of Patmos is the authority for saying that without the gate of Heaven are dogs, and he also lists with the canines some very undesirable though picturesque folk. Doubtless he had once had a regrettable encounter with a scavenger dog of the type that runs amuck all through the East. Doubtless there are many who would choose the company of their dog to the company of many types of persons who are listed as being on the inside of the aforesaid gate. That need never bother us. This we know, however; soul or no soul, the same forces that impel a man often enough impel the dog—and vice versa. Despite his much-vaunted soul and spirit, man is not raised so high above the dumb creatures that an appreciable amount of his fidelity and tenderness can be attributed to a power other than those animal instincts which impel the dog to be faithful and tender. The same instincts that bid us preserve ourselves and our generation from harm and destruction, that make us work for food and shelter, that make us play, cause the dog to fight for us and for his own, cause him to cherish the choice bone, cause him to dance and run with joy.

The Russians, it would seem, are the only race that has considered the services of dumb beasts of sufficient worth to make them an object of prayer. Of all the liturgies, the Greek Orthodox alone gives them a place. The prayer, beautiful in its simplicity, is as follows: "And also for those, O Lord, the humble beasts who with us bear the burden and heat of the day and offer up their guileless lives for the well-being of their countries, we supplicate Thy great tenderness of heart. For Thou hast promised to save both man and beast, and great is Thy loving kindness."

Among the men least given to sentimentalizing is Rudyard Kipling, yet he it was who penned the stern admonition: "Don't give your heart to a dog to tear." The warning might seem needless, were it not a fact that most of us do give our hearts to dogs, and that eventually we know what it is to experience a heart wrench over our separation from them. We can see our grandmother's chair carted off to the limbo of the dust-bin without a qualm, but we don't want to stay around the house on the day that the coachman delivers the *coup de grace* to a faithful old dog. On that day we may make a silent vow that we'll never possess another dog, and we suffer with tight collars for some days after. Then—wonder of wonders—our vow fades into nothingness, and, before we realize it, a new dog is prancing his way into our hearts!

There is no overcoming the persistent friendship of a dog. We capitulate before the siege has begun. The dog has his place in our out-of-doors life, and the only way to enjoy that life to the fullest is to share it from time to time with him.



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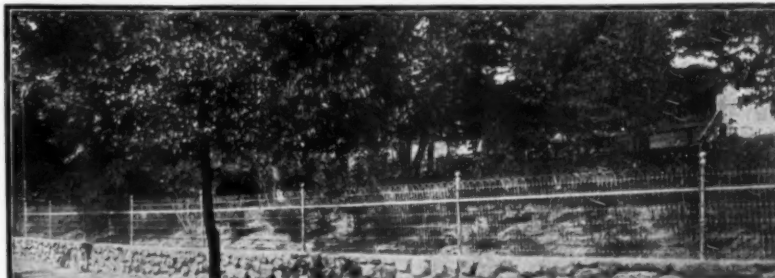
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The fatal V-Shaped Crotch!

Looks sound and healthy—to the untrained eye. But the V-Shaped Crotch is structurally weak, doomed to premature destruction, and

Only real tree surgery can save a tree of this type from eventual destruction!

On nearly every place there are some trees of this weak crotched type. There is only one safe thing to do—have them examined and attended to *at once*. Every wind splits a weak crotch a little further. Decay eats its way from this split down through the trunk. It becomes weaker and weaker and then—crash!—the tree is ruined. See picture at left which is typical of millions of trees.

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Real Tree Surgery is Davey Tree Surgery

Davey Tree Expert Co., Kent, O. Gentlemen:

I want to tell you how pleased we are with the work done by your representative on the trees on this estate two years ago.

Unfortunately, these trees had been worked on four or five years ago by some New York concern. After their work had stood two or three years, it proved to be absolutely worthless. The decay had continued to eat its way behind the fillings and many of the fillings were broken and in bad condition, proving their work both unscientific and mechanically wrong.

Just about two years ago, we engaged your concern to do the work all over again. We were highly pleased with the work at the time because of its apparent perfection, both scientifically and mechanically. But, now, after a lapse of two years, I can say to you that this work done by your men is absolutely perfect. It is, in my opinion, a model of tree surgery. I cannot recommend it too highly nor express too strongly our appreciation of the great service rendered in this connection by your admirable corps of men.

JOHN T. BURNS, Supt. of the
Miss C. A. Bliss Estate, New Canaan, Conn.

The V-Shaped Crotch is only *one* fatal weakness of trees. Many dangerous tree conditions remain hidden—and can be discovered only by the trained eye of a real tree surgeon. Don't wait until it is too late to save your trees. Write today for free examination by—

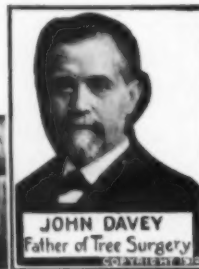
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constant wind pressure gradually splits it. Decay enters the crack and this dangerous condition results. It's the beginning of the end.



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Cabot's Creosote Stains

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which is as cool and brilliant and soft as new whitewash, and as lasting as paint. The stains are rich and handsome, and the combination is harmonious and appropriate.

You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.

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Cabot's Stucco Stains—for cement houses



Walls finished with Cabot's Old Virginia White Roof finished with Green Cabot's Creosote Stains. See May House & Garden.
"We are using the same stains on other houses with equally satisfactory results."—Herbert Foltz, Architect, Indianapolis

The Choice of a Vacation Home

(Continued from page 410)

house. The stairs are often made to open directly into the living-room, thus doing away with the necessity for a separate stair hall.

The dining-room, if separate, should be planned to face the north or east, so as to obtain the morning, rather than the evening, sun and to be shaded at all events from the midday heat. The kitchen may be made as small and compact as a ship's galley, since many servants are a nuisance rather than a help to vacation life, while the pantry need only be large enough to hold the china-cupboards and sink. These two rooms should be placed away from the sun, and if there is a large tree to shelter the kitchen porch, so much the better. A cellar is seldom a necessity when no heater is desired, but often advantage may be taken of a sloping site to build one at slight expense. As a storage space for fuel and provisions it is worth including in the building of the house.

The bedrooms of the vacation home may be made smaller and less luxurious than those in town houses, since less waking time is spent in them, but they should be made bright and attractive with fresh colored hangings and rugs. On the other hand, there is an increasing necessity for bathrooms, which are welcome adjuncts of country life, and no pains spent upon their planning will be wasted. Shower baths are particularly appreciated after a hard day's tramp or a strenuous game of tennis and should be included in the bathroom equipment. Good ventilation of the sleeping quarters is essential and, more than that, the attic or roof space should always have openings to allow the access of the breezes. An appreciable lowering of temperature in the bedrooms will be noticed if this latter point is observed.

The decoration of the summer home has made rapid strides during the past decade and it is now as carefully schemed out as that of the town house. The latter has even taken lessons from country life and an element of freshness is being introduced into city interior decoration. In the country house no definite style need be followed if harmonious shapes and colors be selected. Indeed, one of its charms is the relief it gives to the eye from the studied decorative schemes of city houses. Furniture of willow or rattan may be combined with simple Colonial mahogany or with Tudor oak. An infinite variety of choice is allowed in the hangings; the wealth of English and Austrian chintzes and printed linens is remarkable. The walls to contrast may well be treated with distemper which has the color values of a pastel, or, if wallpapers be desired, the combination can be reversed and the hangings made of strong, plain colors.

It is quite possible to carry this same note of freshness and simplicity throughout the house, keeping all in perfect taste

and yet having a wide range of choice in fabrics and furniture. Of course there will be considerable variation in the interiors of each different type of house, since what would be appropriate for the furnishing of the mountain camp would scarcely fit the seaside bungalow, but for each problem one may find in the shops a host of suggestions.

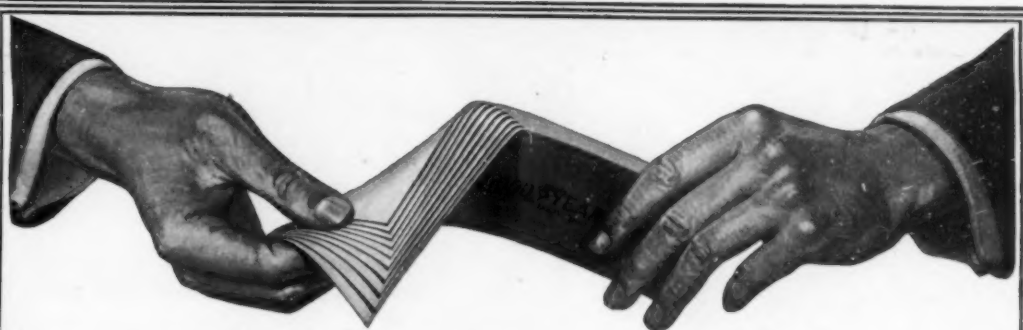
Not an unimportant part of the summer home is a garden, whether it consist of merely a few hardy flowers or be a place where in the cool of the early morning one may spade and hoe. In too many vacation homes the architectural appropriateness of a garden arrangement is not realized. It really may be made to be the connecting link between the house and the landscape and should be as carefully studied as the planning of the house itself. Even if it is merely the question of a few paths and shrubbery that need little or no care it is part of the design of the house and can make or unmake the final effect. It is manifest that nothing will ever compensate for the lack of a naturally advantageous site or that the untamed beauties of the country can be improved upon. But no matter how ideal the location, there must exist some evident connection between it and the house.

The building of a summer home is, even when reduced to its simplest terms, full of petty trials and vexations; but when all is finished and it is ready to move into, these are quickly forgotten, and after a time, and the weather beginning to mellow its new and raw appearance and to tone it slowly and gradually into its surroundings, it begins to take on a personality that is full compensation for the time and trouble spent in building.

Restoring in Less Than a Year

(Continued from page 415)

but when the beds were ready we put in the seeds or transplanted from boxes in which we had sown seeds requiring more delicate handling. Although we knew really nothing about gardening, we did know about color, and planned to have our colors massed in harmonious groupings. So our crimsons melted into rose and rose into paler pinks and blue, that seemed to have shadows of pink, and so on into the violets—the crimson and white phlox were alongside of the wonderful violet-pink of the stocks, the old-fashioned gilly flower and the rich blue of the Chinese bell-flower; the glorious Canterbury bells in pink massed with the crimson and pink snapdragon—along the fences and in the background were the rich yellows, orange and browns of the marigold and calendula with the tall artichokes and helianthus in the extreme back; against the heavy green vines and shrubbery were the stately hollyhocks and dahlias; in another luxuriant bed were poppies and bluets in such profusion they were begging to be gathered, the tall blue larkspurs with the little



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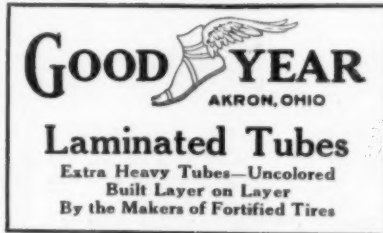
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dwarfs hugging their roots and alongside the sturdy foxglove with its luxuriant bed of leaves at the foot of the flower stalk, and so on through a lot of others.

The pergolas and trellises were planned and completed, and at each post were planted pink rambler roses, so that in time there will be a bower of roses; but to make it beautiful this first year, we used the wild cucumber vine, which is more wonderful in growth than Jack's famous beanstalk. The wild cucumber seed must be planted in the fall, therefore, anticipating, we had put in quantities the previous autumn; when pergolas and trellises were ready the vines, just peeping out of the ground, were transplanted; over the top of the large pergola we put the large meshed wire, so the entire pergola was a mass of tender, beautiful green, making most delightful shade and softening the garishness of so much white paint. There was a tea house built, which in a short time was completely covered with the cucumber vine. The service yard was divided from the main part by a trellis of strips; on the inside of this we put tomato plants, which were trained up the trellis, and planted artichokes on the outside.

At the gate on the front street one stepped down onto a quaint attractive brick walk, not an ordinary brick walk, but made like stepping stones, arranged in squares of the lovely old brick which age had so beautifully colored, the bricks laid both horizontally and perpendicularly in twos with the short grass peeping up between. This led to and through one of the pergolas, giving quite an old-time air to the place. The other walks and drive were made of scallop shells, which crush easily, making a clean, well-drained walk.

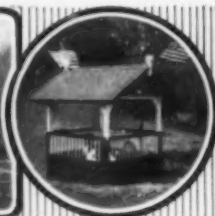
By the middle of June all workmen had left and we felt that we could take things more quietly. In looking over the place it seemed impossible that with the exception of the new kitchen, cellar and back porch, which were built the previous November, all the improvements had been made since the first of April—the interior alterations, repairs, papering, painting, inside and out, the pergolas, trellises and tea house built, painted and partly covered with vines—the ground graded, sodded, weeds removed, seeded and fertilized, the walks and drive completed. By July the garden was a mass of bloom and continued so until November. By August first, the pergolas were not only completely covered with vines, but a mass of feathery white bloom, some of the vines trailing far up into the trees and second-story windows. The quaint old house, painted white, with green blinds, the pergolas white with their green covering of vines and feathery bloom; the various trellises, the tea house, the rickety and unsightly old barn made beautiful by its generous covering of vines, the lawn, the flowers—it really seemed incredible that so much had been accomplished. Magic! some say; but it was



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sheer determination, hard work and pleasure in the work. We secured possession of the place in October; in November the kitchen, cellar and back porch were built, but not finished; April first the workmen began again, and by the middle of June we were living in the house, everything finished and in order—the garden finished and in bloom!

Simplicity in a Suburban Home

(Continued from page 418)

first requisite of a successful trellis room is a nice relationship, an interesting spacing of the horizontal and vertical strips.

This trellis room is a small room for a large house like this, where there are many rooms and plenty of space, but one can never use it without feeling what a boon it would be in many a house in lieu of the ordinary reception room. It has a cozy window-seat, with a high back and a broad window-sill in back of it with interesting double casements. It has an interesting wall treatment, suggestive of an out-of-doors atmosphere, appropriate as a setting for house plants and flowers. It has lovely soft colorings with which to delight the guest and a welcoming tea table. How much better, purer, truer, a little room like this is for the receiving of visitors—to whom you cannot offer the full hospitality of your house—than a room furnished out of all keeping with the rest of the house, in delicate coloring, in gilt and mahogany, with useless bits of ostentatious, inartistic bric-a-brac, like a survival of the old parlor traditions, with decadent gilt trying to keep up the royal tradition of the French Louis!

The Pattison house is rich in color suggestions. Its hall has dull, deep, gold Japanese burlap, a weave, finer and different from grass cloth, pressed in gold. The wood is stained brown, with here and there in a broad grain a wee suggestion of Pompeian green. The drawing-room has a deep green weave with black-stained woodwork, which is used with gold picture frames and other touches of gold throughout the furnishings. In the library the woodwork is black with a broad-striped paper of dull old yellow. The color of the dining-room, which is so placed that it is more or less a room apart from the more open hall and drawing-room, is silver. This is an unusual color to use in this style of house, but it just goes to show that you can harmoniously use any color if only you choose the proper shade and the right texture. Here the silver is a Japanese burlap and it is used with gray-stained woodwork. There is a very beautiful rug here with lovely rose color and blues in the pattern.

All the colors on the first floor of the main house harmonize, as stained wood, woven wall coverings, rough wall colors harmonize if used intelligently. There is no need to keep to the same color in a house, if you don't care to, but the effect



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Box 40, Germantown, Phila.

must be harmonious. This mixing stain in one room with a paint in the next, polished mahogany in one room with brown oiled furniture in the next, white in one room with paint in the next, is intolerable, for on the first floor, with its wide openings and interchanging vistas, colors must be used with the effect of the whole continually in mind.

In the service wing paint has been used throughout. Starting with the butler's pantry and the kitchen, a smoke-gray, suggestive of the gray scheme of the dining-room, has been used for the walls. It is oil paint with enough turpentine to give it a dull finish. You have no idea what wonderful finishes you can get with oil paint, what lovely soft colors, what dull finishes, what subtle effects by using one transparent color over another glazed body color. This last effect has been gotten in one of the upstairs rooms in the wing by using a transparent brown over a body color of rich golden yellow. In the kitchen and butler's pantry the top surfaces of the woodwork have been painted white and the sides of the wood suggesting the width have been painted black, a most effective scheme such as Austrians like Coloman Moser are fond of using. It is a curious thing that while the Germans and Austrians, for instance, and most of the European nations, are doing a great deal, and have done a great deal, for the past fifteen years in experimenting in color in the domestic interior, Americans have been most conservative. This gray and black scheme could be used with great charm throughout an entire floor of a small house because so many other colors could be introduced in the hangings, upholstery, rugs, flowers and furnishings in general. In the kitchen of the Pattison house designs of various kitchen activities have been stenciled in blood red upon the walls to make effective space division as well as a delightful color scheme.

My Suburban Garden

(Continued from page 423)

trees, made a wedge point for the entrance and return of this round turn. This gave an oval-pointed bed some twenty feet long, rounded at the rear end at twelve feet radius, which was all the land we could spare to it, and from the rear end of the curve ran out the drive to the barn. This radius worked out all right, even with a large coal wagon, and would accommodate a car of the smaller sizes by backing it once or twice in making the turn. To permit this without overrunning the rear lawn we widened the drive on the curve to eleven feet and, at that, got a car of ten feet wheel base around it without trimming off the edging sod.

With the drive laid out, the walks followed easily. Tradesmen must have direct and easy access to the back of the house or they will make their own paths, so we laid out two curved ones from drive to

rear steps and to the opposite side of the place for the benefit of the milkman and the grocer boy. The main central garden walk laid itself out naturally, straight out from the rear porch to the back of the garden. In the same way the direct walk from the street to the front door argued a straight path, concreted, with two steps in the top curve of the slope. This was originally in bluestone, but with the active feet of three children, the postman, and the wash of the rains, there was no living with it, and, after scooping it up off the sidewalk numberless times and redistributing it along the walk, I bought six bags of cement and several loads of sand and had the darkey lay it at a cost of six dollars—and was at peace once more!

While a straight, flat concrete walk, smooth-finished, with grooves across it at three-foot intervals, was within the abilities of my darkey as a mason, I felt that he could hardly undertake the complicated slopes and abutments of a properly-constructed concrete drive-in, so I had a contractor do this, for \$23. Such a drive-in should have a double slope towards a central gutter, both slopes grooved with inch, half-round grooves, spaced about eight inches; it should extend some ten feet up the drive, and, where it joins the curb, should have generous concrete curving abutments, so that incoming wagon wheels will not overrun it nor yet break off any sharp corners. The rest of the drive requires a foundation of ash or gravel, six inches deep, and on top of it an inch of fine bluestone or gravel. Bluestone is \$4 a ton, and an eight-foot drive will take a load of it to each lineal twenty-five feet, so it will run into money unless kept reasonably shallow, the foundation being of cheaper material. It will not do to tamp or roll the original soil down hard and then put on your stone, for weeds will assuredly spring up and they are very hard to get out of bluestone without hand weeding. Our ash foundation cost us 15 cents a load, via the colored human watermelon who held the proud post of garbage collector for the borough, and his total bill was \$4.50. The bluestone cost \$20, and we never had any trouble from weeds with that drive.

While all these operations were going forward the lady plunged into that most delightful—and expensive—occupation of accumulating shrubbery and flowers. Done all at once, it would easily stand you \$200 to make any showing on such a place, but with us it was a labor of love; and, little by little, in lots of some fifteen to twenty dollars at a planting, we got in our shrubbery in about three years. My rich neighbors simply left the whole matter to the landscape gardener of the borough, and paid the bill, getting the usual stereotyped setting. We could neither afford it nor did we want our trees in that way, for each one was bought at some sacrifice of other coveted amenities of civilized life,



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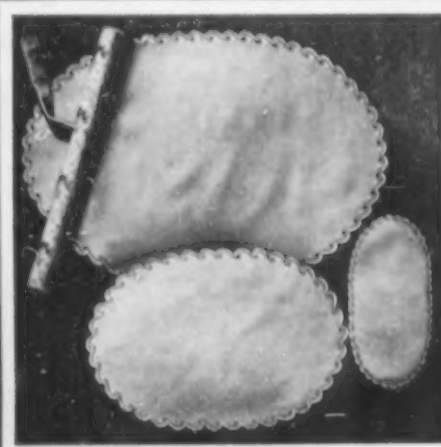
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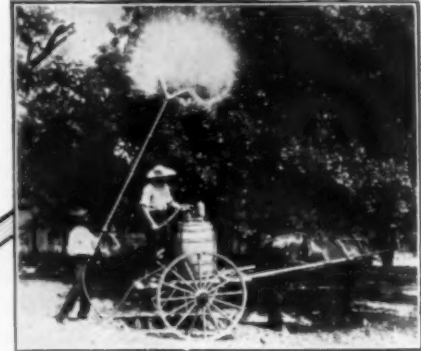
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such as theaters and clothes, and each was planted with our own hands, all the family taking part in the ceremony. What joys our neighbors missed, of the arrival of long boxes from the nurseries, of unpacking the beauties, of arranging them like furniture in a new room until each reached its own best location, they will never know, but we regard those plantings as among the most cherished memories of the growth of our place.

In a Dutch Colonial house the usual group of evergreens planted thick around the watertable is absolutely out of keeping with the style of the building. Our porch was a great red concrete expanse, 42 feet long by ten feet wide, and the top of the lawn sloped directly off from it at the same level. To plant evergreens around such a porch would be in the last degree banal. What was wanted was a few formal plants, just enough to embellish salient points, and for this what better tree than Holland's own glory, the box! The illustrations show how this feature was carried out; also the box window-gardens on the roof. These in Germany are often of flowing petunias, billowing down over the spotless white sides of marble window boxes. Our climate is not favorable to develop petunias as they are done in Potsdam, and annuals in a window box are more or less of a nuisance, besides not being visible during eight months of the year, so we chose the permanent decoration of small box trees, and arranged them in the design shown. They cost about twenty dollars altogether, but were well worth it because of the permanency assured us.

The first thing we needed around the place was some sort of hedge. We bought the inevitable—California privet. It is the cheapest and the hardiest fence ever invented. Barberry, if one can afford it, is beautiful, but its cost is out of the reach of the small home builder's means; the same is true of hemlock. Privet will cost you about \$22 for 400 feet of hedge, in three-foot plants, provided that you buy it from one of the great nurseries located in the South or up State, away from any large city. Privet will grow anywhere, sun or shade, any soil, unless it is swampy, and will even come to life in the most miraculous manner, if thoroughly dead from root starvation. Some of mine, that had given up the ghost in a swampy corner, bloomed afresh when the lawn mower grasses were piled against it—a most worthy instance of converting worthless waste into money! But do not load the bottom of your planting trench with fresh manure and put the privet directly on it. A neighbor of mine did this very thing, transgressing thereby one of the first rules of planting, which is that fresh manure will surely rot your roots. The result was that for two years he had a spindly and half-dead hedge until the privet could grow a new set of roots up near the surface.



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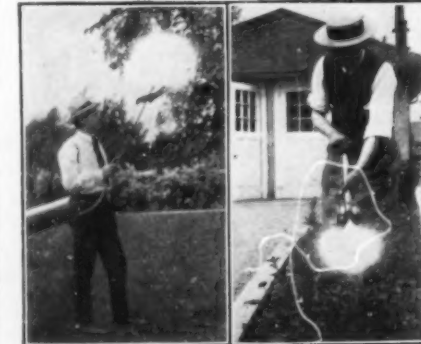
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Another temptation with privet is not to cut it back close to the ground after planting. It seems such a shame to cut off those long shoots that you paid so much for, and the beginner will usually cut them off about the height he wants his hedge to be, forgetting that the privet will send out *two* shoots from each cut, each one of them three or four feet long if you let them grow. You have then no recourse but to cut them off a few inches above the original cut or else let the hedge grow higher. How much better to cut them short near the ground, letting the two new shoots grow up that same year to the height you want it and *then* cutting it still back a few inches below the final height of the hedge. In this way you double the thickness of your hedge the first season.

With this privet order we bought four two-foot privet balls to plant at entrances of driveway and walk. These are formed in the nursery by trimming back a thick privet plant until it is one dense spherical mass of branches and twigs. It is very compact and hardy and looks well throughout the year. Cost, about \$1.50 a ball. On each side of the walk, half-way between the entrance and the porch steps, we put in two umbrella plants, *catappa bungei*, costing 75 cents for six-foot specimens. They leaved out well the first year, forming perfect little knobs of foliage, very formal in effect, and are now perhaps two feet in diameter. They must be pruned back somewhat every year.

The logical place for evergreens on our place was in the two corners where the privet made an ell at each corner, extending parallel to the sidewalk for perhaps fifteen feet. One of these reached as far as the drive entrance, twenty feet from the drive to the west hedge, so that quite a clump of evergreens was needed to fill in the corner. For this we chose a feathery, silver-green *retinospora plumosa*, a compact rounded cone some four feet high, for the angle of the corner; in front of it a blue Koster's spruce and a Japanese *retinospora*, and along the hedge a dense, bushy hemlock, a large biota and a four-foot Norway spruce. These, with a few little evergreens (two small, white cedars and a golden biota) filled the corner without crowding and cost \$9.75.

Carrying the eye back to the rose garden, along the hedge was, first, a plot of *rosa rugosa*, chosen because of its dark, glossy-green foliage, almost evergreen through all but four months of the year; next, a magnolia bush; and then the roses, twenty or thirty bushes, American Beauties, Mareschal Niels, Gruss Von Töplitz, etc. They bloomed the first year, and each June after that gave us enough roses to fill the house and leave lots outside to gladden the eye. Back of them the deciduous flowering shrubs curved out to the drive again, so that the west lawn was an oval, some seventy-five feet deep by twenty-five wide. Along the drive we put



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four weeping mulberry trees, spaced about twenty feet apart. This gave us ample shrubbery for the west side of the place, and where to find sun for it was something of a study, for the glory of the place was the big forest trees left standing when the lot was cleared. We had twenty-seven of them, and, even with all the spindly ones taken out, those that were left to shade the house did not allow any too much sunlight for the grass and not enough for the roses.

Around the chimney base the lady decided to put her rhododendrons and English ivy. The chimney being on the west side of the house, and the west lawn having many large trees on it besides the forest wall, it got no direct sunlight at all. But both ivy and rhododendrons were intended by Nature to thrive in the shade, and with the one climbing up the chimney and the other surrounding its base we did very well with our greenery for it. The ivy plants cost 25 cents each, in little pots with perhaps two feet of vine; at the end of the first season they had climbed up five feet, and in the second season extended nine feet up the chimney. Rhododendrons at 75 cents to \$1.50 a bush went rapidly into money, for it took seven or eight of them to make any sort of showing around that chimney base.

For the central bed of the round turn of the drive we used three syringas, two barberry bushes, three roses, two snowballs and a transplanted sassafras from the forest. The sweet syringa or mock-orange is an old favorite, and it has the custom of growing very large in a short time, so that it wants plenty of room. Ours grew from small 50-cent plants to large bushes in three years, and bore flowers their second season. The barberries started as little 25-cent brooms, but spread all about, so that long, feathery shoots from them were well interlaced in the rest of the shrubbery.

We felt that the turn of the knoll at the end of the porch needed a little group of evergreens, not over three of them. These three ought all to be exceedingly ornamental and striking in appearance, and for them we chose a deodar or Indian cedar, a golden biota and a Japanese maple. It needed a little more filler, so I added a solid, feathery hemlock in behind the clump and a retinospora of the whorled plumage variety (there are a million retinosporas, all beautiful!) and the group was complete. The deodar is not hardy much north of Asbury Park, but it is a most beautiful object, a feathery-green fountain of a pale silver-blue green with needles as delicate as a larch. Ours has gone through five severe winters with no other aid than a board screen to the northwest and plenty of forest leaves piled around it in the fall. The golden biota is a small, compact, golden-yellow evergreen, with its leaves set on edge like the leaves of a book, always a striking note in any clump of evergreens in which it may



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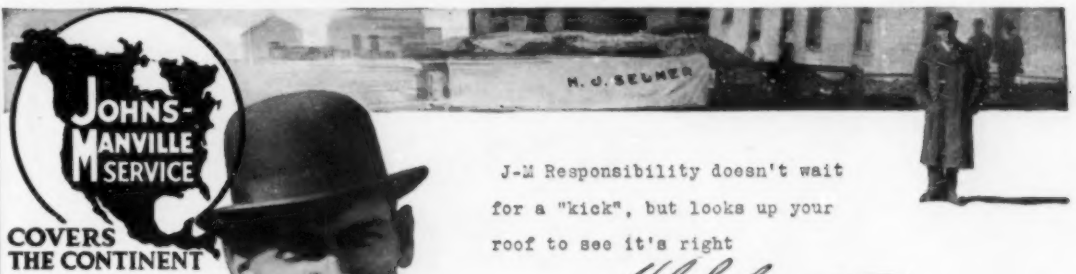
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be put. The Japanese maple has intensely red leaves, out very early in the spring, as early as the golden bells of the forsythia, and this red persists throughout the summer, deepening towards fall. Even in winter its red twigs never fail to attract attention. The American hemlock is easily the most beautiful of our Eastern evergreens, and a good nursery specimen, thick and bushy, with its feathery dark green foliage, will be a joy to its owner from the moment it is planted out. These trees in this group were added from time to time, the average cost being \$1.25 a tree, except the hemlock, which cost \$2.50. In the east front corner of the privet hedge we put in another retinospora plumosa, a biota, a whorled retinospora, a Koster's blue spruce, an American white pine and a pitch pine. The pitch pine is a three-needled, sap-green pine, strikingly handsome in appearance, growing wild all over South Jersey, and easy to transplant if taken in the early spring when not over three feet high.

All these evergreens are best planted in the early fall, September, October; or November at a pinch. If gotten in in the spring before May they will also manage to get through the summer, but if dug up when the season's growth has started they will surely die. They all come with burlaps wrapped around the roots, and nurserymen usually plant them just as received, depending upon the burlap to rot away. I always remove it, as I want a clean trunk down to earth, one that has no rags on it to catch the rake, and I think that the roots start out to lay hold on the soil quicker when not held in for a considerable period by a layer of burlaps. The reason that fall planting of evergreens usually succeeds better than spring is, not only less danger of loss through too much demand for sap due to the spring growth, but also because during the winter the roots continue to grow slowly and get a good hold on the soil before the spring rush demands a lot of sap for new growth in the crown.

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Master Masons and Builders

(Continued from page 426)

reaching out to take what he may and then retiring, with no anxiety for the rest of his kind. But how characteristic of primitive nature even to the human race! The Chinese had made a great advance when, instead of sealing themselves up as individuals or even as small families or cities, they included a nation within the protection of their great wall. Since then we have learned that no nation liveth unto itself, and, indeed, at present we painfully realize that no nations can slay and destroy each other without inflicting a blow upon the whole human race. Yet, in the face of the greatest setback of history, and in spite of the Bernhardt philosophy, when we look back to earlier civilizations, as in the time of Nero, we can say that altruism has slowly advanced and humanity will begin to climb once more as the present horrors subside. Though our generation may not see it, the day will come when great armaments shall be no more, and to those who look back upon to-day encircling fortresses will seem as primitive as the cell of the caddis.

There are many other species of the caddis displaying as many different forms of protective covering. One, for instance, builds a stationary shelter from which he sallies forth a very short distance in search of food, but turns homeward upon the slightest alarm.

These few descriptions will not be in vain if they induce someone to go hunting for other varieties of this small game, while the gun, with the spirit which generally accompanies it, can be left behind.

While some few species are carnivorous, the food of the caddis consists chiefly of water plants, although, strange to say, under certain circumstances they will eat the leaves of oaks, maples or almost any trees or shrubs. If you will hunt in the bottom of a little spring filled with clear, cold water and more or less surrounded by trees, where there is but little plant life and a gentle current, you will probably find many leaves which have apparently been skeletonized in a very careful manner, often wonderfully perfect and beautiful. These leaves are generally associated with the caddis, and I suspected that it was another manifestation of their skillful workmanship and had long hoped, some day, to catch them in the act, but met with no success until resorting to a little strategy suggested by a hopeful looking spring in the woods. Here the skeletonized leaves, as well as the caddis worms, were abundant, but the leaves were old and none of the work sought for was in operation. After giving the spring a thorough cleaning out and then replacing the caddis worms I picked a number of fresh leaves and put them in the water. Sitting down beside the spring I waited patiently for hours, but the little workers had been disturbed and refused to betray any se-

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crets, so I finally decided to give up for the day. Upon returning to the spring more than twenty-four hours later I was delighted to find my leaves, one of which is shown in the illustration, partly reduced to network and some of the caddis worms clinging to them. Getting down flat on the ground and watching closely with a magnifying glass I could see them very slowly nibbling the green leaf from between the veins.

It seems probable that the green leaves, which very often fall into a spring, are not chosen by the caddis as a most natural food supply, but are taken as a substitute where water vegetation is scarce, as it is apt to be in a cold spring in the woods. We may be very glad, however, that he is so resourceful and can adapt himself to conditions and thus add to his goodly account one more masterpiece of beauty to Nature's store.

The Purple and Gold Garden

(Continued from page 431)

For the early tulips Yellow Prince, and Wauverman, dark violet, were selected. For the Darwins, Bouton d'Or, Ellen Wilmot and Mrs. Moon were used for yellow, Rev. Ewbank and Erguste for lavender, and Negro and La Tulipe Noire for deep purple and almost black. A few deep purple hyacinths are used in these beds and clumps of gladioli, Canary bird and Blue Jay, whose names speak for themselves. It may be asked how all these bulbs are to be crowded in. They are placed between the perennials, which seem to have the most free soil around their roots. After blooming, the tops are left until they turn yellow and are then cut off. They are not dug up and replanted each year, as some people suppose. The gladioli can be planted between the iris, as their leaves will blend nicely and the blossoms come at different times.

In the narrow bed next the house are vines and tall flowers. In the spring a *Forsythia suspensa* in the corner of the house will give early bloom, and its long, trailing branches can be trained against the house. Borders of primroses and deep, yellow daffodils, Trumpet major, Trumpet maximus, and the old-fashioned double Von Sion will make a change from the center beds.

In May purple wistaria, purple and yellow iris and the yellow *Azalea mollis* Anthony Koster will look well together.

In June the golden *Lilium Hansonii* will have the house for a background, and the Harrison's yellow rose and the deep purple *Clematis Jackmanni* will be effective as well as sweet.

Some gladioli and a little anthemis each side of the door will give color in this narrow bed until in the fall the purple asters and golden heleniums make a tall mass against the house. They will need to be tied up, no doubt. In each of the center beds is one helenium and one aster,



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and there are plenty of small, yellow-button chrysanthemums everywhere.

In the border the same flowers are used, but, unlike the square garden, there is more of informality in the arrangement and less of balance. Lilies are at the end of the path, where they form a fitting climax to the walk, and around the circle and the little statue are yellow daffodils succeeded by pale yellow snapdragons and purple stock, as well as the always desirable heliotrope. The little borders are irregular and composed of heliotrope, aubretias, violets, primulas and Iceland poppies with the little bulbs among them. At the back of the border are asters, heleniums and lemon-colored cactus dahlias. A fluffy mass of lavender-colored statice is just outside the hedge and there are scattered bunches of iris and phlox everywhere. The trolius, or tall double buttercup, for early spring, and lemon lilies for June, *Hemerocallis Thunbergii* (late) and *flava* (early) form accents on each side of the path at the lower end. The late yellow columbine and yellow-button chrysanthemums are used in long drifts. Between the chrysanthemums are tulips and between the columbines are gladioli, making in these spaces two crops of flowers. Tulips are scattered in irregular clumps of ten or twelve all along on each side of the central path.

Outside the garden for a background are some yellow birches contrasting with some dark green hemlocks, with daffodils in the grass and witch hazel and *Cornus mas* back against the fence.

In estimating the quantities of perennials needed allow 2' apart for large plants, 1' apart for the medium ones and 6" to 8" for the little border plants. For bulbs allow for the large ones 12", medium 6" to 8" and for the tiny ones 3" to 6".

The purple-and-gold garden would be full of life and color, yet there would be no discords. The gray stone walks and planting would make the flowers seem still more vivid by contrast. The garden would look well with a stone house.

The cost is not great, comparatively speaking. Many perennials can be raised from seed, and the shrubs can be bought in small sizes if the owner is not impatient for immediate effect.



The House and Garden Index

The index to HOUSE AND GARDEN, which is compiled twice a year—in December and June—for the preceding six months, is now ready for distribution. Copies will be sent gratis to subscribers upon application.



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On every order for Tulips, Hyacinths, Narcissus and other bulbs that I send to Holland before July 1 my grower gives me a discount of 10 per cent. I will give the same discount if you will send your order to me before that date. Don't wait until fall, for prices will not be lower and you run the risk of not being able to get bulbs at any price.

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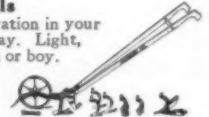
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The Case for Wall-Board

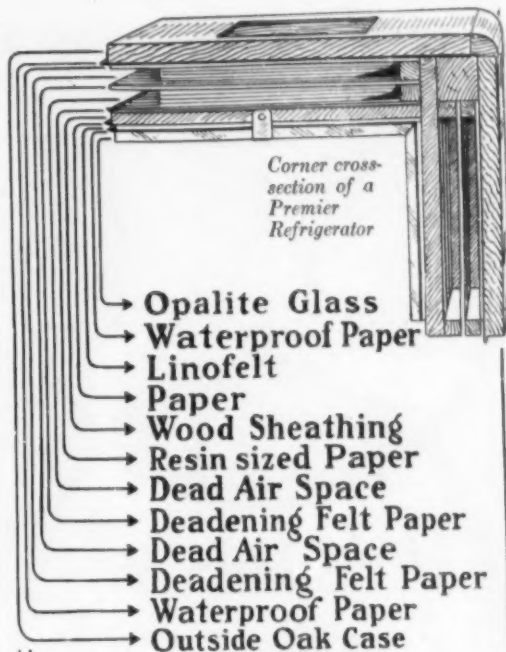
(Continued from page 433)

strips are applied. This avoids the possibility of a white edge should a wooden strip shrink slightly after it has been put in place. Any desired colors may be applied, and the variety of artistic color-schemes and stencil borders that may be worked out are almost endless. In general, use light colors in dark rooms, darker colors in light rooms. As the upper part of any room is darker than the lower, there being a natural gradation of light from floor to wall, frieze and ceiling, the shades of color applied may well reverse this progression, the lightest on the ceiling and the darkest on or near the floor.

Cold water, oil, flat-finish or enamel paint may be applied as on wood, plaster or steel, except that the best wall-board requires no priming coat. Flat- or dull-finish paints are most often employed, because they reflect a soft, restful light and may be washed to keep them absolutely clean. Two coats are sufficient, and stippling with a stiff brush intended for this purpose will spread the paint more uniformly without brush marks.

Such are the inherent advantages of wall-board in building a new house. It is of equal service, however, in the improvement of houses already built. Fully 20 per cent of the average house consists of waste space in attic or cellar on which insurance, taxes or rent are being paid. Wall-board provides the means to convert this space readily and economically into attractive, livable rooms. To do this is a clean, simple carpentry job which many a house owner will enjoy doing himself in spare moments. Because of its non-conductivity wall-board will render these barren, uncomfortable places cooler in summer and warmer in winter; lining them thus thoroughly always makes a perceptible reduction in the fuel bill, minimizing the upward flow of heat. A play-room, billiard-room, workshop or extra bedroom will be welcomed in any household, and this is the place and the way to have it at least expense; even as a store-room it is desirable to line the garret walls to prevent the percolation of dust through them.

In thousands of instances wall-board has proved itself invaluable for purposes of remodeling. When the plaster, especially the ceilings, becomes discolored by smoke or leaks, unsightly through the application of many coats of whitewash, cracked, broken or sagging with age, a satisfactory repair job demands the removal of the entire ceiling or at least one side wall, as the case may be. This is a dirty job at best, rendering the room uninhabitable for days or weeks and necessitating the removal of furniture or seriously endangering it if not removed. Then there is always the possibility that stains or waves will appear on replastered



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surfaces; in fact, the only safe method is to remove and replace the lathing, and this entails considerable expense and untold dirt. Wall-board can be applied and finished in two or three days, with no objectionable dirt, by furring over the old plaster with strips $\frac{7}{8} \times 2$ inches, as for steel ceiling, and then nailing the panels of wall-board to these strips.

While wall-board finds an appropriate place in the mansion as well as the cottage, it is the lining *par excellence* for the summer camp or bungalow; no other is so economical or so satisfactory in every climate. Its non-conductive properties make the building warmer in winter and cooler in summer, while its low cost and simplicity of application ensure more artistic and restful interiors than are customary in summer homes for the minimum of cost, time and trouble. This is convincingly shown by the accompanying photographs of the Stone bungalow, where the living-room illustrates something of the panel possibilities with decorative wood strips, and one of the bedrooms the simpler treatment with wall-board strips.

Plaster is often impractical in out-of-the-way camps because of the high cost of materials and mason's labor, due to transportation charges; then, too, atmospheric conditions may be unfavorable. Wall-board is so light that the cost of transportation is very small. On its arrival the same carpenters who built the house can put it up. One thousand feet of wall-board weigh only a trifle over five hundred pounds, plaster nearly five times that.

The Fore-Court and Garden of a Farm House

(Continued from page 435)

ant sound. The pool is little bigger than a bird bowl but just big enough for the garden. Japanese iris in four groups around the pool make interesting reflections. A *Pinus mugho* specimen stands at each corner of the almost square grass plot and gives four green accent points.

Narrow flower borders edge the garden. There are very few flowers, but they are arranged with great care and are of sufficient variety to insure a succession of bloom. When I saw it in early July two great peony bushes marked either side of the seat with their striking foliage, the white Japanese iris were in full bloom around the pool, the foliage of the German iris made accent points in the border, the foxglove had just faded, the larkspur was beginning to open into bloom and a very little early pink phlox, very likely the charming variety, "Elizabeth Campbell," had just come out.

This is a perfect expression of a garden. It has all the elements requisite for a garden—proper enclosure, flower borders, grass plot, pool, seat, united into an harmonious composition. Though restricted in area and in the selection of plants, there is no limitation to the attainment of perfection of proportions and design, choice-



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ness in color effects, and finish in small details.

This small garden is suggestive to the owner of farm houses where a charming garden can be had. It is suggestive as well to the owners of small properties, who generally despair of having gardens because they lack spacious grounds and unlimited wealth. It hints at the possibilities of the small garden of good design and planting for which there is ample opportunity in our suburban towns. Such a perfect example of the small garden is welcome as an inspiration and incentive to more as well as better gardens.

Efficiency in the Flower Garden

(Continued from page 427)

are without a rival for the late summer or fall garden, and are fine for cutting during a season when flowers for cutting are scarce. There is now almost as much variety in the shape of the flowers as in the colors. And as the various types are so decidedly distinctive in appearance as to be almost like separate flowers, before ordering any you should be sure that it is of a type that you like, as some people prefer the grace and beauty of the cactus type with its curled and incurved petals, and others the more uniform and symmetrical flowers of the show and decorative types. The peony-flowered sorts are of newer origin and form a type between the decorative and the cactus, the petals being much broader than the latter, but to some extent twisted and curled. The collarette dahlias are particularly charming, both on account of their form and the pleasing contrast of colors which most of them show. They have broad-petaled single flowers, with a collar or row of short, frilled single petals inside of these, about the center of the flower—and usually of a contrasting color. The single or century dahlias, while not so well known as the others, should be included in every collection, even where only a few varieties are used. The flowers are five inches or so across and borne on long, stiff stems, so that in addition to their grace and beauty, they are well suited for cutting. The duplex type is similar, but with a double row of petals. Both of these kinds are excessively free flowering. The miniature pompon type has not been developed so rapidly as the others, but contains a number of very beautiful varieties, and on account of their small size they are particularly useful for cutting when used in connection with other flowers.

The growing plants should not be set out until after all danger of frost, but the bulbs or roots can be put in a little earlier. In planting the latter cut the roots up so that only one or two clumps will be planted in one place; otherwise too many stalks will be thrown up for good flowers to be obtained.

Gladioli are different from most of the other summer flowering bulbs in that they are comparatively hardy. For this reason

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6 ft. long.....	60	\$1.00	\$2.50	\$7.50
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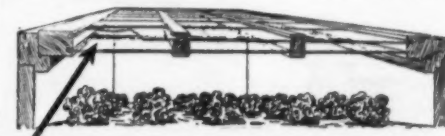
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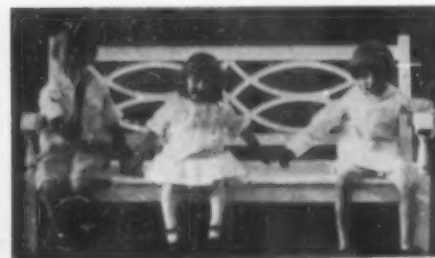
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most people make the mistake of planting them early in the spring only. To have flowers after frost—and they are at their best during late August and September—they should be planted at intervals of two weeks or so up to the middle of June or the first of July. If you have planted all of your bulbs this year get a few now—they are usually cheaper at this time of the year—and make another planting or two, putting some two inches deep and some four, so that they will not all come along together. Gladioli bulbs are comparatively hardy and they can be taken in any time in the fall before freezing weather. In taking them up be careful to save all the small bulbs which form on the old bulbs. These planted the next spring will give fine flowering bulbs the year following.

Cannas have vied with dahlias in their development during the last few years. Whereas many are still grown for their value as ornamental foliage plants, there are now dozens grown which are in the very first rank of flowers for superb effect in bedding, and beautiful also for cut flowers. For this purpose they have, in common with the gladiolus, the great advantage of continuing to open up new buds on the flower spikes for a long time after they are cut. The newest flowers are of truly gigantic size, some being a full eight inches across. The colors include solid shades of pink, yellow and white, in light and dark shades, and many striking variegated sorts with lily-like effect. Like the dahlias, they can be planted either from dormant roots or started plants. Dormant roots are usually not obtainable after the first of May; but as the started plants cost but a little more, this is no disadvantage. Cannas are very strong growers and rank feeders and the ground for them should be particularly well supplied with manure, and an abundance of water given during dry weather. On account of their habits of growth cannas make particularly effective centers for beds of various kinds of flowers. From one to six plants are usually enough for a medium-sized bed. They are most effective, however, when used in separate beds by themselves. Only one variety should be planted in a bed.

The caladiums or "elephant's ears" are quite distinct in the tropical effect they produce, not only as summer flowering bulbs, but as any other garden plants available for use in northern sections. For beds in front of tall verandas and in corners of walls and in other places they will fit in. The ornamental-leaved sorts do not grow so large, but the leaves are wonderfully marked and variegated in pleasing color combinations which are always interesting.

Tuberous-rooted begonias may be had in plants or in flower at this time of the year at reasonable prices, and they will continue to flower freely throughout the season until frost. The bulbs should then be taken up, and they are easily kept over

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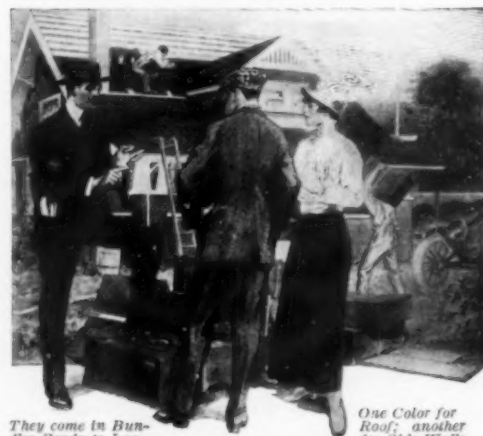


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until it is time to plant them out or start the next season. They are particularly valuable for shady positions, being the best of flowers for a low bed between the path and veranda, where there is frequently a narrow garden strip that is in shade part of the day, with a background too low for tall-growing plants. The individual flowers, as well as the general effect, are strikingly beautiful. As beds of this sort frequently get very hot and dry during the part of the day when the sun does strike them, a mulch to cover the surface when hot weather comes is highly desirable. As the growth is brittle they should have a support of a light stake, except when grown in such masses as to support themselves.

In addition to these there are available a number of other bulbs that can be planted now for results this year, including tuber roses, the summer-flowering hyacinth (which is hardy and does not have to be taken up in the fall) and Tigridias or shellflowers, which bloom freely throughout the summer, having large lily-like flowers. They cost but a few cents apiece and should be planted in every garden where a variety of flowers is appreciated. Ranunculus and zephyranthes, or wind flowers, are two other simple little flowers in a number of charming colors, which are not among the universally known kinds, but well worthy a spot in the garden.

The Saturday Afternoon Garden
(Continued from page 419)

The succession plantings of beans should be put in every three weeks or so, so as to be sure to have a supply of pods in the best table condition. Most of the dwarf varieties get too large to be really good in a short time. The "wax" type is the best for summer use. In planting lima beans, which are one of the last things to go into the garden, as they are very tender, be sure to plant each seed with the eye down. They should be covered 1½" to 2" deep and planted in rather dry soil when there is little prospect of a rain for some days to come. The slightest surplus of moisture in the soil is almost certain to cause them to rot. Endive and lettuce can be sown where they are to grow and thinned out afterwards, although where space is limited it is better to start them and to transplant them later, as already suggested. In case they are sown in their permanent positions thin out the plants to about 6" after they are well started, and then take out every alternate plant as soon as they begin to crowd. This method is particularly successful with the loose-headed kinds of lettuce.

Peas may be sown up to about the first of July, or even later, if one has irrigation or moist soil. They will not be successful, however, in hot, dry weather unless water can be applied freely. The spring varieties of radish, if planted now, quickly get pithy and tough; therefore the summer

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varieties, such as White Strasburg, should be sown now. If a succession crop of spinach is wanted sow New Zealand, which is distinct from the ordinary spring varieties and of a low-spreading growth, so that it should be given plenty of room.

The root crops, aside from parsnips and salsify, which should have been planted when the garden was first made, should be put in this month, with the exception of turnips. For this purpose Detroit dark red beets, and either Chantenay or Half Long Danvers carrots are excellent. Sow, if possible, just after a good, soaking rain. The seeds may be put in more thinly than for the first spring sowings, as the fall germinations will now be more favorable. Rake the ground over carefully just before planting to destroy any sprouting weed seeds. This will take only a few minutes now and may save several hours' work at the time of the first weeding.

Every Saturday afternoon, if not oftener, you should look over the garden carefully in search of the first sign of injury from insects or disease. Otherwise, even with the best seed, fertilizer and care, the crops may be destroyed beneath your very eyes. Just as the doctors are placing more and more emphasis upon the importance of sanitation, rather than upon medicine, the garden doctors are emphasizing the fact that prevention, rather than cure, is the surest and in the end the most economical method of keeping plants healthy. With a modern compressed-air sprayer or powder gun, the work of applying sufficient preventative to such vegetables liable to attack is very slight and can be done with a trifling expenditure of time.

If you will watch the various insects at work you will soon see that some of them eat or chew the leaves, while others seem to thrive lustily with no visible means of support. The plants to which the latter attach themselves, however, soon show the effect, as they live by sucking the plant juices and frequently do more harm, although it is not so quickly evident as that done by the eating insects. For the former class internal insecticides, which are all called "stomach poisons," are used. As the latter suck the juices from the inside of the plant, under the skin, they cannot be reached in the same way, but must be destroyed by an application of something proving fatal to them when applied externally. Arsenate of lead, Paris green and helebore are the three most commonly used chemical internal poisons. Formerly Paris green was used almost universally, but it has been displaced, to a large extent, by arsenate of lead, which has the double advantage of staying on the plant much longer, being practically impervious to rain after it once has been set, and being safe to use without danger of injuring the foliage, as Paris green does do, unless it is used very carefully. Helebore is the weakest of the three, but as it washes off very readily with the first rain and is safer to apply, it is sometimes

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used in the home garden, particularly upon things which are nearing maturity, such as heads of cabbage for the cabbage worm, currants, and so forth.

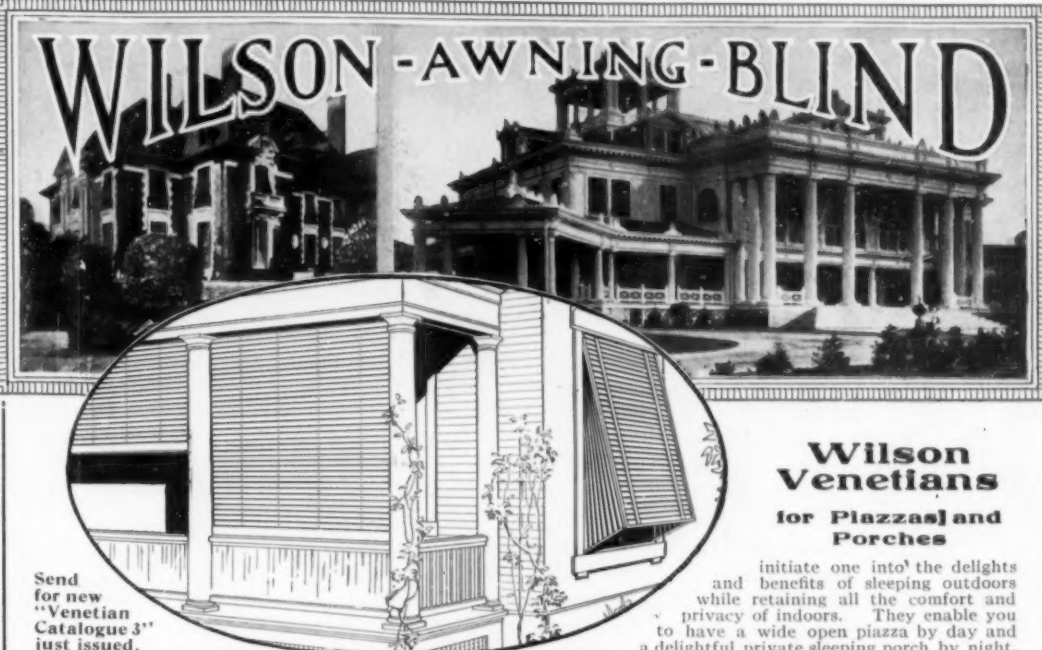
A good supply of arsenate of lead and Paris green, preferably the former, should be kept on hand. It can be had in either a paste or a powder form, the latter being available for use either for spraying or dusting, while the former can be used for wet spraying only.

The insecticides for sucking insects are of a number of different kinds. Some of the most effective contain a considerable percentage of nicotine, combined with other oils, which will mix readily with water to form an adhesive spray. Kerosene Emulsion is a standard treatment for sucking insects and one of the best to use. You can either make your own solution or buy a small can of stock solution, which need only be mixed with cold water to be ready for use. The ingredients are: ½ pound of good soap cut into thin slices and dissolved in hot water; when thoroughly dissolved, mix this with ½ gallon of water and 2 quarts of water and 4 quarts of kerosene in a pail or small tub. Then churn vigorously until of the consistency of lathery cream; a force pump used to pump the material is the quickest and most convenient way. When cool, store in large bottles or some other suitable containers until needed. For use dilute with water; for most purposes dilute ten times. An excellent and effective repellent for general purposes, and one which is easily applied, is tobacco dust. In buying it be careful to get a kind which is made to use particularly for this purpose. It is particularly valuable for dusting over young plants of melons, pumpkins, cucumbers, squashes, and so forth, and the seedling plants of cabbage, cauliflower, lettuce and radishes to keep off the blight cucumber beetle and the flea beetle.

The diseases which cause the greatest amount of damage and which are to be most feared are blight and mildew. The standard remedy for these is Bordeaux Mixture, but to be wholly effective it must be used before the disease gains a foothold. While the Bordeaux Mixture, like Kerosene Emulsion, can be made at home, it is much more convenient for use on a small scale to buy it ready prepared. It comes in the form of a paste, which, when diluted with water according to directions, is ready for use. It should be applied frequently enough to keep all new growth covered to be effective. Once a week or every ten days for growing crops like potatoes is sufficient. Crops which do not grow so rapidly do not need it so frequently, as when once applied it stays on through wind and rain.



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House & Garden for July


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- How a woman whose love for her native Italy constrained her to reproduce a house of Italian lines and atmosphere in New England.
- How to dress the house for hot weather—getting your home into a comfortable negligee of light curtains and furniture and rugs.
- How Nature protects her own by coloring and lines, making each bird and bug a product and protege of its environment.
- How a band of women in Kingston, N. Y., rejuvenated interest in gardening, and brought back to the town an old time glory.
- How to select the right kind of wall treatment for your house, and how the walls can be decorated and cared for with the best results.
- How a man who had a penchant for fireplaces built a summer house of seven hearths, each striking and effective.
- How to know when a dog has rabies and how best to handle him under these circumstances.
- How an impatient woman who wanted a quick-growing garden made over her place in an unbelievably short time.
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Furnishing the Garden Living-Room

(Continued from page 413)

and inexpensive. In many cases no floor is necessary, the grass being sufficient. It were wiser, however, to provide little wicker footstools to guard against dampness. Striped awnings give a gay touch of color to the garden. They come in striking combinations, from the expensive painted ones of orange, brown and green stripes, to the cheaper woven variety of blue and white. Some are painted green on the under side, shedding a soft, subdued light.

Canton furniture is the best to use in these canopied pavilions. It is light, cheap and durable and has rather a look of the East, especially harmonizing with the gay-striped awnings.

A simple way of making a little pavilion is to stretch a canopy from the garden wall. This, of course, forms little protection in rough weather, but at least it affords a shady resting place. A long settee with drawers under the seat provides a place to tuck away cushions and covers in case of a shower.

One must expect to give the outdoors living-room some attention and care. While it is bothersome to have the care of our garden furniture on our mind, yet if we relegate to it more than the bare necessity of bench and table we must be willing to have a care as to cushions, cover and books when necessary.

The terrace and pergola are an elaboration of the canopy hung from the garden wall. The terrace brings to our mind peacocks and urns and garden hats and high tea in England. They are the amphitheater of the garden, and from them the garden is a thing of vistas. Their centers of attraction may be a sundial amidst the flowers, or a bird bath and a marble or terra cotta bench, or a bee-hive within hailing—but calling distance. Best of all is a fountain as the center or as the culmination of a vista. A marble bust may be placed against the green background of a hedge, and always most lovely is a marble vase or urn. Terra cotta jars, similar to the oil jars of Sicily, make a good silhouette. All garden effects are a matter of silhouette and color masses. Terra cotta vases are not expensive. Their substitute, blue and gray ironware jars, well set in a simple garden, add a note of distinction. The desirable point is always the beauty of outline. Large Italian and Spanish glazed vases are wondrous things in a garden, but alas! bring prohibitive prices.

There are interesting effects to be gotten in a Japanese garden, although we are apt to tire of it. It would seem a little too trivial and exotic. As a side feature of a larger garden it is a charming thing to wonder at and wander through. But it is really too detached to take its place in our Western world; moreover, very few houses lend it a suitable back-

ground. It were best, perhaps, to limit our Japanese gardens to table decorations.

Little outdoor nurseries or playrooms are a boon to the children. There they have no restrictions against picking flowers or trampling lawns. Small movable pavilions are easily and cheaply procured, and with a sand box and sturdy furniture they may take their place in an out-of-the-way corner of the garden.


The third type of garden living-room is the detached garden grouping. A settee set against shrubbery with a table and a couple of chairs—all in white wood—gives a clean, fresh look to a garden. A little bower of lattice overgrown with vines makes an attractive resting place; a double sun chair, similar to the bathing chairs of European resorts, is a roomy and easily moved adjunct. A seat of concrete, architecturally suited to the house, adds just the right amount of dignity needed in a formal garden.

The matter of floor covering is always a feature in outdoor furnishings. Large red and buff tiles make serviceable floors; they are easily cared for and always cool. Over these, however, we may need something else. For hard wear Algerian fiber rugs come in plain tans or with colored borders. They are weatherproof. Numberable hemp, rush and fiber mats are on the market; for more protected wear there are Crex, Bungo, Scotch and domestic woolen rugs of tapestry weave. Matting proves very disagreeable in damp weather and should not be used.

Screens play a necessary part on chilly nights. Besides numerable varieties made of wicker there are some with oak frames about two inches wide with wicker panels. Hawaiian screens, made by natives, of flat reed in brown with a zigzag pattern in green are light and prove a good wind-shield. A cheap, easily constructed screen is made from window blinds fastened together with hinges, the edge of each shutter painted white, the rest green.

There have never been such attractive fabrics for hangings and cushions to choose from as this season. They are made purposely for outdoor rooms. As one can stand more brilliant color there than indoors colored stripes abound. Black-and-white-striped chintz with a black-and-white Chinese figured chintz may be well combined in porch decoration. Designs for pillows popular this season are made of blue and white checks edged with green and green and white edged with black. Garden cushions of not too futuristic design, but with pure, fresh, brilliant colors, add a note of life and gaiety to the garden. Madagascar cloth cushions in wide brilliant stripes are weatherproof and inexpensive.

Other accessories include table cloths of old-fashioned flowered chintz or heavy linen embroidered in bold design and colors. Use with these Austrian or Breton china decorated with gay bouquets. Pottery bowls in good shapes and sizes make the best flower holders.



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