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Although the old Italian villas and their gardens are essentially formal, they have a homelike, livable quality. Transplant such exotic elegance to America and the result is often grotesque—the form is there but the spirit is lacking. From this glimpse of an Italian house in New England can be caught some of the genuine spirit. How it was created is described on the opposite page



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The house rises from a bower of greenery, relieved here and there by flowering shrubs and the more formal accents of bay trees and cedars, while the partly wooded hillside, left purposely in its natural state of wilderness, forms a striking background

An Italian House in New England

HOW THE EXOTIC ELEGANCE OF A FOREIGN STYLE HAS BEEN FITTED TO AMERICAN SURROUNDINGS—“VILLA-AL-MARE,” THE SUMMER HOME OF MR. GEORGE LEE AT BEVERLY FARMS, MASSACHUSETTS

WALTER A. DYER

Photographs by Mary H. Northend

EVERY departure from the strictly native in domestic architecture is always attended with difficulties, and some of our worst architectural blunders have been due to the attempt to transplant exotic elegance into an uncongenial environment. Perhaps no style has suffered more from this treatment than the Italian. Our New England hillsides and mid-Western prairie landscapes are dotted with mistakes of this nature. Shorn of its proper surroundings, the style is coldly formal and lacking in homelike quality.

But such crimes against good taste are by no means unavoidable, and it is quite possible to handle the Italian style of archi-

tecture in such a way as to make it seem entirely at home in its New World setting. On the shores of Lake Michigan, at Bar Harbor, and in other places, architects with a true feeling for the meaning of the style have succeeded admirably in adapting the style and adjusting the environment so that there is no hint of incompatibility, no suggestion of impropriety.

An excellent example of such adjustment is to be found in “Villa-al-Mare,” the summer home of Mr. George Lee at Beverly Farms, Mass. Here the architect, Mr. William G. Rantoul, was given a sufficiently free hand in the matter of design and planting to produce, in a brief time, an effect of settled beauty,



In the living-room the paneled wainscot rises two-thirds of the way to the beamed ceiling, making an excellent background for the heavy old Italian furniture and the plethora of antiques which have been assembled here



The music room is Italian Renaissance in design and furnishings; the walls finished in white and gold panels surmounted by a shallow vaulted ceiling

coupled with the inherent elegance and dignity of the Italian style.

Bostonians are fortunate in their North Shore, and Mr. Rantoul was fortunate in having so fair a frame for his picture. The way from Beverly to Magnolia is a delightful panorama of shady woodland, sunny meadows, a rolling hinterland, rugged headlands, sandy beaches, and the eternal beauty of the sparkling sea. In this delectable combination of shore and country there has grown up a colony of attractive homes, varying from the simple cottage to the stately mansion, surrounded everywhere by the green beauty of trees. It was amid the natural beauties of the North Shore that Mr. Lee, a well-known Boston banker, chose to erect his summer home, on the crossroads a third of a mile from the Beverly Farms railroad station.

It was sixty years ago that Col. Henry C. Lee, Mr. George Lee's father, one of the four pioneer summer residents of the North Shore, built a home not far from where Villa-al-Mare now stands. The section in the immediate vicinity developed slowly, and when the son purchased the land on which his house now stands it was a rough, forlorn-looking spot enough. In fact, it was largely a sand pit. But Mr. Lee and his architect saw the possibilities of the site, and the transformation is now complete.

Villa-al-Mare stands somewhat back from the main road on a slight eminence, commanding a superb view of the sail-dotted



Dignity rather than ornament is the keynote of the dining-room. The woodwork, the leather upholstered chairs and the massive refectory table are of mahogany. An Italian hanging chandelier is suspended from the beamed ceiling

ocean. In the distance is Misery Island, where Mr. Lee has a week-end bungalow called "Ye Court of Hearts." Visible also from the villa is the yellow stretch of West Beach, the favorite bathing resort of the North Shore colony.

The house is built of gray stucco with a red tiled roof, befitting the Italian architecture. The roof line is broken by dormers and the design displays a happy combination of balance and variety. The arrangement of windows, balconies, porches and terraces is admirably calculated to offset any tendency toward stiff formality. The entrance is at the end, facing the road, while the main front commands the view of the sea and overlooks the garden. At the left of this the wild, rocky hillside offers a charming foil to the works of man.

The feature which at once attracts the attention of the beholder is the wealth of planting near the house, and to this is due, in large measure, its appearance of being comfortably at home. It seems to rise from a bower of greenery, relieved here and there by flowering shrubs and the more formal accents of bay trees and cedars, while the partly wooded hillside, left purposely in its natural state of wildness, forms a charming background.

The house is approached between ornamental gate-posts, up a short flight of steps, and along a winding gravel path between velvety lawns and masses of shrubbery. The little entrance porch, with its tiled roof and white pillars, flanked by hydrangeas



This view of the living-room indicates its position in the house. The French windows open directly on the terrace shown on the next page



Across part of the garden front extends a brick terrace with bay and box and palms in tubs, bordered by a stone-capped, vine-covered parapet

and bay trees in Italian marble tubs, is just the right size to offer a friendly welcome. Around the house to the right the lawn extends, and to the left, on a lower level, is the garden, which can be reached from the entrance porch by two easy flights of stone steps.

Across two-thirds of the garden front extends a brick terrace, with bay and box and palms in tubs, bordered by a stone-capped, vine-covered parapet, at each end of which is a century plant in a marble pot.

Below this is a shrub-massed terrace, and below that the formal garden, with its stone retaining-wall nearly covered by clinging *ampelopsis quinquefolia*. The garden is simply formal, Italian in its elements like the house, its center of interest being a single-spray fountain in a circular pool, surrounded by a low concrete curb and a ring of greensward. The garden lawn is broken here and there by sentinel cedars, standard roses, flowering shrubs, and bits of rare Italian marble, with seats arranged at convenient spots.

At the left of the brick terrace, which is reached from the living-room



At the left of the terrace is a covered veranda enveloping the corner of the house. Suitably furnished, it may be enclosed for a sun parlor

through large French casement windows, is a covered veranda enveloping the corner of the house. This may be enclosed as a sun parlor, and is suitably furnished.

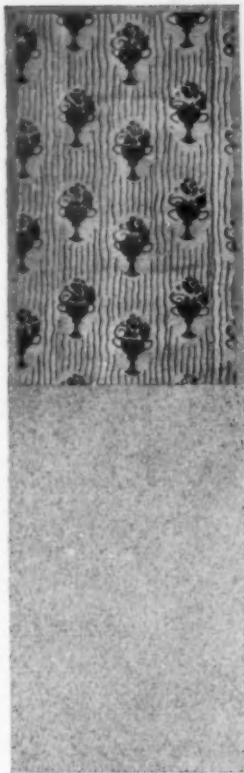
The wild hillside at the rear of the house, with its few gnarled old trees, is a tangle of wild roses and clover, while nature has been assisted by the planting of *clematis paniculata* and *ampelopsis*, which partly cover the gray ledges in summer. A short distance to the rear are the stables, where Mr. Lee keeps a string of thoroughbreds, reached by a gravel walk through a smooth-shaven lawn, bordered at intervals by hydrangeas and other plants in tubs.

The interior of the house, in which the Italian note has been preserved, is no less successful than the exterior. The entrance door opens directly into an arched hallway with mosaic floor and paneled woodwork. From this hallway oaken stairs ascend to the second floor.

To the left of the hall is the music room, which is Italian Renaissance in design and furnishings, not far removed from the English Georgian style. The walls are finished in white and gold panels and
(Continued on page 2)



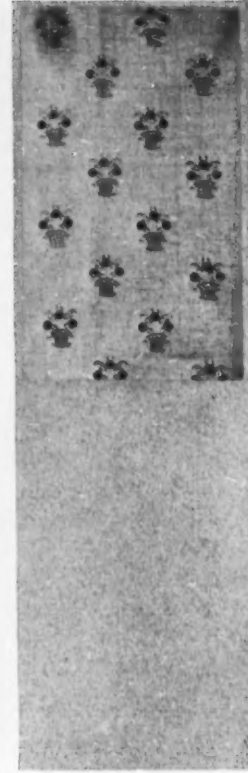
Befitting Italian architecture, the house is of gray stucco, with a red-tiled roof. The arrangement of windows, balconies, porches and terraces is admirably calculated to offset any tendency toward stiff formality



One of the summer fabrics—varitinted flowers with a black-hued background



The first principle of refurbishing for the summer is to put away all furniture and hangings that suggest winter and to give the room a sense of spaciousness



Another fabric is the basket and flower pattern on a blue-checked ground

The House in Summer Negligé

THE FURNITURE TO DISCARD AND ITS HOT WEATHER SUBSTITUTES—SUMMER COLOR SCHEMES—THE NEW STRIPES—SUMMER CARE OF WINTER FURNITURE

AGNES FOSTER

IN "doing over" for the summer, our axiom should be: not "overdoing." Simplify and eliminate at every turn. The stuffiness and fussiness of winter quarters must be replaced by the fluffiness of summer furnishings. The imagination plays such a part in our being cool that, while a red plush sofa does not actually heat us nor a gray wicker *chaise longue* upholstered in light-green chintz keep us cool, these factors of psychology must be kept in mind.

There are some things to be attended to before we start to redo our quarters for the summer. It were best to cleanse thoroughly several of the largest and more cumbersome pieces of furniture, wrap them in sheets and put them away in the store room. Even with the use of slip covers there is bound to be much wear and tear on furniture during the summer, so it were more prudent to put them away altogether. Oriental rugs should be rolled up in newspaper—moths detest nothing as they do printer's ink—and put them away. The grit of summer dust is particularly hard on rugs. Wash all the bric-à-brac, put over them covers of oiled paper, and place them upon the topmost closet shelf. Along with these go the oil paintings in their heavy gold frames. Leave only a few etchings or water colors, which can now come into their own in prominence. These things disposed of, we have a working basis on which to refurbish for the summer.

Our first consideration is the walls. If the paper is in good condition it may need only a thorough wiping with a clean cloth and with dry bread around the squares where the pictures have been removed. In case the paper has had its day, the walls may

be done over with alabastine. This comes in very good shades and leaves a smooth, clean, fresh surface.

If the walls are to be repapered choose gray or putty color or a soft, cool tan. Striped papers are very popular this season, and they come in a great variety of stripes and tones—and at a small price. Black stripes on a white or gray or buff background make a charming side wall. If care is taken to select a stripe that is wide in proportion to the size of the room, a very striking and not altogether bizarre effect is obtained. Of the many figured papers being shown this season one particularly is interesting: blackbirds and flowers on a white background, suggestive of an old English paper.

Granted that the woodwork is white, the mouldings of the door casing may be striped in black. The greatest care should be taken that this is not overdone. It would require, perhaps, the judgment of a decorator to get just the proper balance of black and white. The entire door and trim may be painted black, but this, I believe, to be less successful than the striping.

Never have the papers been more attractive than this season. To be sure, stripes predominate, as they do in women's clothes. For the dining-room there come blue and buff stripes; for the bedrooms, lavender and gray. Chintz papers are always suggestive of summer rooms. Used in conjunction with a plain, white wainscot, the chintz papers are at their best, especially if the hangings and upholstery are confined to one or two tones. A pretty bedroom is done with a light lavender wall and woodwork of lemon color; the tones must be very delicate and one or two notes of deeper lavender should be introduced to keep

the scheme from becoming insipid. Thus, one can use wicker furniture dyed lavender with vari-flowered chintz coverings repeating the tones of the walls and woodwork.

A very cool color-scheme is black and white or gray, and, to offset it, use mulberry here and there. While mulberry is not so much in vogue as last season, it has retained its place in its proper use. With black and white may also be used a very little vivid orange and a very little blue-green.

It is not always possible to have two sets of floor coverings. If the carpet or large rug must be kept, it can be cleansed, covered with newspapers laid smooth and then covered with denim stretched and tacked around the edge. The papers prevent the dirt from sifting in and keep away the moths. As the denim may be had in tones to harmonize with any color-scheme and is easily stitched up, it forms a cool, agreeable covering. Each year it can be taken up and packed away for the ensuing summer. If the rug is large it were wiser to turn the denim over the edges and sew it firmly underneath.

The best rug for summer is one with no pile. Flat tapestry weave rugs come in all sizes and colors. The more expensive Scotch rugs, the cheaper American art rugs and the Colonial rag rugs all fall in the no-pile class. For medium price and service the domestic art rug is preferable. For bedroom use rag rugs have some justification, but the art rug is at all times best. These come in two tones with plain banded or fancy borders. They have countless trade names and are to be had in a variety of grades.

For the first-floor rooms and the outside living-room fiber rugs are serviceable. It is well to avoid too fancy weaves and colors, as they make a room chaotic and too suggestive of the camp and porch, besides frequently having a wearing effect on the nerves.

In refurnishing, if one wishes to use what is at hand as to rugs, they can easily be dyed. Thus, in a black-and-white room we may not be certain that we will like the scheme and therefore do not want to go to the expense of buying a black rug. As a

try-out we can have an old rug dyed black at a small expense.

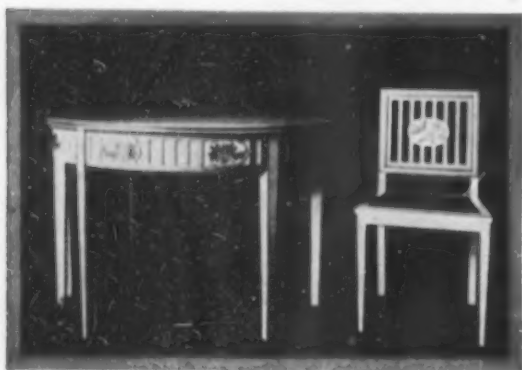
It is always better to have small rugs in summer time than large, as they are more easily taken up and cleaned, and, moreover, a sparsely covered floor gives a sense of coolness.

To re-kalsomine a ceiling is a matter of small expense if the painter uses care. A newly tinted ceiling adds freshness, and done now, it need not be redone in the fall. Always have it tinted to tone in with the color of the wall. For that reason a dead white ceiling is impracticable; moreover, it would show quickly the smoke from lamps, the fire and the furnace.

The heavy, handsome velour or damask hangings at windows and doors are the most essential winter furnishings to be gotten rid of. Upholsterers will sometimes recommend their being left up hung in bags, but nothing is more ghostlike in appearance than these great, sheeted things dangling in midair. Take them down and substitute at the doors a plain cotton rep, which hangs well and is inexpensive. At the windows nothing is more effective or partakes more of the summer gladness of color than chintz. Narrow-width cretonnes in excellent patterns and colors come at twenty cents a yard; double-width linens in beautiful design and wonderful colors come as high as \$4.50; and one's choice lies all the way between. For furniture coverings the 50-inch width cuts to the best advantage, but for the hangings the full width is too broad for the general run of window openings and the split width looks a little scrumpy. Use the 30-inch width.

An excellent way to treat a window is to put next the glass a cream scrim with a wide hemstitched hem at the bottom. This curtain shields from the strong glare and prevents the dust from blowing in. As it is readily washed, a fresh, crisp appearance can always be maintained. Inside these could be hung the chintz curtains, preferably with a valance. The valance shuts off the top light, serving somewhat as the awning does outside. It also gives a good finish to the top of the window and hides the rod.

Some chintzes look best with the light coming through them and showing the color, so they are best left unlined;



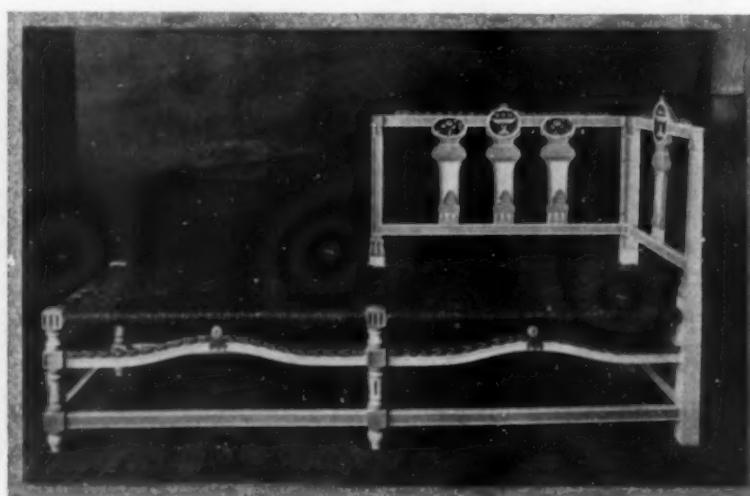
Painted peasant furniture can be decorated in the design of the hangings, giving the room a decorative unity



Extension tables, light in weight and with clean-cut lines, can serve a dozen purposes in the summer home



The fact that peasant furniture is eminently adapted to the summer arrangement does not forbid it a place in an all-year decorative scheme



A couch of these lines and light structure is always serviceable. Its decoration can match the hangings, and its tone the walls



Rattan and willow furniture has no equal for summer use if it is employed judiciously. Painted to harmonize with the walls and upholstered in gaily-tinted chintz, it lends a refreshing air of coolness and comfort, a respite from the stuffiness of winter furniture

others lose their pattern when unlined. A rather odd and dainty window hanging can be made of Japanese toweling. Both patterns and colors are summery. Hang them on either side of the window and use a valance of the material. These are adaptable to both dining and bedrooms. In the former the blue and white patterns are especially good to use when the china also is blue. Table runners and dresser covers may be made of the same material. It washes well and is inexpensive, coming from fifteen cents a yard upwards.

There are numberless sunfast materials shown, and, if one avoids the clinging variety, no better window drapery can be had. It is well to avoid the type that has a black warp thread, for while these are pretty enough in the hand, they are not pretty with the light streaming through.

If one wishes to go in for a rather expensive linen it were best to choose one with many colors, because good linen gives many years of service and you can change the color-scheme of

your room from year to year, picking out of the linen a tone and matching it up with plain fabrics. Nothing is cooler than a gray and rose linen. Use with it gray-painted furniture and plain rose upholstery, alternating with a few pieces done in linen. A

room becomes tiresome when all the pieces are upholstered alike and is perhaps too reminiscent of a "suite." On the other hand, a room of conglomerate upholstered pieces has neither restfulness nor dignity. Plain walls, figured hangings, plain and figured upholstered furniture—this is a fairly good rule to stick by.

Summer chair-coverings are so inexpensive that they should be redone very often. With the help of a good upholsterer who comes in by the day, a complete summer garnishing may be easily accomplished. It is well, before putting on the covers, to rub the furniture down with a good polish, as the heat is hard on the furniture finish. If the oil is well rubbed in there is little chance that it will blister or crack.

(Continued on page 55)



A combination lounge chair and foot rest of this kind will be found indispensable



The first flowers that can be gathered successfully for house decoration—narcissus. Arrange them in a stand set in water for even the stems are beautiful

I HAD a garden by the house, but I wanted another. Gardeners always do! This was to be for cut flowers—a place where I could try out my experiments and have my fun and failures unseen. I wanted, moreover, a gay garden all summer.

A corner of the vegetable garden was taken—a plot 64 feet by 74 feet—and laid out along the lines shown in the plan. The beds I dug over two feet deep, filled them with a foot of well-rotted cow manure and then layers of earth and manure, thus raising them well above the level to allow for settling. The center beds were edged with grass, the borders with brick, covered with edging plants to save space and labor.

In the oval center bed I planted nine Madame Plantier roses, which were large enough to hide partly the beds from one another. In June they are a mass of small white roses. There is an added advantage in that they never suffer from blight and are perfectly hardy.

On the south and west sides of the garden I stretched a wire fence and, in order not to take any space from my beds, planted outside of it rambler roses, Dorothy Perkins and Northern Light, the last a dainty pink-and-white rose exceedingly attractive. Ramblers give no trouble, requiring only an annual cutting away of the dead wood; moreover, they grow quickly and make a wonderful show in June.

In the two borders by the wire fence I planted most of

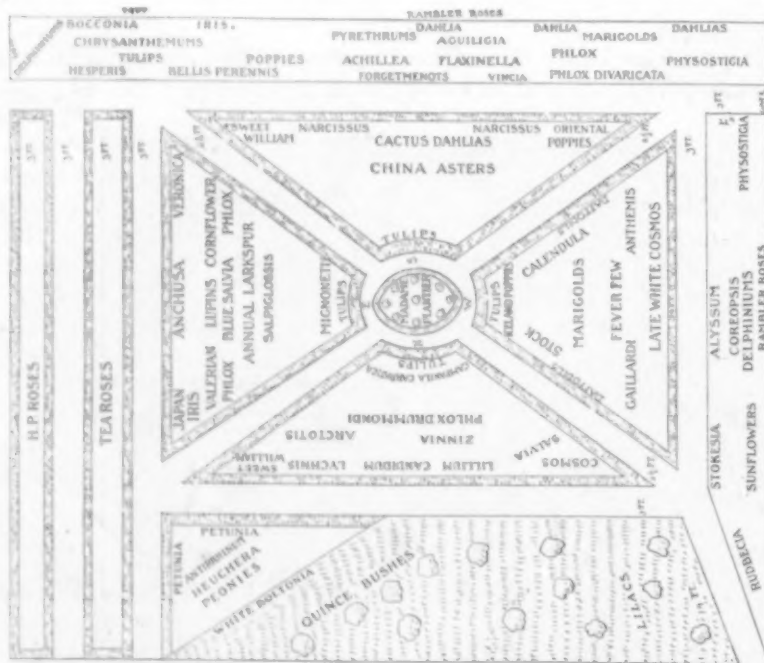


Miss Lingard, a white phlox, has two blooming seasons: starting early in June and blossoming three or four weeks, and again in July

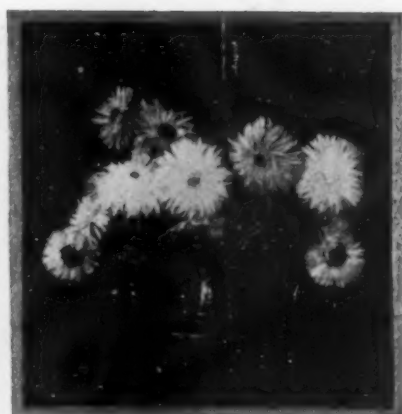
Making a Garden for Cut Flowers

THE PROPER USE OF A GARDEN PLAN—CONTROLLING THE COLOR SCHEME—THE FLOWERS THAT LAST BEST IN WATER—PLANTING AGAINST FROST

CORNELIA L. CLARKSON



By using a plan, space and labor were saved, the kinds were segregated and the color scheme more easily plotted and maintained



China asters last well in water. During their culture watch for black beetles. Once past that stage, the blossoms are a well-won reward

my perennials. They were generally successful, save the hollyhocks, which became diseased. As there is no remedy for this plant sickness, I burnt the plants and sprayed the ground with Bordeaux Mixture. I will try them again in a couple of years.

From May until frost my borders are gay, first with tulips, arabis and little English daisies, *Bellis perennis*, quickly followed by columbines, *Aquilegia*, pyrethrums, German iris and the old-fashioned gas plant, *Dictamnus Fraxinella Alba*. The last should be better known; it has a beautiful white flower in May and a good foliage all summer; a slow grower, but when four or five years old it branches out and makes a handsome bush. The pyrethrums, single and double, also last a long time. If the lower leaves are cut away they will not rot out, as often happens when the roots are too damp. The columbines are always a joy, lasting many weeks and being of many colors. The long-spurred variety generally die after a few years, but the short-spurred seem to live on indefinitely. The latter variety sow themselves, and many seedlings can be taken up in the autumn and given away, thus affording one the pleasures of helping other gardens and gardeners. German iris are—or should be—in every garden. To make them bloom more freely divide the clumps every three or four years.

In June the tall delphiniums are at their height of beauty.

A self-contained flower, the delphinium, if cut back when it goes to seed, it will send up new healthy shoots. In the same month coreopsis flowers. A hint as to winter care: do not cover them with manure, as it will kill them, a straw or leaf mulch is all they require. On and off all summer the *Pearl Achillea* blooms. It is especially valuable for cutting. As it spreads like a weed, boards should be placed in the ground all around it.

So that they might be tied securely, the dahlias were planted by the fence. Their culture is simple enough, although many gardeners play tricks with them—often to their regret. Thus some cut out the middle stalk with the idea of getting more flowers and less foliage. I have not found this practical. If more than two stalks come from the bulb I cut them off at the ground.

The poppies, sown in every empty space, bloom in July and August with the phlox. Of the many varieties of phlox the best I know is the early white Miss Lingard, which has huge flower heads, blooms early in June, lasts three or four weeks and flowers again in August. Of the salmon pinks the prettiest is the Elizabeth Campbell.

In September the pink-and-white *physostegia*—which, by the way, is an excellent cutting flower, lasting for days in water—keeps gay the border of my garden. The dahlias, marigolds and chrysanthemums last until frost.

As chrysanthemums seem to dislike wind, I have found it better to plant them in a sheltered spot.

The four middle beds of my garden are largely for annuals. At first an annual bed is not pleasing, the seedlings seem scrawny until July. They should have been mixed with perennials, but

keeping them separate proved convenient for cutting, so I bore with their appearances.

The north and west beds are partly sheltered by old lilac bushes, so I planted my late white cosmos in them, and they are often saved from a first frost—an excellent idea to remember if your garden happens to have bushes and you wish to make your cosmos last as long as possible.

The color scheme of the north bed is red and white with the white supplied in part by candidum lilies. As these are in a hot sunny spot they seem to thrive; I cannot grow them satisfactorily in half shade. Red is given by scarlet salvia; and in the autumn, when the garden is turning brown, I am grateful for their brilliant color.

Blue and white is the scheme of the east bed. My Dropmore *Anchusa* has grown larger than any I've ever seen; besides, it lasts from May to July. The Emperor William cornflowers are excellent for cutting, but they turn brown by July. Were it not for the fact that they seed themselves, I would not bother with them. In May the hardy lupines are beautiful. They make big plants four or five feet high. However, they also die down, so I plant the hardy blue salvia, *Azurea grandiflora*, in front to hide them.

The south bed is principally for China asters, pink and white (American Branching), and by August is a glorious sight. When the first buds come watch for black beetles. No amount of spraying will affect these. You must pick off by hand morning and night, and to make sure that they do not return drop them into oil or boiling water. The work is arduous, but if

(Continued on page 55)



The old-fashioned gas plant, *Dictamnus fraxinella alba*, should be better known. It has a beautiful white flower in May and a good foliage all summer



When the Sweet William died down, a row of white petunias covered their place along the edge



Madame Plantier roses, which filled the middle oval plot, were a mass of small white roses in June



Together with pink tulips in the south bed was rock cress, *Arabis alba*, the double long-blooming variety

A WALL space has either one of two functions to fulfill. It should be frankly decorative, and so treated that it becomes a distinctly recognized feature in determining the character of a room, or else it should be regarded as a background and kept quiet and inconspicuous to serve as a foil for whatever may be hung upon it or set against it. In either case a wall should never be allowed to obtrude itself upon the eye or become oppressive to the occupants of the room. It is a mistake to try to combine the "decorative" and "background" functions, for no middle ground between these two extremes of treatment can be really successful or satisfying, and an attempt to carry out such a combination—an attempt oftentimes unconsciously or thoughtlessly made—is primarily responsible for many of the failures in wall management that we see all too frequently.

Having realized clearly the several functions of a wall and having determined which treatment is preferable for any particular case under consideration, it remains to choose the manner of making from a number of possibilities about to be enumerated. It is important to decide the "decorative" or "background" question first; for some wall surfaces, once made and appropriately furnished, do not readily lend themselves to being changed from one classification to the other.

Walls may be wainscoted or covered with wood either wholly or in part, and this wood casing may be either plain or paneled. In the same way walls may be tiled either partly

or over their whole surface. Last of all, they may be plastered either in part or in their full extent. The combinations and diversities that may be derived from these basal methods of treatment yield a wide variety of rich and interesting possibilities.

Nothing is more suitable for walls, nothing is more fit for their adornment, nothing affords a greater or more agreeable variety for their treatment, than wood. Whether the manner of execution be exceedingly simple or highly ornate, the natural beauty of wood, imparted by color and grain, makes it a material always desirable for interior finish. Even when the wood is entirely covered with paint its wholesomeness of surface and texture can still be seen and felt. Wood, furthermore, possesses the advantage of being easily worked and readily adaptable to a diversity of treatments.

If a wall is to be wainscoted its full height from floor to ceiling there is no occasion for plastering it first, if it be a partition. The studs on which the laths would be nailed for a plastered wall will serve as a supporting framework or backing for the wainscot, which will be nailed directly to it. Just how close together the studs must be will depend on the character of the wainscot and the size of the panels used, but in any case they should be close enough—two or two and a half feet apart—to make the work thoroughly stiff and rigid. If the wall is an outside wall, however, it should be first plastered, with the brown and scratch coats laid on lathing nailed



Three elements are represented here: a plastered wall, papered in a neutral tone, a paneled wainscot, and a ceiling-high paneling over the fireplace end of the room—an effective treatment, decorative in itself

Structure and Decoration of Walls

PANELING—PLASTER—CONCRETE—TILE—BURLAP—HOW EACH IS MOST EFFECTIVELY USED—THE COSTS—PICTURE MOULDING AND PLATE RAILS

HAROLD DONALDSON EBERLEIN



If tinted in a color harmonizing with the woodwork, the plastered wall needs little decoration. Here the lines of the windows and the stair add sufficient interest

to the furring strips in the usual manner. This should be done as a protection from excess of dampness, which, in addition to being unhealthy and uncomfortable, is bound to work havoc with the wainscot. When walls are thus plastered "grounds" must be nailed horizontally to the furring strips. These "grounds" project through the plaster coat and afford a support to which the wainscot is fastened. To be properly spaced the design and measurements of the paneling ought to be known beforehand. The same general method of construction will apply to walls that are partly wainscoted and partly plastered.

The pattern of the paneling will depend entirely upon personal taste and the guidance of architectural precedent and tradition. Each architectural mode of expression has its own peculiar and well recognized styles of paneling and its own strongly characteristic molding profiles and dimensions. A detailed discussion of these, however, belongs to a specific architectural treatise and can only be alluded to in this place. It will be germane to the purpose, however, to observe that the panels, of whatever shape they be, are small, with numerous stiles and rails (the uprights and cross pieces) in Tudor and Stuart architecture, while in the Queen Anne and Georgian types the stiles and rails become fewer, though broader, and the panels far larger, the moldings, at the same time, frequently being bolder in profile, more prominent in projection and heavier.

The woods in general use for wainscot and paneling purposes are oak, chestnut, cypress, red gum, sweet gum, butternut, walnut, white pine and poplar. The cost of paneling per square foot will necessarily depend on the kind of wood used and the style of panel, which will involve various amounts of labor according to the particular pattern adopted. An approximate idea of cost may be gained, however, from the prices of lumber. At the date of writing, March, 1915, these prices per square foot are: Plain white oak, $6\frac{1}{4}$ cents; quartered white oak, 10 cents; chestnut, 4 to $5\frac{1}{2}$ cents; cypress, 3 to $5\frac{1}{2}$ cents; red gum, $5\frac{1}{2}$ cents; sweet gum, $5\frac{1}{2}$ cents; butternut, $6\frac{1}{2}$ to 11 cents; American walnut, 14 cents; pine, 7 to 9 cents; poplar, $4\frac{1}{2}$ to 6 cents; mahogany, $16\frac{1}{2}$ cents.

These prices are subject to variations contingent upon locality and the fluctuations of supply and demand and are quoted mainly to show the present relative values of the different woods. It is important to state also that the prices quoted refer to 1-inch stock,



A novel treatment fitting for a room of this type—hollow tile walls and floor laid in wide bonding. It shows also the foundation for plastered or paneled walls in hollow tile houses

which can be worked down to give a finished panel $\frac{7}{8}$ of an inch thick. While much of the old paneling was considerably thinner, it must be borne in mind that it was much easier for the old joiners than for our modern carpenters to come by well-seasoned



For kitchens, laundries and bathrooms glazed tile is the best treatment. Have the tiles set close together to avoid any roughness from cement joints. The cost is not necessarily prohibitive

lumber. It is therefore advisable to allow for a $\frac{3}{8}$ -inch finished panel to prevent warping and cracking, unless one can be *absolutely positive* that he is getting well-seasoned or kiln-dried lumber, in which case he might risk a $\frac{3}{8}$ -inch panel worked from $\frac{1}{2}$ -inch stock. As it is well nigh impossible to get such lumber, it is safer to allow for the 1-inch stock. Stiles and rails should be $\frac{7}{8}$ -inch thick worked from inch stock or, better still, $1\frac{1}{8}$ -inch thick, work from $1\frac{1}{4}$ -inch stock. The latter thickness is especially advisable if the moldings surrounding the panels are bold and deep in profile. Even when well-seasoned wood is used, it is much more advisable and safer to have the panels laminated, that is to say, built up of three, five or seven thin layers, glued together with the "way" of the grain reversed in the adjacent layer. This is the only way to ensure against warping and splitting. For the small Stuart paneling the laminated panels should be $\frac{1}{2}$ inch thick. For large Georgian panels an inch thick is better.

The observations just noted apply particularly to paneling in which the natural grain and color of the wood form an essential part of the decorative calculations. Where the paneling is to be covered with paint a lighter construction may be used, although, on general principles, the more staunchly built work is preferable. This lighter construction may have thin panels of poplar, laminated panel board (three or five thin layers of wood glued together with the "way" of the grain running in contrary directions to prevent warping and cracking), or some sort of compo board set within stiles and rails of pine or poplar. Poplar has the advantage of not requiring a preliminary coat of shellac, as does pine, to prevent the resinous sap from working through and staining the paint.

Too much care cannot be expended on the quality of the joinery, if paneling is to be staunch and present a permanently satisfactory appearance, free from pulling and buckling. The wood must be carefully selected for quality, color, grain and seasoning and stiles and rails must be mortised and tenoned together and *fastened with wooden pins*. In the finishing of panel work our modern artisans use entirely too much sandpaper. The surface of the wood is sanded down to an unsympathetic mechanical hardness that destroys all the traces of craftsmanship. Sandpaper is used to cover a multitude of sins. For instance, if a mitre joint of a molding does not fit very well it is sandpapered smooth and the dust pushed into the crack. That eventually tumbles out and leaves an ugly, gaping joint.

The further processes of "natural" finishing, fuming, staining and polishing, showing the grain and some sort of color may be all very well for getting a quick result, but none of them

can compare with time and atmosphere. Good wood just let alone assumes with each additional year a greater beauty of tone and character—a tone and character that no application can give. The trouble with us is that we are too impatient for results and spoil natural processes by our haste. In one or two important public places paneling has recently been left entirely to the action of time and atmosphere and even within a brief period the result has begun to justify the course adopted. In old Quaker meeting houses, and in several other old buildings, the writer has seen woodwork of white pine that has never been

touched with paint, polish or stain since it was put in place more than a hundred years ago, and nothing could surpass the mellow beauty of its rich golden brown.

If the owner of the paneling cannot possess his soul in patience and wait for the finger of Time to do its matchless work, he may use a little boiled linseed oil to feed the wood and a mixture of wax and turpentine to get such polish as he requires, but it seems almost a profanation and sacrilege and an injustice to the wood itself to distort its appearance and character with fillers and stains and chemical fumes and all sorts of polishes that often disguise the underlying qualities completely. Some of the fuming and staining processes, of course, produce perfectly satisfactory results and are not at all to be condemned, but a great many altogether overdo the matter and spoil the result. So that it is necessary to be discriminating and cautious in choosing.

An effective low wainscot without panels may be made from carefully matched vertical boards tongued and grooved or held in place by

a sliding tongue. The joints may either be plain or marked by a fine beading. The top of such wainscot is finished by a cap molding. This wainscot may either be painted or left in its natural condition.

When paint is to be used on wainscot or paneling the surface should be sandpapered absolutely smooth. It will always pay in the end to put on a number of thin coats, letting each dry thoroughly and rubbing it down with oil and pumice before applying the next, rather than one or two thick coats. In painting wainscot or paneling, particularly in houses of Georgian style, there is no reason for adhering absolutely to white. Gray and other colors can be used with excellent effect and have ample historic precedent.

While it is not usual to consider tiles as one of the possibilities for covering mural surfaces in dwelling houses, particularly in houses of average size and moderate cost, it is worth while to call attention to one manner in which it is feasible to employ

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If burlap, crash, canvas or muslin is used, hang the fabric loose enough to show that it is a fabric. Otherwise it might just as well be a piece of paper

Efficiency in the Flower Garden

THE INSECTS THAT ATTACK THE GARDEN NOW AND HOW TO FIGHT THEM—DISEASE AND DROUGHT—SUMMER PRUNING—THE DUST MULCH AND CONSERVATION OF MOISTURE

F. F. ROCKWELL

THE different troubles to which the flower garden is subject are not generally known as those attacking vegetables. Moreover, they are not so easy to get at. The vegetable garden, laid out in straight rows with foot room between, and with each thing by itself, makes an ideal battleground for an attack on the enemy. In the flower garden exactly the reverse exists. Furthermore, in the flower garden one is somewhat restricted as to the weapons he may use. If arsenate of lead or Bordeaux mixture leaves the potato patch or the rows of beans streaked or discolored, or if kerosene emulsion used against the pea lice or tobacco dust used on the melons causes a disagreeable odor there is no serious objection. But it is, of course, desirable to keep the foliage of flowers clean and green and to avoid disagreeable smells about the house. For this reason, in place of the standard sprays, it is often desirable to use substitutes which, not perhaps as effective, are free from some of the undesirable qualities.

The first and most important step in carrying on a successful fight is to diagnose correctly the trouble. Some of the most powerful remedies are absolutely ineffectual against certain kinds of bugs and spores. The treatment must be adapted to the disease. The troubles most likely to be encountered may be considered in three general classes—the eating insects, the sucking insects, and parasitical diseases. In addition to these there are sometimes encountered root grubs, borers and constitutional diseases. But in nineteen cases out of twenty, the trouble with a plant in the flower garden will be found to belong to one of the three classes first mentioned.

The eating insects are the most general and the easiest to identify. They work, however, in many different ways. Some eat the leaves as they go; others chew or cut out holes; others merely skeletonize the leaf by chewing off the "skin" and leaving the framework, often working from below, so that often a great deal of damage is done before their presence is discovered. Still others, like the rose bug and the aster beetle, seem to take special delight in working on the buds and flowers themselves and in seeing

how many they can ruin in a long working day. There are two methods in treating this type of intruder; the first is to put them out of business with an internal poison applied on the leaves, so that they take it along with their daily bread; the second is to gather them by hand and destroy them. In the flower garden the latter method has several advantages; and where only a few plants are to be cared for anyone who has given it a fair trial will be quite likely to make use of it. Rose bugs, aster beetles and some of the worms and other bugs usually appear first as matured specimens; while quite active and hard to get on warm days, they are usually sluggish and dopey in the cool of the morning, and it is then not a very long task to rid the plants of them thoroughly if one is provided with the proper equipment: a wooden handle about two feet or so in length fastened to an old skillet or a large tin can.

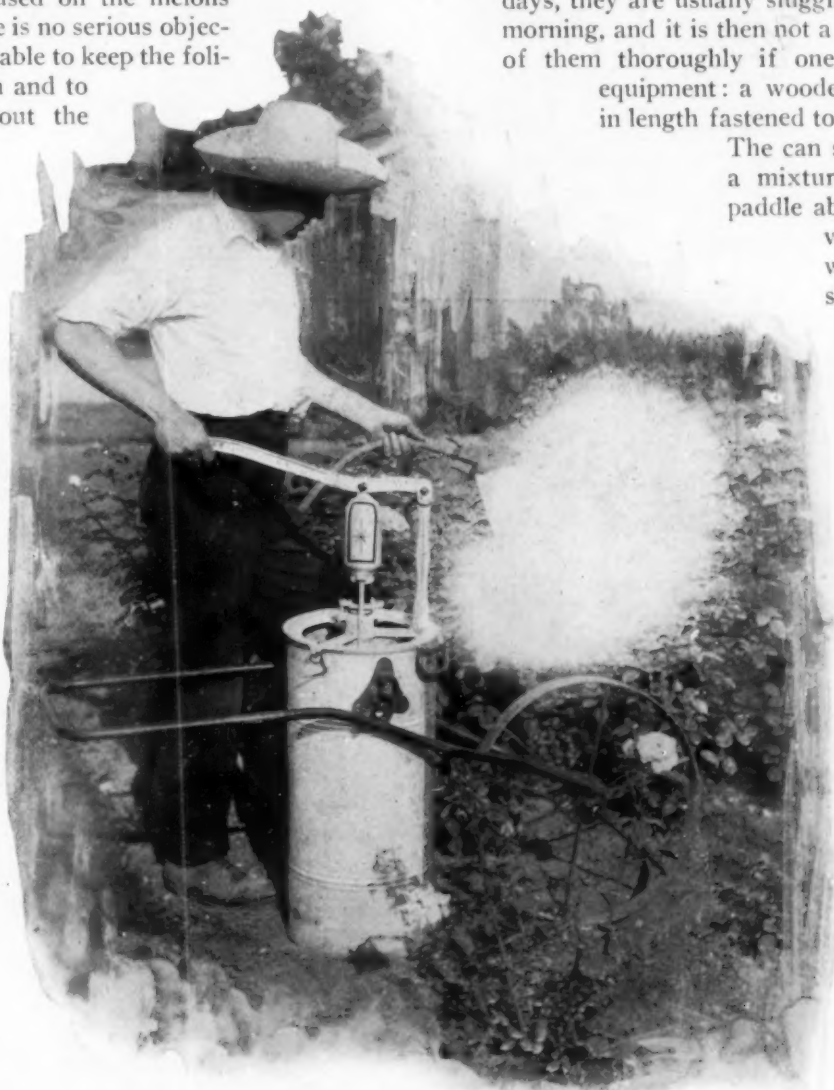
The can should be about half filled with a mixture of kerosene and water. A paddle about 18 inches long and of convenient shape can be readily whittled out; this should have a sharp point at one end. With this equipment the bugs can be very rapidly gathered in.

Where spraying is preferred, however, there are a number of poisons to choose from; Paris green, for many years the favorite, has to a large extent been superseded by arsenate of lead, which can be applied either as a wet spray, or may be procured in the powder form; the latter is equally as effective and less conspicuous. Apply in the dust form when the foliage is dry. A powder gun should be used so that the under as well as the upper surface of the leaves can be covered. Arsenate of lead is particularly valuable where protection is needed for a considerable time. For intermittent use hellebore, which will wash off at the first rain, and is not so dangerous to use near the

house, may be applied. Tobacco dust, while not a poison, is very obnoxious to most insects and is usually effective in keeping them from reappearing.

The sucking insects are much harder to control. The various forms of aphids or plant lice and scale, and the newly hatched young of the white fly and the squash bug belong to this class.

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Having diagnosed the plant disease, waste no time in getting at the source of trouble with a spray; meantime feed the plant to strengthen it against attack



A vista through one of the terraced gardens showing the box bordered path and the pool

What Old Kingston Did for its Gardens

THE RESULT OF A COMMUNITY ENDEAVOR TO REVIVE THE PAST GLORY OF A COLONIAL TOWN—GARDENS ON HILLSIDES

A. VAN HOESEN WAKEMAN

A GARDEN in connection with a wall calls up visions of restricted areas at the rear of city houses, where things grow in a halting way surrounded by walls that are high, dis-

rug of grass—soft, thick and fine as velvet—bordered widely by flowers that cover all the space within the wall, save at the center. Here the flowery border curves in toward the wall, leaving an open space on either side of a pool, where are placed graceful white slat seats.

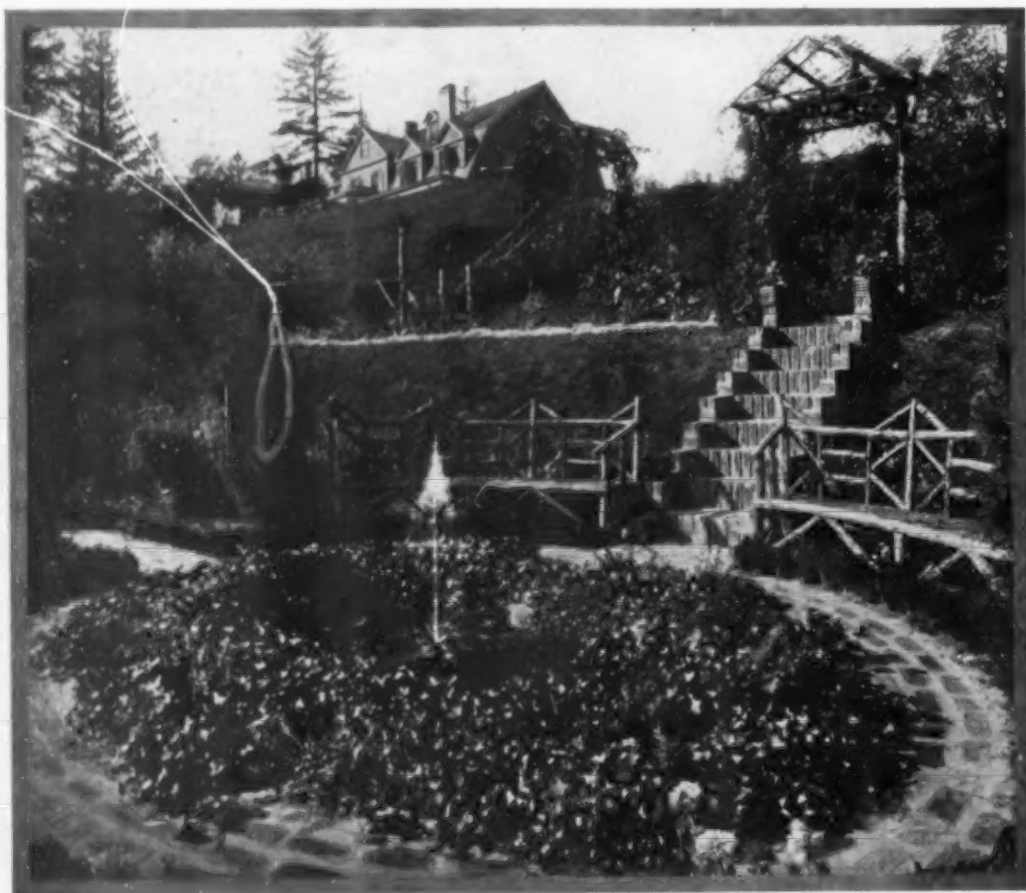
With no perceptible motion the water goes in and out of the pool in a way which keeps it wholesome for the fish, which, like splashes of gold, move about in it, and yet the lilies, "the lotus of the North," which lie on its surface, and flourish only in still water, put forth opulent blossoms in their season. The border about this pool is exceptionally interesting. It is not of the water

colored, unsightly. Wholly unlike these is the wall of smooth-faced brick in soft bronze-red, with its slender coping of brown, which incloses one of the most interesting of old Kingston's many beautiful gardens.

Along the top of the wall little steps at rather long intervals break what, without them, would be a hard line. This tends to make it a perfect background for the vines and high-growing flowers which more than half conceal it.

An authority suggests that a garden should be placed at the side and a little back of the house, and this is so placed. Passing down a few shallow steps—ivy embroidered at the edges—then along a path which divides the rose garden, and down more shallow steps of gray stone, one is in the garden. In planning it, the pivotal idea was a room out-of-doors.

Co-ordinate with this idea of a room is what may be called a



The combination of brick path and rustic furnishings make this pivotal point a veritable garden living-room. Around the pool are sweet alyssum and ageratum

plants commonly used, but is of sweet alyssum intermingled with the cool blue of ageratum. These are not only charming as a border but effectively carry out the composition of this garden-room, where recurring notes of white hold all together in a way that shows the unities have been carefully considered in its arrangement.

The flowery border of the big grass rug—it is about six feet wide, and if it were straight its length would be about three hundred feet—is held to the grass by a broad fillet of sweet alyssum. There are white flowers among the others which grow

high against the wall, where the Dorothy Perkins rose, hollyhocks and delphinium are dominant. These, with the flowers in the border, blend quite as do the colors in a fine oriental rug. It is easy to see that this border is made up of rare kinds of familiar flowers. There are petunias, for instance, the big white



The border in this garden is made up of familiar flowers—petunias, dahlias, mainly with a sweet alyssum edging

"Snow Storm," fringed at the edges and with yellow throats; eccentric dahlias, which have a single whorl of slender, dark red, velvety petals, with a yellow fluted panuelo of smaller ones about a head of pale-green transparent scales. There are many other well-known flowers, which are so transformed as to seem like the faces of old friends grown beautiful almost beyond recognition.

One may see these, but for the most part the superb view beyond them, including the quaint old town known as Round-out, before it became a part of Kingston, the Catskill and the Hudson, so completely challenge the attention that the near-at-hand is not much noted.

As unlike this wall-bounded little area of beauty as two things of the same kind can well be, is a garden devoted almost exclusively to perennials. This garden has been made to fit—at least it does fit in the nicest way—the plain, staid old house to which it belongs. Still, though it is in a way old-fashioned, it is very much up-to-date as to the flowers grown and the way in which they are cultivated.

Between the seed beds and the high-standing, self-contained house is a dooryard in which, scattered about in a happy-go-lucky fashion in the grass, are snowdrops, each shrub leading an independent life in a little pool of black earth. These seem to express the motive of the whole garden, where all is helped



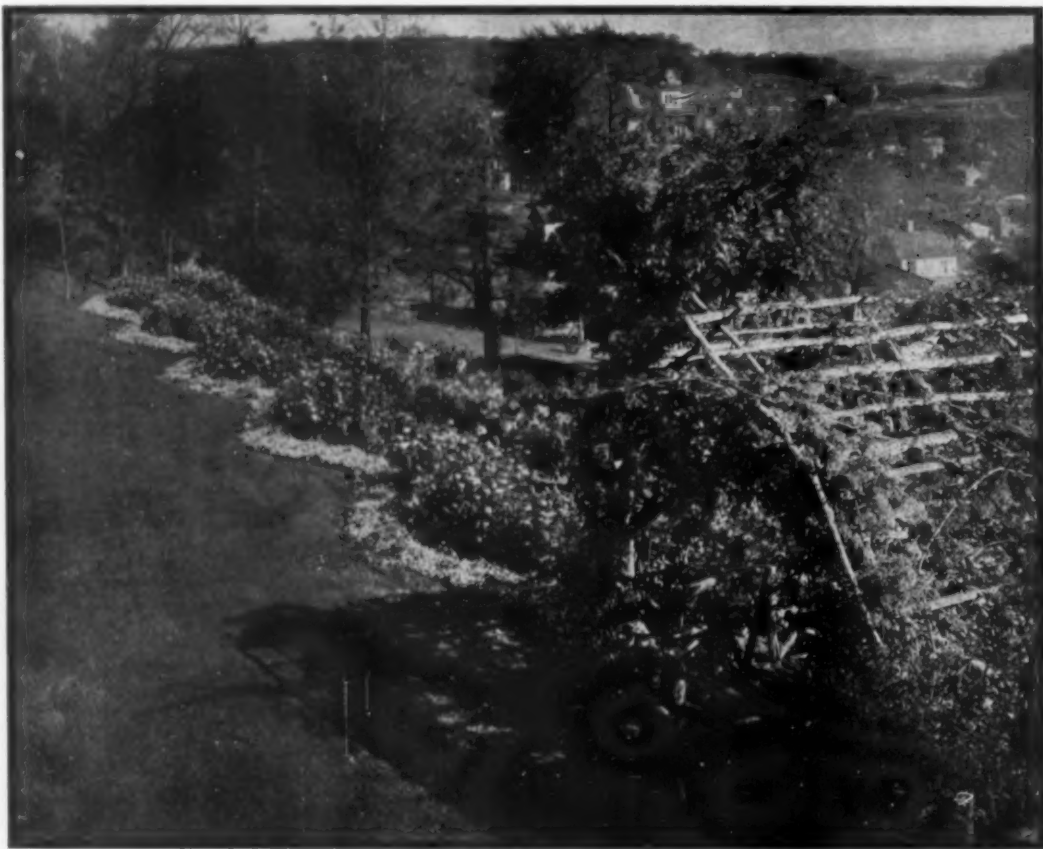
Through this rustic pergola seat you pass down to the second terrace, as shown in the farther corner of the illustration on the page opposite

to make lusty normal growth and nothing is forced or artificial, and, together with the wide acres extending back from it, constitute "The Manor Farm." The Slide and Overlook mountains, seemingly near, and the whole atmosphere of freedom and space, make this garden at any time unusual, and especially so when the blooming season is at its height.

In late June, July and August the perennials here are at their best. It is during these months that Canterbury Bells, white and in all shades of pink, purple and blue, and foxgloves in all colors, so rejoice the eye that one is ready to declare that they are the queens of all flowers—though when the Japanese iris is in bloom a new conclusion is reached.

In this garden this beautiful iris is grown in great masses. It is in every shade of purple and heliotrope and in white. The white, opulent in size and fairy-like in its delicacy, is especially beautiful. In its big bed—white and colored in solid phalanxes—this iris in full bloom is not unlike a great company of unusual orchids. True, it does not blossom for more than a month or six weeks; but even so its beauty is a joy to recall and to look forward to all the rest of the year.

As all familiar with its culture know, it is not counted quite easy to raise Japanese iris from the seed, but that it can be successfully done, and with no very great difficulty, has been demonstrated here. The plants are expensive, while the seed is not, and if sown in drills, in proper soil, and kept well wet down, the result is all that can be desired. It must have, several times each week, a thorough drenching; in fact, the soil should not be permitted to become really dry at any time, since it halts growth and often prevents successful bloom.



Here the terraces are tied together by a ribbon of flowers that, were it made straight, would be an eighth of a mile long. Zinnias, phlox, larkspur, delphinium, and a host of others are included in it

The cost of such a perennial garden as this is really negligible, and the work required to keep it in order is much less than in making and caring for an ordinary garden. Of course, it is the personal equation which counts—to know what to do and how to do it—in this as in other things. Such a garden can be managed without a gardener—this one was a sheep pasture and has been made the thing of beauty it is by its owner, with the occasional assistance of a workman and the good offices of a little Griffon terrier. When a plague of moles threatened to undo all that had been done, the terrier took a hand—that is, if a dog can be said to take a hand—and the moles were vanquished.

The owner of this garden has made some interesting and successful experiments. This she has done by becoming *en rapport*, as it were, with her flowers in her intimate work among them—her sole reason, as she states it, for having a garden being her love for flowers and her pleasure in being with them. One simple and interesting experiment she has made is in deferring the bloom of certain flowers for a month or more by carefully taking off the buds as soon as they appear. She states that the retarded blossoms were as opulent and profuse as those which matured at the usual time.

As unusual as is this perennial garden, or the one which is walled in, are two which are terraced and held together by such a ribbon as never yet was woven. If its waving curves, along the edge of the first terrace, were made straight, it would be nearly, if not quite, an eighth of a mile long. In it are an uncountable number of zinnias. These, in all the pastel shades, form the ground. Embroidered on these, in dottings and groupings, are *Phlox Drummondii* in all the new varieties—primrose, salmon-pink with red eyes, shades of lilac, pink striped with white and others which are unusual. As the heads of these are



The garden of "The Manor Farm" is devoted to perennials—an old-fashioned corner carefully maintained in which many interesting flower experiments are tried

broken off as soon as they bloom, they continue to put forth flowers the season through. There is annual larkspur in the various shades of its familiar blue, and in pink and white, and also the larger varieties; the perennial delphinium in all these colors. There are columbines, asters of every hue, Sweet Williams, pinks, marigolds, such as our grandmothers never would have recognized; poppies, flaunting their silken petals here and there; Love-in-a-mist, *Nigella*, opulent yet coy in its veil of green, and many other flowers which make this blooming ribbon a wonder of variety, and of beautifully blended colors. Along its entire length is a broad band of sweet alyssum. This, together with Baby's Breath, *Gypsophila*, gives the fragrance which is

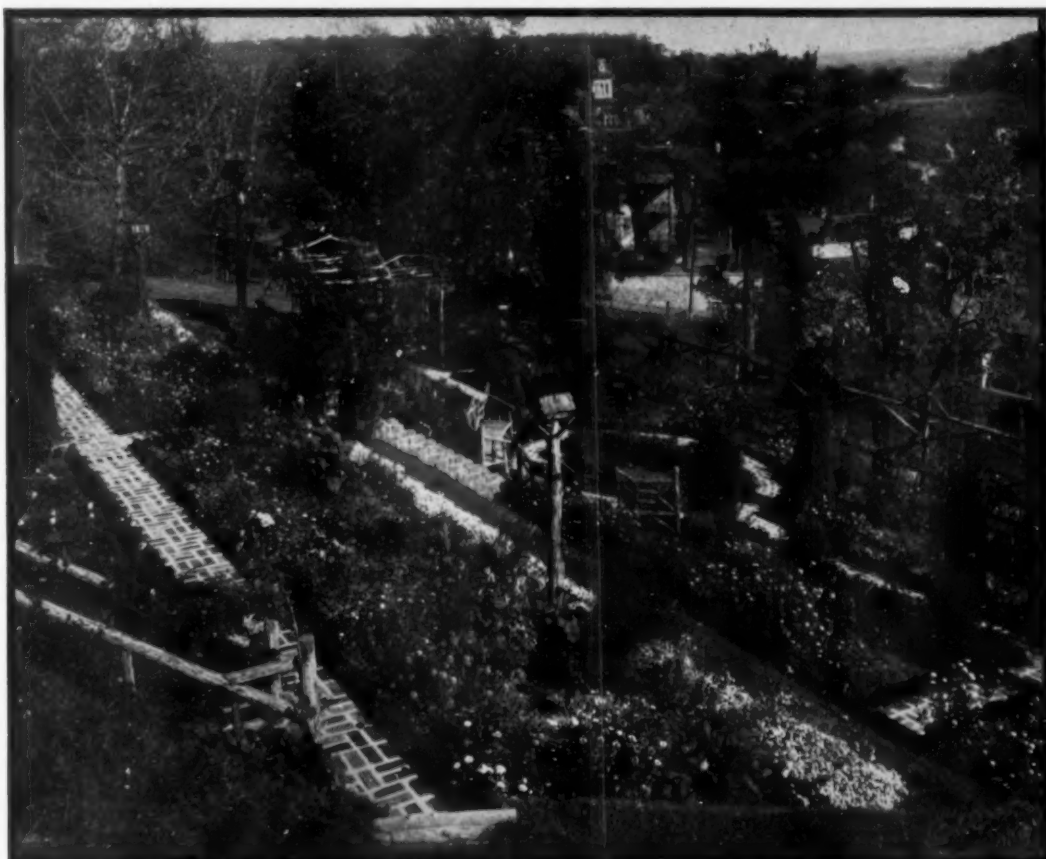
of a vertical cliff which makes a barrier of sheer beauty there.

At one end of each of these terraces are roses. Many of these are blooming and fragrant in late September. In the pool, at the center of the lower terrace, the pink lotus, *Nelumbium Speciosum*, and also white water lilies flourish. Here are rustic seats, and from them one sees the town below the cliff, the Hudson and the Berkshires, and through the guarding pines glimpses of the Catskills.

The other of the two ribboned gardens has a distinct individuality. Gardens, as do people, have atmospheres, auras, if you will, which are all their own. This one gives the impression of a charming living-room. Flowers are everywhere in this

garden, with the exception of the sloping side of one terrace, where grass divides the flowers like a bit of verdant hillside. Even the perpendicular stone wall of the lower terrace is covered with flowers. First, ampelopsis, growing along its base, covers it in the way it has of covering a wall. Its soft shades of varying green make a perfect background for the ramblers in different colors embroidered on it. These last hold themselves in place by clinging to wire so fine as to be almost invisible, stretched along the wall a little distance out from the ampelopsis. When the ramblers have finished blooming the starry blossoms and fairy green foliage of clematis take their place, and are an attractive setting for the rose garden below.

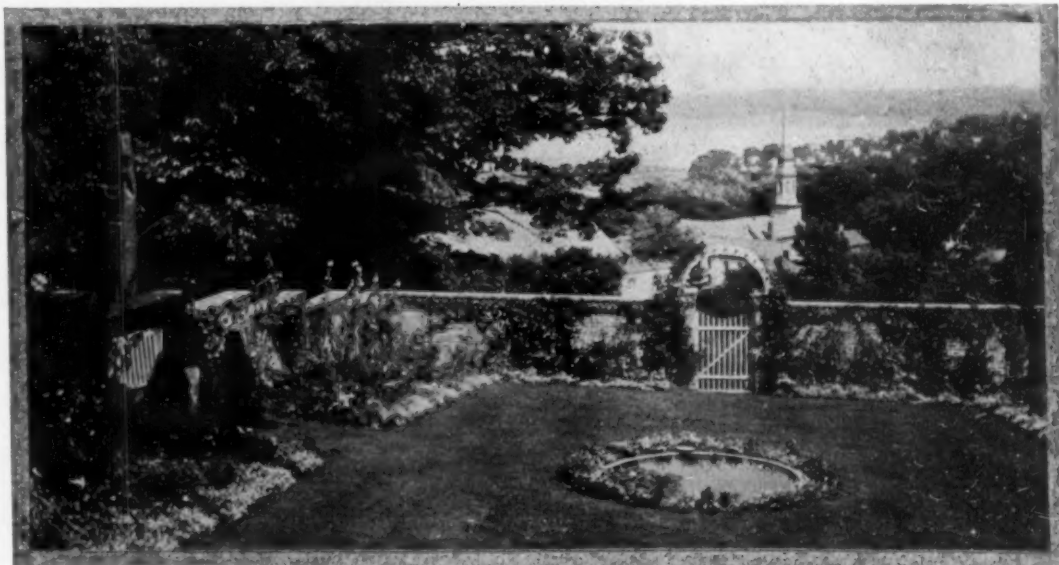
In the center of the broad lower terrace a fountain tinkles and rhymes, as it falls into a pool bordered with ferns, ivy and dwarf iris, which half conceal its cobblestone rim. This garden, while not remote, is hidden from the house. Also, as one must pass through a rustic rose-roofed entrance, go down a little flight of brick stairs, along a box-bordered walk and down another flight of stairs to reach the rustic seats, it is really secluded and near to nature.



Those difficult problems presented by the garden on a hillside have been successfully solved in this instance: brick walks and ha-has supporting the embankments and each terrace developed individually

the one virtue the zinnia lacks.

As the ribbon connects these two terraced gardens, in a way, tall, native pines—nine of them, stately and old, though by no means gray—stand guard above them at one side. And yet the two gardens are quite separate and unlike. In the first, midway between the majestic pine trees and the opposite boundary, the ribbon is interrupted by a rose-twined, rustic entrance to the garden below. Passing this there is first a grassy terrace, then another, box-bordered, and devoted to tall-growing flowers—mallows, *Physostega*, cosmos and hollyhocks. On the next level is a fern-bordered pool, another ribbon of flowers, more box borders—these thrifty low borders of box are a special feature of this garden—as well as a high rustic rose screen along the edge



For a small garden on a hillside no treatment is more effective: a wall affording both privacy and an immediate background, a pool and garden furniture, intimacy and diversion



Planned after the English manner of using the ground intensively, this sketch shows how a portion was given to each kind of garden activity and the divisions separated by shrubbery boundaries

Dividing *the* Garden *with* Shrubbery

A FALL RIVER PROPERTY IN WHICH THE VARIOUS PORTIONS OF THE GARDEN WERE SEGREGATED ACCORDING TO THEIR USE—PRAY, HUBBARD & WHITE, LANDSCAPE ARCHITECTS

ELSA REHMANN

through the leafy frame of shrubs and the arching elm branches is much more pleasing.

It was essential to plant, not only boundary plantations, but borders along the foundation walls of the house. This is often a difficult problem. The composition of such a shrubbery generally depends upon the house façade and must subordinate itself to the window arrangement, so that spreading branches will not encroach upon them and their light. The difficulty was eliminated here, as a balustraded and unroofed porch, resembling a terrace, which runs along the whole front of the house, allows the use of a continuous shrubbery border along its entire width. Japanese barberry and rugosa roses are planted in groups on either side of the porch steps—a familiar but always welcome combination. The looser habit of rugosa roses helps to soften the compactness of the barberry growth, and the barberry, in its turn, hides the leggy growth that the rugosa roses are apt

WITH an inborn knowledge of garden art and land economy, an Englishman makes an intensive use of his ground. He invariably divides it, no matter how small the plot, into little parcels with well-established boundaries for each part. This is done to segregate the various portions, according to their use, and to create a diversified interest in his small property. The same principle appealed strongly to the owner of this small place, and it was this idea that he brought to the landscape architect to Americanize and rearrange to fit certain personal needs.

The ground in front of the house is developed into a shrubbery and tree-bounded lawn, thoroughly simple in keeping with the informal and semi-suburban character of a Fall River street. Two elm trees stand on either side of the entrance and a shrubbery border extends along the entire street front of the property. This shrubbery is high enough that you can stand unnoticed on the lawn, and low enough to allow from the entrance porch a view of the Fall River Harbor.

This view is a wonderful asset to the property. On the sloping land just across the street crop out gray rock ledges overgrown with bayberry, sweet fern and wild roses. Below is the harbor, beyond it the checker-board, part-colored fields of Rhode Island, framed by the low hills of Connecticut, all blue and gray in the distance. The omission of the planting along the street would have given a broader and barer view of the harbor, but a more restricted outlook



In front of the house, a shrubbery and tree-bounded lawn. Two elms stand on either side of the entrance and a shrubbery border extends along the street front

to acquire. Red rambler roses grow over the balustrading, their bright colors enlivening the white house. Rose climbers are especially good for such position because their branches fall in scattered graceful sprays and do not hide completely the design of the balustrading. To emphasize the architectural symmetry of the house the ramblers are planted on each side of the entrance. In front of each rose group the low spreading *Spiraea* Anthony Waterer, with broad, flat, flower clusters, is growing, the two blooming at the same time. The red of the ramblers and the rose color of the spiraea make a curiously effective and unusual color harmony. Tall *Lonicera tartarica*, already fruiting at the time the spiraeas are blooming, are planted in a bold mass at the northwest corner of the house. They form a high accent, good for a corner which is apt to be a bare and windowless wall space. The group curves out from the house toward the north boundary, where a privet hedge and a solid row of maple trees on the neighbor's lot form a strong high screen. There is a break in the shrubbery to allow a grass path to meander through it, connecting lawn with kitchen entrance. As it is not a real path but only a short cut, the branches of the shrubs are allowed almost to meet and merely suggest the break. Van Houtte spiraeas make an emphatic high spot on the southwest corner of the house to balance the loniceras on the other side. They are planted also along the south side of the house wherever they do not obstruct the windows. To be quite certain that the line of green is not broken, however, *Euonymus japonica* clammers up the foundation walls under the windows.

The lawn of this enclosed front yard is an uninterrupted grass space with no disturbing shrub or tree to break its full extent. This is one of the surest ways of gaining an impression of size for a small lot. The very fact that the lawn is enclosed hides from it all the outside objects which might dwarf it by comparison in scale. Moreover, it makes one understand that a glimpse of the house through trees, of the doorway through frames of green, gives a more pleasing impression of a building than a bare and uninterrupted view. It makes one realize that frames of trees and shrubs turn bare hot expanses of grass into shadowed and secluded lawns. It makes one comprehend the meaning of the English walled or hedged gardens and appreciate the desirability and advantages of the privacy thus attained.

The ground back of the house is divided into four parts.



The simplest kind of a flower garden—narrow beds bordering a brick path. When the lattice is covered, this will make a secluded garden walk

Through the center of the lot runs a flower-bordered path which terminates in the vegetable garden. Relegated to the north side of the lot, to be near the kitchen, are laundry yard, garage, auto run and turn-around arranged in a closely related and efficient group. On the south side is a small rectangle called the orchard. Enclosed by vine-covered fences, lattice screens, free-growing shrubbery or clipped hedges, each subdivision can be treated as a part by itself and concentrate upon itself all the interest of the moment. Each is an important and separate factor, but having its appropriate share in the development of the property as an organized whole.

The garage is connected with the house. Many interesting problems in house building and ground development are now arising through the desire of weaving house and garage into one architectural composition. It will do away with the many, and for the most part, ugly little outbuildings, which spoil so many small suburban properties where garage and auto run seem to monopolize all garden ground. The strong concrete firewall between house and garage so diminishes fire risks that insurance companies make no extra rates for such construction.

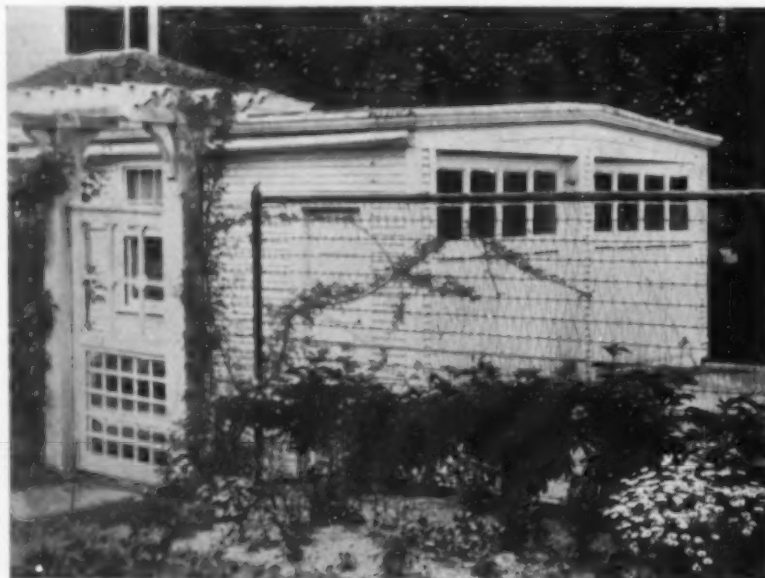


Japanese barberry and rugosa roses are planted on either side of the porch steps. Red ramblers grow over the balustrading; in front of each rose group a *Spiraea* Anthony Waterer

The laundry yard is a narrow space between the garage and the lattice screen of the flower garden. The auto run, with an exit to the back street, is a pleasant tunnel under maple and fruit trees and arch overhead. The turn-around, or court, is bounded by hedges and high fences completely hidden under rampant honeysuckle vines.

The so-called orchard has four dwarf apple trees and one dwarf pear tree, which, with several fruit trees in the vegetable garden, yield a very presentable harvest for a small place and a small family. Its space has other uses: it has trial ground for rose-growing, and a swing and improvised tent show the nucleus of a playground. A clipped hedge separates it from the flower border. The east and south sides are enclosed by shrubbery borders. The shrubs are planted in straight rows, but the difference in their habits of growth and in the spread of their branches

gives the appearance of an irregular plantation. On the west side a lattice divides the orchard from the lawn. Many might omit this dividing line and lose thereby an interesting effect. The open gate in the lattice provides a little view of the lawn enclosed by the trees of the street boundary. This little vista, this tiny glimpse into the lawn, excites a curiosity to see what there is of interest outside the direct line of vision.



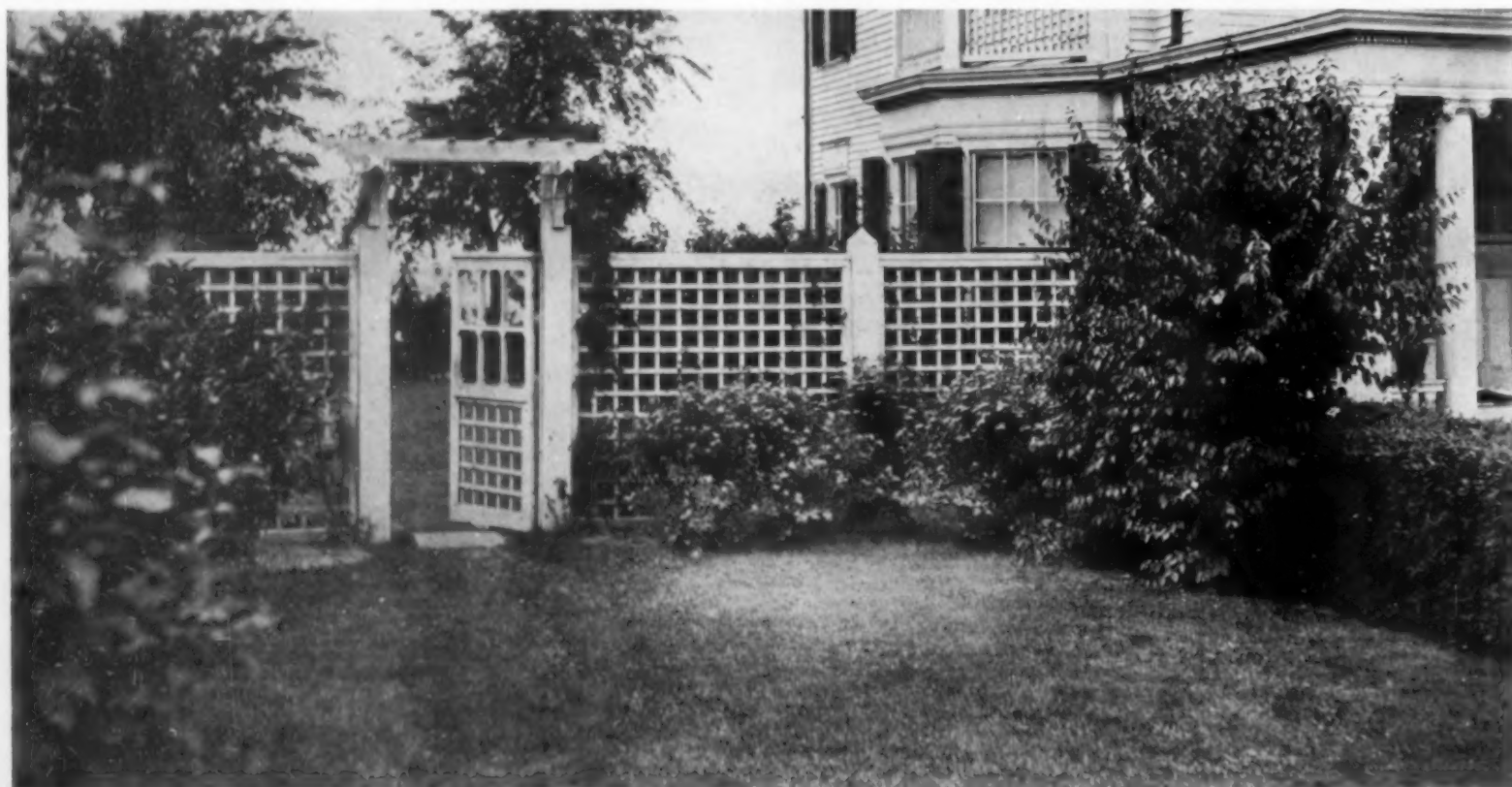
The contrast here between the decorative lattice and its poor iron substitute, which screen the garage, shows a false note that only a good vine growth can overcome

The flower garden consists of narrow flower beds bordering a brick path. It is the simplest kind of a flower garden. The lattice on the north side (which was designed to continue the full length of the garden instead of the poor iron substitute) and the hedge on the south side form backgrounds which, in time, will make it into a secluded garden walk.

It is a modern requirement of a garden that it be placed in close connection with the living portion of the house. Sometimes the living-room windows open upon the garden, sometimes the garden centers on the doorway of a central hall, sometimes, as in this case, it is a continuation of a small living-porch at the back of the house. A garden so placed becomes a necessary and integral part of the home. With the development of a garden in such close relationship with the house will come also a better understanding of the fact that the back or garden façade of the house is worthy of better designing.

Unfortunately for the picture, various misfortunes, especially the hard winter of 1913, make the garden look bare. It is one of the prime requisites of a small perennial border that it is crowded with plants. In a small garden it is well to remember several points in making a choice of flowers. Plants should be

(Continued on page 50)



Between the front lawn and the orchard stands this screen. The effect is interesting. Through the open gate can be caught a glimpse of the dwarf fruit trees, rose garden and playground. A clipped hedge separates, in turn, the orchard from the flower-bordered path

Your Saturday Afternoon Garden

SUMMER PLANTING—WATER AND IRRIGATION—CULTIVATING TO HOLD MOISTURE

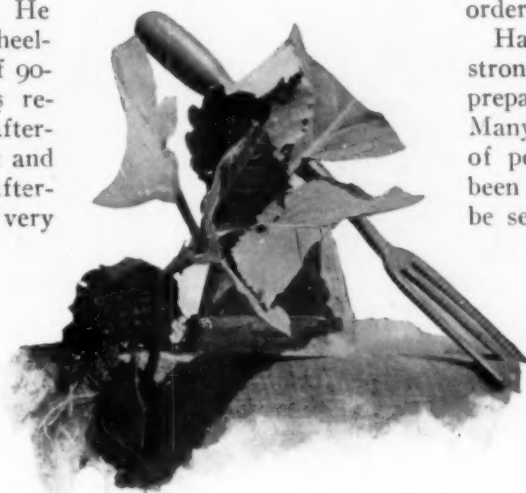
D. R. EDSON

JULY is the test month for the gardener. He who sticks to his guns, or rather his wheel-hoe and sprayer, through the first attack of 90-degrees-in-the-shade weather will reap his reward in autumn and winter. The Saturday afternoons in July are likely to be scorching hot and drenched with thunder storms—but the late afternoons are light and often cool enough to be very comfortable for work. And most of the work in the garden at this season is such that it can be done piecemeal.

The important jobs in July are summer transplanting, planting succession crops that can still be put in, and maintaining the soil supply of water by cultivation and, where necessary, by artificial watering or irrigation.

In spring transplanting there is not much loss in getting a late start, as conditions are often unfavorable and the plants to be set out are developing faster in the frames than they would be outdoors. In summer, however, it is well to get the transplanting done as soon as the plants are large enough and the ground can be made ready. If the soil is very dry and it is impossible to get water while transplanting it is sometimes advisable to wait for a good rain. The seeds of cabbages, cauliflower, Brussels sprouts, endive and late tomatoes, sown as suggested in last month's article, will be ready early in July to be shifted to their various permanent places. If the plants are growing fast it is a good plan to cut back the leaves slightly when they are three or four weeks old to keep them stocky,

This, of course, does not apply to tomatoes. The seedling plants should have been thinned out so that each one has sufficient room to develop. If this has not been attended to, do it at once, even if you expect to transplant within a week or so. If insect pests threaten do not fail to keep the seedlings well sprinkled with tobacco dust and, if necessary, spray with arsenate of lead in



A seedling cabbage ready to be planted out in the row.
Note how the outside leaves are cut back

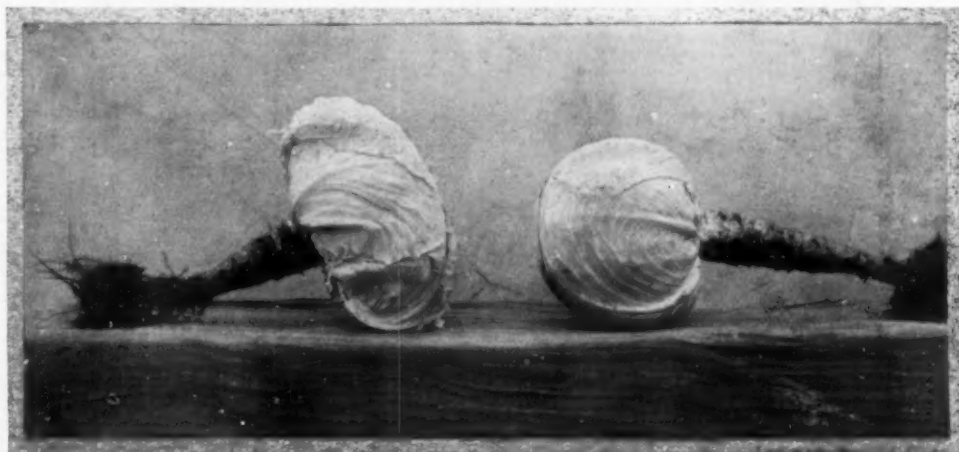
order to drive away the destructive pests.

Having made provision for a supply of good, strong plants coming along, the next step is to prepare the soil thoroughly where they are to go. Many gardeners, after removing the first crop of peas, beans, lettuce, or whatever may have been growing, when the new plants are ready to be set out, simply rake the surface and dig the holes where the plants are to be set. This is a great mistake. Through cultivation and harvesting, the ground has become packed almost as hard as it was in the spring and consequently every square inch of it must be forked up before the second planting. Through the loose, friable, well aerated soil the new roots formed a few days after transplanting will spread rapidly and will have a big field in which to forage for plant food. If planted the other way the roots will be more or less confined to the

small volume of loose earth immediately about the plant. Another mistake which is very commonly made is to set out the plants and then water them on the surface. In most instances this is worse than useless. With a watering can or even with the hose it is almost impossible to saturate the soil thoroughly enough to get beneficial results; and, in addition, the surface is puddled and rapidly dries, forming a hard crust. The proper way, if the soil is so dry that water must be used, is to apply it in the hole before planting.

In addition to a thorough forking or spading of the ground for

the second crops, unless a very heavy dressing of manure was used in the spring, the ground should be well fertilized. It doesn't pay to half-starve the second crop. An abundance of plant food for them is necessary not only to get good results but to make sure of getting any at all. Plants in a half-starved condition may be so delayed in maturing that the frost (Continued on p. 3)



Two distinct types of late cabbage: to the left late Dutch, Danish Ball to the right. The former makes larger heads but requires more room



One of the bedroom hearths—a comfortably intimate place to pass a half hour with a book before turning in

The House of the SEVEN HEARTHS



Like the room, the den fireplace is small and simple. It is deep and capable of producing great heat

A NEW HAMPSHIRE SUMMER HOME WHERE INDOORS AND OUT THE CENTERS OF INTEREST ARE FIREPLACES—WHAT THE FIELDS AND WALLS CONTRIBUTED—AND WHAT THE NEIGHBORS SAID

JOSEPH AMES

AS a matter of fact, there were eight, not counting a Franklin stove and the kitchen range; but the eighth was in a detached building known as the Study, so it really did not count. The very idea of so many hearth stones in a single dwelling seemed to disturb the rural neighbors. More often than not, the first explanatory comment from "native" to newcomer regarding the house on the hill had to do with this shameful superabundance.

"Open fires in every room! And I hear tell the chimneys alone cost all of fifteen thousand dollars!"

Sometimes these remarks were adorned with flowers of verbiage; frequently they betrayed grammatical lapses. But always the exclamation points were present, accompanied by a strong undercurrent of disapproval, more or less tolerant, as who should say, a fool and his money soon parted.

The truth is—and it seems the most flagrant sort of anachronism—the average inhabitant of New England rural regions has small use for chimneys. He looks upon them as institutions to be kept down in number and reduced to strictly utilitarian dimensions. The vast central stacks of his fathers, with its wide, deep, clustering hearths, its bake-oven,

back log, and all the other accessories of the old-time fireplace, is to him a drawback and a detriment, rather than a joy forever. Either he bricks up the openings, leaving only uninteresting stove-pipe holes, or else he reconstructs the chimney, barbarously slicing away two-thirds or more of its bulk and boasts of the square feet gained by the operation.

There is, of course, an explanation for this point of view. The long, hard New England winters and the rarity of furnaces in farm houses combine to make for these conditions. Where rooms are heated by stoves open fires are unnecessary, often impracticable;

and with the bred-in-the-bone agriculturist it is generally the practical alone that counts. From this point of view any man who deliberately puts fifteen thousand dollars into mere chimneys is a fool.

It really wasn't fifteen thousand, or anything like it. In fact, the entire house cost less. But the mason's bill happened to be somewhat out of proportion for a frame building of that size, and gossip has gone on adding to the amount ever since, like a snowball gathering volume down-hill.

The owner simply happened to be a person who wanted fireplaces—wanted them of generous size and in ample numbers, no less



The outdoor fireplace which breaks up the monotonous expanse of stone serves no really useful purpose, but it must be a bully place to sit around at night and tell stories

than of beautiful line and perfectly right construction. He wanted artistic treatment; and the artistic, like Parisian simplicity in women's dress, is usually expensive. It takes time and money to search innumerable old walls and even distant mountain slopes, for just the right shapes of weathered, lichened stone; it is almost as costly to employ the sort of workmen who will lay these stones as they should be laid to obtain the best effect. But no appreciative person, seeing the result, has doubted for a moment that it was money well spent.

The house, set on the crown of a New Hampshire hill, faces south and the view. The main portion is a simple rectangle, fifty by thirty feet, from which the service wing stretches at an angle. It is at their juncture that one of the great chimneys—perhaps the largest, certainly the most unique in treatment—towers up to face the approach.

Always the tying-in of a great mass of masonry to a frame house is difficult to accomplish effectively. In the present instance this was admirably accomplished by the happy expedient of carrying the stone clear to the corner of the building, making the entire east end of the first story, including a casement window, of stone.

The result was charming. From within, the deep, embrasured window, with its rough stone arch, and sill made of a single slab of weathered granite, has an interestingly mediæval effect—an effect greatly heightened by the presence of an old Gothic choir stall, and the carved panel hanging at one side. The fireplace adjoining is, of

necessity, a corner one; but the window and the remaining stonework provide a balancing effect which entirely prevents the lopsided appearance made by so many corner fireplaces. The whole "stone end" is, in fact, extremely happy, being unusual and picturesque, without a touch of the bizarre. It gives an impression of natural growth, almost of a necessity. Viewed from close at

hand or from the further extremity of the great room it is equally charming.

Perhaps it is not quite accurate to describe the main portion of the lower floor as a single room. Strictly speaking, the large rectangle is undivided by actual partitions, save for the pantry and a smallish den back of the stairs. But the placing of the massive square columns and pilasters of North Carolina pine, and the ingenious variation of the ceiling beams, give a distinct effect of hall, living-room and dining-room without detracting in the least from the airy spaciousness desirable in every summer house.

These beams, and to an even greater degree the wall sheathing, form another attractive and unusual feature of this unusual house. It is all of pine, not stained or varnished, but simply merely oiled after the fashion of the simple Colonial paneling, which, darkened a little and worn by time and use to an exquisite satiny softness, survives here and there in old mansions to excite our admiration and perhaps our envy. The quaint, yet simple, beading that gives the sheathing its distinction and redeems it from the commonplace, was copied from the wall

(Continued on page 50)



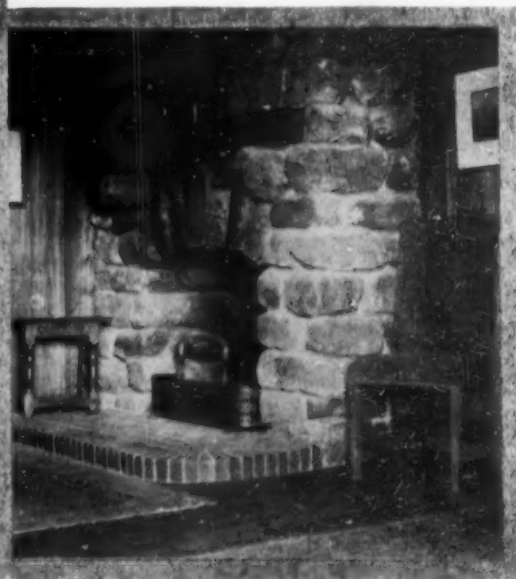
The entire east end of the house is stone, hence the deep embrasured casement window, with its interesting mediæval effect made by the old Gothic choir stall and the carved panel



This carries the glimpse of the living-room farther along, showing the massiveness of the masonry and the airy spaciousness of the beamed ceiling



And this brings us to the living-room fireplace, a cavernous affair capable of holding immense logs. There is genuine Colonial atmosphere in this room



Another of the bedroom fireplaces—set in a corner and with a raised brick hearth—a comfortable and convenient adjunct for toasting one's toes

The Gardening of an Impatient Woman

WHICH RECORDS AN AMATEUR'S ATTEMPT TO MAKE A QUICK GARDEN—THE WILD FLOWERS THAT CAN BE TRANSPLANTED—AN INEXPENSIVE BIRD BATH

M. C. AYMAR

LET me preface this article by stating at once that it is not written for those who are "old hands at the business" of garden making. But if there be any who, like myself, have had the misfortune of moving into a new house when summer has already begun and have been confronted with the hopeless aspect of new grounds, let them read and mark the words and doing of "A Woman Who Couldn't Wait."

It was bad enough to get settled inside the house during hot weather, but when one adds carpenters, plumbers and painters, who were still occupying space, there one has come to the true nightmare of moving. As I was thus balked in my natural desire to put our Lares and Penates in order I turned my attention to what had been left of Mother Earth out-of-doors. And I am bound to say the prospect was enough to discourage an expert—and, far from being so awesome a person, I was simply a city dweller come to live in the country for the first time. But ignorance is the purest bliss where some gardening is concerned—no matter what that same expert may have to say to the contrary—and nothing but it, and doing things yourself, will ever be so helpful a teacher.

The trenches around our house had just been covered over, the filling in and the road only completed after we came; so, while waiting for the first spear of grass to show green amid all that expanse of brown dust, I looked about to see how I could help push old Mother Nature along in her much-too-slow-to-suit-me process of covering unsightly spots. Consulting seed catalogues was fascinating, but also very discouraging work, as no nurseryman would sell me anything in the way of plants, vines or shrubs so late in the season. They had plenty of suggestions for September and October, but



Common field daisies, which are not at all particular as to their home, were transplanted for a foundation screen

sun or shade, moist or dry, appeared all one to this hardy pioneer—it certainly did not demand manure or sifted loam—and what would be prettier than a mass of them growing on my own grounds instead of the paltry few I could pick and take home in my hand? No sooner thought of than done! One side of our house was a long, unbroken ugly line at the foundation, and I need not tell a new homesteader what soil lies in such a position. Everything—from the remains of the workmen's lunches to the castoff shoes of the plasterers, which even they deemed too hopeless to carry away. Well, I did dig down a bit into this unpromising mass and smoothed it over

I wanted my cake, and I wanted it now! I had no time, either, just then "to dig a trench two feet deep and put in it well-rotted manure, wood ashes, etc., and fine-sifted loam on top," which, I read, was the proper way to go about making a proper bed. So I took to wandering in the nearby fields and woods and kept my eyes open with a purpose in mind—and that was to see how Nature herself did *her* planting on poor soil and in improbable places.

The first thing which struck me was that the ordinary field daisy was not at all particular as to its home; was that the ordinary field daisy was not at all particular as to its home; and dug a lot of holes and then I went, myself, with basket and spading fork, into our nearest field and found it easy enough to dislodge the daisies, for their roots are very shallow. I take it for granted that even the novice knows enough always to take a ball of the original soil which is around the roots and remove as much as possible with *any* plant. Let me, however, impress on all would-be transplanters (who may be as ignorant as I was) that my good fairy whispered to me this time to "puddle" them—that is, fill each hole with water before planting—this



Every one advised against moving this tree. The advice was stolidly disregarded. And this is its healthy condition after a year and a half

and subsequent frequent waterings save many a doubtful experiment.

One gets no idea from the picture how pretty and effective that row of white flowers looked against that hideous cement foundation because it was taken when they were first put in and does not show them at their best in full flower.

Let me warn the beginner against some of the Wise Ones, who frown upon experiments of every sort. For instance, they usually advise starting a new garden with buying what they call "clumps of three" (meaning three of a kind—and all very well for trees and shrubs), but I had great cause to regret listening to them when my perennial bed was finished; for in this way you get but one spot of color at a time, as a rule, which looks very lonesome in a large bed, and I decidedly say buy a dozen or two of *one* kind of plant (those that flower for more than a month preferably) and have a display which will mean something to you and your neighbors. Then at least you really have them to pick and some to leave for show as well. The white daisies lasted nicely (and I never touched them after a couple of days' watering) into July, when I cut off the wilted ones and, much to my surprise, they blossomed again, in smaller size, when August came.

In early July I turned my eyes once more to our next-door field and saw there the black-eyed Susans just ready to come out, so I promptly transferred them in large quantities to the same place. There their yellow sunshine glorified that spot for nearly two months. At this same time I noticed the goldenrod, too, and, having an unsightly barn foundation as well, I transplanted these against it in a long row. I must admit that I had to call for the help of a man here, as these roots are much harder to manage than the daisies, and the clump of dirt taken with them should be larger. I wish to remark that they were moved in full flower and not one was lost. I watered them for a few days and put news-

paper sunbonnets over the blooms to keep off the hot sun, but after that they took entire care of themselves. So, you see, that any unsightly place *can* thus be covered at once and with the "immediate results" so dear to the heart of a beginner.

The front of our small barn was an eyesore and I decided I must have something to hide its "homely" face, so I called in a professional to look at a large pine I wanted moved for this purpose. His ultimatum was fifty or seventy-five dollars and no guarantee that it would live at that! I bade him a polite good morning and went forth investigating on my own account. I found a much smaller white pine, really being killed by its proximity to our splendid oak, so I got the Italian, who was doing our grading work, to stop that work long enough to assist in this project.

It was moved, amid much excitement on all sides, for just six dollars! But with the assurance from everybody who knew anything (and from those who didn't) that "it wouldn't live—and if it did it would last two years, as the sap would have all been exhausted by then." The picture only shows you its condition after one year—please wish me good luck! I had read that evergreens must never be allowed to get dry after transplanting, and so in every spare moment (and many that I couldn't spare) I turned the hose on that sick-looking tree. Meanwhile I had put ferns, taken from the

woods, in a position in which I wanted them but which they seemed very doubtful about liking as a permanent home.

Let me digress one moment as to one of the surprises which awaited me in these heretofore unknown realms. I had always supposed that most vegetation "just grew" where it was put, of course a little better in some surroundings than in others; but when I began a course of sprouts in the garden books and catalogues and my own experiences, I found that no spoiled child could have as many finical likes and dislikes as some flowers
(Continued on page 52)



In order to transplant wild flowers successfully, dig up a ball of earth with them and puddle when planting



These sunflowers, seeded in June, were eight feet high by August, forming a good screen for the poultry yard. The seeds were later given to the chickens for food



The bird bath was made from a wooden chopping-bowl, stained, oiled and set on a standard where the birds would be unmolested



Do butterflies make love? In this male fritillary can be seen the scent organs clustered along the nervures that cross the middle of the forewings. The larger scales that cover these parts are covered with special cavities in the wing structure, from which they appear to derive an odorous fluid employed to charm the females

Some Marvels of Insect Life

A FEW GLIMPSES OF THE MANY WONDERS THAT ARE REVEALED IN THE GARDEN—NATURE'S PROTECTIVE FORM AND COLORING—HOW INSECTS FEEL AND BREATHE

EDWARD STEP, F.L.S.



The antennae or "feelers" are the seat of the sense of smell in most insects. Those shown are from the male moth of the common silkworm

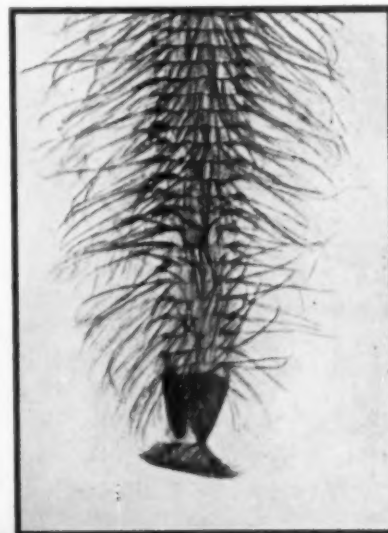
garded as an insect; in fact, among the present generation there are many persons for whom the word has scarcely any more definite meaning.

All the multitudinous forms of animal life have been sorted out by naturalists and placed in a number of grand divisions, according to their possession of certain characteristics. There is no present need to name all these, but one division consists of animals to

BACKYARD naturalizing cannot but become a hobby for those who work intimately with their plants. The more one looks, the more wonders are revealed. With the aid of a magnifying glass the backyard naturalist has even greater sights shown him. To write of them all would fill volumes, but herewith are shown a few that may tempt the uninitiated to begin their studies.

Formerly any living creature of small size was re-

which these authorities have given the name of Arthropods. It includes the crabs and lobsters, spiders, centipedes, insects, etc. All these creatures agree in having the body built in segments or rings, all or some of which bear pointed appendages. The insects differ from the others in having these segments grouped, in adult life, into three regions, usually quite distinct. These regions are the head, the fore-body and the hind-body. The spiders, which are commonly



By this tongue the bee collects nectar from flowers to be converted into honey. As shown here, it has been dissected out from the surrounding mouth parts



The caterpillar secures his cocoon to the branch to insure its safety when the leaf falls. Before making the cocoon proper, he carefully weaves around the leaf stalk, beginning at the branch and continuing it into the cocoon



regarded in popular estimation as insects, have only two body-regions. There are other differences, of course, which are not evident upon a superficial view of the exterior form; but even here two or three additional points may be mentioned, contrasting a spider with an insect. The head of the insect bears a pair of antennae, or "feelers"; the spider has no antennae. The insect, with a few excep-

tions among the simpler forms, has a pair of prominent compound eyes made up of a large number of lenses, and two or three simple eyes, or "ocelli," placed between the compound eyes. The spider's eyes are all simple and number six or eight. All the winged insects pass through a series of changes, called metamorphoses, after they leave the egg, in the last stage having their wings fully developed. Spiders pass through their developmental stages before they leave the egg, and after hatching merely increase in size without change of form. Insects have only three pairs of true legs; spiders have four pairs.

We have spoken of insects and their allies having the body built up of segments or rings. It must not be supposed, however, that these rings are separate and distinct. Taking a long cylindrical body, like that of a caterpillar or a dragon-fly, for example, and making a longitudinal section of it, we should find that it forms one continuous tube of skin, which has been fortified by the deposit of chitin in rings, having connecting rings of thin, purple skin, which allow of contraction or distension in length and of lateral curvature of the body, as a whole or in parts. By the attachment of muscles from the hard to the soft rings such movements are brought under the control of the insect. This plan of structure allows a considerable amount of elasticity to the body as a whole.

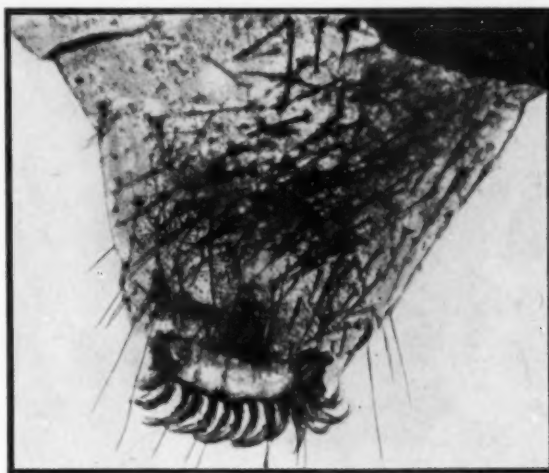
The theoretical insect consists of twenty of these strengthened rings, but the whole twenty are not evident in most cases. Some of them are combined to form the three distinct regions of the body—the head, the fore-body and the hind-body—and one or more of the hindmost segments are "telescoped" so that they do not appear except on dissection. It is considered that the first four rings have been consolidated to form the

head, which bears four pairs of external organs, a pair of jointed feelers, or antennae, a pair of compound eyes, and the appendages of the mouth. In like manner the next three segments have been united to form the fore-body or thorax, bearing on the lower side the three pairs of legs, while on the upper side the second and third rings bear the two pairs of wings. The hind-body, though theoretically it may have thirteen rings, usually consists of ten or eleven, and often of a smaller number. The hind-body bears no appendages, except those connected with the function of reproduction. Stings, where present, are modifications of these organs.

The limbs of mature insects are all made up of several joints, and it is remarkable that these joints are constructed on the same principle as in backboneed creatures, and are extended or folded by the contraction of similar sets of muscles, though in the one case the muscles are attached to the central bony portion, and in the other to the chitinous exterior. The number of joints in these limbs is not the same in all orders or families of insects. There is considerable variation in the terminal section of the legs—the foot—which normally consists of five segments, but may be reduced to three or two. In caterpillars the only true legs are the three pairs at the front end of the body: those in the middle and at the hind extremity are unjoined temporary structures. The jaws and sucking apparatus of the mouth are seen by the process of development within the egg to be essentially modified limbs. So also are the feelers or antennae.

The internal organs of an insect may be said briefly to consist of the circulatory system, the organs of nutrition, the nervous system, the breathing apparatus, and the reproductive organs. The

(Continued on page 52)



Have you ever noticed how tenaciously a caterpillar clings? With these terminal hooks he fastens onto the object. The true legs just behind the head manipulate its food



The leaf-cutting bee and a sample of its work, which can be seen on rose bushes at this season. The pieces are used in building the nursery



The tongue of a butterfly—in fact, a long trunk kept coiled like a watch-spring when not in use, but extended for sucking the sweets of flowers



Scales from a butterfly's wing: some are colored, but the color effects are often optical, due to the reflection of light by ridges on each scale



The outside walls are constructed of hollow-tile blocks, faced with brick laid up in Dutch bond in the first story; with stucco in the second and on the gable walls of the attic. The foundation walls are of concrete, water-proofed on the outside, with a tile dry drain all around

THE HOUSE
OF W. J.
GESELL,
MONTCLAIR,
NEW JERSEY



DESIGNED
BY
O. F. SEMSCH,
ARCHITECT



Throughout the first floor the woodwork is oak finished in the natural color and waxed. To tone with it the walls are papered in warm browns



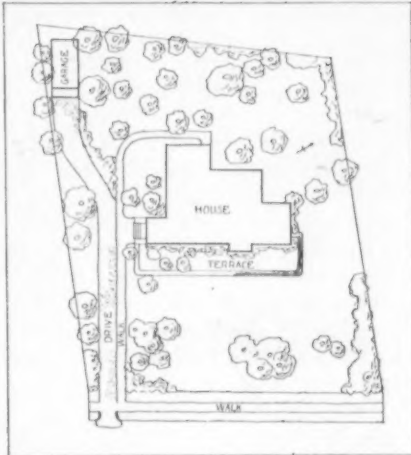
The fireplace of the living-room is faced with dull brown tile, with a brass moulding, the whole blending with the finish of the oak trim



White wood finish has been used in the dining-room and bedrooms. The French windows lead to balustraded balconies that can be used for sleeping porches



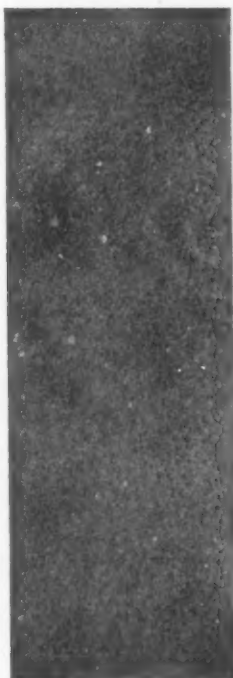
In order to make the reception hall more than a mere place of passage, the owner recessed the stairs in an alcove



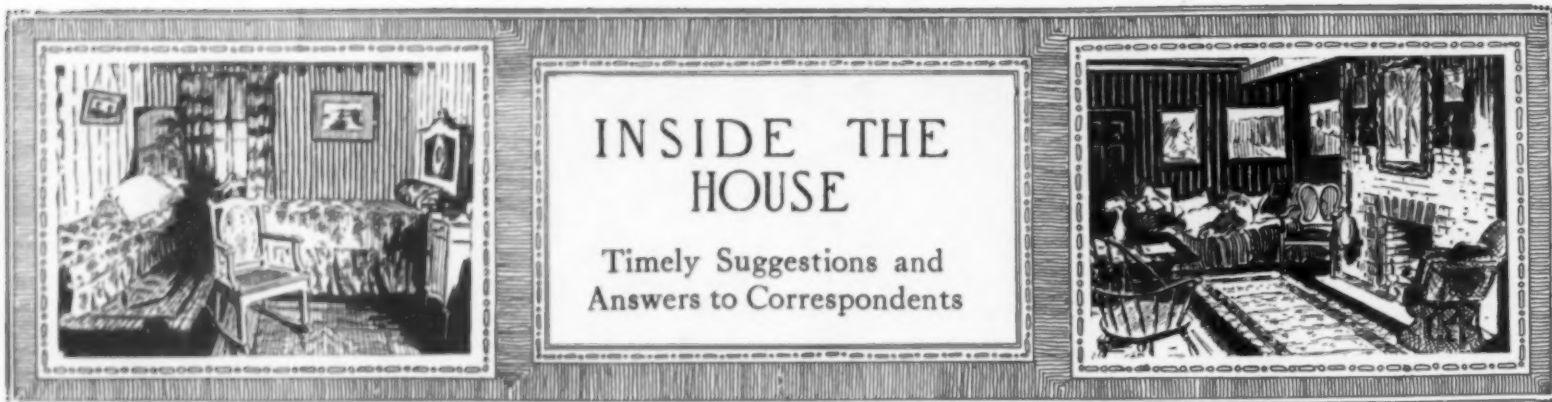
The arrangement of paths and planting has been made as simple as possible, giving ready access to garage and service quarters



An abundance of closet room is found on the second floor. Note also the fact that the library has been placed upstairs



The end elevation shows the generous service quarters, which include a servant's alcove at the rear. In the cellar beside the heating apparatus is the laundry, a vacuum cleaning pump and, under the sun room, a "Trinkstule," trimmed in cypress, with wainscoting, amber colored leaded glass windows and plaster finish



Hand-Blocked Prints, a New Industry in America

HAND-BLOCKED chintz, designed in an artist's studio in this country and printed for the first time in his workshop here in 1915, marks the begin-



In the chestnut design the leaves are green and yellow, the nuts red on black and white

ning of a new epoch, not alone in the production of modern decorative textiles but in art as associated with this industry in America.

Always accustomed to look to the European studios for designs and to their long-established industries for fabrics of artistic merit, we may be a bit slow to grasp the fact that the United States has taken its first step in this field.

Since America became interested in that form of modern art as applied to fabrics used in the home, the liking for them has grown tremendously. All these new drapery stuffs were made abroad and could only be had by importation. But there are fine artists here; why not have them make designs as the artists do abroad? Designing, however, was not so difficult as reproducing the design on the blocks of hard wood, from which it is transferred in properly blended colors on to the natural linen. The printing is the

most difficult of the whole process, and only skilled workmen are entrusted with the work, which is done entirely by hand.

All the fabrics which are illustrated are designed in one studio, but by different artists, and they are printed in the one workshop. Virtually the industry has been transplanted from the studios and *Werkstaetten* of Europe, but not literally, though it seems to have taken root firmly here. The industry is not in an experimental state, for the promoter of it has had years of artistic training in the *ateliers* of France and the *Werkstaetten* of Austria.

There is only one feature of this textile development that is really new to this country: the indefinable relationship between a people and the things which are a part of their life; which stamps itself upon its architecture, its painting; which runs through its music, and which is manifest in the development and decoration of homes, by all of which we recognize one country or people from another, even as we recognize racial characteristics and different personality. Such is national individuality.

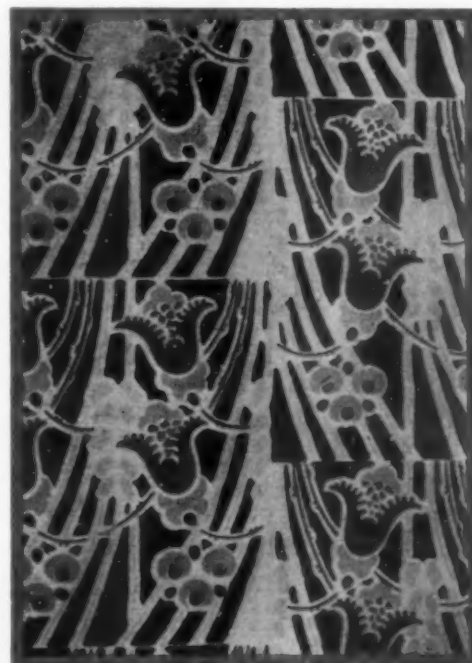
It is this relationship, this individuality, which is subtly struggling for expression in American decorative fabrics. It is our



A pretty conception for the nursery or child's bedroom—a girl and rabbit motif in reds and black

virile, democratic spirit which the artist seeks to suggest in these new chintzes—to express the intermingling of the spirit of the new with the art traditions, the ages of training, the inherited feeling and invaluable ideals of the old.

America is inheriting the artistic efforts



The bell flowers in this print are red, blue and green in pronounced tones; the ground black

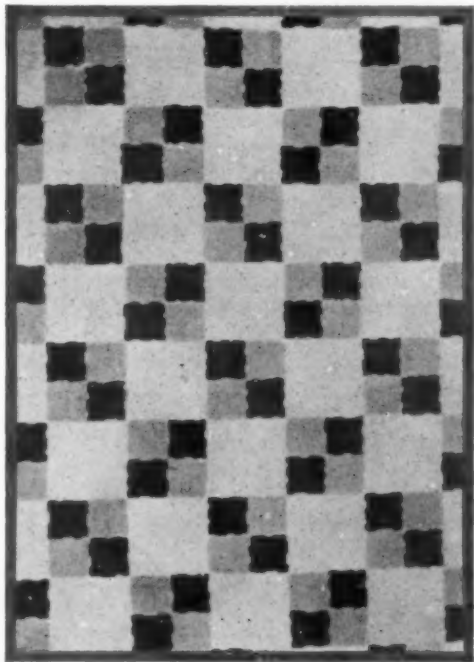
of Europe. In this instance it is the movement of late years in England, Germany, France, Austria and Hungary to establish a high standard of decoration independent of the much-overworked "period styles," to create a style which is of our own time and which shall in some degree embody the artistic ideals of the present. The result has been to form an association which includes all the industrial undertakings that co-operate with artists in the elaboration of their products, whether the member be the architect of a palace, the builder of an automobile or the designer of printed linens or silks. Only those manufacturers are eligible to membership in these associations who work hand in hand with trained artists, and every artist's work is signed, whether he designs printed fabrics or the abode of royalty.

Because of the high standard required of designers the artists have largely taken

the matter out of the hands of the merely commercial decorator and have imposed their tastes and trained judgment upon contemporary styles, instead of coming in as slavish martyrs by having to meet the business notions of popular demand. By such association and co-operation of manufacturers and artist, the artist studies the market and gains a knowledge of materials, and the manufacturer learns something about the technical side of art as applied in industries.

In Europe the individualistic movement in decorative textiles and the utilitarian arts reflect the national characteristics, and in them one reads the artist as if it were his handwriting. Indeed, the designing and printing of fabrics is such a fine art and represents so much care that a piece of decorative linen or silk is always selected according to the artist, just as one would buy a painting or an engraving.

We recognize the combinations of black and white with the Persian effects which



An effective linen corner in irregular square spots of rose and black on a natural tan ground

Poiret uses; we see the fine patterning of silks and of wonderful linen that come from Professor Hoffman, the great Austrian architect and designer of decorations. The products of his country are full of vitality, elegance of line and harmonies of color. His designs and others of his school are particularly admired by the prominent decorators of New York.

And so we in America have inherited, or will inherit in the near future, the great benefits to be derived from the art associations of the old world. We are too closely allied by every tie with the countries of Europe to consider our life as entirely separate and apart from theirs. On the contrary we are bound to them in every way. They come to our shores and become a part of our national, our



The bouquet design is an arrangement of blue, orange, yellow and green printed or untinted linen

industrial, our artistic and our daily life. They do not come empty-handed. As we open our doors to them, so do they bring to us all the Old World arts, their painting, their music, their hand-wrought textiles, their Old World customs and all that makes up their inner and their outer life, their thought and their feeling. Out of this cosmopolitan inheritance of character it is but natural that the spirit of democracy should grow and that its interior decoration should be in harmony with this spirit.

To country homes and city apartment alike these linens are particularly well adapted. Their artistic designs run more on conventional than naturalistic lines and their strong, harmonious colors are admirably adapted to rooms with plain walls. Such marked individuality in furnishing fabrics becomes the dominant note in a room and should be used with a nice discrimination for good effects. Solid wall paper is the ideal background for fabrics of such vitality in line and color, and both woodwork and furniture should be of simple lines also, then these fabrics as furniture coverings, draperies and cushions add a desirable note of life and contrast.

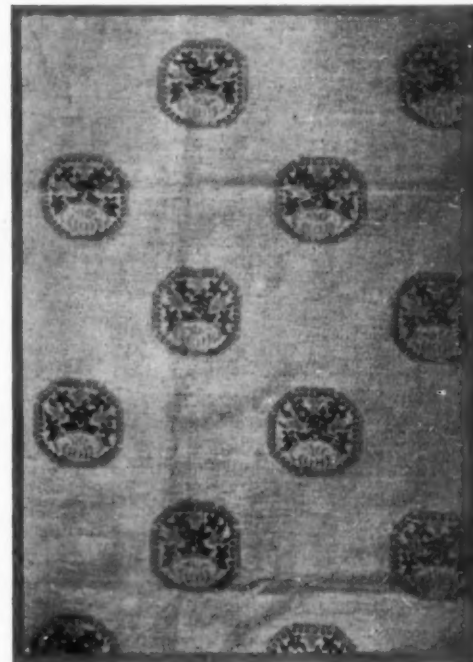
These New World chintzes disclose the feeling of the modernist movement as it has developed in Europe and with which are now blended features that express the young art life in America unfolding in industries. As one woman decorator expressed her decided admiration of the wavy black lines in the piece of linen printed with the cup-like vase against which rise the yellow and red flower, the designer told her that those lines were put into the pattern especially as an interpretation of American taste. They tended to soften the whole print, which

would otherwise have held only the vase in bold relief on the natural linen ground.

It is a great thing to be able to sense the feeling of a people so as to use successfully a soft color with a simple, strong design. In the square spot there is only a lovely, soft rose combined with black in a not too rigid square, printed on linen of the natural color. The effect is harmonious and delicate, with a pervading sense of dignity.

In some of these modernist prints one can trace with much interest the influence of the art that has come from some far land and entered into the country life of its adoption until one is almost unconscious of its foreign ancestry. So in the piece that seems printed over with old-fashioned china plates that have the corners cut off there is a suggestion of Sèvres with a decided effect of the Japanese. The figures are printed in a blue, red and green decoration on a pale tan linen.

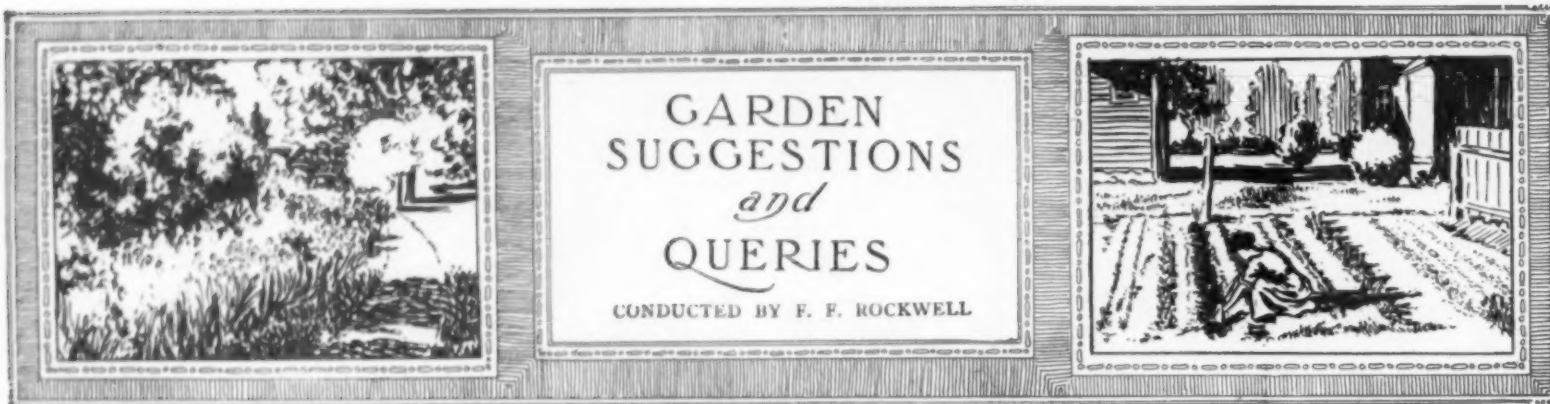
Bird and animal figures disport in many



There is a suggestion of old French china in this fabric. The figures are blue, red and green

favorite patterns that come from the different *Werkstaetten* abroad. In this American workshop was seen a linen printed with a rabbit gayly chasing a young girl in a red dress, and in another piece a gorgeous parrot flaunts itself in plumage of green, yellow, red and blue. The bird is printed in a large oval of the plain fabric, and between the ovals the background is striped, avoiding too large splotches of plain space.

A very effective design shows generous bunches of chestnuts hanging against yellow and green chestnut leaves, the whole backed by black and white stripes, which give to the print almost a solid effect, as in verdure tapestry. This is a very rich and interesting print.



Have You Overlooked Up-to-Date Irrigation?

THE modern systems of applying water which have been developed during the last few years have been mentioned from time to time in *HOUSE AND GARDEN*. But methods which are a radical departure from those that have preceded, no matter how good, are always slow to be accepted. If you have a vegetable or a flower garden which usually suffers from dry weather during July, August or September—and there are very few which do not—lose no time in investigating the several overhead systems of watering. Usually, to see one is to have one. Before deciding that you will not profit this year from this great advance in watering, consider the following facts: any of these systems is just as practicable for a garden a few rods square as for that of several acres. The most expensive part of the outfit is $\frac{3}{4}$ -inch galvanized pipe. This costs from five to eight cents a foot. Hose cost from fifteen to twenty. If nozzles are used—they are placed every three or four feet—they cost five to seven cents apiece. Sprinklers cost from two to six dollars apiece, and each one covers a circle of from forty to a hundred feet in diameter. You will not have to waste any of your precious gardening time in holding the hose, rolling and unrolling it, and in moving it about. Furthermore, plants that are kept growing vigorously with an

abundance of water are much more capable of withstanding and resisting the attacks of insects and disease. On the whole, there is no garden investment that you can make which will give you as much satisfaction as a modern watering outfit. It will do more to make big vegetables and perfect flowers certain than any fine varieties, high-priced fertilizer or up-to-date cultural methods that you have ever used.

Pot Plants in Summer

The various house plants are somewhat of a problem and a good deal of a care during the summer months. They are usually kept on the veranda, or a wire plant stand, where, in spite of constant attention, they frequently dry out, so that the plants are more or less injured. The most convenient way of caring for such plants during the summer is to spade up a bed for them in some corner or under a tree where they will get partial shade. The pots should be half plunged or buried in the soil, and turned or taken up occasionally to prevent their rooting into the dirt below. They will have to be watered only half as frequently as when the pots are fully exposed to the sun and air. Those designed for winter bloom indoors should not be allowed to flower much during the summer. They should be cut or pinched back occasionally to be got into ideal shape.

Plants for House and Greenhouse in the Winter

It is time now to start plants, either from seeds or cuttings, that will be wanted in fall or winter for use in the house or in the greenhouse. The best method to use for starting cuttings at this time of the year, when the temperature is apt to be high, is the "saucer system." It is simplicity itself. An earthenware dish, several inches deep, is filled partly full of sand, which is saturated until the moisture stands on the surface. Place the cuttings in this in an upright position around the edge of the bowl, which is kept in full sunlight. Success depends upon keeping the sand properly saturated. In hot or windy weather, if the bowl is kept out-of-doors, evaporation will be very rapid and the sand should be looked at frequently. In preparing the cuttings care should be taken to get them just right, as in fall and spring propagation—that is, they should be taken from new growth that has become firm enough, so that when bent between the fingers it will snap instead of merely doubling up. The lower leaves of each cutting should be cut off, and the larger ones shortened back a half or so. This makes the cutting less likely to wilt and makes it possible to get a great many more into the same-sized saucer. Another method of rooting the cuttings in the summer is to break the shoot partly off from the plant, leaving it partly attached by a



In the garden the pipes are hidden behind foliage which, however, does not interfere with the spread of the stream



By running the pipe down the center of the garden both sides are reached, the mechanism being adjusted without labor

shred of the skin and flesh on one side, which is sufficient to keep it from wilting. If left this way for a week or ten days the break will have been calloused over and be ready to root in a few days in sand and water or in sandy soil. In moist, cloudy weather the roots will sometimes form in the air.

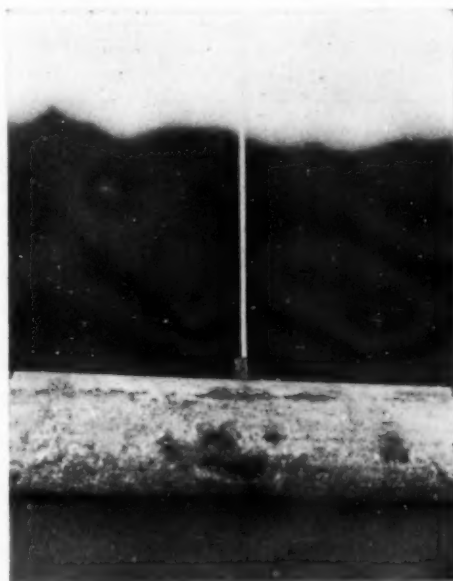
In the flower bed, after the plants have made a good growth, favorable conditions for rooting can quite often be found, and large branches can be taken off and rooted in the bed in the shade of the plants. Large slips of geranium, handled in this way, and rooted in July or August, will make good, big plants for flowering indoors in the early winter.

The seeds of many plants for winter flowering, such as begonias, heliotrope, verbenas, snap-dragons, and so forth, may be started now. A specially prepared soil should be used, the same as for starting seeds indoors. Most of the seeds are small, and, as they should be barely covered from sight, it is necessary to have a soil that will retain moisture and keep damp on the surface. The seed bed or flat, if they are used, should be placed in semi-shaded position, or a temporary covering or shade should be rigged up over the seed bed. Water the soil thoroughly before sowing and use a fine spray for watering afterwards, as the little fine seeds are easily washed from their positions. The little seedlings should be potted up in thumb pots as soon as they are large enough, being careful to keep them well shaded for several days after this operation. A five- or ten-cent package of seeds will give an abundance of plants for the winter garden or for the greenhouse.

FOR A FULL CROP OF STRAWBERRIES NEXT JUNE PLANT NOW

Under the usual method of procedure, a crop of strawberries must be waited for a year or a year and a half. A bed set out in August will not bear until a month from the following June. By using potted plants this month or early next month, however, with proper methods of culture, a full crop can be harvested next June. Potted plants may be bought for three to five cents apiece. They are easy to set, sure to live, and, if properly cared for, will give a full-sized crop of perfect fruit next spring. These plants are especially adapted to what is termed "hill culture," as each one will quickly form a strong bushy plant if all runners are kept pinched off. The whole strength of the plant should be thrown into making a good, strong crown to bear next year's crop. Set the plants a foot apart in rows two or three feet apart, or two or three rows in a "bed" a foot apart, with an alley two feet wide between beds. If a ready-mixed fertilizer is to be used it should be sown in the drill and then thoroughly mixed with the soil, either with the hoe or by running the wheel-hoe with the cultivator

teeth along the row. Strawberry plants are easily injured by fertilizer used in the hill or drill, unless it is thoroughly mixed with the soil. A mixture of cotton seed or tankage and bone meal is safer than ready-mixed fertilizer, and will give the plants a good, strong start. A little nitrate of soda worked about the plants a week or so after planting is also very good. Be careful not to get any on the leaves, and mix it into the soil about the plants at the first hoeing. If the new bed is in proximity to an old one, in which rust



Plants that are kept growing vigorously with an abundance of water are much more capable of withstanding and resisting the attacks of insects and diseases

has appeared, spray with Bordeaux immediately after setting, and every ten days or so thereafter until growth ceases in the fall.

GROWING YOUR OWN POT PLANTS

If you already have a strawberry bed there is still time to pot up plants to set out this fall, or to fruit in pots in the greenhouses, or for use for an extra early crop in the coldframe. A surprisingly large number of berries can be grown under a sash or two. Potted plants should be started now and set later in a frame ten inches or so apart each way. Have the ground rich and give plenty of water to keep the plants in vigorous growth until freezing weather. Do not keep the sash on late in the fall, but let them freeze up. They may then be mulched and covered, to prevent freezing as severely as they would in the open. The covering should be removed and the plants started into growth under sash early in the spring. The method of securing good, strong potted plants is simple. A supply of two-and-a-half- or three-inch pots, which by the hundred should not cost over a cent apiece, should be procured. Then spade up well between the rows or about plants

of the varieties you wish to continue to use, and sink a pot under each of the new plants forming on the first or second runners: those on the later runners will not be so strong. The first or second plant on the runner should be taken. The runner is held in place over the pot by a clothes-pin or a small stone, which will serve also to mark where the pot is. If a good watering can be given or a rain occurs soon after the pots are placed, the new plants will be ready in three weeks or so. The soil in which the plants are growing is usually suitable for filling the pots, but if it is very poor or dry a prepared soil, moist and well enriched, will give better and much quicker results. In selecting runners from which to root potted plants they should be taken only from strong, vigorous plants, preferably from those which were marked during the bearing season as the best of their respective kinds. Plant selection for strawberry propagation is particularly successful and immediate in results.

PLANTING FOR FALL AND WINTER SUPPLY

Of the seeds which may be planted at this late date the most important are turnips, beans and early beets. The early varieties of carrot will generally have time to mature if they get a prompt start. All these things are much better in quality and will keep better if they do not get too large before being taken up for storing. Early Model or Detroit Dark Red beets, Petrowski, Golden Ball and White Egg turnips are mild in quality and good keepers. All of these care for the winter supply. There is still time, if planning is done promptly, for early peas, lettuce and radishes. Golden Bantam and other early sweet corn, planted by the 4th, will generally mature, even north of New York. Laxtonian, Blue Bantam, British Wonder and Little Marvel peas are all excellent varieties for late planting. The heaviest, most retentive soil should be used for these, and they should be planted deep. Deacon, All Seasons, Iceberg and New York are good summer lettuces. Big Boston and Grand Rapids should be planted toward the end of the month for a fall supply: it may be necessary to water the soil before planting and shade lightly to get a good stand. Crimson Giant is a good, long-lasting radish.

The great secret of getting a good stand from seeds planted in hot, dry weather is to firm the seed in the soil. Seed for these late sowings should be planted deeper than for those in the spring. When planted by hand, they should be firmed into the bottom of the drill with the sole of the foot or the back of a hoe before covering them. This insures more moisture being absorbed by the seed to start prompt germination, and it gives the sprouting tap root of the seed a congenial environment.



EDITORIAL



IN A NEGLECTED GARDEN

It had been built on a hillside seven, eight—possibly ten years back. The time makes no difference, save that there had been time enough for the patient, persistent, steady ravage of the years. That, and the fact that the garden had been hewn out of a hillside. Yes, veritably hewn. For the slope was precipitous, and in those days strong arms had dragged from near and far the great stones to shelve up the beds and lay the walks. Once a weed-grown patch, blistered here and there with an outcropping of shale, it was dug and petted and coaxed and fed into such a garden as no flower could disdain. The new year had found it an abandoned place; midyear found it a riot of color and life, a growing monument to the toil and care that had been lavished upon it. There had been no attempt at an effete color-scheme. With equal affection all the flowers had been planted and tended, from the pansy bed down by the edge of the wall to the range of iris clumps that fringed the corner of the woodland above. As you came out of the deep shade and troubled rustling of the trees these steps of blossoms in the brilliant glare greeted your eyes like a sudden sunshaft in a clouded sky. Aimless, the feet would carry you about from bed to bed, for each step was as exquisite as its fellow. As innocent of weeds as a maiden of sin, those beds. It was as though the souls of flowers have been liberated into a *Paradiso* that knew naught of evil. Thus the woodlands looked on the garden and the garden looked on the river that flowed a hundred feet below, a silent, sparkling, silver ribbon drawn on through the eye of the hills.

That was seven, eight—possibly ten years back. The time makes no difference, save that there had been time enough for the patient, persistent, steady ravage of the years.



It had always been a riot, and a riot it was now. Nature is habitually riotous, and Nature had gained the upper hand. For that reason this garden in its present state could never be called abandoned. Between the abandoned garden and the neglected lies a mighty difference. In the one no care at all is taken; in the other, care, but not enough of it. And that was the circumstance here. The hands that had fashioned the spot out of the hillside had been called away to other work. Whereas formerly days on end were passed there, now only an occasional hour could be spared. Once on a day one lone person worked out his individuality there; now a dozen tinkered at it with no purpose and no visible result.

The riot of color had been subdued under an overshadowing of weeds. Stones that had shelved up the beds had fallen across the path, letting down little avalanches of soil and what was left of the scattered edging plants. Where once the paths lay—stepping-stones laid on cushions of moss—were rank carpets of sourgrass. Athwart the beds weedy creepers stretched out tentacle arms that wound about the stalks of sickly plants and choked them Laocoön-wise. Between the iris clumps flourished milkweed and pusely and wild carrot. Disease and all manner of insects had made of the rose bed a sorry thing. The phlox had passed into the stage of senile decay. Black beetles found the aster buds fat carrion to fatten on. Against the sky the arch that had once worn a queenly crown and robe of roses stood stark and gaunt.

Yet there were signs that work had been done in that garden—

occasional work from which the toiler had fled. A rusted spade bristled in the gladiolus bed; along one of the paths, atop a pile of bleached weeds, lay a rake. It also was rusted. Papers were scattered about. Only in one corner was there a mark of loving care: a little patch, walled up with stones and tilled, bore a notice scribbled in a child's hand, "Please do not disturb anything here because cotton is growing!" That and a few dahlias, those faithful, hardy servitors, which remain with us through the universal neglect to the last.

In a garden Nature is at once both a friend and foe. The right hand rarely knows what the left is doing. Weeds serve their sane, commonsense purpose: we must be eternally fighting them, and in fighting them we are forced to cultivate the soil. Insect pests, which would never seem to blight and destroy weeds in a forest or meadow, fatten on the tender stalks and buds of flowers. We hurl against them a pitiless cannonade of spraying, little aware that in this way we are paying the price of a past generation's wantonness, doing the work that birds, which the ruthless destruction of man has made extinct, once faithfully accomplished. We look for the sun to give life and strength to the seed; and we fight its searing heat with cooling waters. Pawns in the hands of Nature, these gardeners who would carve out a wild meadowland or a precipitous hillside a garden spot of loveliness.



And even as in the life of man must discipline be applied, the unrestrained garden will bring forth many blossoms for a time, but the garden that will produce the fairest flowers must know the discipline of shears and the binding of cords. The painful discipline that makes saints and martyrs makes the exquisite flower and the sturdy plant. Lashed to a stake like a Joan of Arc, the consuming spirit of a rose blossoms into unbelievable beauty and gladioli strain flaming arms to the sky.

In this neglected garden had been known no restraint nor discipline for many a day. Once a friend, Nature had turned foe. Discipline her, and that great mother is an untiring ally; give her the upper hand, and no labor will survive her wantonness. A few more months, and there would be left but few and scattered marks of the toil that had been expended on this place. Taken in hand now, Nature would fall hopelessly before the gardener's counter attacks, the order and loveliness of cheerful yesterday would be restored. And that is blessed compensation of gardening: there is something permanent about it. The soil is there, the sun still shines, and the rain falls. Given these and labor, no seed can fail to germinate; given care, and no plant can refuse to attain its consummation of flower. These things are always there. They are dependable if the gardener is dependable. And according to the measure with which he invests his time and patience and strength in the work will his place give its increase. Size does not make a garden nor do rare flowers. Care only, unrelenting care.

Such care had hewn this garden out of a hillside, had dragged from near and far the great stones to shelve up the beds and lay the walks, had set there a riot of flowers between the deep shade and troubled rustling of the trees and the river, a silent, sparkling silver ribbon drawn on through the eye of the hills. That was seven, eight—possibly ten years back. The time makes no difference, save that there had been time enough for the patient, persistent, steady ravage of the years.



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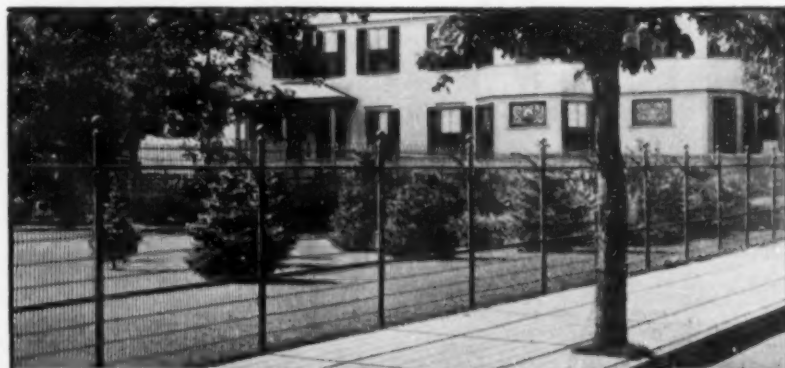
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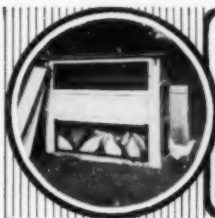
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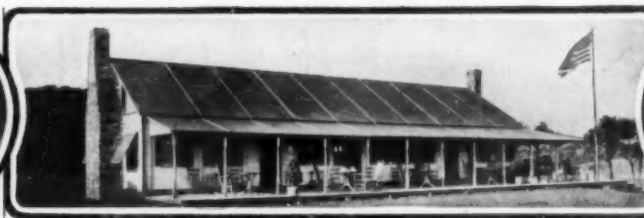
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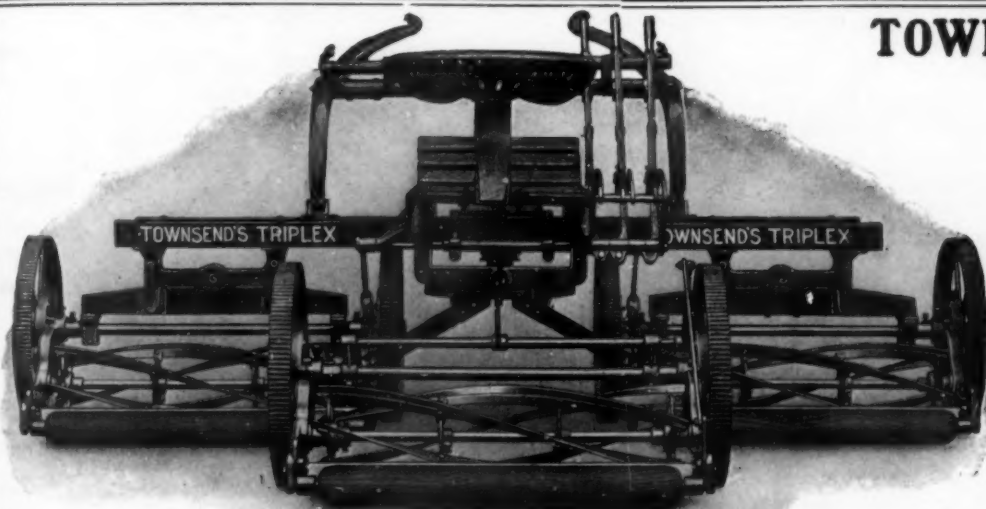
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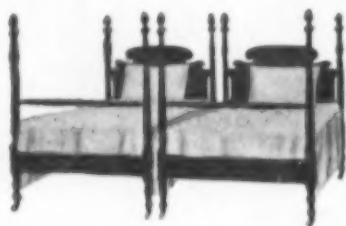
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	85	1.50	3.00	10.00

GREEN COLORED.

2 ft. long	35	60	\$1.50	\$4.50
3 ft. long	45	75	1.75	6.00
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5 ft. long	85	1.50	3.25	10.00

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6 ft. long (1/4 in. diam. up)	12	50	100
6 ft. long (3/4 to 1 inch diam.)	85	\$2.75	\$5.00
6 ft. long (3/4 to 1 inch diam.)	\$1.25	4.00	7.50
6 ft. long (3/4 to 1 inch diam.)	1.75	6.00	10.00

H. H. BERGER & CO., 70 Warren Street, New York City

Structure and Decoration of Walls

(Continued from page 22)

them in wall making. The advent of the concrete house has introduced new methods and created new precedents, and among other things it has opened the way for encrusting either large or small areas with tiles. Such a treatment is suitable for conservatories, bathrooms, kitchens, vestibules, and, in special instances, occasionally elsewhere, and may either be applied in place of wainscoting or extended over the whole wall surface. In either case the tiles must be set firmly in place while the concrete is "green," that is to say, while it is soft and fresh. The cost of such tiling is not necessarily prohibitive, as it is quite possible to secure inexpensive tiles of good color and shape. Of course, if one wishes to do so, he may pay almost any figure, according to quality and design, but acceptable tiles may be had at a reasonable figure. It is not at all necessary to have glazed tiles and it is often preferable not to use them. In kitchens, laundries, bathrooms and other places where there is much moisture or where the surface of the wall is occasionally washed down, the tiles ought to be set as close together as possible to avoid any roughness from cement joints. Where tiles are set in walls at intervals, purely for decorative purposes, they ought to be disposed at points or on lines of structural emphasis or else placed in panels.

Interior concrete walls may be laid on expanded metal lath or mesh. Plain walls of this sort may be made for about 75 cents per square yard. The chief objection to such walls lies in their uncompromising surface. This objection, however, can be removed and an agreeable texture imparted in several ways. In the first place, when the wall is being finished the face may be "floated" to approximate smoothness if the sand in the surface coat is fine enough. When the wall is thoroughly set and dry the surface may be given a coat of varnish or shellac. This will fill any small holes and roughnesses where dust and dirt would otherwise lodge, remove some of the appearance of hard asperity and temper the cheerless, depressing tone. Another agreeable and inexpensive wall surface is produced by "scratching" the concrete back while it is "green" and applying a coat of plaster made of lime and coarse, gritty sand. Instead of smoothing the surface with precision it is "floated," not too regularly, with a piece of board, which should be used with a circular motion. The sand grits pull and drag, and in this way the surface is striated with scratches or combings in arcs or circles as though it had been dressed with a rough currycomb. When the surface is quite hard and dry a wash made of cement and water, of about the consistency of whitewash, should be roughly applied with a whitewash brush. This will give depth

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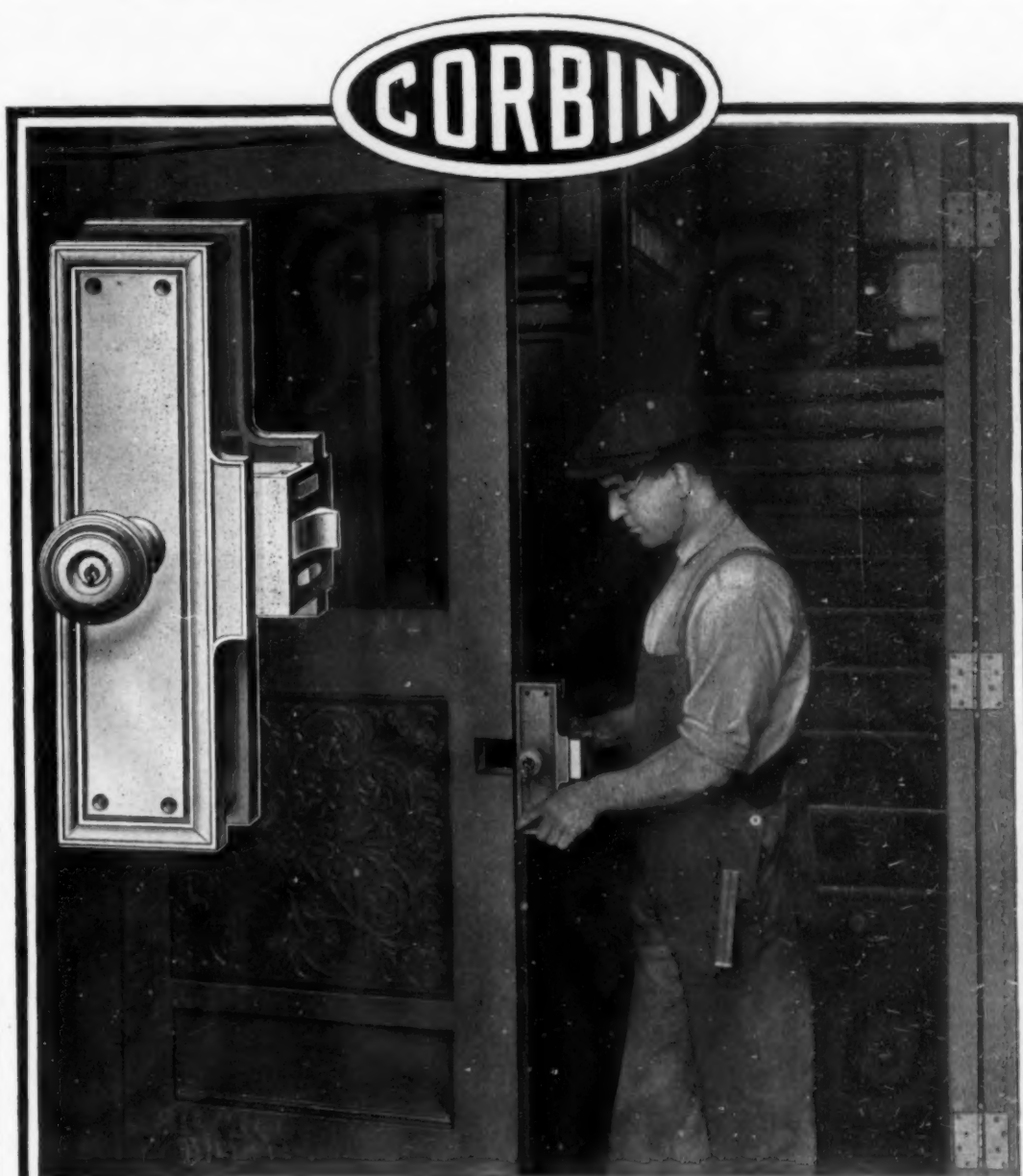
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and tone to the shadows in the shallow scars or depressions. Last of all, the surface is given a coat of orange shellac. If the coat is diluted and thin it will produce a yellowish golden tone; if somewhat thick, the tone will verge toward a reddish gold. This wall treatment is susceptible of several interesting variations. Then, again, a concrete wall may be whitewashed with excellent effect. There are certain styles of architecture in which white or gray walls, slightly rough, above a simple wainscot of plain and close-fitted vertical boards of oak, chestnut or deal may be highly appropriate. Whitewash possesses the advantages over paint of being exceedingly cheap and much easier to apply. It may be made absolutely fast so that it will not rub off by mixing according to the Government formula usually known as the "lighthouse mixture." It is as follows: Slake a half bushel of lime with boiling water, cover during the process to keep in steam. Strain the liquid through a fine sieve or strainer and add to it a peck of salt, previously dissolved in warm water, three pounds of ground rice boiled to a thin paste and stirred in while hot, half a pound of Spanish whiting and one pound of clear glue, previously dissolved by soaking in cold water, and then hanging over a slow fire in a small pot hung in a larger one filled with water. Add five gallons of hot water to the mixture, stir well and let it stand a few days, covered from dirt. To be applied hot.

Last of all, a concrete wall may be painted any hue desired. Whether painted, whitewashed or varnished, if the surface coat has been properly prepared with fine sand and the workmen use their floats carefully, the face of a concrete interior wall may be made to resemble closely a wall of rough, sand-finished plaster. The expanded metal lath or mesh, which serves as a core or base for the concrete, is usually fastened to metal bars in place of studs or furring. Concrete walls of this type possess the further merit of contributing to fire prevention.

The plastered wall, more than any of the several sorts of walls previously mentioned, offers opportunities for varied treatments without entering into alterations of a radical nature. It may be papered, painted, hung with textiles, or given a rough sand finish, the last necessarily applied when the plastering is first being done. The plastered wall by itself, plain and unadorned, cannot be considered a thing of beauty, when the only points to relieve its flatness are the cornice—which is not always present—and the baseboard, a pitifully dwindled and degraded survival of dignified wainscot. A plastered wall always needs something to temper its staring bareness, even when it is wainscoted for part of its height. The only exception to be made is in the case of a sand-finished plaster wall, which presents a surface and texture sufficiently interesting and suitable as a background to be let



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alone. Whatever coloring is to be applied may be included in the mixture, but no coloring is necessary, for, when dry, the surface will have an agreeable tone from the presence of the sand. Plasterers frequently object to making a sand finish because the heavily "sanded" plaster pulls and is harder to work than ordinary "white coat," but the result is worth whatever additional cost and labor are entailed. The sand-mixed plaster pulls too much to be worked in molds, so that no moldings or intricacies of any kind should be attempted in it. Sand-finished plaster is particularly appropriate for the upper part of walls that are wainscoted either high or low with oak, chestnut, butternut or some other wood of markedly brownish tinge. As an agreeable alternative to sand-finished plaster may be mentioned a plaster made of ground Caen stone, which is usually finished by tooled lines to give the effect of joints between blocks of cut stone.

Efficiency in the Flower Garden

(Continued from page 23)

As they suck the plant juices from under the surface of the stems or leaves, the poisons described above are useless against them and resort must be had to something that will either smother them by coating them over, asphyxiate them, or destroy them by contact. The simplest and surest remedy for this class of insects is kerosene emulsion; it may be readily made at home by dissolving a piece of soap about an inch thick and wide and 2 inches long in a pint of hot water and adding a quart of kerosene and churning thoroughly. To use, dilute further with ten to fifteen parts of water. Even a simpler way is to buy the concentrated emulsion ready prepared and dilute with water according to directions. There are several market preparations which have as their chief ingredient nicotine. Most of these are very effective against aphids and other sucking insects. They come in varying strength, but usually those containing the highest percentage of nicotine are the cheapest to use, because, though costing more, they can be much further diluted than the lower grade. In using any preparation of this kind be sure to follow the directions very carefully.

There are a good many kinds of blight, rust and mildew which attack a number of the plants in the flower garden, including roses, hollyhocks, verbenas, carnations and some others. The standard specific for all these things is Bordeaux mixture. Wherever one wants to make sure of keeping his plants healthy, and thus secure a good crop of flowers, even though the foliage is somewhat discolored, spray regularly with Bordeaux mixture every ten days or two weeks. Where it is desirable to keep the foliage clean and unspotted ammoniacal copper carbonate solution may be used in place of the Bordeaux; but it



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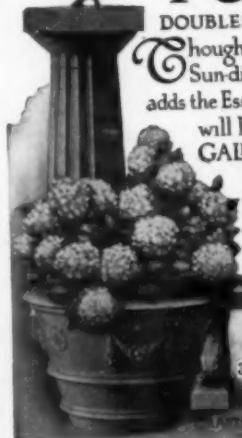
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is not so strong, and, unlike the Bordeaux, it must be used immediately after mixing. The best way to get the Bordeaux for use in small quantities is to buy it ready prepared and dilute it as needed. The ammoniacal copper carbonate solution may be made as follows: Dilute 2 fluid ounces of ammonia in 15 ounces of water; mix 2 teaspoonfuls of copper carbonate with enough water to make a paste; mix the two together until thoroughly dissolved; then add two gallons of water to dilute to spraying strength. This will make a convenient amount to use in a hand-size compressed-air sprayer. Use it the same day as mixed.

One of the greatest enemies of young plants and new shoots is the common brown cut worm, familiar to every body who sets out cabbage or tomato plants in the vegetable garden. Wherever a young flower stalk is found half eaten through, and as a consequence shriveled up, a careful search in the dirt about the plant will usually reveal this fellow curled up and "playing possum"; a slight pinch just back of his head is the easiest way of disposing of him. If the cut worms appear in large numbers use poisoned bran mash and put it about the plants they are likely to attack late in the afternoon. A teaspoonful of Paris green, or two of arsenate of lead powder, a tablespoonful of molasses and a quart or so of bran, or a quantity of freshly cut grass will serve as a bait.

When plants that seem to be otherwise healthy and unattacked by any other insects on the foliage fail quickly, the trouble is likely to be a borer or a white grub or wire worm working at the roots. Take the plant up carefully and examine it. A strong nicotine solution, tobacco dust spread thickly about the base of the plant and washed in with the watering can, or tea made of water and tobacco stems, will rid the soil of most of these things. To save individual plants make a hole several inches deep with a dibble and drop in a few drops of bisulphide of carbon, filling the hole up quickly.

The specific remedies which have been mentioned will be found effective in most cases if used properly. But the gardener must always remember that his greatest safeguard lies in having his plants in robust, healthy growth. If they are attacked it will always pay to stimulate plant growth as well as to fight the insects, thus enabling the plants to withstand or recover from the resulting check. A handful of guano, or of tankage and bone meal, mixed in and about the plant will often serve to enable it to recuperate rapidly, where otherwise it might have been permanently injured. An ounce or two of nitrate of soda dissolved in hot water and diluted with two or three gallons of water and applied with a watering can will serve as an effective stimulant; it should not, however, be applied when the ground is very dry without first watering the plant with plain water.

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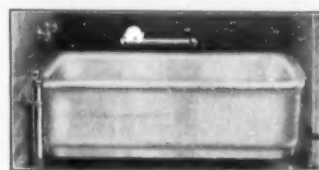
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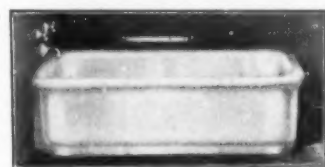
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The Syracuse Wire Works
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Dividing the Garden with Shrubbery

(Continued from page 30)

chosen for their foliage effectiveness. Iris sheaves, the long blades of hemerocallis, the broad, heavy leaves of the funkia, the feathery sprays of gypsophila, the matty growth of iberis, pinks and Sweet William, each has a distinct foliage value. Plants should be selected for striking flowers, so that a few plants will make strong color notes in the planting. Plants with long-blooming periods should be given preference, for then only a few kinds will be needed for a continuous succession of bloom. Here German iris and yellow day lilies, *Hemerocallis flava*, for the spring bloom; yellow marguerite, *Anthemis Kelwayi*, and phlox for summer flowers, and tall, reddish-purple New England asters for the autumn form the heavier masses for the borders. Arabis, Iberis, harebells and coral bells are used as edging. Besides, columbines, foxgloves, peach bells, larkspurs, Penstemon (which grow in spikes with graceful drooping blossoms), Madonna lilies and delicate Japanese anemones crowd the borders with bright color throughout the season.

The path does not end with the flower border. It extends under the rose arch between the hedges of currant bushes in the vegetable garden to the end of the property. This change in the border of the patch appears to increase its length, and the long vista down the patch gives a feeling of size to the grounds. The vista is to be terminated by a garden seat harmonious in design with the lattice work.

Three maple trees, placed at equal intervals along the back of the property, make a shady border for shade-loving shrubs, such as *Aralia pentaphylla*, cornels and viburnums, snowberry and *Clethra*. This shrubbery hides the street just beyond. Fences covered with honeysuckle enclose two sides, and a row of fruit trees completes the enclosure. These screens separating the vegetable garden from the rest of the grounds have a distinct value in making it attractive.

The House of Seven Hearths

(Continued from page 33)

covering of the famous House of Seven Gables at Salem, recently restored by the architect of the present dwelling.

Naturally the fireplace in the living-room end is the largest and most important. With a breadth of twelve feet and an opening five by three feet, and four feet deep, it is truly impressive. Here logs a foot or eighteen inches in diameter can be burned, and the construction has been so entirely safe that the fiercest blaze need cause no nervousness to the most timid soul. Perhaps whole oxen could not be roasted here, but the wide, cavernous opening with its massive iron fire dogs

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makes one think, nevertheless, of the old Colonial days when wood was something which literally had to be got rid of by one means or another before the fields could be cleared or tilled.

In direct contrast is the fireplace in the den. Small and simple, like the room, which is compact and cosily low-ceiled, it is still deep-throated and capable of producing great heat in a short time. On cold mornings or chill, rainy autumn days this hearth, with its warm, red face and small hot blaze glowing back of the tall andirons, is cosier, more intimate than the roaring blaze which at other times appeals to other moods.

Upstairs the hearths are all attractive and all of distinctive individuality. In one room the fireplace stands in an alcove. Exigencies of construction made two courses of brick desirable, thus raising the projecting hearth several inches from the floor. Instead of being objectionable, the effect is quite as if the thoughtful architect had built with a kindly eye to the more comfortable and convenient toasting of toes. An easy chair drawn up, with well-filled book shelves on one hand and shaded lamp on the other, brings irresistibly to one's mind a pleasant picture of the cosy bedtime hour, when a book and a pipe, or perhaps just ten minutes or so of relaxation, seem to make sleep so much the sounder.

In another room, a smallish dressing room, an interesting old steel basket grate filled with pine cones or light wood stands in the fireplace. At the touch of a match this flares up in a quick, hot blaze, warming the room thoroughly on the frostiest of autumn mornings.

Another of the seven hearths, and almost the most picturesque of all, is the outdoor fireplace. It was, in a way, an afterthought, born of the desirability of breaking up the sheer, monotonous expanse of stonework on the east chimney. There being enough room for an extra flue, the problem was met by the addition of still another fireplace, which the wisecracks around the village store regard as quite the most freakish of all—a fireplace out-of-doors. From their point of view they may be right. No really useful purpose is served, no heating difficulty met by the presence of this delightful eccentricity. Nevertheless, on still, cold nights, when the air nips and the perennial, boyish love of a campfire rises strong within one, a mass of dry brush and branches is always ready for the lighting. A rough, square terrace flagged with wide, flat, weathered slabs makes a perfect spot on which to gather, chatting, laughing, singing, telling tales—perhaps just sprawling silent watching the yellow flames spout up the thirsty throat to flower from the chimney top in sprays of golden sparks that drift slowly across the spangled night until one by one they vanish.

There are other hearths, each one of which has some distinctive feature. It



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may be only a curiously flat rock, diamond-shaped and sunk above the mantle after the fashion of an escutcheon. Perhaps it will be found in some subtle, effective assembling of the lichen stones in a chimney face, or yet again in the graceful lines and contours of a whole massive pile of stone tapering to a chimney pot. But always there is evidence in the work of care and love and infinite painstaking. Just as the conception must have been the offspring of a brain in which the poetry and charm of hearth stones was paramount, so, too, the actual laying of each stone has been done in sympathy. It's rather a pleasant thought, somehow, to realize that these workmen, unknown, unremembered, save by what they have left behind, have done that work with heart, as well as head and hand.

The Gardening of an Impatient Woman

(Continued from page 35)

and plants. "Sulky" is the word for them when they are not satisfied with their surroundings, and so you have to study their whims and fancies—and the best way to do this is always to see how the great and supreme teacher Nature does her work. Any observant person will notice that the darkest green things are usually in moist, shady places and that most highly colored flowers grow better in the open sunlight, while the more delicate tinted ones require less of it. To go back to my ferns then—I soon saw that what I liked wasn't going to please them, so, as I realized that they must have more water than they had been getting under the overhanging eaves of the house, I deliberately moved them in the middle of July! I had sense enough to take a damp, cloudy morning and I put them where I was already putting so much water daily—under that thirsty pine tree. But despite the watering and the shade they soon wilted and apparently died. I was by no means willing, however, to take up fifty of these again, so I cut off all the dead leaves about an inch above the ground and waited for results. This may sound paradoxical from a self-confessed impatient woman, but, you see, my better half had cast too many slurs on my garden attempts (he being an expert vegetable grower) for me not to be put upon my mettle. I might say, in passing, that he strongly objected to all these "weeds" of mine being so close to his precious corn, potatoes and beans, for fear their seeds would give him trouble the following year. But I retorted that he ought to be glad that it was the flowers which were wild, and not his wife—and there really seemed to be no answer to that, from a respectable married man, at least. My patience was finally rewarded, for in less than a month tiny fronds from the ferns could be seen raising their dainty, timid heads in that arid desert, and they soon set about beautifying it from that time on.

And now I must tell of my *chef-d'oeuvre*. I had seen with envy the attractive bird baths of my neighbors, for which they had paid anything over a ten-dollar bill, and I longed for one of my own, but had no idea of giving any such price. (Since then there has been one advertised for five dollars which looks very satisfactory.) The shape of many of these reminded me of the wooden kitchen chopping-bowl, so I purchased a new one for sixty cents, stained it brown—on the outside only—and put it on a cut-off mop handle on which projecting arms were nailed to hold it. As this article had no devastating seeds to broadcast, the Disparaging One kindly stopped his more important task and made it for me. I was a proud woman, until one hot day the bowl split in two with a resounding report, for I had forgotten to oil it thoroughly before putting water in it. It was replaced by another, which had three coats of linsed oil soaked in twenty-four hours apart. This was set in a three-cornered plot, formed by paths, and around it that first year I put zinnias and marigolds, but in the fall I planted the perennials, which were to stay there permanently. And, by the way, I found that the birds, too, had their preferences; they do not like too high or too thick plants around their bathroom, for fear of their enemy, the cat, which they could not very well see under those circumstances. Also they must have a little runway down into the basin, as they are not given to diving into unknown depths of water.

Some Marvels of Insect Life

(Continued from page 37)

nervous system occupies the lower side of the body, the circulatory system the upper side, with the alimentary system central. The circulatory system is of a simpler character than is to be found in any of the backbone animals. What may be termed as heart (it is usually known as the "dorsal vessel") is a series of about eight connected sacs extending one behind the other from head to tail, and opening one into the other by valves which permit the blood to flow in one direction only—from behind forwards. There are no arteries or veins, the blood filling vacant spaces between the internal organs. There are valvular openings in the sides of the dorsal vessel as well as at the ends; and as the chambers of the vessel contract and expand in rotation the blood is drawn in from all parts and sent in a stream to the forepart, whence it finds its way again all over the body.

The nervous system consists of a brain, situated above the gullet, and a double series of nerve-cords extending to the further extremity of the body along the lower surface, connecting up a large number of ganglia, or knots from which run nerves to all parts.

The digestive system occupies the greater part of the body cavity and consists of various well-defined portions.

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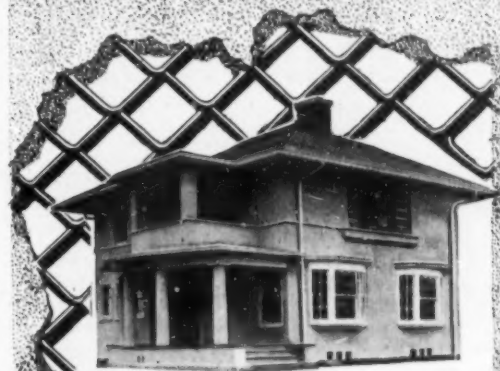
which differ in the several orders, according to the nature of the food. It will be understood that in many insects whose habits change during their life period considerable modification takes place in this system.

There are still a considerable number of people to whom the mention of senses in insects must appear to be the purest nonsense. Believing that it is derogatory to man's status, as the "lord of creation," to concede the possession of intelligence to the lower animals, insects are considered by them to be mere automata moved by instincts, and, therefore, not in need of senses. Perhaps, also, there may be a difficulty in believing that it is possible to crowd into such minute bodies the organization that is necessary for the development and exercise of sense. That insects are not quite so plentifully provided with different senses as man may be admitted, perhaps; on the other hand, there is reason for believing that those they have are finer than the corresponding ones that we possess.

Many insects have the power of sound-production, and that power is usually confined to the male sex. This implies that it is of use in the courtship of the species, and further that the other sex at least must be provided with organs of hearing to render this sound-production effective. Some naturalists have argued that insects are without ears, and can only appreciate sounds as air vibrations by the sense of touch. Against this we have the fact that in many of the grasshopper family there is a distinct ear, imperfectly formed in those species that do not produce sounds, but highly developed in those that do. In some species these ears are situated on the upper side of the hind-body, just above the base of the hind-leg; in others they will be found on the shank of the front pair of legs, a little below the knee. There is a tense membrane or drum covering an inner chamber in which are auditory rods connecting with the nerves of hearing and collecting impressions from the vibrations of the drum. In other insects it is believed that the sense of hearing has its organ in the antennae. Ants and certain species of bees have in their antennae flask-shaped organs known as "Hicks' bottles" (from their discoverer, Braxton Hicks), and Lubbock believed that they act as microscopic stethoscopes. Some of the hairs on the wonderful antennae of the male mosquito and gnat have been proved to respond to the vibrations of a tuning fork giving 512 vibrations to the second. Other hairs were found to vibrate to other notes, extending through the middle and next higher octave of the piano. It was found that the hum of the female mosquito was of just the necessary pitch to set these hairs vibrating. Mayer found that the song of the female affected the hairs of one antenna of the male more than those of the other, but by altering the position of its head until both antennae were evidently affected the male knew in

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which direction to fly, and was by this means able to guide himself to within five degrees of the direction of the female.

In addition to the organs named, others of a special sense have been discovered at or near the base of the wings in flies, beetles, butterflies and moths, dragon-flies and grasshoppers, with a trace of them in bugs. These have been variously considered organs of smell and hearing. In the two-winged flies there are the rudiments of a second pair of wings, known as halteres or balancers. At the base of the halteres there are a number of small bladders arranged in four groups, to each of which extends a branch of a large nerve—after the optic nerve, the largest in the insect. Each of these bladders is perforated and contains a minute hair. It is thought that these sense organs allow the perception of movements which the halteres perform, and which enable the fly to direct its course.

There are some common insects that seem doomed to remain unknown, not only to the general public, but to the enthusiastic entomologist also. Among these are the aleurodes, or powder-wings, a name given to them because their wings, instead of being covered with microscopic scales, as in the butterflies and moths, are coated with a delicate powder very like flour for fineness. Several species that may be found on the under surface of leaves have a very close resemblance to a small moth. Indeed, the great Linnaeus actually included these insects as moths in his natural system of classification. Other great men followed "the illustrious Swede," and it remained for Latrielle, in 1795, to show that these insects had near affinity to the plant-lice, among which he placed them. Later investigators, for good reasons, have removed them from that family, though allowing them to remain in the same order as the plant-lice and the scale-insects. To the last-named they are more nearly akin than to any other family.

One of the reasons why so few students of insect life have paid any attention to this group is to be found, no doubt, in their small size, and in the difficulty—in some cases the impossibility—of distinguishing between the species in their winged condition. The wings are always white or pale yellow, spotless or with indefinite darker marks, reminding one of the finger-and-thumb mark on the sides of the haddock. It is in the earlier stages that we find differences of form, color, ornamentation and food-plant that enable us the better to distinguish between the species.

They are produced from eggs, the mature insect not sharing the power possessed by the plant-lice for producing living young. These eggs are elliptical in shape, with a short footstalk by means of which they are attached erectly to the under side of a leaf. They are usually colored pale yellow or orange; and one female lays a large number of them. They hatch in from ten days to a fortnight—on

an average, say, twelve days; and it is interesting to note that similar periods bound the larval and pupal stages. The newly hatched larva—one can hardly apply the term grub in this case—immediately selects a suitable spot into which to insert its beak, and there it remains until it has acquired wings. At this period it is elliptical in shape, almost flat, and so thin and colorless as to be nearly transparent. For this reason it is difficult to make out any organs; but as growth proceeds these become more evident. The presence or absence of hairs and spines, differences of color and of the character of waxy fringes, distinguishes the species one from another. One organ is evident in all species from the beginning. This is an opening on the upper side of the hindmost segment of the body, and it is fitted with a sort of lid for closing it or opening to allow the extrusion of a tongue-like process. From this orifice the insect appears to furnish a sweet, sticky fluid like that supplied by plant-lice and scale-insects, and it has the similar power of enlisting the kindly offices of ants for their protection. In most respects these larval powder-wings are like scale-insects.

In most species the pupal stage is entered upon within the skin of the larva; on being withdrawn the rudiments of the future legs and antennae may be seen. In some cases the larval skin breaks up and reveals the pupa.

The perfect insects may be distinguished from the two-winged male scale-insects by the possession of four wings. There is a common species to be found on the under side of bramble leaves near the ground, whose habits the present writer has had the opportunity for watching more closely than in other species. It is found that the female, before laying her pale yellow eggs, takes care to dust a small area of the leaf with the white meal, presumably from the under surface of her wings. This is a useful clue to anybody searching for the eggs, which are very minute and not appreciable to some eyes. If these mealy patches are first found, the pocket-lens may be brought into requisition, and the eggs will be found scattered over the patch, and standing on end like ninepins.

There is one species that is found on the under side of cabbage leaves, and, according to the gardening books, in such numbers as to be regarded as a pest. The cabbage powder-wing may be distinguished from that found on bramble by an additional dark patch, extending nearly across the middle of the wing from back to front. A very similar species is that found on the celandine.

One with the wings entirely unspotted may be found in numbers upon the hawthorn and other plants. In the larval stage this is a more striking form, owing to the white, mealy patches upon its upper side and the fringe of waxy hairs around the margins of the body.

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The House in Summer Negligee

(Continued from page 17)

In place of holland covers, which give a room such a transitory appearance, chintz covers are advisable. Chintz is better than linen, as linen crushes and creases easily. Using the winter furniture with chintz covers and with the addition of a few pieces of wicker, a room is completely transformed. There is an endless variety of wicker, willow and rattan furniture, and, whereas at one time it was relegated to the porch, it is now used the year round in all rooms.

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Making a Garden for Cut Flowers

(Continued from page 19)

the asters are saved that reward is sufficient. Together with the pink tulips in this bed is rock cress, *Arabis Albida*, the double variety which blooms a little later than the single *Alpina*, but is far prettier and lasts twice as long. The colors of this south bed are, for the most part, yellow and white. Gaillardias and anemisms bloom all summer, and the white feverfew—another perennial that needs only a straw or leaf mulch—looks well with them. The cosmos I cut back, which makes them shorter and stronger and produces more flowers.

In the corner bed the row of white boltonias bloom for Labor Day, and I fill all the large vases in the house with them. In front of these, you will notice, are planted pink and white peonies. The snapdragon, an annual which comes in wonderful colors, blooms until a heavy frost and lasts many days in water. This corner bed is edged with petunias. Once started in June, they are always in bloom. I tried the pink Rosy Morn, but could not keep out the magenta strain, so I now have only white.

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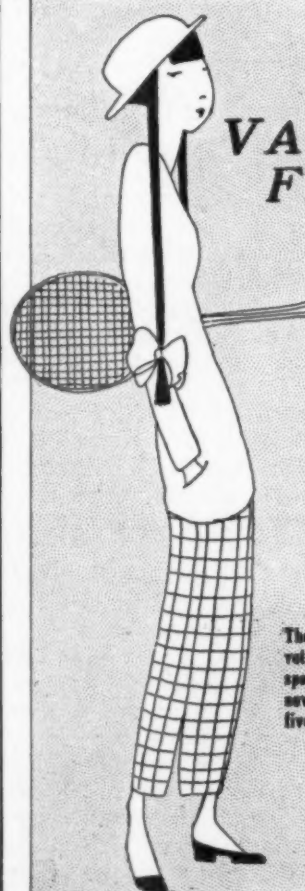
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Efficiency in the Flower Garden

(Continued from page 55)

But careful selection and planning alone do not make the gardener efficient with shrubs. They must be made to live after they arrive from the nursery. And the surest way to have success with them after they arrive is to prepare their places for them before they arrive. As in vegetable gardening or flower gardening, so in gardening with shrubs, the preliminaries cannot be slighted without poor results in the end, no matter how much care may be bestowed afterward. Thoroughly rotted manure and bone dust—preferably fine and coarse or knuckle bone, mixed together—are the best fertilizers. They should be thoroughly mixed in the soil in each hole where a shrub or tree is to be set, if possible a couple of weeks before planting. Where a border of any size is to be made it will save trouble to plow or spade up the whole and enrich it, rather than to make individual holes. Small shrubs should be set about three feet apart; larger ones four or five; when fully grown they should crowd each other slightly and completely shade the ground between them, as this more closely approximates their natural condition of growth.

Unpack at once upon receipt from the nursery, and if they must be kept a few days before planting, heel in in a moist trench. When planting, cut back any broken or scraggly roots to clean, sound wood. Set in slightly deeper than the old soil-mark on the stem. Pack the soil in firm, using the fingers or a blunt stick. If it is dry pour in water when the whole is half filled, and after it has soaked away complete the planting. Use the feet to make the shrub very firm in the soil, after the dirt is filled in. Then cover with loose soil on top to act as a mulch. If the weather continues hot or dry a mulch of leaves or spent manure or inverted sod should be placed around the stem. This will double the effectiveness of any watering you may do.



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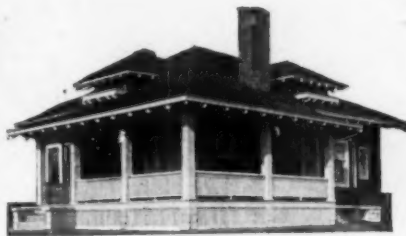
A PRACTICAL BOOK OF PERIOD FURNITURE.
By Harold D. Eberlein and Abbot McClure. J. B. Lippincott Company, Philadelphia. \$5.00.

Readers of HOUSE AND GARDEN need no introduction to the authors of this book, nor scarcely to the subject, but in few instances has there been a book that justifies so completely its title. For of the plethora of books on period furniture this is the most practical and the most comprehensive. In the beginning are pages of illustrations showing types of furniture, key plates to be consulted when reading the chapters that follow. Later there are plates showing the details by which a piece of furniture can be judged and given its proper classification. The letterpress is arranged in a form equally handy. The dominant characteristics of each period are epitomized in the beginning of the chapter, and the varied forms in which those characteristics were expressed are set down in logical order with due reference to the fabrics and materials employed and the manner in which they were used. To these chapters are added others on Advice to Buyers and Collectors, Furnishing and Arrangement, and a convenient glossary. In short, the book is such that no collector can be without and no one who desires to furnish a home in good taste should neglect to consult.

In books of this nature, i. e., books on furniture and furnishings, one is often apt to forget that they are the product of a well-defined movement, a revision upwards in taste. For those who do not comprehend the meaning of the periods and of the recent period revival, there is in this volume an introduction full of meaty thoughts. And quite apart from the practical value this book has is its sanity of approach to and handling of those things that are generally considered in a sentimental, dilettante fashion that leaves the reader sorely tried in patience and not one whit more informed. If you want to know the periods, if you want to create in your house the atmosphere of the periods, here is a book that will prove invaluable.

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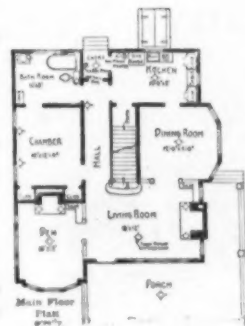
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served to stay the iconoclastic hand of progress. To the architect, the principal interest in these old buildings is their forms, in which were expressed the supreme effort of the artistic genius of our ancestors. A chapter on "Church Organization in the Colonies" affords a concise summation of the historical beginnings of the bodies ecclesiastical in America. Mr. Embury has refrained from giving the bare, architectural appreciation of the forms of the hundred and twenty churches considered, and has given, in his consideration of each, an historic resumé—established by the facts that brought the church into being. What form that building took seems to have been a creation of each sect, as well as location. There was always an "Americanism" in ecclesiastical buildings. Moreover, early American church architecture was distinct from its predecessor across the water.

DESIGN IN LANDSCAPE GARDENING. By R. R. Root and C. T. Kelley. The Century Co. \$5.00.

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A valuable contribution to the literature of architecture is "A Guide to Gothic Architecture," by T. Francis Bumpus, Dodd, Mead & Co., publishers. While the volume lacks nothing of thoroughness and scholarship, it is written in a tongue understood of the layman, and with no little charm.

"Historic Homes of New England," by Mary H. Northend, issued by Little, Brown & Co., tells of the old romances of old houses. Some of the houses are tenantless; others well preserved, but all storehouses of history, and, to the antiquarian, constant sources of interest. Miss Northend has described these New England homes with much feeling and charm. The volume is well illustrated.

Hot Weather Care of the Dog

THE "dog days" are probably the hardest, from a canine point of view, of the whole year. That is, they are the most productive of bodily discomfort, especially if the dog that must endure them is one of the heavy-coated varieties. Such an animal really suffers from the heat, and it is little to be wondered at if his erstwhile happy disposition cracks under the strain and he becomes irritable and morose.

A great deal of the dog's suffering in hot weather can be eliminated, however, by thoughtfulness and care on the part of his owner. Shade, water and proper feeding are essential to his comfort and well-being, and each is deserving of more than casual mention.

The best shade for the dog that is quartered outdoors is, of course, a tree whose branches are high enough from the ground to permit a free circulation of air under them. Lacking this, build in the dog yard or in front of the kennel a flat roof of boards four feet above the ground and large enough to supply a generous amount of shade throughout the day. Climbing vines, too, such as morning glories or some one of the rambler roses, may sometimes be trained so as to provide protection from the sun's rays. In any case it is important to see that whatever breeze may be stirring has free access to and through the shady spot provided.

Placed in the shade, where it will remain as cool as possible and be accessible at all times, should be a pan of fresh, clean water. Do not put a lump of sulphur in it with the idea that the dog will benefit thereby. Lump sulphur is insoluble in water, so if the dog's blood needs cooling it had better be done with one of the regular sulphur prescriptions put up for the purpose. Besides the drinking pan there is nothing wet that is quite so good for the dog in summer as a stream or pond where he can splash around and get thoroughly wet and cool. Do not, however, send him into cold water when he is overheated from exercise.

The proper summer rations differ from cold weather food chiefly in that they contain less fat and blood-heating matter. Boiled green vegetables, boiled rice, selected table scraps (*not* potatoes), dry wheat bread, now and then some raw lean beef and a good bone to gnaw on—these will keep most dogs' digestion in condition. The best grades of manufactured dog biscuits are also good, especially as a variation from the regular diet. A light meal of them in the morning, and in the evening a moderately hearty meal of the first-mentioned foods should be sufficient, for remember that in summer most dogs are apt to take less exercise than at other times and fat accumulates readily under such circumstances. Do not, therefore, overfeed; a tendency to leanness will be far better for him than a superabundance of fat.

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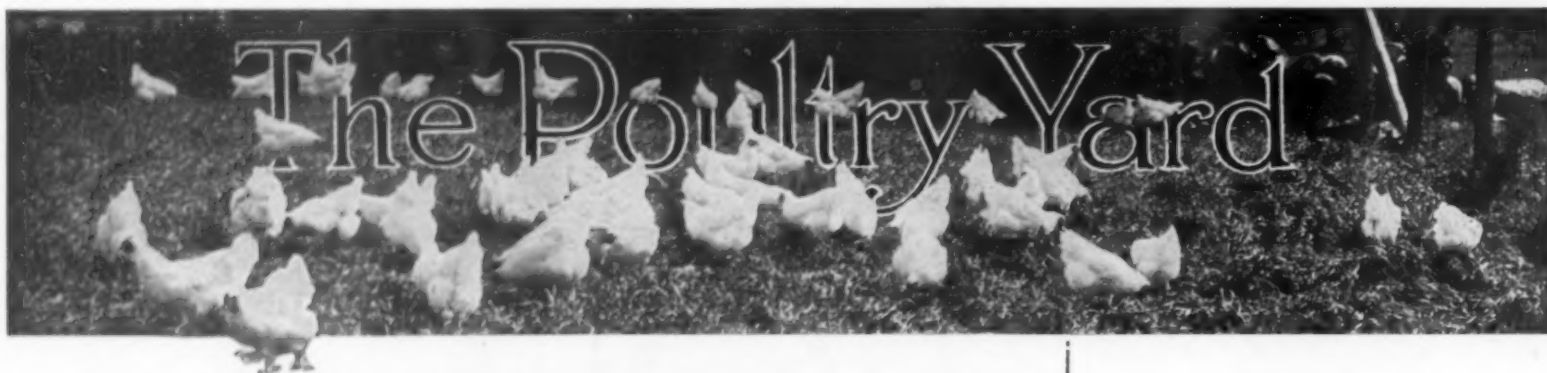
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Poultry Work for August

IT is a lucky poultry keeper who gets a full egg basket in August. Many hens are molting, some are still broody and others apparently are just resting. Altogether, it is an off month.

On the other hand, there is no month in which the hens require more attention. Young stock, too, must be kept growing and not allowed to suffer from lack of shade or water. Also, this is a very good time to plan new poultry houses and to make improvements in those already built. August is really a busier month for the poultry keeper than for the poultry.

Molting is an operation which has never been standardized. Some hens drop almost all their feathers in a few days and stand around naked, if not ashamed, until the new feathers come; others make the transition so gradually that it is hardly noticeable. Some shift their coats in a few weeks; others require months. Occasionally a hen will lay right through the molting period, but usually the egg yield is greatly diminished, even if it does not cease entirely. It is doubtful if anything is gained by having the hens lay intermittently when molting, for when that happens they usually take more time to get their new feathers. Several rules for hastening the molt have been laid down, but experience shows that nothing is gained in the total egg yield by following them. Of course, the hens which molt early will be more likely to lay well in the early winter months than those which are late in molting, but experiments seem to show that the late-molting hens will give the largest total in the course of the full year.

The amateur who raises a new lot of layers each season is probably better off when his birds molt late, for then they will continue to produce eggs until it is almost time for the pullets to begin. Perhaps he will carry over a number of yearly hens to use for breeding pens the next spring, but as it would not be advisable to force these hens for winter laying in any event, nothing is lost by having them molt late. And to fix the habit of late laying, the hens which lay late should be selected, as a matter of course, for the breeders.

It is common and reasonable advice to sell off the old hens when they become broody, but the amateur must pause be-

fore he follows it too literally. In case he likes to get rid of all his old flock in order to reduce the labor of the summer months, the hens may go to the collector's wagon as soon as they begin to set, but if he wants to keep up his egg yield until the pullets begin, he must retain a considerable number. Usually, a broody hen will go about five weeks before laying begins again; therefore hens which are broody in July and August may still be depended upon for eggs before the end of the season. It may perhaps be more profitable to get rid of the hens as soon as they begin to cluck, but the man who keeps only a few is looking for eggs rather than profit, as a rule.

Feeding can hardly be too liberal in August. It is a fine growing month, if conditions are right, and broilers should be coming along fast enough to keep the family table well supplied. Needless to say, the broilers should come only from the cockerel pen. The number of cockerels and pullets is pretty evenly divided in most cases, and the former should about pay the expenses of raising the new flock, crediting those served on the home table with the amount they would bring if sold.

When possible, it is desirable to keep the pullets and cockerels in separate pens, and there will be less fighting among the belligerent males if they are yarded out of sight of the pullets. It will be hard to get much fat on the growing stock, but the flesh will be very tender and sweet. Even Leghorns and Anconas, small as the birds of these breeds are, make excellent broilers.

All the old males should have been disposed of long before this, if the matter of economy in feeding is to be considered at all. It should be made a point, in any event, to have all the male birds out of the hen yards before the molting period begins. Those being kept over for breeding purposes should have a yard to themselves.

If the growing stock can have a wide range, of course, the necessity of separating the sexes is less important, although the cockerels will be in better condition for the table if kept confined to smaller yards. A wide range, however, gives just the right conditions for the pullets, and if they can have a corn patch to run in, so much the better. They will be protected from hawks and will have shelter from the sun, as well as an excellent hunting ground.

Many people get an idea that when the chickens have a large field to wander over they need no beef scraps, but that is a mistake. Seldom do the youngsters get as much meat in the form of bugs and worms as they need. Of course, it will not be necessary to feed so much beef scrap as to yarded birds, but a certain amount will be needed, either in the dry mash or in a hopper by itself.



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