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"Flowering Trees and Shrubs" has 64 pages and covers, is printed on fine book paper, has been carefully written from the experience of the management of the Biltmore Nursery, and is illustrated with specially made photographs used by no other nurseryman. It costs a great deal of money to produce this book, but the profit from each copy sold—each copy is sold at a loss—will more than cover the cost. No pre-announced distribution is planned, and the book is distributed free of charge. We will be glad to send a copy to any one who writes. In writing to advertisers please mention Garden and Forest.

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BY B. M. TREBOR

No sport of recent years has gripped the outdoor-loving America like that of motor boating. The development of the marine motor, which has attained five feet of remarkable perfection in the past few years, has rendered the motor boat a safe and sure vehicle of recreation. No longer must the oar be held up miles from shore and be obliged to paddle through the humiliating experience of modulation being towed home.

No sport is more wholesome, more open to the clean or more stimulating than the motor boat. It is pursued on the water. No length of time can only be a form of recreation so enjoyable, so capable, but, as a means of conveyance, the motor boat is comparable only to the automobile itself. A motor boat may be had at one-third of the price of an automobile, its up-keep is not a fraction of the expense and it outlasts the motor driven land vehicle.

For day sailing an open boat from twenty to twenty-five feet in length is gasole and about the proper size. For enclosed waters, such as small lakes and rivers, a twenty-foot boat will be ample. An engine of this size will drive the boat at a speed of about eight miles an hour. The cost of such craft would run from three hundred dollars to five hundred dollars according to the speed desired. What makes such a boat ideal for use on larger bodied water is its greater stability is needed and live fast pace, or more added to the length will insure this safety and comfort. The engine power at two-foot depth and running at a speed of eight-horsepower according to the speed desired. Where high speed, however, is not required a five-horsepower engine will be ample. An engine of this size will drive a boat at a rate of about eight miles an hour. The cost of such craft runs from three hundred dollars to fifteen hundred dollars according to build, finish and engine equipment.

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A country house with a water situation, whether it be by lake, river or sea, is far from taking advantage of its opportunities unless the home is supplied with a suitable motor boat. In this Motor Boat Section appear announcements of only reliable boat and engine manufacturers. Their product has become standardized through years of experience. We shall be very glad to advise any of our readers in regard to the purchase or equipment of a motor boat or engine. Address correspondence on this subject to the Royal Engine Co., Bridgeport Conn., 612-30 Church St., New York, 662 Lincoln Ave., Detroit, Mich., 2 H. P. $48 ready to install. Satisfaction guaranteed or five cent refund. Guaranteed for 2 years.

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**(Continued on page x)**
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by Frank T. Carlton

Mr. Carlton will tackle owner queries pertaining to individual problems connected with the care and training of dogs. If you have a special question or problem that requires a specific reply, please enclose a self-addressed stamped envelope.

The Terrier, in almost any variety, is the ideal city dog.

The Terrier is easy to rear, control, keep clean and "put up." He is as hardy as nails, is adaptable to all conditions, and requires little grooming. He is made up in packages of varying sizes, but in his smallest variety is alertness, ginger and courage personified.

All members of the Terrier family possess an eminent degree just those qualities that man most admires in his "best friend." If they are combative it is only when occasion requires it; and they have never been accused of treachery or foolishness.

As watch or house dogs, they acknowledge in any of their varieties no superior; and as guards of the person, not even the Great Dane, Mastiff, or Irish Wolfhound, could give points away to an Airedale, or Bull Terrier. They are veritable furies in a tight place.

They are lighth earted chums too, never out of sight, but never under one's foot. And as playmates and guards for children, reliable under every test, the Terriers carry off the palm.

It is acknowledged that not even England, the shrine of dogdom, has achieved greater success in breeding all varieties of Terriers, than has the United States.

(Continued on page viii)

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(Continued on page viii)
In the March Scribner

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Theodore Roosevelt

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States, some of the finest living show specimens having been bred here. This is particularly true of the Fox Terrier, the Airedale and the Bull Terrier.

And shall we forget the Boston Terrier, the "American Dog"? If so, we shall be ungrateful, not to say unwise. The Boston is held to be a most companionable little dog, and so far as appearances and conformation go, among small dogs he is one of the most highly esteemed. He has just sufficient sportiness in his aspect to make him attractive to master and mistress alike, and the necessary brains and character to make him useful around the house. There is more than mere patriotism to commend the Boston. Were it otherwise he could not have attained his present proud position in the American dog world. Puppyhood passed, the Boston is no more of a "hot-house plant" than the average dog. Remember always that whatever family of terriers you decide to affiliate with, the most satisfactory specimens are those of pure strain and pedigree. Ninety-nine times in a hundred "bargains" are sad disappointments.

The Maltese Terriers

This is a beautiful variety of pet dog. Its handsome appearance when its long white fine silky coat is well groomed, more than compensates for the labor and care expended on the task. The great age of this breed, extending back centuries, is without question, proves that its character and great physical beauty have struck deep into the regard of dog-lovers, for it to remain extant in even its present-day popularity. Its vogue fluctuates, of course, as in the instance of all other breeds, but, like Tennyson's brook, the snow-white Maltese "goes on forever."

A good Maltese is covered (face as well as body) with fine white silky hair. The coat is straight, long, and profuse, in good specimens trailing the ground. The skin is pink, free from dark blemishes, and the nose, lips, roof of the mouth, eyes, rims, and pads of the feet, are coal black. The skull is broad and round, eyes large, dark and round, ears large, short and straight, feet small and dropped to the side of the head. The back is short, chest deep, ribs flat and deep, legs short and straight, feet small and like the hare's in shape. The tail is short, covered with hair, and carried curled over the back, or over one hip.
FROM THE PUBLISHER'S DESK

Our New Book

It was gratifying and at the same time rather embarrassing to us, after advertising one of our books, "Country Homes and Gardens of Moderate Cost," in the January issue, to be swamped with orders that put the book in the "out of print" class within a few days. Since then we have been trying hard to make our peace with those of our friends who were disappointed in not being able to secure a copy. To these and to all who are interested in the making of beautiful, comfortable and distinctive homes we want to announce that we have been for some time at work in the preparation of a new book that will, we confidently believe, set a new mark in home-making literature. There have been numbers of books published in recent years that have aimed to fill the great need for pictures and information that would be of practical help to home-builders. Roughly, these books have fallen into two classes—one showing homes that are too elaborate and too costly to be of real help and value in suggestion; the other class, avoiding this fault, but containing homes that are hopelessly inadequate in architectural merit.

There is an unquestioned need for a work that shall avoid both of these faults, and we believe we are making such a book now. It will contain photographs of the exterior and principal rooms of about seventy-five American homes of various types, with floor plans, and descriptive text. We can promise you that every house included in the book—and these will range in cost from $2,000 to $20,000—will measure up to House & Garden's standard of good taste in home-making. Distinctive Homes of Moderate Cost will be ready for delivery the latter part of this month. While you think of it had you not better fill out the coupon at the bottom of this page so that you will have a copy of the book as soon as it is ready for delivery?

Would You Pay More for Your Magazines?

In view of the facts outlined on this page last month and those that follow, quoted from the keen analysis by Mr. George W. Wilder of the postal deficit, is there any fair and logical reason why the postal rate on second-class mail matter should be increased 300 or 500 per cent as recommended by Mr. Hitchcock and endorsed by President Taft?

In the year ended June 30, 1908, the weight of second-class mail matter compared to 1907 decreased 18,000,000 pounds. The postal expenditures increased $18,000,000. There is something in it besides second-class matter.

"In this report [Postmaster-General's Report for 1909] among the items of cost charged to second-class matter there is rural free delivery $13,821,100. That is, the loss caused by the Government's policy of rural free delivery is charged to second-class matter. [The magazines do not need nor should they be forced to pay for deliveries on rural routes as often as once or twice a day.]

"In arriving at the amount of transportation and other expenses based on weight to be charged against second-class matter, the estimate is made on a percentage of weight of second-class matter to the mail carried which is claimed to be 63.91 per cent. This should be 35 per cent instead of 63.91 per cent. It makes a difference of over $13,500,000.

"Page 256, Postmaster's Report, 1908, says: Franking privileges weighed 4,555,634 pounds. They certainly cost the average price of all mail in all ways. And Governmental matter for Departments other than the Post-Office weighed 18,644,010 pounds."

"This report says that if the matter was charged at postal rates it would yield a revenue as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second-class</td>
<td>$531,560.94</td>
</tr>
<tr>
<td>Franked matter</td>
<td>3,987,546.44</td>
</tr>
<tr>
<td>Government</td>
<td>16,362,131.95</td>
</tr>
<tr>
<td>Total</td>
<td>$20,881,239.33</td>
</tr>
</tbody>
</table>

"And that awful deficit disappears."

If Congress puts through a measure raising the rate on postal service for the magazines it will require years of readjustment for the publishing business and your magazines will cost you more. In the interest of fair play all around, will you not try the same old preventative measure—write your Congressmen that you want a full and open investigation into the Post-office Department's methods of doing business before that rate is arbitrarily increased.

McBride, Winston & Co.,
449 Fourth Ave., New York City.
I enclose $ for one copy of Distinctive Homes of Moderate Cost to be sent to my address (expressage 25c.)

Name
Address
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THE GROUNDS WERE ABSOLUTELY TREELESS. BIG MAPLES
AND PIN OAKS WERE MOVED TO IT FROM OUR NURSERY.

If you want us to take the whole thing off your hands, we will also dig the holes and plant the trees. A good many prefer to have it done this way, feeling that the additional cost is well worth it.

One of the great advantages of our nursery is the variety from which you can make your selections. Maples, three kinds: Yellow, Red, and Silver, and Evergreens. Hundreds of these trees are up to 20 feet high, and have a spread of from 14 to 18 feet. If you can, it is quite the best way to come right to the nursery and pick out just the trees you want. On the other hand, we have a rather unusual new catalog from which it is a very easy matter to make your selections. We surely want to send you one of these catalogs, because we are certain you will be much interested in the numerous illustrations, showing what has been accomplished on various places with our big trees. Then there are the illustrations of how we dig, load, move and plant them, showing operations which are really quite wonderful. Hot don't delay in your ordering, because it is decidedly best to move big trees as early as possible.

A maple wrapped and loaded on one of our wagons, preparatory to its shipment to Ohio. Our method of growing these trees makes the roots so flexible that many of them can be tied up to the trunk, which accounts for the apparently small root ball.

ISAAC HICKS AND SON,
WESTBURY, LONG ISLAND, N. Y.

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A Model Colonial House for Poultry

(Continued from page vi.)

6 ft. and made from 1 x 3-in. material. The nest platform is 2 ft. from the ground. It is nailed to a cleat on the side of the house and braced from top of runner. The platform is 22 in. x 5 ft. The nests are made of 5-gallon oil cans, the top and part of front being cut out, 2 in. left of front to hold in nest material, and a small strip at top which acts as a brace. Once the nests are fitted a sloping top, which keeps the chickens from standing on nests, and helps to darken the nests. The dropping platform is made of 1 x 8-in. ship-lap, is 2 ft. 8 in. from floor in front and 2 ft. 9 in. in rear. The slope permits the board to be cleaned more readily. For the same reason the boards should be put on from front to rear. The perches are made of 2 x 5-in. material, set flat. They should also be level and about 12 in. from dropping board in front. The roosts are set 18 in. apart.

BILL OF LUMBER REQUIRED

Sills (runners): 2 pieces 3 x 6 in. x 14 ft., rough
Cross-pieces: 1 piece 3 x 4 in. x 14 ft. rough.
Plates, rafters and roosts: 134 lineal ft., 2 x 3 1/2 in., sized.
Siding: 13 pieces, 1 x 12 in. x 14 ft.; 4 pieces 1 x 12 in. x 14 ft.
Cornice: 5 lineal ft., 1 x 8 in.
Base, 2 lineal ft., 1 x 6 in.
Ridge and nest platform: 20 lineal ft., 1 x 6 in.
Frieze and corner boards: 80 lineal ft, 1 x 5 in.
Fascias and trimmings: 350 lineal ft., 1 x 3 in.
Dropping board, nest cover: 80 lineal ft., 1 x 8 in., ship-lap No. 2.
Shingles: 1,000
Cost of lumber: $14.50

HARDWARE

5 pounds 8d. cut nails
1 pound 8d., wire finish
2 pounds 6d., wire finish
1 pound 14-in. brads
3 pounds 2d. shingle nails
16 feet poultry netting, 1-in. mesh, 2 ft. wide
1 pair 4-in. T-hinges
1 lock
Cost of hardware, $1.60

PAINT

1 gallon creosote shingle stain
1 gallon paint
Cost of paint, $2.00
Cost of all material at Corvallis, $18.00

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From a photograph by M. H. Northend

Contents Design: Pussy Willows
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Frontispiece: An Exhibition Dining-room of the National Society of Craftsmen
Photograph by Edwin Levick

Planting Trees for Air, Light and Shade
By Grace Tabor

The $5,500 Home of an Architect
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Book Notes

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HENRY H. SAYLOR, Editor

VOL. XVII, No. 3
Nothing will give such an air of stability to a country home as a proper setting of trees, but successful planting is a difficult art.

Planting Trees for Air, Light and Shade

Trees around many homes are either close enough to make the house damp or too far away to make the shade of any value.

By Grace Tabor

Photographs by Thomas W. Sears, Nathan R. Graves and others

The sixth of a series of articles by Miss Tabor on the subject of landscape gardening as applied to the American home of moderate size, preceding titles being "Utilising Natural Features," "Getting Into a Place," "Formal or Informal Gardens," "Screening, Revealing and Emphasizing Objects or Views," and "Boundary Lines and Boundary Plantings." Any questions relating to further details and planting information will be gladly answered.

There are two distinct aspects under which the question of tree planting and the shade and shadow resulting from tree planting must be considered. One is shade in its relation to buildings, the other is shade and shadow in their relation to landscape composition—in other words one is a purely practical, the other an aesthetic, aspect. The small place is limited usually to the former; the practical aspect being therefore of more general application, we will give it first attention.

It is very difficult not to go to extremes in the use of trees. The tendency is invariably to plant either too many or not enough, according as the planter loves "cool shade" or abominates "sombre shadow"; and in this connection, as in many others, personal prejudice is very strong and does not take kindly to being reasoned with. There is a standard, however, set by hygienic demands as well as by those of beauty—the two are in absolute harmony, by the way—which will regulate this unruly tendency to extremes, if it is permitted to do so.

In the triangle of air, light and shade that this subject of tree planting resolves itself into there is one member which we cannot live without. We need all three of course, to live happily and comfortably—and healthily—yet light and shade are not vital. Life does not depart if these are withdrawn from us; but it does if air is. We can live longer deprived of anything than we can deprived of air—indeed we cannot live at all if it is taken away from us.

This little abstract analysis may seem to have nothing to do with tree planting, but it has. Anything that emphasizes the importance of an element which can be excluded from our houses
so easily by wrong placing of trees has an important lesson for prospective planters of trees.

Of course foliage will never be "dense enough anywhere to smother anybody, but it can very easily be dense enough to seriously interfere with that free circulation of air which is so essential to comfort in hot weather and to health at all times. That is the point.

On the other hand, a dwelling situated in the open, with no trees near it, is subjected to such a glare of sun and heat during the summer as to seriously affect those living in it; for even with awnings or shutters it is impossible to secure that depth of shade needful to repose in scorching weather. Nor is a breeze sufficient compensation—man needs rest from heat and glare as much as he needs cooling, something to soothe disquieted nerves as well as something to lower his temperature. A certain measure of darkness is comforting as nothing else can be—thus it is evident that air is not enough without shade. We must have both.

But ventilation cannot be perfect where the sun's rays do not reach—heat is necessary, in other words, to help us keep cool; so, though air is the prime essential and shade next, the ideal conditions are all three and all three are what we must aim to secure, the first in fullest abundance, the second and third in needful proportions.

I doubt if the real secret of the relation between shade and a building, the thing which makes the planting around it a success or otherwise, presents itself very often to the gardener. Certainly I have never found any mention of it in any work on planting, though hints leading in its direction are given in one or two very ancient treatises on the subject—and some gardens, especially those of India and other tropical countries where the art has been greatly perfected, seem to show a development of the idea that may or may not be conscious. Yet this one thing is to my mind the most important in the whole matter of shade tree planting.

Planting should shade the ground around a building rather than the building itself. No structure is ever one whit cooler for having the sun kept away from it on one side or another if it shines directly and hot upon the earth immediately about it. It may look cooler from without, but that is all. Even a lawn reflects the light and heat up and back into windows and doors and porches; and awnings afford no relief from this reflection, for it rises under them.

A house is itself a shelter from the sun; the sun should shine upon it—into its windows indeed. Every room needs light and unobstructed outlook—which means of course that trees cannot stand very near. But this unobstructed outlook from windows and doors and verandas should be cool and inviting, should rest upon shade instead of a dazzling expanse that glimmers with heat.

Shade around a house means cooler air around it, therefore cooler air coming in at its open windows, whereas shade that is only upon it cannot affect the surrounding atmosphere in the least; and shade at a considerable distance from it is offset by the intervening sunny area whence come blistering little puffs of heat that are the very last straw to one's endurance on a genuinely hot summer day.

The little diagram of tree arrangement around a dwelling is given as a study in shade only and illustrates the manner of finding out what results any given arrangement of trees will give. At noon, with the sun approximately a little south of overhead, the trees will cast their shortest and least shadow, and this will of course fall on their north side. The object is to place them so that this shadow as it swings on towards the east and lengthens in the hottest part of the day, is seen at its maximum from the house. This has been effected with every tree as here shown save the two small ones in the upper left hand corner and the single one opposite on the right. The latter is placed to cut off the hot sun of early morning, while the two former, which may very well be some tall, spire-like tree such as the Lombardy poplar, will stretch their lengthening shadows around as the day wanes until they reach along the grass to the house at sunset.

The tree nearest the house is fifteen feet from it and though the shade of several will fall on the building's foundations and part of the lower story at some hour of the day, the building itself is actually in the open and the sun has free access to every side.

In passing it is worth while to remark that a house placed thus at an angle to the points of the compass enjoys the greatest number of those advantages which arise from sun and weather. Every room has sunlight for a little daily, winter and summer, and the prevailing south and west breezes will, either of them, strike two sides of the building.

It is always very easy and very wise to work out shade out-of-doors on the ground, using rather long stakes. Where there is not much space this is particularly advantageous; the direction of the stake's shadow will of course be the direction of the tree's— and very exact locating of a tree is sometimes necessary to get shade just where it is wanted.

Always bear in mind that the promotion of individual growth is not the most desirable thing to foster in tree planting. Symmetrical specimen trees are interesting, impressive and sometimes very beautiful as specimens, but the effect of many solitary, evenly branched individuals,
Plant your tree planting carefully on paper beforehand with the varying shadows in mind about trees before venturing to select. It is better to have many of one or two kinds than one of many kinds, and although there must be a certain amount of diversity to prevent monotony, we should ever be mindful of the fact that Nature continually presents thickets and groups and patches dominated by one variety. Sometimes there are a few of one or two others and sometimes not; if it is a beech wood there may be a few chestnuts, a sweet gum here and there and now and then a tall, straight maple or an oak, but these are scattered. The ranks of sleek, gray, satin-coated beeches rising on every side are in an overwhelming majority over all the others combined, a majority of from 75 to 90 per cent.

This proportion is not possible always of course, nor necessary; but if three trees are to be planted, have two of one kind and one of another; if ten, have five or six of one kind, three of another and one or two of still another, rather than three of one kind, two of three others and a "singleton."

There is a system of selection which has been used in some of the best and greatest landscape parks in the world, that is worth considering by the owner of even a half acre, though he may not be able to apply it fully. This is the formation of groups composed entirely of different varieties of one family or species. Take for example the maples; there are in all between sixty and seventy species, out of which a dozen are found in North America—enough to make up a very respectable group from just native species, even though some must be omitted as not hardy north.

The red maple is a beautiful tree in winter and summer, whether young or old, and grows from 80 to 120 feet high; the silver maple attains the same height but is distinctly different in habit, being more spreading. It is swifter growing too, but its wood is soft and easily broken, therefore it has not the permanent value of the other varieties. The sugar maple, 75 to 120 feet high, is probably the finest of the genus when all its good points are considered. Beauty, permanence, shade and utility are some of these.

The black maple is very like it, but differs in its habit and the shade of its green; the large-toothed maple is smaller and different from all the rest in many ways; the ash-leaved maple or box elder, quick growing and from fifty to seventy feet high—which doesn’t look like a maple at all, by the way, to untrained eyes—is still different; and then there are three small species which are scarcely more than shrubs—the mountain maple, growing to thirty feet, the striped maple which ranges from a shrub to forty feet and the dwarf maple of the west which stops at twenty-five feet—all sufficiently dissimilar in size, shape and color to furnish variety in abundance when added to the group.

The form of a tree is important architecturally when it is to be placed in intimate relation with a building which belongs to a distinct style or period. With the Gothic, for instance, trees of the Gothic type should be used—poplars and any of the spire-shaped evergreens are examples—for harmonious lines are more effective than those which oppose. This is of course a fine point and need not ordinarily be raised, for ordinarily our dwellings are not designed with such strict adherence to the purity of a style as to demand such care in their surroundings. It sometimes presents itself, however, usually after a wrong selection has been made. I mention it for the benefit of those to whose case it may apply.

THE ESTHETIC ASPECT

Shade and shadow in their relation to the living picture which all planting aims to create, are subject to the same laws of composition that govern the painter’s use of them on his canvas. A landscape is cheerful or gloomy, happy or sad, according as light or shade predominate in it.

It is a difficult matter to say just what the proportion shall be and even more difficult for an untrained eye to determine just what it is in any given landscape; but approximately light and shade in their relation to the living picture which all planting aims to create, are subject to the same laws of composition that govern the painter’s use of them on his canvas. A landscape is cheerful or gloomy, happy or sad, according as light or shade predominate in it.

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A glimpse of the wild garden, looking from the flower garden along the side of the house

The house is placed near a front corner of the 54 x 160 ft. lot, but with its entrance at one side and its living-rooms at the rear or garden front

The $5,500 Home of an Architect

A HOUSE ON A FAIRLY SMALL SUBURBAN LOT NEAR SYRACUSE, N. Y., THAT SHOWS INDIVIDUALITY, GOOD TASTE, AND AN ATTRACTIVE GARDEN SETTING

BY LOUISE SHRIMPTON

Photographs by T. B. Boothroyd

AN interesting combination of house and garden, planned with regard to the advantages of the site, is shown in the home of Alfred T. Taylor, architect. Built nearly five years ago, the house is in a suburb of Syracuse, N. Y., on a corner lot 54 x 160 feet. While the street in front is uninteresting, behind the lot are rolling hills, beautiful in summer and winter. Neighboring houses face the street, with front porches that catch the dust of passing traffic. The Taylor house, though the main entrance is at the side of the lot, really faces the hills, as the porch, large living-room and principal sleeping-rooms are all at the back, as far from the street as possible. The house is placed well to the front of the lot, leaving space at the rear for a good-sized garden, entered directly from porch and living-room.

The shingles of the exterior are of California redwood, left unstained and weathered to a soft gray tone. The walls are covered with wide clapboards having the same weathered gray finish. The window and door trim, of cypress, is painted cream white, and the blinds are painted a soft green. Foundations are of red brick and the chimney is of the same material.

The quaint roof lines and architectural detail of the exterior suggest an early Colonial cottage or farmhouse type, modified to suit modern needs. "A noteworthy feature is the main entrance, with recessed doorway, leaded glass side-lights and white pillars. The tradesmen's entrance, at the opposite side of the house, has a small porch with built-in seat, approached by a separate path and a small courtyard. A large porch faces the garden and hills. In warm weather it is used as an extension of the living-room, and is screened with Japanese awnings and furnished with old Colonial chairs and a breakfast table. The trellises placed at intervals against the walls form an effective though minor detail of the exterior. They are made of strips of ordinary lath, nailed together at right angles and covered with vines.

The flower garden has cost its owners practically nothing, since it was started with slips obtained from a deserted farmhouse garden discovered on a country road not many miles from the Taylor home. Exchanges of slips and seeds with friends have supplemented the old-fashioned flowers. The garden plan was worked out in connection with the house plan, and has been adhered to in general outlines, but in details is changed every spring. A wide gravel path leads from the porch steps to the foot of the flower garden, where a pergola of rough tree trunks and white-painted beams stands, covered with woodbine, wild clematis and mountain fringe. Beyond the pergola are brick steps leading down to the vegetable garden and children's playground. At the junction of two other garden paths is an arch made of three rough tree trunks topped by curved wires and covered with moonflower vine. On one side of the main garden path are flower beds and narrow paths, on the other a wide flower border and grass plot. A low stone wall partly encloses the street side of the garden. Beyond the sidewalk is a row of shimmering poplar trees. Chosen because of their capacity for rapid growth, they will gradually be replaced by elms and maples, since they are of the American variety which often proves unsatisfactory. In the
meantime they make a beautiful and effectual screen for the garden against the houses opposite. Near the stone wall are grouped the tallest flowers, forming a background for the rest of the garden. Hollyhocks grow outside the wall and Canterbury bells, larkspur, foxglove and cockscomb are just inside. In the beds annuals are planted every summer to fill in between the perennials and keep a succession of bloom. Armfuls of flowers are picked in the garden every day until frost comes and even then hardy chrysanthemums continue to bloom. Columbine, hardy phlox, blue and white heliotrope, blue flax, nicotiana, salpiglossis, poppies, marigolds, platycodon and pompon sun-flowers are among the plants that fill the beds. Grass borders are used next the paths, and white flowers mingle with the varying colors in beds and borders in order to harmonize them. The bulbs, first comers in the main garden, grow in the flower border beside the main path, and include red tulips, narcissus and iris. Later, the border, like the beds, is filled in with annuals. Two borders are planned for the coming season, one on either side of the path.

On the slope extending from the front entrance to the large porch is the wild garden. Many wild growing things of the region have been dug up and brought to this tiny plot. Maidenhair and other ferns, myrtle, bloodroot, trillium, spring beauty, hepatica, wild columbine, lady's slipper and wild roses grow thickly on the bank. Little blue spruce trees were also brought from the woods, and rocks are planted with the flowers to duplicate wood conditions as far as possible.

Roadside shrubs were transplanted to the garden from country highways and lanes. In front of the lot are cornus, hawthorn, sumac, Japanese barberry (the only hot-house product) and elder. Near the large porch is a big bush of thimbleberry, extremely decorative with its glossy fruit and leaves, and elderberry and sumac grow nearby.

The first floor, as will be seen by the plan, has a central hall of small dimensions, with a winding stairway. On one side is a small reception room, on the other a flight of three steps leads down to the large living-room, made higher than the smaller rooms by a greater excavation under the floor level. One end of this room is used as a dining-room. A recess holds the sideboard. Two other recesses, opposite each other, contain, one a large brick fireplace, the other, built-in bookshelves and desk. Two French windows with divided half doors open upon the porch.

On the second floor are four large bedrooms, one of them provided with a fireplace. Built-in window seats are in nearly all the rooms. The space behind the winding stairway has the effect of a gallery, and with its bay-window, seat and cupboards, makes a pleasant reading nook.

On the basement floor are a laundry and workroom, as yet unfinished, and the usual cool-room, coal-bins and furnace room. On the third floor is the maid's room and an unfinished attic.

The plan is unusually well adapted to the needs of an average family, and although the house would be classed as small, the rooms are large.

The interior wood trim throughout is whitewood. In the living-room this is stained a light brown, except for the doors, which are painted a creamy white. In the kitchen the woodwork is painted a dull green. Throughout the rest of the house the
On account of its size it was thought best to make the living-room higher by lowering its floor finish is ivory white enamel. The stairway rail, treads and newel post are, however, of birch, stained mahogany color. The floors throughout are beech finished in light brown.

A hot-water system heats the house. The radiators, usually an inharmonious feature, were treated to a coat of green paint, which was nearly all rubbed off before it became dry, giving a bronzed effect that is pleasing in tone and color.

The electric fixtures in hall and reception room are in dull brass, of a formal type that harmonizes with the Sheraton chairs and Colonial tables. In the living-room the fixtures are simple in style, in accord with the informal character of the room and its furniture; wooden arms or brackets, finished to match the other woodwork, project from the side walls; the electric bulbs hang from the brackets, shaded by glass globes of bell shape.

The window curtains throughout the house are of plain madras, an unusual and ingenious arrangement of lighting fixtures, where the bulbs and cords are suspended from wooden arms on the side wall woodwork.

An unusual and ingenious arrangement of lighting fixtures, where the bulbs and cords are suspended from wooden arms on the side wall woodwork.

The location of the stairway gives an interesting balcony effect with a seat in the bay at the rear of a light tan color. They are made with a scant valance and hang in straight folds.

Wall coverings are dispensed with in nearly all the rooms. In the reception room and hall the plastered walls are tinted a pale yellow, while in the living-room they are covered with golden brown burlap. The kitchen walls are painted green like the woodwork. In the sleeping-rooms the natural color of the plaster is as yet left untouched.

The interior of the Taylor house is an example of the unspoiled work of an architect. The furnishings have not been allowed to interfere with the architectural detail, but harmonize with it. While the owners plan the completion of two or three unfinished rooms in basement and attic, and the painting or papering of some of the bedroom walls, these additional features will cost no more than three hundred dollars.

The Garage for the Country or Suburban Home

ITS PRACTICAL REQUIREMENTS IN THE WAY OF FIRE PROTECTION, ACCOMMODATION AND EQUIPMENT, AND A WORD AS TO ITS ARCHITECTURAL DESIGN

BY CARLETON MONROE WINSLOW

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BY CARLETON MONROE WINSLOW

Photographs by Waldon Fawcett and others

THERE was a time when the city man, if inveigled from his customary habitat into visiting his suburban or country friend, was invited sooner or later to inspect the stables, see the horses, and look over the vehicles and other paraphernalia of comfortable or uncomfortable country road travel. From this era we are passing to the newer one, that of garage, motoring and automobile, which supplants in the conversation between host and guest, talk of carriage, horse and stable. In many country places the stable is still kept and the private garage is erected as an addition or extension to it, the new garage being built frequently as an entirely separate building, and again in new places, particularly when the area of the lot is limited, the garage is planned as a part of the dwelling. The garage lends itself delightfully as an architectural element in planning the group of buildings of a country place or town house. The plan of having it but one story high subordinates it to the house. The garage should always be in keeping with the architectural style of the house, and its position on the lot carefully thought out as well as the problem of its relation to the landscape.

The plan for the contemplated garage is the first matter to think about, unless it is the site. It should not be too large to accommodate the number of cars that will occupy it, and the ease with which they are enabled to enter or leave it, as well as planning for easily accessible work-shop and bench, washing...
Rough field-stone walls are backed up with reinforced concrete, and the roof is of the latter material.

Cement walls and red tile roof make an attractive combination for the private garage.

place, store closets and other accessories, must be taken into serious account in the initial stages of planning.

It is seldom wise to plan only a one-car garage, unless there is a definite reason for so doing. There are occasions when one will wish to put up a visitor's car, or otherwise house a second motor. However, the garage is sometimes a mere shed or enclosure, and as such can be reduced to 9 ft. by 15 ft. inside measurement for an ordinary roadster, with a height of 9 ft. 4 in. to the top of the plate for the roof rafters. Such a one was built for a physician in Asbury Park, New Jersey, and with its outside covering of cream colored siding and red shingles, glass lights with heavy panels in the doors, it is by no means unattractive and was built at a complete cost of $250.

Generally, the garage should be planned so that the cars can stand against the back wall with the door or doors directly opposite; one door 9 ft. 6 in. wide, and of about the same height, is generally sufficient, providing the room is about 20 ft. deep, to allow for making the necessary curve for rolling the car into place. These dimensions apply to a garage to hold two cars. For a still larger garage two doors are better, or one sliding-door of three sections making an opening of 9 ft. on one side or the other of the door as desired. A small door, either separate from the large doors or built into them, will be found convenient in the winter time for accessibility and keeping in the warmth.

Unless there is a separate work-room a work-bench about 4 feet wide at one side of the room is a necessity. A window should be over it with an electric light conveniently arranged for night repairs, and a sink with hot and cold water connections built in at one end. This will be found a great convenience while repairing tires. A shelf below makes a suitable place to store tires, and a closet for storing gears, springs and other duplicate and sundry parts should be near at hand. The location of the washing stand follows generally the arrangement of a carriage wash in a stable. It is advisable, however, to have the whole floor of the garage slope to the one or more floor-drains. A revolving overhead wash, fitted with an electric light, will be found most useful. Closets with poles, hooks and drawers for the storage of rugs, coats and other accessories should be at hand. The attic can be arranged for the storage of tops, usually, and other large parts not in use. A hand elevator will be found a great convenience for lifting these heavy articles and can be put in at a small cost.

There seems to be a difference of opinion as to the usefulness of the repair pit. The alternative is a chain tackle arranged to lift one end of the motors to get at the under side, and geared to work easily by hand power. But the pit has a number of advantages in spite of its extra expense. If the garage is built upon sloping ground there should be an outside escape from the pit with glass in the door. Suitable dimensions will be found to be 10 ft. by 3 ft. 6 in., with a depth of 4 ft. 6 in. Seats 12 in. wide and 18 in. high, arranged on both sides of the pit, will be found a great comfort to the mechanician. A drain in the floor and an electric light upon a cord are practically necessities.

Other questions of planning are involved with the very important one of making the building as fireproof as possible.
Regulations as to construction materials and arrangement of the garage vary considerably in various localities. Outside of the city limits of the more important centers, there are few restrictions, except those imposed by the Board of Fire Underwriters and the owner's own desire for security. It naturally follows, however, that the building should be constructed in the safest manner, both to secure the best insurance rates and to anticipate more strict regulations for house and machine which will undoubtedly come in the future. The floor should be of concrete, the walls of brick, concrete or porous tile plastered upon the outside. If the walls are of wood the studs should be dressed and exposed on the inside. If the floor alone is of wood the ceiling should be constructed of sheet metal of the simplest design.

A better floor than this, particularly if there are living apartments above, is of reinforced concrete of one of the approved systems. The regulations for the garage built within the city limits of New York are strict and somewhat complicated. Some slight modification is allowed for the private garage where no gasoline is kept in storage and where the fuel tanks of motors are neither filled nor emptied, but this is only allowed on special permit from the Fire Commissioner. The architect planning a garage within the city limits should have these garage regulations at hand. They are easily procurable at the Fire Department headquarters and the writer is of the opinion that they should serve as a guide in planning a garage to be built at more remote points.

The heating of the garage should be of steam or hot water preferably, brought from the dwelling in pipes laid in a trench. When this is not possible the heating room should be kept entirely separate from the rest of the building. A small coil can be put in to supply the hot water to the wash stand and sink and to the living apartment if there be one.

Only incandescent electric lighting should be installed.

Gasoline should always be stored in a tank underground and at least 10 ft. away from the walls of the garage. The New York City regulations require the tanks to be embedded in 12 in. of concrete. A suction pump fitted with hose connection and gauge are inside the building; vent, convenient syphon filler and a device for keeping the tank filled by water flowing in automatically as fast as the gasoline is pumped out are other practical accessories of a good storage tank. This latter device is particularly advantageous; it leaves no unfilled space at the top of the tank just above the liquid to become filled with inflammable and explosive gas. The arrangement of having two tanks of equal capacity is also good. The owner is then automatically notified to replenish his supply of gasoline long before it has run short.

As to the cost: it is difficult to advise or suggest in an article of this sort. The prices of labor and building material vary so in different localities and at different times that estimates here would not be of particular value and might even be misleading. And then again the cost increases as the fireproof qualities of the structure improve. The simplest form of a shelter for the motor, just large enough to house one machine, built upon brick piers with frame walls, shingle roof, wood floor, glass in the doors, no heating nor plumbing, costs about $250 in the vicinity of New York, and less in most more distant points. From this the price runs up. The so-called portable garages are not bad looking, but they seldom harmonize with the style of the house, are not inexpensive and their very name tells of their appearance of instability and their temporality.

In conclusion the writer would suggest to the man who is building a new place, that he build a garage with a capacity of at least two cars. You may not own a motor, you may even dislike automobiles, but the time may come when you will acquire one, or if you sell the place its value is greatly increased over the additional first cost. In the meantime use the garage for something else. The vines and planting would have a fine chance to grow and mature around it. And you can secure a better contract price if the builder of your house puts up the garage at the same time.
Modern English Plaster Houses for America

WHY THE TYPE OF PLASTER HOUSE THAT IS BEING BUILT IN ENGLAND TO-DAY COMES NEAREST TO FULFILLING THE AMERICAN REQUIREMENTS FOR A HOME

BY J. LOVELL LITTLE, JR.

WHEN I was asked to write one of a series of articles, each advocating a particular style of architecture for the country or suburban home, I protested. I said it was foolish to try to prove that one style or another is the only one in which to build a house. The word style loomed large in the foreground; horrid, with all its arbitrary importance, and exceedingly independent and pompous on account of the adulation and attention which it is always receiving from the public. I started to explain to the editor that style is a growth, a long painful process of evolution; brought about by the life of the people that has developed and perfected it, and not an arbitrary attribute to be bought and sold. You know the argument; for no doubt you have cornered an architect and asked him some poser about style, and he has retired behind this well worn armor; but I gave it up and said—well never mind what I said, but I accepted the invitation to argue for a style.

I was not only to argue for a style but I was to present an enthusiastic argument. So at this stage in the game I was committed to do something that I didn’t believe in doing, and do it enthusiastically at that. I was to stand up and say, “You must build your house in this style or not at all.” I was to be uncompromising in favor of a certain fashion. I had begged the editor to let me “hedge” a little, and I wrote him some very sound truths on tolerance, but he scorned them.

Then he told me that I should present the case for the Modern English Plaster House. He knew I liked the modern English house and he played to my weakness. I still pretended to be disgusted, but I no longer worried, for I saw a great light, and I hope now to show why I felt that my troubles were over.

In “A Dictionary of Architecture and Building” by Russell Sturgis, there are two definitions of “Style” in the following order of importance.

1. Character; the sum of many peculiarities, as when it is said that a building is in a spirited style. By extension, significance, individuality; especially in a good sense and imputed as a merit, as in the expression ‘Such a building has style.’

2. A peculiar type of building, or ornament, or the like, and constituting a strongly marked and easily distinguished group or epoch in the history of art;

There is more of this second definition, but this is enough to show its meaning; it is a type, a fashion. I might have added to the sentence quoted, “such as the American Colonial Architecture,” by way of further explanation.

But turn to the first definition and read it again, carefully.
The use of shingles as a base, with plaster above, marks this informal country house at Hamilton, Mass., for Messrs. A. L. and F. D. Cochran. Parker & Thomas, architects

The Henry Howard residence in Brookline, Mass., combining a Colonial fence and classic doorway with the general mass of an English house. Charles A. Platt, architect

It is a big, broad definition. You will find three words worthy of note: "Character," "Significance," "Individuality"—qualities well worth finding in a house.

I am going to try to point out the value of these qualities, and to show you that the modern English house, with all its faults (and to an American these are not a few), combines these three qualities to a greater extent than do the average houses of our own and other countries. Finally, I should like you to consider how similar are our own needs and tastes when we want a home.

Character in house architecture means that the building inside and out shall have domestic qualities and suggest, more than all, a home.

Significance I understand to be the successful harmonizing of the needs of the client with the natural setting of the house; in other words, it is the logical solution of the problem, that brings peace and comfort to the occupants of the house, and gives an outsider the pleasure that one has in any well balanced view or picture.

Individuality is more or less the result of character and significance, and is greatly influenced by the relation of the owner and the architect.

Now Colonial houses have character; no one will deny that; and very charming it is, but it is the character of the past. In his definition of the Colonial, Russell Sturgis says in part that it is the architecture of the Colonies, "especially in American use, that which prevailed in the British settlements in America previous to 1776, and by extension and because the style cannot be distinctly separated into chronological periods, as late as the beginning of the present century," etc.

There are many times that a client comes to one and asks to have a Colonial house, for it is justly a popular type of American domestic architecture. The architect must set about to adapt the Colonial type to modern and special requirements. The difficulty is perhaps best illustrated in the article of this series devoted to the Colonial style, where the author pictures the house and its rooms. What does he do? He draws a delightful picture of days and customs gone by and places "My Lady" in a lovely frame. But "My Lady" is not a modern American woman. No doubt she still exists, and, when a specimen of her is found, give her the Colonial house by all means without a question. She will want it, she will be fitted to care for it; in short, to give it to her is the solution of the problem in this particular case.

Colonial house architecture to-day lacks significance, except in special cases. That is the truth of the matter. It is the architecture of a more aristocratic time, the architecture of men and women who lived more formally and with less of American independence than we do to-day. It isn't democratic, as we are democratic and as even the average Englishman is democratic.

Take for example the informal out-of-door life, with its varied sports and occupations, shared alike by the whole family. This kind of life is being lived by an ever-increasing number of people in this country, and it is producing a different style of architecture than that which prevailed a century ago.
Where can you find any close relationship between this very vital characteristic of our modern life and the life of Colonial days? The whole scheme of life was more formal. The modern problem of domestic service did not present itself. The great families in the south and in the north, had their slaves, their trained servants and even in the average household there remained some traditions of English formality, of aristocratic rather than democratic life. To-day in most households life is entirely different. The younger generations have much more independence and it is the era of individual development. To-day our children conform less to any formal routine of the household than at any other time in our history. They and their friends share with us the informal life of work and play at home. There is a great movement towards the country and, whether large or small, American suburban and country houses reflect the trend of our life.

All this makes for a new type of house; a house with at least one large living-room that typifies the life of the household. There is no other one room in the house that can economically balance this in size, and it is this one fact that is largely responsible for the gradual growth of a type of house that is comparatively new to us.

No, the Colonial style is not significant to-day. The plan with its central hall and four corner rooms is economical, no doubt, but it is the economy of the bargain counter, inasmuch as one is getting more than one's money's worth of something one doesn't want. The type must always be twisted and turned to fit changed conditions or the client must be molded to fit the frame.

I have dwelt somewhat at length on the inadequacy of the Colonial in itself because it is the most serious rival of the style I am championing. It has tradition, dignity and charm; it still has character and individuality to some extent, but only occasionally does it have significance. Perhaps I am too hard on this style, for I find myself trying at times to qualify my statements, but please remember that I am dealing with the subject in a general way and must treat it generally. I must not dwell too long on the many delightful examples of Colonial houses that I know. I must overlook the fact that I was brought up in a Colonial house, and I must stick to the point, which is that the modern English house hits the nail on the head more often than any other style of house.

I have just fallen a victim to the word "style" in its sense of "a peculiar type of building," which leads me to state here that I am not arguing for the Modern English Plaster House, per se, but for the house with character, significance and individuality, and I must now justify my statement that the Modern English Plaster House has these qualities highly developed.

First to get the plaster part of my title settled. No doubt the insertion of this word was a pit-fall de-
The beautiful shell-top motive of Colonial days can scarcely be improved upon.

The simple rectangles of the glazed door flanking the fireplace are too seldom used in china cupboards.

At the right the cupboard is built in so as to be flush with the woodwork.

Even without doors the built-in cupboard is attractive.

At the right the cupboard is built in so as to be flush with the woodwork.

Even without doors the built-in cupboard is attractive.

This mahogany frame is in striking and effective contrast to its contents and background.

Ledged glass doors occupy the ends of this long built-in sideboard and cupboard combined.

In this dining-room designed by Lawrence Buck, the china is displayed sparingly over the built-in sideboard.

It is curious how the Colonial builders hid delicately carved interiors with solid wood doors.

A combined sideboard and china cabinet in white enamel and leaded glass that saves space and makes an effective feature in a bay.

NINE TYPES OF BUILT-IN CHINA-CUPBOARDS
ALMOST every plant under cultivation is subject to some blight or pest that it has been free from in its wild state. Fungoid, parasitic growths and insect visitations cause such havoc in our orchards and gardens, from hedgerow to flower-bed, that scientific research into the subject has come just in time to save the plant-grower from many discouragements.

There is now hardly a single plant ailment that we are either unfamiliar with or unable to cope with, wherefore liquid spraying, or the application of liquid fungicides and insecticides to affected trees, shrubs, vines, and plants, has become an expedient of the greatest importance to everyone having a lawn or garden. It is a disheartening thing to see the plants you have worked over and nurtured turn serene-leaved out of season, droop and die, when you have looked forward to their mature beauty and usefulness with all the hope the heart of a garden-maker can hold.

Fungoid plant-diseases are quite as much to be dreaded as attacks from insect foes upon plant life. We can hardly cure their mischief, but, to a great extent we can prevent their occurrence by spraying and, in some measure, check the spread of blight or anthracnose likewise.

As only a microscope will disclose to us just where the minute fungi spores are lodging themselves, it becomes necessary to prevent the possibility of their appearing at all, even if, in seasons past, our trees and shrubs and vines and plants seem to have been free from disease. Not only must they be sprayed once but often, as the effect of liquid spraying (which has great advantage over dust spraying) is cumulative. The first spraying may not reach tiny spores tucked away in budding portions of the plant, which, when these come into branching proportions then present the disease upon a surface that can be reached by subsequent spray applications.

As the writer has often had occasion to remind the gardener, all the spraying in the world will be rendered futile if one’s neighbor’s trees and plants are diseased and do not receive like attention. Therefore one of the first things to do is to prevail on him to have his spraying done coincident with yours, and if he remains indifferent to the matter it is far better for you to bear the expense of doing it for him than to subject your trees to danger from contamination. Indeed, the matter of communal effort in this direction is of such importance that many neighborhood societies of garden owners have been formed, and out of the common treasury the expenses of neighborhood spraying have been borne, thus establishing one of the most helpful cooperative movements known for the maintenance of fair areas.

Insect pests may be divided into two general classes: insects that injure the plants by biting and chewing (these must be got rid of by poisoning their food), and insects that destroy plant life by sucking the juices of the plants (these latter must be met openly and killed by external poisons, fume suffocation, etc., as they pay no attention to surface poisons).

In the first class we have the Flea-beetle, the Potato-bug, the Cabbage-bug, Aphides (Plant-lice), and the Cinch-bug, and among the second class are to be found the moth parents of the Cut-worm, the Tassel-worm, the white Grub-worm’s moth, the Onion-maggot, Maple-borer and Rose-bug.

Spraying is easily accomplished even on the smallest premises. Excellent and inexpensive apparatus is offered in the market (your florist or your nurseryman can always supply you with reliable manufacturer’s addresses). The pump should be strongly made, and one nozzle will be sufficient. You will probably have to renew the spraying hose every year, if you have much work to be done. If you have a large garden you can rig up a barrel on wheels, for moving the Bordeaux Mixture or other arsenate sprays around, and fit it with pump hose and nozzle at a total cost of ten dollars. For a small garden a hand sprayer costing, say, four dollars, is sufficient. The knapsack style of sprayer, carried by straps on the shoulders, is especially good and will throw a spray fully fifteen feet. This can be used to equal advantage on fruits.
and vegetables. With heavier sprays, such as Paris green and Lime-sulphur wash, agitation is necessary to keep the compound properly mixed, and many mixtures should be strained before using; thus for Lime-sulphur a strainer of not more than twenty meshes to the inch is necessary (a smaller mesh would fill up). The nozzles must be kept from clogging.

The garden-maker should make his preparations early, and from time to time study the subject so he may be forewarned as well as forehanded. One good way to keep posted on such matters is to study the catalogues of manufacturers and by reading agricultural bulletins, as year by year spraying apparatus is improved and simplified, and many valuable spraying formulae are produced to combat with success new plant pests. The accompanying table is, in all general purposes, a safe calendar of spraying operations to use as a guide.

The following recipes are some of the more common ones in general use:

### INSECTICIDES

1. **Aryenate of Lead.** Use 4 oz. to 5 gals. of water.

2. **Paris Green.** Use ½ oz. Paris green and 1 oz. freshly slaked stone lime to 5 gals. water.

3. **Kerosene Emulsion.** 4 lb. soap dissolved in 1 gal. boiling water. Add 2 gals. kerosene; agitate 5 minutes. Dilute a dozen times before applying with spray.

4. **Lime-sulphur.** Use lime, 1 lb., sulphur 1 lb., salt 1 lb., water 3 gals.

5. **Arsenate of Soda.** Use white arsenic (crystalline) 1 lb. to 2 lbs. Carbonate of soda.

6. **Ammonical Copper Carbonate.** Use Copper carbonate 5 oz., Ammonia (20° Beàme) 3 pints, water 45 gals.

7. **Whale-oil soap.** Dissolve 2 lbs. in 1 gal. hot water. Dilute 4 times before spraying.

8. **Formalin Spray.** Use 1 pint Formalin to 30 gals. water.

9. **Copper Sulphate.** Use 1 lb. Copper sulphate to from 25 to 50 gallons of water.

### FUNGICIDES

10. **Bordeaux Mixture.** Use 5 lbs. Copper sulphate, 5 lbs. unslaked quicklime, and 50 gals. water. Slake lime with water to a thin paste and strain this. Place lime paste and Copper sulphate in jug and mix thoroughly by shaking. Then add this to full quantity of water. Any arsenites to be combined with Bordeaux mixture may be added as required.

11. ** Sulphid of Potassium.** Use 4 oz. of potassium sulphide to 5 gals. water. Dissolve sulphide in warm water and dilute to spraying strength. Use only when fresh as it soon loses strength.

The following names of insect and fungous pests are followed each by the number of the recipe for the spray to use in coping with it:

### INSECT PESTS

- Aphids (Plant Lice) 5
- Borer 10
- Canker Worm 2
- Codlin Moth 5, 9
- Cottonwood-leaf Beetle 5
- Cutworm 5
- Elm Beetle 5, 3
- Elm Scale 3
- Fall Webworm 5
- Four-striped Plant-bug 3
- Hollyhock Bug 3
- Leaf Cutter 3
- Maple Borer 11
- Maple Cotton Scale (Woody Scale) 7
- Mealy Bug 7
- Oyster shell Scale 3, 4
- Red Spider 3
- Rose Bug 1
- Roseleaf Hopper 7
- Rose Scale 3
- Rose Slugs 6
- San José Scale 3, 7, 4 (winter)
- Scurfy Scale 3, 7, 4 (winter)
- Tussock Moth 2
- Willow Worm 5

### FUNGOUS PESTS

- Anthracnose 10
- Chrysanthemum Leaf-spot 10
- Hollyhock Rust 10
- Leaf Blight 10
- Leaf-rust 10
- Maple Leaf-rust 10
- Mildew 10
- Pansy Rust 10
- Rose Leaf-blight 10
- Rust 10
- Verbena Rust 11

For the Borer paint the trunk of trees with lime-wash, containing 5 oz. of Paris Green to each gallon of water. For ants pour a teaspoonful of bisulphate of carbon in each ant-hole and cover up. The chewing insects that injure our ornamental trees may be destroyed by arsenite sprays, but the sucking insects must be smothered by such sprays as the whale-oil soap (7), kerosene emulsion (3), or the lime-sulphur solution (4).

One of the greatest aids to freedom from fungous and insect pests is cleanliness in the garden. See to it that your lawns, yards, orchards, gardens, borders and all are free from rubbish, especially free from vegetable matter, such as old tree-twigs and plant stocks that have died from abnormal causes.
To have early vegetables start the seeds in a hotbed, coldframe or in the house if the former are not available.

Grow Your Own Vegetables

THE WHOLE ART OF STARTING THE PLANTS INDOORS OR IN A HOTBED OR COLDFRAME—JUST HOW TO MAKE FLATS, SOW THE SEEDS AND HARDEN OFF THE SEEDLING PLANTS

BY F. F. ROCKWELL

If you expect to have a vegetable garden this year—and no matter how small your available ground is, you certainly should be planning one—don’t miss the fun of starting your own plants. It is not necessary to have a greenhouse to do this. You can make a hotbed or coldframe with little expense, or, if you do not care to go to the trouble of doing this, any warm sunny window in a heated living-room will answer the purpose.

Have you ever put a packet of little dry brown seeds in the ground and watched daily for the earth to crack above them? If not, you have missed one of the most interesting experiences possible! And if part of your seed sowing is done now, while winter reigns without, and the leafless trees, "Bare ruined choirs, where late the sweet birds sang," are bent against a cheerless sky, you will find your little experiment increased ten-fold in interest, and you will watch for the first green seed-leaf pushing aside the mold with a keenness of expectation and a satisfaction that will repay your trouble a thousand times.

It is not a difficult art—this matter of starting your own plants. Let me emphasize at the outset that the main factor of success will be regular attention. It won’t take many minutes a day, but it will take a few minutes every day. Don’t forget that, and if you are thinking of starting a few plants with the idea that you can spend a few hours to-day sowing the seed, and, in three or four weeks, half a day transplanting them, and later a day setting them out in your garden, you would better give up the plan now, and later on spend at the florist ten times what your seed would have cost for some plants whose pedigree you know nothing about.

It is very much better to start your own plants, and you will find it a good deal of fun, too. Do not be scared away from the undertaking because you may have read somewhere that this, that, or the other condition, which you found it impossible to comply with, was absolutely essential to success. Unfortunately, some of our writers about these matters are given to describing in detail their own methods, and assuming that no others can succeed. By way of illustration—and of encouragement to the beginner—I recently found, in an article on starting plants, the statement that if a temperature never below 60° and never above 80° could not be maintained (in the room where seed-boxes were to be placed) it would be best to wait until such a temperature could be had. Such a temperature may be preferable, but it is not by any means essential. In fact, I am inclined to believe the beginner, who has not yet had a chance to learn the amount of ventilation, moisture and care which such a degree of warmth makes necessary, would have better success with the ordinary vegetables in a cooler place. One spring I started thousands of plants in an old leaky greenhouse where the temperature at night on several occasions went down to 34°, and frequently at noon climbed to 100°, and yet the plants came through finely. Of course this was going to the other extreme, but it shows what can be done.

So if you have a bright sunny room, where the night temperature is never lower than 40°, and if you have decided that you will attend to your seed-boxes properly...
and regularly, you may safely go ahead with the assurance that your efforts will bring success.

There are three things you will want in the way of accessories. First of all, your seed-boxes, or "flats," as the florist terms them. These are open wooden boxes three to four inches deep, and of any convenient size. For a small garden such as the one we planned in the last number, one or two dozen will be a great plenty, and the easiest way to get them will be to have your grocer bring you a few soap or cracker boxes, with the tops. If you can, get them all the same size. Saw these up lengthwise into three-inch to four-inch sections, and bottom each, being careful to draw out the hand or a short flat stick—say a piece of shingle. Pieces of shingle may also be used to divide the box up into sections, for one-third of a biscuit box flat will give you plenty of seedlings if you require only a few dozen or a hundred plants of each vegetable. This will be better than using three small boxes on account of the decayed chips and bark which you can scrape up at the wood-pile will do. Mix and turn your pile thoroughly, and you are ready to sow your seed.

Cover the bottom of a flat with about half-an-inch of coal ashes, chip dirt, or any similar coarse substance. Sift on through the sieve about two inches of your mixed soil. Jar the flat to settle the dirt firmly, and smooth off level, without pressing, with the hand or a short flat stick—say a piece of shingle. Pieces of shingle may also be used to divide the box up into sections, for one-third of a biscuit box flat will give you plenty of seedlings if you require only a few dozen or a hundred plants of each vegetable. This will be better than using three small boxes on account of the decayed chips and bark which you can scrape up at the wood-pile will do. Mix and turn your pile thoroughly, and you are ready to sow your seed.

After sowing the seed either in rows or broadcast, sift over them enough fine soil to cover them to a depth of two or three times their diameter.

Fill the flats with one part garden loam to one part leaf-mold, adding enough sand so that the mixture will crumble apart after being squeezed in the hand.

After sowing the seed either in rows or broadcast, sift over them enough fine soil to cover them to a depth of two or three times their diameter.

After sifting the soil covering over the seeds press the whole area firmly with a flat board. A shingle will do, but you can easily make a firming board like this.
You can have big early onions by following the accompanying instructions for starting seeds indoors. This will be indicated by the appearance of the third and fourth leaves, which are usually different from the first or seed-leaves. The day before you expect to transplant give the seed-boxes a last good watering.

The job of transplanting is accomplished as follows:

Prepare your flats as before, only in place of the coal ashes, use, if you can obtain it, thoroughly rotted stable manure. (Don’t use manure that is at all fresh, as that will heat and kill your plants.) Put a layer of about an inch or so in the bottom of the box, and pack it down firmly. Fill the box level full with the same kind of earth as before. If well decayed manure is not to be had, use a handful of bone-meal, thoroughly mixed into the dirt, for each flat.

The young seedlings should be set from one to two inches apart each way. The ordinary flat, as described above, should hold about one hundred, but, if you can, give them more room, have been growing, or make a small wooden paddle, and loosen and lift them out, keeping the roots unbroken as much as possible. Make a small hole with the forefinger in the prepared flat, and lower the plant into it, without crowding the roots, with the other hand. It should be set in about half-way up the stem. Then close the dirt firmly about it with the forefingers and thumbs. Properly set, the little plant should stand up firmly, with as little packing of the soil about it as possible. When the flat is filled jar the sides to even the little heaps and hollows which will have been left about and between the plants, water thoroughly with a fine sprinkler, and set the box in the lightest, warmest place you can give it. If the sun is very bright, shade the boxes with a single thickness of newspaper.

Include the root crops in your home garden if you can possibly spare the necessary space. Give up potatoes first and get stockier plants. In taking the seedlings out of the box in which they don’t pull them up. Take the fingers, and loosen and lift them out, keeping the roots unbroken as much as possible.

How Shall We Wainscot the Walls?

COMPARATIVE EFFECTS, MERITS, DEFECTS AND COSTS OF BEVELED PANELING, STRIP PANELING AND WOOD STRIPS OVER PLASTER THAT IS PAINTED OR COVERED WITH A WALL FABRIC

BY JARED STUYVESANT

Photographs by C. H. Claudy, M. H. Northend and others

If the title of this article had been "When Shall We Wainscot the Walls?" the text matter might well have begun and ended with the answer "Whenever we can afford it." I have tried hard to think of some room, downstairs or up, or a hall between, that would suffer in effect from the addition of suitable wainscoting, but not one solitary instance occurs to me. Wainscoting seems to be the exception among all features of interior furnishing and decoration, in that it alone can be used to the improvement of a room of any style or type. Even a factor of interior furnishing with as broad a scope as wall covering, does not possess this universal fitness. I can picture many types of rooms that would be better without wall covering; and you will agree that, for example, a study floored with handmade tiles might be more effective without a floor covering, even though Oriental rugs were available. But take any living-room, bedroom, dining-room or hall, whether it be in an English half-timber house, a rough summer camp, a Colonial homestead or in just an ordinary yellow-dog house; can you imagine any one of these that could not be made more attractive with the addition of a suitable type of wainscoting?

Of course, that word "suitable" is the crux of the whole matter, and also in large part the explanation of the eternal fitness of the wainscot. You would not put an intricately paneled, white-enameled wainscot in a summer shack of batten hemlock boards. Neither would you agree for a
Paneling that involves real joinery is closely associated with Colonial work. The cut-out star is most unusual.

The device in the upper square panels of this modern dining-room is stenciled in green and gold. Aymar Embury, II., architect.

A very clever semblance of wainscoting has been secured by painting white the plaster between baseboard and chair-rail, and running the upright wood members across.

moment that a brown-stained series of wood strips over a rough board backing would add to the consistent beauty of a Colonial dining-room. But the wainscot's great merit lies in its adaptability to any environment; it has many strings for its bow. It may be of a material and design in keeping with the most sumptuously furnished dining-room, such as the one illustrated at the upper left corner of the opposite page, or it may be simple enough to be in perfect keeping with an $8,000 home as in the hall illustrated to the right.

In British usage the word wainscot means a superior quality of oak imported for fine panel work. That is the original meaning, from which, naturally, the term came to be applied to panel work of that material or another, applied as a covering to interior walls, but especially when of somewhat elaborate workmanship. Here in America the word is undergoing a still wider stretching, for it is coming to be employed as an equivalent of the word dado, meaning a continuous lower portion of a wall surface marked off horizontally by base and cap moldings. That is, if we mark off the lower portion of our dining-room wall by means of a baseboard and chair-rail, painting white the woodwork and the plaster wall between the two boundaries, we frequently call the result a wainscot. In order to be a wainscot, for the purist, the wall surface between baseboard and chair-rail or cap-molding should be covered with wood. Or, again, we frequently cover the lower portion of a wall with burlap, book linen, grass cloth, or some such fabric of pronounced texture, dividing up the surface so covered by means of a pattern of wood strips, three or four inches wide, covering the vertical joints of the textile with perhaps an intermediate horizontal division as well. It is not wainscoting, literally, but it has much the same effect and it will in all probability be accepted under that term even by the dictionary makers before long.

For your Colonial home there is the good old white-enameled wainscot—a work of real joinery rather than plain carpentry. The panel surfaces are beveled off and the tongue thus made is wedged tightly into the surrounding stile or rail (A stile in paneling is a thicker vertical member, as the parts of an ordinary door containing the hinges and the lock. A rail is a similar horizontal member.) To give the panel thus mortised in a better finish, a small molding is run around covering the intersection, and neatly mitred at the corners. Of course, the size of the panels, and their shape, depends upon the height to which the wainscot is carried and also upon the length of the wall surface. A very nice judgment is needed to determine upon a proportion of panels that will appear neither too wide nor too long, and at the same time be about the
same size as those of an adjoining wall, where a different total length will necessitate a re-division of panels.

Wainscoting of this type is expensive, even though the wood need not be one of the hardwoods. The joinery entails a lot of rather costly labor. Often, however, one can secure the same effect, or an equally satisfactory one, by utilizing old doors (or new ones), laid upon their sides. Many doors have five or six panels of the same size, with a larger rail at the bottom. By sawing part of this off to make it equal in width to the top rail the door will cover the central portion of a wall space. Another similar door, sawed down, will perhaps be enough to piece out evenly at both ends, the joints being covered with a molding or flat strip, and the whole finished with a quarter-round molding along the floor and a cap molding of some sort along the top. I know one resourceful man whose mahogany wainscoting arouses the envy of all his friends. It is made up of magnificent old mahogany doors, picked up at the wrecking of an old New York mansion. One might pay ten times as much as he did for wainscoting without being able to secure that splendid age-toned wood.

But there are much simpler forms even for the Colonial room. Quarter-inch strips, three inches wide, covering the joints between twelve-inch vertical boards, with perhaps a cross strip to make a row of square panels at the top, will make a very presentable wainscot if properly capped. Such a form may be seen in the middle illustration on this page.

The cheapest of all wood wainscoting is made of ordinary tongue-and-groove pine sheathing, capped and finished with a base. Usually it is built of "beaded" boards, which serves to complete a most commonplace effect. If the sheathing were not beaded, and had a panel pattern of quarter-inch strips laid over it, the result might be not unpleasing, though never so good as wainscoting with solid panels.

Cheaper still is the effect obtained by using wood strips over a textile wall covering, and though inexpensive, the resulting wall may be particularly harmonious with crafts furniture of oak and a solid-color paper of lighter tone above.

For the summer camp or bungalow an effective and inexpensive scheme of treating the studs that are left exposed inside is to cover the lower portion with plaster board or compo board, over which may be stretched burlap, and upon this a panel pattern of wood strips.

In all wainscoting it is well to carry around some marked line for the top boundary—the line of mantel-shelf or of window-sills. Sometimes the wood covering is carried to the ceiling, but most of us, perhaps, will be satisfied with a less ambitious treatment.
Curtains for the Summer Home

WHAT TO PUT UP IN PLACE OF THE HEAVY WINTER DRAPERIES IN ORDER TO GAIN A FRESH COOLNESS IN KEEPING WITH THE WARM WEATHER

BY MARGARET GREENLEAF

Photographs by L. H. Dreyer, H. S. Collins and others

IT is intended in this article to deal with the correct window treatment for homes of moderate cost, giving particular consideration to the simple country house, the mountain bungalow or the seaside cottage.

In deciding upon the window draperies one should view the question from both sides—that is, the effect from the exterior as well as that of the interior. To have the curtains of a material and style entirely suited to the rooms in which they are hung goes far toward insuring success to the completed whole. For many types of rooms the fabric employed for its draperies is of decidedly less importance than the manner in which this is made up and hung. As a rule, it is possible to hang net curtains close to the glass, in which case they show from the outside. Occasionally, owing to the use of inside blinds or some unusual construction of the window, the reverse is the case, but ordinarily it is best to have the general effect of the windows of an entire floor the same.

If straight hangings of lace or net are used for the living-rooms, ruffled muslin draperies may be selected for the bedrooms. These must be so arranged that a certain uniformity of treatment will be presented in the windows which are in line. Where full-length sash curtains—that is, curtains hung directly against the glass and extending from the top of the window to the sill line—are used these may be of ecru Arabian net of medium mesh and firm quality. They may be simply finished by a two-and-one-half-inch hem at the bottom and the edges completed by a narrow linen tape, fancy edge braid of the same color, or by a narrow hem.

Occasionally a one-inch, or an inch-and-one-half insertion of Arabian lace may be set about two inches from the edge all around, or a corner motif may be used. Such curtains can be
made at home by an amateur—as the material lies straight—if care is taken in the measurements. Remember to allow for the bottom hem and the turn-in at the top to form the casing by which the curtain will run on the small rod.

When the accurate measurements of the windows are secured from rod to sill, the requisite number of inches required for hem and casing must be added. When the material is laid out for cutting, four widths may be carefully basted together, keeping the goods perfectly straight by the selvage and mesh, and pinning with long needle tacks at three corners. It may then be cut, using very sharp shears. All hems should be folded by a card measure and basted. Before stitching the curtain it should be tried on the rod at the window. One-and-three-quarters the width of the window is sufficient allowance for fullness and all ordinary windows should have two curtains at each.

Point d’esprit or small-figured cream or ecru nets make attractive curtains, and scrim, white batiste, or colored and figured madras and silk grenadine are also successfully used. The cost of the Arabian net first mentioned is 90 cents a yard, 108 inches in width. The point d’esprit is 60 cents for 48 inches width, and the other fabrics vary from 25 cents to $2.00 a yard, and in width from 36 to 58 inches.

For the bedrooms, dotted muslin or organdy curtains, ruffled or plain, are dainty and suitable. These may be caught back about the center of each curtain and tied in place by hemmed strips of the material, or with a cotton cord and tassel. In some cases it is more effective to allow bedroom curtains to hang straight to the sill, but these should not then be ruffled. Where no cretonnes or other inside draperies are used, printed muslins showing floral and other designs in charming colors are attractive and very inexpensive.

Among the plain fabrics (other than thin silks) suitable for window draperies, there are crash and linen effects in coarse and fine weave, which come in a full line of colors. There is also a material of coarser weave which is sold under the various trade names of Craftsman, Arras, and Monk’s Cloth. This textile is like a thick burlap; it is 50 inches wide, and for door curtains and over-draperies is particularly well suited to houses designed along craftsmen lines. The price is $1.25 a yard. The crash and linen mentioned above vary in price from 60 cents to $1.10 for 50-inch widths.

With plain walls, figured fabrics can be used, or plain curtains with or without border may be equally good. But where the wall covering is figured, plain or, at most, two-tone materials should be always selected; otherwise the effect is chaotic and restless.

For rooms in which the wood trim is dark in tone and the furniture built on heavy lines, a good choice in figured drapery material is some one of the cotton fabric tapestries which reproduce in soft dull tones many of the most beautiful old-world designs; and if this material is used to cover a davenport and wing chair or to make cushions for the window-seats, it adds greatly to the effect.

Very many people must live in rented houses, and, for this reason, often live with structural effects that are anything but pleasing to them. A frequent fault in the inexpensive house built some years ago was the lack of width in windows and doors, and the too great height of these. Fortunately this fault can be remedied by the arrangement of the curtains. For instance, at a narrow window the rod holding the over-drapery may be set so that it will extend from two to three inches beyond the trim, allowing the curtain to push well back to the end of the rod, thus covering the trim entirely. A valance, from eight to ten inches deep, can be used to complete this and will be found to take decidedly from the apparent height of the window, while the width is materially increased. Nothing is taken from the light as these heavy curtains practically end where the glass begins. A similar method can be followed for door curtains with good results.

(Continued on page xiv)
The Whole Art of Growing Muskmelons

HOW TO SELECT AND PLANT THE MOST LUSCIOUS MELONS FOR AN ADEQUATE FAMILY SUPPLY THROUGHOUT JULY, AUGUST AND SEPTEMBER—STARTING THE SEEDS INDOORS

By Dr. C. D. Jarvis

Of the Storrs Agricultural Experiment Station

Photographs by the author

Twenty-five square feet of ground will grow all the muskmelons the average family can eat. The amount of labor involved in their growth is small and the pleasure great. Melons commonly found on the market are green when they are picked and for this reason are often "dry" and lacking in flavor. The home-grown melon may be allowed to ripen on the vine, adding greatly to its quality, both in juiciness and flavor. Market melons, also, are usually of the more productive varieties, which, as a rule, are inferior in quality. The man who grows his own melons may select the kinds he likes best and he may have a succession of varieties so that he can go out to his garden any morning during July, August, or September, and find four or five fine, fresh, juicy melons. Those who have not waded through the dewy vines and scooped the inside out of an Emerald Gem muskmelon before the sun has warmed it up, have only a faint idea of real melon quality.

In view of these facts, is it not remarkable that so few people grow their own melons? There are many people who believe that muskmelons are unfit to eat. The writer during the past summer convinced many such people that melons were not only good to eat, but that when the right kinds were chosen and taken at the proper time, they were among the most appetizing and delicious of fruits. These people had vivid recollections of once getting from the store some tasteless things called melons, of using a great deal of sugar or salt in their efforts to make them palatable and finally relegating them to the garbage barrel.

To grow early melons and also to lengthen out the season for the later varieties, especially in the North, the plants must be started inside. The seed is started in plant-boxes or modified berry-boxes. These are made from veneer material which may be purchased cheaply in the "flat." This material is partially cut so that with the necessary form, as shown in the illustration, they may be readily folded and tacked into shape. Two pieces, one for the sides and another for the bottom, are necessary for each box. The common berry-box will answer the purpose very well, but a larger box is better. One box is needed for every hill of melons that is required.

The boxes are placed side by side on a table or bench and filled with stable manure that is just beginning to ferment or "heat." The manure is then packed down, leaving the box about half full. Then the boxes are filled up with a moderately light soil, that is, one containing a large proportion of sand. After standing for a few days to give the manure time to heat up, the seeds may be sown by simply pushing them into the soil with the end of the finger. Although only two good plants are needed...
for a hill, it is well to use four or five seeds to allow for the failure of some to germinate. If more than two grow, they should be pulled out to give the others a better chance.

The boxes are then placed in south windows or, if there are very many, in a hotbed. Each box, it will be seen, is a miniature hotbed, so very little extra manure will be needed in the ordinary hotbed. If manure to a depth of six or eight inches is placed on the bottom of a hotbed, there will be no danger of freezing. The boxes are placed directly on the manure. A coldframe, with the required amount of manure, will answer just as well, for the plants will only need an eight or ten inch space between the top of the boxes and the glass.

A coldframe, with the required amount of manure, will answer just as well, for the plants will only need an eight or ten inch space between the top of the boxes and the glass. By utilizing a storm sash from the house, a suitable hotbed may be readily made with boards a foot or more in width. It is not necessary to make a deep pit in a hotbed for this purpose.

After the boxes are placed in the hotbed or in the window, as the case may be, they should be given a liberal watering. Except for watering and ventilating no further attention will be necessary until the plants are ready to transplant. At this time the only point to be observed is to avoid over-watering. The manure at the bottom of the box will hold a large quantity of water, and, although the soil may seem dry on top, the plants should not be watered unless they should begin to wilt. On bright sunny days the temperature under the glass is likely to go too high, and to avoid this, the sash should be raised a few inches at the higher side of the frame. Later in the season it should be removed entirely on warm days.

The time for sowing the seed varies in different sections, but as a rule it should be done about five weeks before planting time. In the North it is sown about the middle of April. The important point is to sow the seed just early enough to have the plants at the early running stage at transplanting time, or when all danger of frost has passed.

Another method is to plant the seed on inverted sod, cut in squares of about six inches on a side and placed in the hotbed. After dropping the seeds on the sod, about a half-inch of soil is spread over them and they are then watered. The sods may then be handled in much the same way as the boxes, but the latter are decidedly more convenient.

**TRANSPLANTING**

The warmest, lightest and best drained soil in the garden should be selected for melons. If there is nothing but heavy clay soil in the garden and if only a few hills of melons are required, the soil may be improved by mixing with it a few shovelfuls of sand to each hill. If some well rotted stable manure is available, a forkful may be placed under every hill or mixed with the soil.

When the ground is ready, the plants are watered and taken to the garden in the boxes. The boxes are torn off without disturbing the roots and the block of earth holding the plants is set into the ground. By transplanting in this way, the plants receive no setback and continue to grow unaffected by the change in location. Melons are usually planted in hills, six or seven feet apart each way. The vines may be kept within bounds by "pinching back" the runners. Further treatment in the garden consists simply of keeping the soil well stirred up around the hills. If really fancy specimens are desired, it would be well to place the developing melons on shingles and turn them over occasionally.

**THE BEST VARIETIES**

There are probably one hundred distinct varieties of muskmelons cataloged by seedsmen in this country and many of these varieties are known in commerce by several entirely different names. With such a maze of names and with such meager catalogue descriptions, the grower usually finds it difficult to make selections.

For early use the well known variety Emerald Gem is the favorite. This variety has a smooth skin, colored flesh and a rich musky flavor. For those who prefer a green-flesh early variety, the Eden Gem is recommended. The latter variety is also known as Buskirk and Sweet Air.

For midseason, there are a great many choice varieties. Probably the best among the colored-flesh sorts are Grand, Banquet, Christiana, Defender, and Paul Rose. The last two are very similar, but the Defender has the advantage in having a thinner rind. The largest of these is the Christiana, followed by the Grand. The variety Banquet is a small round melon, beautifully netted and of high quality. Banquet, Defender and Paul Rose are about the right size for cutting in halves when serving. For green-flesh varieties may be mentioned Pineapple, Nutmeg, Cosmopolitan and Jersey Belle.

For the late crop the best varieties are Osage and Burrell Gem among colored-flesh varieties, and Montreal and Superior among green-flesh sorts. The Montreal is very large and, when well grown, will weigh from fifteen to twenty pounds.

American seedsmen offer somewhere near a hundred varieties of muskmelons, and every year foreign varieties are being added to American lists. Therefore the enthusiastic melon gardener has an opportunity of making as many experiments as he chooses, in addition to the "tried and true" varieties in his previous experience.
THE GARDEN OF WELD ON THE LARZ ANDERSON ESTATE,
Practical Talks with Home-builders

THE GREAT PROBLEM OF EXTRAS AND HOW TO AVOID THEM—PROVIDING FOR SCREENS, STORM SASH, HARDWARE, LIGHTING FIXTURES, SHELVING AND SUCH THINGS IN THE SPECIFICATIONS

BY ALEXANDER BUEL TROWBRIDGE

[This is the fifth of a series of intimate helpful talks with those who are about to build. The aim is to offer untechnical suggestions to prospective home-makers in the hope that many of the common mistakes and difficulties may be avoided through foreknowledge. The talks are written for those of moderate means rather than for those to whom economy is no object.]

Any a home-builder, entering upon a building project for the first time, is not usually alive to the need of good business methods and habits in his dealings with architect and contractor. There are many occasions when misunderstandings arise which may be avoided through very simple means. The most frequent cause of trouble is due to the fact that instructions are given verbally by the owner to the architect, over the telephone or in office conversations. If instructions could always be in writing and the owner could retain a copy, the chance of trouble would be reduced to a minimum. For women, this requirement would be not only irksome but often impossible of fulfilment. The best way to proceed, in case the owner finds it impossible to keep a record of his instructions, is to always request the architect to confirm a telephone message, a conversation or even a written communication, by letter as soon as possible after the receipt of instructions. This increases the work for the architect but he would generally prefer to add to his labors if by so doing he can feel in perfect accord with his client and place himself on record regarding his understanding of his client’s wishes. Sometimes a client is disappointed because a certain finish or a color is not what he expected. There is one good way to guard against this difficulty and that is for the owner to request samples and to sign his name on those which he wishes to have followed. If the finished result is not like the sample, the contractor will be obliged to do the work over again.

The question of extras is of great importance and, rightly handled, may present little or no difficulty. When the time comes to sign plans and specifications, it would be well if the owner would ask the architect to give him a list of the items that have not been included in the contract, but which are usually a necessary part of the equipment of a comfortable home, such as: blinds, storm sash, screen doors, screens for windows, awnings, flower boxes, hanging shelves in cellar, hardware, lighting fixtures, kitchen range, laundry stove, water heater, mantels, tinting, wall-papering, etc. These are the principal items that are quite frequently omitted from the specifications. It is perfectly legitimate to leave them out, provided the owner has taken them all into account and knows approximately what they will cost.

The writer believes the better way is to include them in the specifications and obtain estimates covering every necessary item. If, then, the estimates are high, omissions can be made to reduce the cost. It is well known that loosely drawn specifications will not allow the sum of dollars for hardware. The specifications usually list all common building hardware and state that the above sum is for finishing hardware only. The owner and architect visit the hardware show rooms and either have a competition among several companies or make a selection outright from one company, adjusting the cost with the contractor in case the above sum is for finishing hardware only. The owner and architect visit the hardware show rooms and either have a competition among several companies or make a selection outright from one company, adjusting the cost with the contractor in case the allowance mentioned is more or less than the final cost.

In the case of lighting fixtures a good way to proceed is to decide upon a sum, for example $400, to cover the cost and installation of fixtures. Then invite several companies to take from the plans a list of the light outlets and to propose or exhibit to you the best selection they can offer for $400. This places the competition on a basis of quality rather than price. If the cost is all important the owner will not feel like following the above method but will prefer to invite several companies to compete on price. It is sometimes difficult to obtain good results through competition in price. The writer has known of instances where an over-zealous salesman has submitted a bid that was too low, leaving to his factory associates the problem of making a selection which would avoid a loss to the company. These factory officials may perhaps have believed, from the low estimate, that the owner had agreed to accept "seconds"—i.e., goods that are strong and serviceable but having slight flaws in appearance. In this way much trouble occurs because the architect is obliged to refuse to accept the seconds, they must be crated and sent back to the factory and, after a long delay, the owner receives what he contracted for. All this can happen without the general contractor being in any way to blame. The selection of goods that are furnished by a sub-contractor is usually made by the architect and owner dealing directly with the manufacturer or his agents. The moral of all this is that the lowest bid is not always the safest to accept. Trouble may be largely avoided by limiting the bidding to only first-class contractors and by requiring the successful general contractor to submit the names of his sub-contractors to the architect for approval.

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The Toad as a Garden Benefactor

THE HOMELIEST MEMBER OF THE ANIMAL KINGDOM, WHO IS WORTH HIS WEIGHT IN GOLD AS AN ASSISTANT IN THE GARDEN

BY A. C. WORKMAN

Photographs by Ella M. Beals

THE common toad, proverbially the ugliest animal form in nature and bearing the burden of many superstitions, is one of the most important animals we have, considered on the side of public economy and judged by the standard of good works.

The American farmer and gardener have innumerable enemies to contend against; probably those assailing their crops and gardens in greatest numbers are the insects. While no actual statistics of the aggregate of annual losses due to insects are obtainable, it has been estimated that they cause from three to four hundred million dollars’ damage annually. More than half of this loss might be saved by utilizing as a beneficent force this common toad that has provided as an efficient check on insect increase. The services that this much-despised animal renders are only beginning to be recognized, but will be more appreciated when the popular superstitions concerning it are accepted as fancy, rather than fact. It has been proved that the toad possesses no venomous qualities, no medicinal virtues; and the common belief that the toad produces warts is likewise a myth, having no foundation in fact.

Possessing no beauty of form or color with which to win its way to popular favor, the acquaintance of the toad must be sought for other charms than those of beauty. One friend of this animal tells us that he “picks up a toad a hundred times a season just to enjoy looking at its eye—a living, sparkling, ever-changing jewel—and his music in the springtime brings a pleasure that nothing else affords.” The lover of nature finds the greatest interest of the toad in its development and habits. Zoologically, no animal has a development better adapted for study.

After a winter spent under rocks, rubbish, boards, or hidden some distance below the surface of the soil, the toads bestir themselves, crawl out of their winter quarters, and begin their annual migration to the breeding ponds. “That tremorous song of the toad,” that Hamilton has described as the “sweetest sound in nature” is soon heard, and a visit to the pond will disclose the source of the music, for there will be seen hundreds—possibly thousands—of toads paddling about in the water, the males trilling at the top of their voices. These “cheeriest wedding bells of the season” are heard only for a few days.

An almost incredible number of eggs are laid by the toad. Dr. Hodge, of Clark University, is authority for the record of 5,787 and 11,545 eggs obtained from two toads. These eggs are about the size of a small pin-head at first, black above and light below, and are laid in ropes, enveloped in a gelatinous covering that swells when it comes in contact with the water, forming a mass considerably larger than the parent toad. The eggs hatch in about two weeks, and the young tadpoles begin at once to feed greedily upon the gelatinous substance, then begin to eat the deposits of slime on the surface of the pond. This habit of eating the slimy growths from everything in the pond, keeps the water as clear as crystal, and has made toads known as good scavengers; it also recommends them for the purpose of cleaning surface waters during the spring, especially such waters as have been used for the dumpage of city waste.

The tadpoles grow rapidly, and in a few weeks the hind-legs appear, the fore-legs develop, the tail is absorbed, and in less than two months after hatching, the little toads emerge from the water, rarely ever returning except for a few days at the mating season. It is said that the adult toads generally return to the pond in which they were hatched to lay their eggs. The question might be asked, why is it that, laying thousands of eggs a year, the species does not increase more rapidly? It is known that practically every egg in the laying hatches, but from the time the tadpoles are formed until they leave the pond they are preyed upon by their enemies, the fishes, ducks, turtles, newts, and water-beetles. On leaving the water, the young toads are killed by ducks, hens, geese, guinea fowl, and snakes; while the adults are delectable morsels for many birds.

In addition to those destroyed by their natural enemies, large numbers of the toad are killed annually by man; lawn-mowers, wheels of vehicles, and the burning of lawns and fields, being the usual methods of slaughter. The greatest charge, however, must be made against the small boy, who, from curiosity, cruelty, or other desire for wrongdoing, kills the toads by thousands every spring on their way to or from the breeding ponds. Dr. Hodge states that one spring he counted two hundred dead, mangled, or struggling toads around one small pond; and the following day he learned that two boys had killed three hundred more. It is probable that this wholesale killing of toads will continue until boys understand the valuable service the animals render, and that they deserve protection.

The toad has neither ribs nor teeth. Its tongue is free behind and attached in front, making it possible to catch insects with great rapidity, almost with sleight-of-hand magic. Only moving insects tempt this little animal’s appetite. Its capacity for worms, snails, crickets, grasshoppers, spiders, cutworms, potato bugs, and thousand-
For an inexpensive entrance this fence of rough, green stained boards, relieved by the white lattice and arch, is excellent.

Brick piers are more costly, but also more durable than wood work; the caps may be of stone or cement.

Garden Entrances

THE NEED FOR SOME ARCHITECTURAL FEATURE TO MARK THE WAY THROUGH THE GARDEN BOUNDARY, WITH SUGGESTIONS FROM SUCCESSFUL EXAMPLES

BY ALICE M. KELLOGG

Photographs by M. H. Northend and others

A LANDSCAPE architect, in making a plea for a more general enjoyment of our gardens, apart from the pleasure of gathering and caring for the flowers, gives many valuable suggestions for introducing various accessories for comfort and beauty—summer houses or shelters, decorative enclosures, such as garden walls or fences, appropriate furniture, sun-dials and fountains. Such features as these demand, in a way, a privacy that the average American garden lacks, but which, when secured, is one of the best means for reaching the desired result.

The most enjoyable garden is one which is in some way related to the house but not necessarily shut away from it. A vista, or even a glimpse of flowers and shrubs carefully arranged, adds to the interior delight of a home during the summer months and when such a view is focused through an archway or gate its value is very much enhanced.

"A garden through whose latticed gates
The imprisoned pinks and tulips gazed."

To complete the effect satisfactorily some objective point may be made with a sundial and its pedestal, a sheltered seat or a picturesque summer house.

The importance of the entranceway, by itself, is too little considered in the making of a garden. If it is not allied, by suggestion at least, to the architecture of the house, and if it is not placed with regard to the fixed lines of pathways and fences, it stands as "an alien object in a foreign land."

The entrance to a garden need not be on an elaborate scale to meet the requirements of out-door art. Simplicity of line is a practical advantage, especially during the summer months when the support is clothed with verdure. A material of considerable durability is required to sustain the vines, and a framework substantial enough to appear well when cold weather withdraws its coverings.

Rustic work suits various kinds of surroundings on a plain or a more expensive scale. It may be successfully employed near a country house of stone and shingles, a clapboarded suburban dwelling, a mountain camp built of slabs, or a seashore cabin of primitive architecture. The old practice of leaving gnarled and unnecessary bits of twigs on the unpeeled trunks as a so-called decoration is fortunately going out of vogue and better effects are attained with trimmed lengths of trees.

With Colonial houses the garden entrance may repeat...
the white painted exterior, or some detail of the porch columns or capitals.

The first illustration shows an entranceway for a rear garden combined with a fence of unique design. The lower part of the enclosure is made with medium-width boards stained an unobtrusive green and set upright with open spaces three inches wide between. The upper portion of the fence is made of rather closely set lattice work, which is painted white to correspond with the posts and also with the trimmings of the house. Virginia creeper makes a luxuriant foliage on one side of this entrance, and lilies and ferns are grown in the opposite spaces.

It will be readily seen that the charm of such a gateway lies in its suitability to its surroundings and that the opportunity to add to the pictorial aspect of the place has been artistically comprehended.

In many of our country, suburban and even town homes there is a chance to add as a uniting link between the house and garden an attractive gate or entrance. That this opportunity is often overlooked is largely due to the conventional spirit of the times which is as apparent outside of our homes as within.

Many people travel through Italy and become, during their trip, steeped in the atmosphere of out-door beauty, but return to live in their commonplace settings, apparently uninspired by their experiences.

The application of Italian landscape work to our own conditions is not intended by this statement to be regarded as the ultima thule of the American garden, but attention should be called to the fact that certain artistic principles that are so generously and generally expressed in Southern Europe might serve a deeper, more lasting purpose than the transitory gratification of the tourist’s eye.

Then, too, the amateur gardener is apt to find so many interesting phases of flower cultivation coming up, that all of his time, strength and ingenuity are expended in this direction and the entranceways are neglected.

In one home, where four generations had planted and tended a flower garden on rather an extensive scale, a small wicket gate had always been the means of entrance until a member of the household became convinced of its ineffectiveness and devised something better. A brick post was placed at either side spanned by an arch of heavy wire. Climbing roses in the course of a few years embowered this simple structure and spread their blossoms, during the season of their flowering, over the framework.

Another expedient of a still less pretentious character was the making of a pair of low posts with field stones, and planting climbing nasturtiums in boxes that fitted the top.

Each in its way suited its position so admirably that it seemed, even when first adopted, to belong perfectly with the general scheme. You may have a wealth of color in your garden, a splendid succession of bloom, but if there is no formal entrance, your garden lacks the one thing that will complete its individuality.
The delicate and dainty beauty of the hardy Primrose commends it as one of the loveliest flowers of springtime.

Why You Should Grow Primroses

BY ADELINE THOMSON

Photographs by Nathan R. Graves

FOR early blossoms in the perennial garden or border, hardy Primroses give greater satisfaction and pleasure than many other perennials. When most other hardy plants are only putting forth green leaves, the primrose unfolds its happy flowers, and for a month or more scatters cheer throughout the garden in spite of Spring's fickle winds.

Primrose blossoms are extremely attractive in their profusion. In form and size they resemble the flowers of the Chinese primrose (always a favorite house plant) and possess colors that shade from purest white through varying yellows, saffrons, purples and crimson. Their color is wonderfully beautiful when used in mass planting.

There are several varieties of hardy primroses—the Auriculas, the old-fashioned Polyanthus, and the English Primrose. All varieties deserve liberal planting in every hardy garden.

The primrose possesses two characteristics that make it a perfect border plant—its low-growing habit, and its attractive foliage, resisting heat or drought.

Primroses are easily increased by root division. From two varieties which I purchased three years ago I have now over eighty strong, thrifty plants. The roots are formed of many small crowns, which, seemingly, are of but one part. These crowns are easily cut or pulled apart, and each crown planted, no matter how small it may be, will form a new plant. The time for this work is immediately after the plant has finished flowering in the spring. If done then, a single season's offsets will become as large as the parent plant. Choose a shady place for the work and exercise care in pulling the crowns apart. Plant the offsets in a shady location until they have thrown up new, strong growth, then transplant to permanent places.

Primroses may be raised from seed, but the young plants require so much care that it is far easier to buy varieties and increase one's stock by root division.

All varieties of hardy primroses should be planted in the spring. By repeated experiments I have found fall planting to be a dismal failure—a fact showing conclusively that primroses must become thoroughly established or winter will kill them. The first week in April has proved, with me, an ideal time for this planting. If the plants are in the ground by this time, they will invariably blossom the first season, though the flowers will be smaller, perhaps, and appear a little later than usual. Primroses, however, will succeed when planted any time between the first of April and the first of June.

I find primroses perfectly hardy in a climate where the thermometer often drops low in the zero region, but if given proper winter protection there is no reason why primroses should not thrive in the coldest localities. They should not be covered until the ground freezes. The plant needs the gradual cold of the fall to become hardened. I find my primroses come through winter much better when covered with leaves and coarse litter, as manure is apt to burn the leaves and also starts the plant-growth prematurely. Leaves must be held in place by branches or old boards, to be removed in March. Do not uncover the primroses, however, until early in April or frost may injure the flower buds.

After the long, barren months of winter, primrose blossoms will seem unusually welcome, and while the flowers that follow may appear more beautiful, they never can have quite the same appeal as the hardy primrose. If it had no recommendation but its early and reliable blossoming, that alone would win it favor.
Asters for the Million

BY M. A. NICHOLS

Photographs by Nathan R. Graves

There has never been a flower garden that has seemed quite complete without Asters. Every succeeding year finds them more sure of their prestige than ever; at least the writer cannot find any flower that has given greater satisfaction in her garden. This has been especially noticeable during the past years when the Asters therein have been planted with regard to massing separate colors, great care being taken with selection.

The varieties selected for last year's garden were so successful that one is safe in recommending them, though there are many others wonderfully beautiful and worth while. The writer's experiment included the large-flowered dwarf White Queen, the peach-blow pink Mary Semple, Truffaut's Peony (glowing crimson), and the rich deep colored Royal Purple. The last three are branching in growth, somewhat later than the Dwarf White Queen, and may be supplemented by Purity, an exquisite branching white variety.

The writer planted seeds an eighth of an inch deep in shallow boxes (flats) indoors the latter part of March, keeping the boxes somewhat cool, and as the seeds germinate in a week's time or so, by the end of May there were splendid thrifty seedlings all ready for setting in outdoor beds.

The soil of these beds had been enriched by a mulch of leafmold over the winter, and by early spring was in a fine, mellow condition, just right to nourish the young plants from the start. These seedlings were set six inches apart, in rows one foot apart. Thus there was plenty of room for frequent cultivation and weeding. As it was desired to collect the seed and to insure from season to season thereafter a true succession of bloom, the separate masses of varieties were so far separated one from another as to secure each from contact with the pollen of the other, beyond what might be carried by visiting insects.

The dwarf White Queen plants came to maturity some three weeks before the others. They were marvels in pristine purity of snowy bloom, growing to a height of fifteen inches, uniformly, and having a blooming season of four or five weeks.

The branching varieties of tall vigorous bush-like growth differed greatly in form. Their extremely large flowers were borne on long upright stems branching out, and were especially fine for cutting. The Mary Semple, a lovely delicate pink, much the shade of the Day Break carnation, was a wonder in the perfection of its double flower. The Truffaut's Peony shared honors with the Mary Semple in all points, and although its crimson blooms were in contrast with the others, they did not, as one might suppose, kill the exquisite effect of their pink neighbors. No such risk could be taken with the Royal Purple variety, however, and the bed containing them was quite remote from the others.

Nearly all branching varieties of Asters continue blooming right up to frost time, if the ravages of black beetles that early commence to chew the petals are combated. This is easily done by watching for the first appearance of these beetles, picking them off into a cup with a pointed stick. It is really wonderful how short a time it takes to keep all your Asters free from these beetles if you go about this task systematically. A few minutes care every few days will protect your beautiful beds.

One of the recommendations for early planting, and therefore for starting plants indoors now is that early plants are not apt to be subject either to black beetle depredations, nor to the mysterious Aster disease which often destroys all the flowers of a bed in a couple of days. A teaspoonful of Paris green in the watering-pot can be sprinkled on the plants at night and early in the morning, which treatment will prove effective. All flowers should be removed as soon as they fade, and beds be freely watered.
Residents of Germantown and its vicinity are most fortunate in having an attractive local stone, sparkling with mica, which the Philadelphia architects have learned so well how to use with the broad white mortar joints.

The first floor plan is of a common type that works out extremely well—central hall, a living-room taking one whole end, and the dining-room opposite, backed by the service wing.

On the second floor one door closes off the servants' bedrooms with their back stairway. On the third floor there are two good bedrooms, with closets, a bath and an ample store-room.

**A COUNTRY HOUSE AT WYNNEWOOD, PA.**

*Mellor & Meigs, architects*

The shingled roof sheltering the first-story windows is a feature commonly called the "Germantown hood".

Two built-in seats flank the front door on a brick-paved terrace that is carried around from the porch.
New hand-riven shingles were put on, and new lattice columns and flower-boxes added, the latter painted an emerald green by lath and plaster. Mud brick filled the spaces between studs.

THE REMODELED HOME OF CAPTAIN KIDD, SEA GIRT, N. J.
SEVERAL inquiries regarding mirrors as decorative features for the living-rooms of the house have been received by this department, so that it seems well to give a general reply covering these.

Decoratively speaking, the mirror can always find a place where it will add to the beauty of the room. This statement, however, refers wholly to the mirror itself, but as it must have some setting, the frame is found to be the stumbling block to its successful introduction as a decoration. The frame of the mirror must be in harmony with the room, in some degree at least. For instance, a mirror framed in dull gold, in the beautiful acanthus leaf design with the crossed torches at the top, is so distinctly French that it would not look well in a Craftsman room, nor would a plain dark wood-framed mirror, suited to a room of the latter type, be possible in a room of French period decoration. This, however, is so obvious a truth that it seems scarcely necessary to point it out, except that unfortunately we sometimes find over-mirrors on mantels made ready to put in place, in which mistakes as flagrant as these appear.

As the mirror is a very usual decoration and completion of the mantel we will consider the style suitable to this first. There is for such a place an accepted type of Colonial panel mirror which may be adapted to many styles of rooms in which the period idea is not necessarily dominant. Indeed, in most rooms, unless they be distinctly on Mission or Craftsman lines, such a mirror can adjust itself agreeably, particularly when the woodwork is of mahogany or has been given an ivory enamel finish. Excellent reproductions of pure Colonial designs may be purchased at very reasonable rates, and in fitting a room one can do no better than put money into a mirror of this kind; the cost is much less than a good picture and the decorative effect often equal to the latter. Also in some rooms the oval mirror can be effectively used over the mantel. This is especially suited to reception or drawing rooms and, if flanked by sconces on either side, provides a complete and dignified over-mantel treatment.

It is much wiser to avoid the over-mantel mirror which is a part of the mantel, as this nearly always gives a commonplace effect. Excellent mantels can be purchased without the mirror, and by adding a very nominal sum to the amount saved on the cost of this mantel such a mirror as described above may be bought. Also there are many beautiful and quaint reproductions of the Queen Anne, the Chippendale, and the Empire designs which can be fitted into any room that will carry successfully a piece of Colonial or French furniture.

In placing a mirror other than over the mantel the vista it will reflect should be considered. By a judicious arrangement in this, the apparent size of the room may be much increased.

Where the woodwork is dark and

There are several types of three-panel Colonial mirrors, harmonizing well with nearly every style of interior other than Craftsman or Mission.

One of the later types of old mirrors, a used here; it serves to heighten the effect of the old candlestick prisms.
heavy and the lines of the room demand the Craftsman furnishing the mirror may be set over the mantel and framed with a perfectly flat border of wood finished like the standing woodwork of the room. Mirrors are only permissible in rooms of this type when framed in some such manner.

In the December number of House & Garden is a very comprehensive article on "Old Looking-glasses" which is fully illustrated and will be found of interest in this connection.

A hall mirror should be simple and so placed as to receive the direct light if possible, so that it will be decorative as well as useful.

There is in New York a wholesale manufactory of mirrors, frames, lamps and shades, sconces, etc., some made of carved wood or composition treated with gold leaf burnished dull. Here one can find the most bewilderingly beautiful reproductions and original designs. This place is unusual not only in the wholly artistic standard it preserves in its reproductions, but also in the opportunity offered the retail purchaser to make selections from the wholesale stock of mirrors which an order for the piece selected may be placed through some firm carrying the goods.

The Dining-room Fireplace and Mantel

W
doI should House & Garden advise me about the dining-room of a house I am now building? I wish to furnish this with some good Chippendale (reproductions) furniture I now have, but do not wish the wood finish to be white enamel as the standing woodwork is of selected birch. I want to make a feature of the beamed ceiling, and also to have a good simple mantel. The room is not high-ceiled, being but little over 9 feet. I have, however, some attractive and correct rooms with low beamed ceilings.

One of the accompanying illustrations shows a very attractive dining-room which seems to hold the necessary suggestions for you. The mantel shown here is extremely good and you would do well to keep to it, in its entirety. The paneling above the mantel shelf and the plain brick, laid in the white mortar, are convincing and good. Also, if you desire a beamed ceiling you may find helpful suggestions in the one shown here.

A Picture Over a Mantel

I have a very beautiful painting which I would like to use in my dining-room. It has been suggested to me that it would be practical to have this set in the wall over the mantel now in course of construction. I am not quite clear in my mind about how this would look. Would House & Garden kindly advise me in the matter? The subject of the picture is a suitable one to a dining-room and the woodwork in the room is oak. I thank you in advance for any attention you will give my question.

An over-mantel picture is effective, but the woodwork frame should be made for it.

The photograph of the dining-room here reproduced shows a picture set over a mantel. While a better example could doubtless be provided, this will convey to you an idea of the effect. If the picture were wider it would be better. There is no more decorative treatment for an over-mantel in a dining-room than the one you suggest, if the picture is a suitable one and the tones are harmonious. We will be glad to serve you further in this matter and if you will send a self-addressed envelope we will write you personally.

Concerning Inexpensive Rugs

T
here are so many really beautiful domestic rugs now made that it is not at all difficult to find suitable ones for the cottage or bungalow, which, together with excellent wearing qualities, will supply the needed color note to the scheme of furnishing.

For the seaside cottage there is scarcely a more satisfactory rug than one of Chinese matting. These are made of twisted straw and in color and design are very pleasing. The queer Oriental figures they show are widely spaced and green, yellow, red, and rich dull blue are each to be found a single color on the yellow-white background of the matting; these cost about $12.00, 9 x 12 size. The fibre matting rugs are also durable, and may sometimes be found in good colors, although these are best suited to porches or to camp use. They may be bought in size 9 x 12 as low as $7.50 each.

Then there is a rug called the "bungelow" rug, hand-woven, of wool, and the line of colors from which one may select is large. In these the two-tone effects are especially good.

Another domestic rug of rich soft pile, good weave, and remarkable wearing quality is made in reproductions of many Oriental designs. Some of these are very beautiful, while those showing stronger colors than the design will carry, should be avoided, but by careful selection in purchasing one of these rugs the result in point of artistic beauty and also in the life of the rug is all that one could ask.

Tiles for the Fireplace

We are particularly interested in getting some information about tiles for the fireplaces in our new home. I have read what this department had to say about selecting these with due regard to the color scheme of the room. Now for my library I am undecided about the color. The room is of northern exposure and the woodwork is brown. I may wish to make the walls red, although this is not decided. For the living-room mahogany woodwork is used and I shall probably put a tapestry fabric on the walls. The reception-room has ivory white enamel and paneled walls. These walls may have the panels covered with silk damask, or may be tinted like the woodwork. I would like the den something very unusual, with a tile which would show a completed picture when in place.

We are glad to know that you are giving this consideration to the color of tiles. This is a question of great importance and one which has not been treated with sufficient seriousness in the past.

For the library we would suggest a dull-finish ecru tile. This will accord with the tint you will in any case use in (Continued on page xvi)
March

THOUGH this be a month of fickle winds, now for the Lion and now for the Lamb, old Sol begins to take pity on shivering things, and though it may not seem to be so, nevertheless the rays of the sun are warmer, and will be beginning to awaken Spring to the busy season before her. Therefore you must make friends now with the Wind, which is to be one of your garden’s summer companions. Go into your garden and discover for yourself if at north, east, south or west you should have planted screening trees or hedges or shrubs for protection last year and plan for next season’s wind-breaks. Remember, too, fine weather in March and April will almost invariably bring a cold May. Then there are many things that come within the month’s province, among them these:

March Preparations

TAKE a look around the lawn and see what repairs it will be needing, and get out your lawn tools for a thorough overhauling, so you may plan for others you may wish to order.

If you have mulched your lawn the autumn before, remove this mulch the first day the frost leaves the ground otherwise the roots under it will take an unnatural start, which will receive a severe setback by later frosts.

Examine your porch vines and tie them up with new fastenings where needed.

Look over your garden paths and walks and plan their betterment. Flagstone and flat stepping-stones can be employed usefully for these.

You may prune your Hydrangeas, Dogwood and Elders now, and if you have forgotten to prune your grape-vines it is better to do it now than not at all. Hybrid perpetual Roses may be pruned back to one or two feet as soon as frost leaves the ground.

Nitrate of soda as well as common salt will help the growth of your rhubarb and asparagus if put on the beds in March.

By March 15th it will be well to uncover your bulb beds and also your hardy borders.

Put boxes and barrels around your Rhubarb plants after the snow has gone, and put manure over them. At night they should have a top covering.

Sow inside under cover bachelor buttons, calendula, Drummond Phlox, French Marigolds, double Petunias, Lantana, Cannas, Coleas, Heliotrope (for budding out), Ostrich Plume Chrysanthemums and Chau baud Carnations (for October and later flowering). Ardisia (for bloom next spring, and berry fruit the Christmas after), Dahlias (to flower this season), among other flowers.

Orchard trees may be transplanted as soon as the ground will work up to a fine and mellow soil. They should never be put into a sticky mortar-like soil. Deciduous trees and shrubs may now be set out.

Magnolias of all varieties, hybrid Rhododendrons and Mountain Laurel should be set out only in the spring, and then as soon as the ground may be worked.

Remember that all your spraying should be finished by the middle of April

Lily-of-the-Valley pips should be started right away, in time for Easter bloom. Your Snowdrops, Scillas, Crocus, Hepaticas, Magnolias and English daisies should be blooming this month. Bring forth the rest of your bulbs from the cellar.

The Lily-of-the-Valley is one of the loveliest flowers for Easter
If you are digging around your garden at any time remember that dug-in snow chills the soil where roots may be dormant, consequently they will be injured or killed by thoughtless treatment of this sort.

Sow lettuce, globe artichokes in coldframes and hotbeds, beets, carrots, onions, tomatoes, egg-plant and peppers in flats; also thin out those already up which you started earlier.

If you sow parsley now indoors you will have a good April crop. Before planting parsley seed soak it in warm water for a day, as it is very slow to germinate.

If the season is a very early one get your Sweet Pea seeds into the ground early.

Fork asparagus beds lightly, first spreading well-rotted manure or bone meal on the ground.

North exposure window boxes will succeed when properly filled

Window Boxes

Will you kindly tell me what plants I can grow successfully in window boxes that have a northern exposure? I am not sure of what to plant.

The following list is recommended for your purpose: fancy caladiums, trailing Fuchsia, Maurandya, dwarf Ageratum, Ivy Geranium, Begonia, Manettia Vine, Boston Fern, Asparagus sprengeri, Cissus discolor, Russelia grandis and Asparagus tenissimus.

Liquid Fertilizer

Will you please give me directions for preparing some liquid fertilizer?

One of the most satisfactory home-made mixtures is prepared with manure from the cow barn—two bushels to fifty gallons of water. And then good liquid fertilizer is prepared as follows:

2 Quarts Water
4 Ounces Nitrate of Soda
8 " Monobasic Calcium Phosphate
5 " Sulphate of Potash.

When using take only one part of this mixture to thirty parts of water, applying once a week. Neater to handle are the prepared fertilizers put up in tablet or powder or liquid forms, which can be obtained through all seedsmen, and are especially convenient.

A Spray for Insect Pests

My plants suffer from aphides. What is a good exterminator of these pests?

For plant-lice, or aphides, try spraying the foliage with soapsuds and rinsing the plants afterwards, or you may spray with tobacco water that can be prepared from tobacco "stems" which any seedsman can supply. Into a gallon of warm water put a large handful of these stems and let them stand covered for some twenty-four hours.

Overwatering

Why do the leaves of my house-plants turn yellow and drop? I keep them plentifully watered.

Probably, if the temperature of your room is right, and the potting soil suitable, the trouble lies with overwatering, which tends to sour the soil, causing the leaves to turn and fall, just as underwatering causes them to wilt. More plants are killed by drowning than by drought. The article on Watering Flowering Plants in Pots, in the columns of this issue should prove of especial interest to you.

Smilax

Can you tell me something about Smilax and how it is best grown and cared for?

The Smilax (Asparagus medoloides, also known to florists as Myrsiphyllum asparagoides,) is especially recommended for the window-garden. Moreover, it thrives in more shade than many other vines, and can be put to grow in the less well lighted corners of your window. It will often exceed eight feet in height, but of course requires a string to climb upon. The dark green foliage is glossy and handsome, and eventually tiny single white sweet-scented flowers appear.

Cyclamens come true to color from seed and one can buy named varieties that can be counted on to reproduce themselves

Cyclamens from Seed

It is always preferable to start Cyclamens from seed to grow on unchecked till the following year. The period of germination is a long one (often six or eight weeks), and some fifteen months are required to bring the plants to free bloom. Old Cyclamen bulbs are not worth keeping.

Ornamental Grasses

Many beautiful grasses may be planted on the home grounds to add to the effectiveness of any place. There are the tall varieties and the dwarf ones, both producing every shade of green, silver-gray, while many of them, such as the old-fashioned Ribbon Grass (Phalaris arundinacea var. variegata) are parti-colored.

Ornamental grasses, reeds and sedges are useful additions to a lawn's attractiveness.
The Growth of Mature Plants

With wonderful intelligence and patience they wait, these reserve buds, until injury comes to the terminal bud, and then they spring into activity in their haste to supply the loss. The strongest gain the lead, and keep it usually, and thus, the original leading stem has ceased its growth, those branches which spring from the strongest buds in their turn become leaders. Sometimes there are several of these, sometimes only one.

There is a third kind of bud which some trees and shrubs produce in great abundance following injury, and these, rising from anywhere on old branches or out of the trunk itself, are called adventitious buds. They simply supplement the work of the dormant axillary buds and hasten foliage renewal when large limbs have been sacrificed and there has been great loss.

Generally speaking the most virile strength of any branch is nearest its tip. Growth proceeds at the apex, with branching growth usually springing from the axillary buds nearest the apex—the upper buds of these are called. Removing the terminal bud stimulates the growth of these upper axillary buds—or branches which these may have formed—because the supply of nourishment to that particular stem has then to be divided between only two, while before it supplied three. It is seldom, however, that the removal of the terminal bud alone will induce further branching down a stem—otherwise that form of growth characterized as bushy—though it may sometimes. The severe cutting back of privet in hedges is an excellent example of what must be done to secure dense branching low down on a plant, and it is also an excellent example of what will happen to a plant that is pruned to excess.

Privet usually branches three times immediately below the cut. To secure these branches near the ground, it is therefore necessary to cut it first to within a few inches of the ground, and then to cut these shoots down again pretty close to the parent stem, and so on. This furnishes stocky, stiff plants—just what one doesn’t want in flowering shrubs, though it is highly desirable in a hedge. Removing the first pair of axillary buds will start the next into growth usually, while the removal of buds or small branches down along a stem will stimulate the growth at its apex. In this way a plant’s general growth may be directed towards a certain ideal form from its infancy, with never a bit of waste in its vitality or in the time required to arrive at that ideal.

Be in no hurry to prune old shrubs,

(Continued on page xix)
Where others have failed to build a small, yet perfect GRAND PIANO meeting present-day requirements, the HOUSE OF KNABE, after SEVENTY-THREE YEARS of careful research and experiment, has succeeded in producing The WORLD'S BEST GRAND PIANO
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Grow Your Own Vegetables
(Continued from page 103)
during the middle of the day; for two or three days. Be careful to withhold water during dark weather, or many of your plants may be lost by “damping off”—decaying and breaking down where earth and air meet.

From now on, if you continue to give attention to watering and fresh air, your plants will grow rapidly. About a week before you expect to set them out, they should be "hardened off," by being put outdoors. For the first few days they will require covering with old bags, or an old rug or blanket, or bringing in if the weather is going much below freezing. After that they should stand anything but severe frost. Don’t be alarmed if your cabbage, lettuce or beets begin to look "blue" from the cold. They are only getting tough, and will go away ahead of soft green plants when they get into the garden rows. When they are once hardened, a little freezing will help, rather than hurt, the cabbage and lettuce.

If by any mischance you should get caught some night, and find any other plants frozen cold and stiff in the morning, don’t give them up for lost. Put them at once in a shaded place, or shade well with newspapers or other covering and water them, dose them, with cold water,—the colder the better. Let them thaw out as gradually as possible, and the chances are they will recover.

The directions given above are for starting plants in the dwelling house. They apply also to the use of hotbeds and coldframes. But even greater attention will have to be given to the matter of watering and ventilation, as one hot sunny day with the sash left down tight will about cook all your little vegetables, weeks before their allotted time. In an article in the preceding issue you will find directions for making coldframes and hotbeds. While your plants can be started successfully in the house, by all means have at least two or three sash if possible. Not only will they give you better facilities for starting more plants, but you can get a crop of lettuce, radishes, cauliflower, cucumbers, tomatoes, and other good things, under way to mature where they are, and days or weeks ahead of your garden crops. Also you can start cucumbers, muskmelons, sweetcorn, and other things not easily started in the house. When using frames some gardeners dispense with the use of flats, but I would advise against this, because some of your vegetables will be ready for transplanting and hardening off long before others, and if they are all in the frames together you cannot attend so well to their individual needs.

Below are a few special instructions relating to the various vegetables you will want to start, to be kept in mind in addition to the general directions given above.

PEAS.—It will hasten germination to soak the seed in lukewarm water 12
to 24 hours before sowing. When transplanting be careful not to cover up the "head" of the plant, where the leaves sprout from the little bulb.

**Broccoli, Brussels Sprouts, Kohlrabi and Cauliflower.**—Treat same as cabbage, except keep from freezing.

**Cabbage and Lettuce** are the easiest vegetables to grow indoors. Don’t use the late varieties. Start any time after February 1st.

**Cucumber and Muskmelon.**—These do not stand transplanting. The best way is to use light soil, in four-inch pots, drained at bottom. Or get a few thick sods, place upside down in frames or flats, and cut into pieces four inches square, kept packed together. Sow eight to fifteen seeds in each, and thin out to three when well up. Do not plant before middle of March or April, when days begin to get sunny and warm.

**Corn** may be started ahead on sod in the same way.

**Celery.**—Seed is much smaller and slower to germinate than cabbage. As the seedlings are very small, a small pointed stick will be of help in transplanting. Start in March, or outdoors in April.

**Egg-Plant and Pepper.**—These require much more heat than cabbage, and cannot be set in the open ground until much later. Do not sow before the middle of March.

**Onions.**—Usually raised from seed sown in the open, but if you want to raise gigantic mild ones, like those sold in the grocery stores, start some Prizetakers, or some of the large foreign sorts at once. They will not require transplanting to other flats, like cabbage. Sow the seed thinly in rows three inches apart, and if they come up too thickly thin out to five or six to the inch. Trim the plants back about one-third when three inches high. They will not require a warm temperature. Sow any time to April 1st, but the early sowings will usually produce the best bulbs in the garden.

**Tomato.**—These will require a higher temperature than the cabbage. They should also be given more room when transplanted. If you want choice specimens, start early and transplant from the second box into four-inch pots, with a little manure or bone meal in each. Unless you can be sure to give them a warm temperature, say averaging 60° at night, do not start before March.

The directions above relate to the starting of vegetable plants; but when you have your flats and soil ready, you should sow also a few annuals for the flower garden. Many of the common sorts may be started with no more trouble than the vegetables. For the finer seeded sorts, make a second sieve for sifting, bottomed with strong wire mosquito netting. In preparing the seed boxes, sift the top inch of soil through this, and cover very lightly with same or with cocoanut fibre (to be had from your seedsman). Water with a rubber bulb.

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the windows are to be used, madras is often found acceptable, introducing color and design in a semi-transparent material. In purchasing madras one must avoid the crude color combinations and too pronounced figures. But choosing well, one can make the windows of the living-room of a house very colorful and decorative with this material.

With sage green walls, madras curtains of dull old blue showing a fugitive charm which complements well certain styles of furnishing. In a room typical of no particular period a most attractive scheme shows a quiet two-tone wall covering as a good background for fresh colored linen taffeta draperies. These repeat in crisper and stronger tones the colors that appear in the rug. The same taffeta covers the cushions on the window-seat. An uncrowded and airy effect in a room of this kind is not the least of its charms.

The Toad as a Garden Benefactor

(Continued from page 113)

...it is said that English gardeners often pay as high as twenty-five dollars a bushel for toads for colonizing purposes. The fact that toads possess a strong "homing" instinct, occupying the same feeding ground year after year, and, if taken away, will immediately leave and attempt to find their familiar haunts, while as destroyer of the Browntail Moth in the infested districts of New England, the toad is of especial value. About eighty-one per cent of the food consumed by the toad is made up of injurious insects form only eleven per cent. These figures show that there are but few animals that render man such valuable service. To property-owners who expect to spend from $40 to $1,000 this Spring on decorations, exterior or interior, our "Dutch Boy Paint Adviser," though free, is worth at least an expert adviser's fee, say 5% of the expenditure. To anyone not interested in painting, it would not be worth the stamp used in sending for it. If you wish it, it is free on request.

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it is claimed that one lived for thirty-six years in an English garden.

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Tiles for the Fireplace
(Continued from page 121)

your ceiling and be entirely harmonious with any color decided upon later for the walls. The tapestry material you will select for your mahogany living-room will most probably show some dull, olive green and smoked blue; therefore, you have a choice in tiles of either of these colors. Always select those of dull surface. In the white reception-room the question is less easily settled. You will probably determine upon the color for your silk panels before long and we would suggest that if rose or Nile green or any appropriate tone is selected, the same color appear in the tile. A white finish tile could be used, but in a room with so much white this would not be interesting. We have sent you the address of a firm who will supply you with designs for the style of mantel tiling you desire for your den.

Modern English Plaster Houses for America
(Continued from page 97)

textures. It is comparatively inexpensive to put on, easily and cheaply maintained and forms a beautiful background for vines and shrubs, harmonizing with all natural surroundings.

Wood is expensive, but it is still the cheapest building material under average conditions in the east. It is cheapest for the first cost of a house, but the upkeep of wood and paint is no small item, and
a material that after the first cost will successfully stand our varied climatic changes at almost no expense to the householder for repairs, is well worth serious consideration.

A wooden frame house, with exterior plastering on galvanized wire lath, costs about three per cent more than a house shingled or clapboarded. This extra initial cost would not go far towards keeping wood finish and paint in good repair. Then, too, plaster can be used to great advantage as a covering for second-hand, or old brick, a material that is often easily and cheaply obtained. It can be applied to houses of fireproof construction, such as brick, hollow tile, or concrete. Added to practical reasons are artistic ones and the greatest of these is simplicity. This should be, I think, the key-note of the design of the average American suburban or country house. A house that depends on its proportions, on the spacing and arrangement of window openings in relation to the walls in which they come, must have, perforce, character and individuality. It must reflect on the outside the arrangement of rooms inside. It must be logical, and if it is it overcomes one of the great defects of our American houses, namely, the attempt to appear something that they are not. It is an American trait; you see it in the way our servants dress; in the one-story shop with a shingled front a story higher; and it is a vulgar trait that we seem to be outgrowing, architecturally at least. In this country we have countless examples of houses designed and placed without regard to customs and surroundings; but with a "style" carefully studied and historically correct. These houses lack something above all. They lack the quality of a home. This quality is one which is preéminent in English houses. It is apparent to the man who views them from the outside, and it is even more apparent to him who stays for any length of time in one of these houses. It is intensely true of English houses that no matter how big the house, it is just as domestic and home-like when almost empty as it is when full of guests.

Slowly we are coming to a realization of the value of character, significance and individuality as expressed in our houses. Not so often as formerly do we start with a preconceived idea of the exterior of our house and then try to fit our rooms into this shell.

The home of Thomas Shields Clark, sculptor, Lenox, Mass. Wilson Eyre, architect

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Independence was the key-note of our national beginnings, but it didn't extend to our house-building. Independence in house-building has for a good many years been the keynote of English domestic architecture. The Englishman plans his house, arranges his rooms to suit himself, and if he shows his independence in what we consider an absurd arrangement of his dining-room and service rooms, it isn't to the point, for what I want to show is that when he has got what he thinks will make him a comfortable house, he goes ahead, or his architect does, and produces an exterior arrangement that in nine cases out of ten is charming.

If the charm of these English houses is often partly due to the setting of trees, shrubs and vines, should that be used as an argument against the design of the house? Not at all, but rather let us consider that it is a further proof of skill, for where is greater skill necessary than in designing in such simple forms that they harmonize with informal and natural arrangements of flowers and trees, in such a way as to seem almost a part of the landscape.

The houses illustrated here, English and American, are chosen at random and are essentially types of average houses such as the most of us might build. Some of them are as distinctly English as others are American, but they all have character, significance and individuality. I have purposely passed over many charming examples because they seemed to owe their charm to some special feature of design or of setting.

But the houses which are illustrated here seem to me to place before you examples of the results obtainable if you will start house-building unhampered by a "style." I have used again and again the words character, significance and individuality, perhaps beyond the limits of your endurance, but these qualities are the beginning and the end of a style. Russell Sturgis says that they are style, and that is exactly what I want to repeat to you. Look at the illustrations; the houses are varied in type. Most of them are irregular in plan and consequently in elevation. But the point I wish to make is that they are not necessarily so. Look at the interiors here shown, English and American. Do they seem to lack the quality of home or of refinement?

Start unhampered by a "style." Plan and build a home. Seek to express in your house your needs and your tastes, and not an historical reproduction. Sentiment for the past, for traditions—yes indeed, lots of it. But reproduce in the spirit of Colonial or any other type of architecture and not in the form, and you will have what the modern English house has more than the houses of any other country. It will not matter what form the house takes or how closely it approximates what we call one another style. It will have character, significance and individuality and it will stand for independence of thought on the part of both owner and architect.
The Growth of Mature Plants
(Continued from page 124)

if you have them—nor new ones either. Wait until the spring warmth has wakened the sleeping buds and they bestir themselves and come forth. Then watch them a little while until you are sure of their intentions; it is the easiest thing in the world to wipe them gently out of existence with a gloved thumb—if a naked thumb is too tender—if these intentions seem threatening to the plant's best form and interest.

Resort to the pruning knife only for dead branches or for those inside branches which previous years' bad pruning has permitted to choke the middle of a bush or tree. But in cutting these out keep in mind constantly the scheme of growth, if you take off their ends you will start two or three side branches into activity, so if you would thin a bush in the center, cut the side branches away from the central stalk that springs from the root—never cut the stalk itself.

But do not be in a hurry to do even this much. Next month is better than this, for all pruning scars heal more quickly when the sap is running freely and the vigorous growth of spring has commenced. And next month the directions for pruning even the smallest branch with the "why," will be given—for there is a right way and a wrong way to remove a twig, or even the terminal bud from a twig.

Plantsing Trees for Air, Light and Shade
(Continued from page 89)

shade should balance, with the excess running a little to shade under most circumstances, rather than to light.

Sharp emphasis of the contrast between light and shade brings a crisp liveliness into a composition that assures its distinction and interest under all conditions and in all seasons and weather, and every means by which such emphasis can be made ought always to be taken advantage of.

A pool of water in the midst of dense shade, yet so placed as to catch the light and reflect it, is perhaps the most striking example of emphasized contrast and well illustrates the point. In this connection it is well to remember that still water greatly intensifies any effect, reflecting as it does shade or sunlight or sky expanse. Especially is this true of shade and the gloom that results from it or accompanies it; deeply shaded water becomes black to the eye and correspondingly suggestive of dark unpleasantness.

Trees vary greatly in their effect of shade, the variation being due usually to their leaf form. For the amount of shade with which a tree impresses its beholder is not the amount of shade which it casts but the amount which it holds. Looking out upon a landscape, it

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is not the shadows under the trees which meet the eye—only a very small proportion of those are seen at all—but the depth of shade which lies among the leafiness of the tree's head. This, therefore, is the depth which must be considered with trees in their relation to a picture or composition.

Elms, while casting a perfect shadow, do not give the impression of as dense shade as maples, because their leaves are differently shaped and smaller. The sky shows through an elm top here and there, but rarely through a maple and almost never through a horse-chestnut, a catalpa, or any other large-leaved and densely furnished species.

In sharp contrast to these heavy trees is the white birch, so delicate in leaf and color that it is hard to associate it with shade or shadow. Indeed it rather seems as if light had been captured and now held in a tree therefore is particularly suitable for positions near still water. It is lovely in reflection and never gloomy.

The lines of a large border planting, or the forms enclosed by the lines, are very aptly likened to the land formation along a coast. There are promontories and peninsulas, capes and isthmuses, with now and then a deeply receding curve where some great bay or gulf sweeps in from the sea—the lawn being the "sea"—and here and there an island or a series of diminishing islands carried out from a bold headland.

Plant detached trees always in this relation to the mass, either as one single island—a tree or an irregular group of trees, or as a series of islands—an irregular group of trees, a lesser group and then perhaps one lone specimen. In either case, however, be sure that they are carried out from a point or "headland" of the mass.

Where the most complete imitation of Nature's planting is aimed at, set two or three young trees into the same hole, once or twice among a mass; this ineffectual attempt to crowd each other out is very common among seedlings, in the woods and out. The trick lends interest even to those plantings which are in no sense intended to be wild, and though the idea seems very radical at first, try it. It will prove itself well grounded.

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From the point of view of this book the school garden is any garden in which a boy or girl of school age takes an active interest, and, surely, such an excellent guide as this cannot fail to inspire the young gardener.


The exceptional facilities which Miss Silberrad has had for studying life in the bulb fields in and around Haarlem, which has been the center of the industry ever since its first introduction, has enabled her to produce an excellent and entertaining book, as well as an authoritative one on the subject so intimately associated with our thought of gardening in Holland. Miss Nixon's beautiful water colors have been admirably reproduced, and altogether the volume is one well worth having.


We hear much about Madeira but know little enough concerning this lovely island, whose gardens, especially those around Funchal, are scarcely to be matched for brilliance and charm elsewhere. It is, indeed, a paradise for the lover of plants and flowers, and Mr. Thomas-Stanford's volume is delightful reading.


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This book is the second of the series in which "Delftware" was the first. It not only describes the famous pottery made at the factory of Josiah Wedgewood, but treats of the work of his followers and imitators. The well-chosen illustrations make this volume a very welcome hand-book of the subject.
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This is an excellent guide and handbook, especially for the amateur. Mr. Foster is noted for his clear and well arranged narrative, which always lends value to even a technical volume in the eyes of the student, and there is much that is new to be found among the illustrations.


English Old Silver forms the basis of nearly all the consideration Mr. Lowes’ text gives the subject, although silverware in other countries is touched upon. The first part deals with “Marks and Makers,” the second with “Ancient and Medieval Gold and Silver,” the third with “English Gold and Silver,” and the final part with “Miscellaneous.”

Collecting Pewter
BY MARVIN COLE

A perhaps nine out of ten of the existing specimens of even genuine old pewter bear no mark at all, and those that do have marks that are scarcely intelligible, the collector of pewter has no
makes are eagerly sought by collectors who have had the courage to go into the intricacies of the subject. Nevertheless, of the vast amount of excellent and valuable pewter ware bearing no mark one cannot afford to pass it by in disdain. Indeed, as an English authority on the subject has discovered, out of fifty-nine pewter vessels still existing in twenty-nine churches in the Diocese of Llandaff, only fifteen are marked.

Leaving out all the “ifs” and “ex-

cepts” in the mysteries of pewter lore, one may assume, in a general way, that the older pieces are indicated by greater simplicity in design. Straight or slightly waved lines came before curves with swelling lines, plain flat lids preceded crested. The elaborate moldings followed more simple ones. When all is said the chief delight in sensible collecting after all is in an object’s simple beauty. Unless specimens of pewter ware make this appeal, it is unlikely that the amateur will bother with it. Still one often runs across excellent examples of old pewter in our antique shops, and it is well worth the while of anyone interested in the arts of yesterday to concern himself with pewter and its history.

Repairing the Window Shades

W I N D O W shades that have become cracked and worn may be taken down, removed from the rollers, and turned with the upper part down, as good as new in appearance. The width of hem that is worn should, of course, be cut off and a hem of similar width turned and stitched on the newer portion, in which is put the stick to keep the edge firm and straight.

The hem may be stitched on the machine, but a loose tension and long stitch are advisable, as the material of which curtains are made is not very tough nor durable, and as it is generally quite filled with stiffening, it is brittle, and liable to split and make slits if the stitch is short or the tension very tight. If the stitching is done by hand it should be

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This TRACTION-POWER Auto-Spray No. 2 is better for larger spraying. It has a capacity of 4 gallons, of power, no breakdowns. Capacity, 6 gallons. (Other styles for field crop and vineyard work.) All Built with Non-Clog Atomized Nozzles, etc.

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Chicken Wire in the Garden

Chick Wire is a permanent fixture in our garden. It is used on trellises for tomatoes, cucumbers, squash and peas; also to tie it, eggplants, peppers or other plants that are not climbers, so that they will make a flat growth and thus save space. We find it useful in covering fruit and vegetables, to keep off animals, chickens, crows and other birds. In winter we use the wires to cover mulching vegetables or similar materials, which is easily blown away and which looks untidy when exposed by the stems of branches.

With little care wire netting is more durable than common bean poles, and the growth is much neater and more compact. And a trellis will accommodate more plants to a given space than will a row of poles. The meshes offer a number of supports for tendril plants and these sorts make a very quick and secure growth on the wire. Trellis culture for cucumbers and squash is an improvement on the old way of allowing them to lie on the ground, for the fruits are easy to find and cannot hide under the leaves and ripen, seed, shortening the bearing season.

The picking and cultivating are far less troublesome. Then, too, the vines are not killed by trampling. Dwarf peas grown on chicken wire are almost as productive as a hedge; the foliage is so even and compact, a vast improvement on the brush method. When tomatoes are trained to wire, trellises for the vines can be spread to expose the fruits to the sun, better than can be done on the usual stakes. Pole beans growing on netting rather long and very even, and may be made just right by pinching first with the needlepoint as wide as desired and following with the thread in these measured spaces.

In screwing in the ring on the lower stick first find the hole on the stick, and then make the hole through the curtain with the point of a penknife by working it around as in boring a hole. There is danger, here, of splitting the cloth and may be made just right by pinching first with the needlepoint as wide as desired and following with the thread in these measured spaces.

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take a firmer hold and cannot be shaken off by gales.

We have found that cultivation with a wheel hoe is quick and simple work when vegetables are raised on netting trellises.

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Flower Vases

In selecting a vase for flowers, one of clear crystal, even though it be pressed glass, is a much better choice than those which show mixed color decoration on porcelain and are much more expensive. There are beautiful pottery jars of Japanese design—or make, with dull soft colors and unglazed surfaces which fit readily into almost any room, and may hold growing plants or cut flowers with equal success. From the tall glass vase which will hold a few long-stemmed roses and which sells for 50 cents, the selection may extend to those overlaid with gold and silver showing the glass between, or the beautiful iridescent glass for which one may pay almost any sum.

Flower Bed Soil

As it is a common mistake when planting flower-seeds not to have the bedding soil sufficiently pulverized, I have used a coarse sieve with great success when working up the soil of small flower beds where I am preparing to plant my annuals. I take a quantity of the earth and after breaking it up I scatter it evenly by means of the sieve on top of the bed. In this way I am sure to have a fine soil for such tiny seeds as those of the Poppy, Tobacco Plant or Petunia.

C. B. N.

The Garden Herbarium

Last year I made a collection of specimens of all the flowering plants in our garden, which I carefully pressed, arranged, and mounted on uniformly sized sheets of thick white mounting board. Then I carefully labeled each specimen with botanical and common garden names in the lower left hand corner. In the upper left hand corner I mounted specimen seeds, and in the upper right hand corner I indicated by a space one inch square the color of the flowers as nearly as possible by a wash of water-color. Then in the lower right hand corner I put a memorandum of the date of planting, the date of the first appearance of the seedling above ground, the date of flowering, and the date of seed maturity. This was less work by far than the telling of it seems, and as my entire collection fit nicely into a library pamphlet case, you will see that I had an invaluable record of my flower-garden.

M. S. J.

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Planning for a Succession of Bloom through the Day

As we try to prolong the season of flowers, so also we may, by giving thought, prolong the day's delight in their bloom.

Morning Glories have blown their bugles long before we ourselves are awake. The flower lover who has them not at some point where they will meet the eye from the breakfast room, or from the kitchen while the morning work is being done, is losing a great delight—particularly when the mornings of late August and early September shall have come around.

These flowers close as soon as the sun is high, but exactly then is when the Portalucca is wide open and a bed of them is very beautiful indeed near the scene of the morning work. I believe in having flowers where the occupants of the home may get the benefit of them.

Make the earth fine and sow plenty of the Portalucca seed broadcast. I prefer the single to the double variety. When these have come up, thin the tiny plants to stand six inches apart. No flower, unless it be the Nasturtium, will stand drought and poor soil so well.

Flowers for mid-day are plenty, but it is worth remembering that the Moonflower begins to open late in the afternoon and continues on until some time in the middle of the next forenoon.

This vine will grow thirty or forty feet in the season. The Moonflower seen in the evening from the living-room or verandah is a lovely sight. It is better to get young plants from the florist, though they may be started from seed in the house early in March.

Another plant that beautifies the early evening landscape is the Nicotiana. Its fragrant starry white varieties grow from two to five feet high. The seeds of this plant are extremely small, and need only that you will poke one of their large black seeds into the soil, to give you a flower where the occupants of the home may get the benefit of them.

And then, from four o'clock in the afternoon, when they promptly unfold their bright crimson, yellow, pink or white silken skirts, until the sun is bright, next day, there are the Old-fashioned, musky, wholesome, Four O'Clocks, which ask only that you will poke one of their large black seeds into the soil, to give you a season's joy.

EVELYN PRINCE CARBOON

Shrubs for Dry Soils

As it often happens that the soil is dry and exposed to the severity of the sun's rays, the selection of shrubs for such places is a question that often brings forth queries as to the best varieties for planting in such places. Therefore, the following brief list may prove of service to the amateur shrub planter:

- Bladder Senna (Colutea arboreacons), Sea Purslane (Atriplex Hailium), Common

In writing to advertisers please mention HOUSE AND GARDEN.
Concerning Soils

NEW YORK is taken as a basis for garden operations and you gauge, as you go further north or south, accordingly.

The soil that is most valued is an alluvial saline deposit, rarely found more than a mile inland from tide-water. It is a dark heavy loam mixed with decaying shells, and is from ten to thirty inches deep, overlaying a sub-soil of yellow sandy loam.

The next best soil is lighter both in color and in depth, being about eight to fifteen inches deep, having a similar sub-soil to the above.

Then there is still a lighter soil, one in which sand predominates over the loam, and which lies on a sub-soil of pure sand. It is almost useless for growing cabbage, onions, or celery, but well adapted for tomatoes, radishes, cucumbers, or sweet-potatoes.

There next comes the fourth sort of soil, a soil which we must place last. It is the least valuable one for vegetable growing. This is found on the highest points only. It is lighter in color than any of the others and is what is termed a clayey loam, ten inches in depth, under which is a substratum of bluish clay. In a stratum of this it is practically useless to attempt to grow early vegetables.

With the soil first mentioned you have all that you need to work with as a basis of culture, enriching it now and then with manures. With the soil second mentioned you have a soil without good qualities that can be made to yield more weeds, as it stands.

Soil can be bettter by patient attention, fertilizing, dressing and working over. One of the best fertilizers to be had for the garden consists of dressing the top-soil with well rotted hop vines from a brewery.

No matter how rich the soil is, never let it have a chance to lose its planting properties, rather enhance them and finer, vegetables and flowers will result.

C. B. HORNOR.

Over-rich Soil for Violets

WITH all its fascinations Violet raising is often attended with many disappointments. Perhaps one reason for amateurs having trouble with unhealthy plants is an over-richness of the soil that is given them, for, unlike some other flowers, Violets are apt to have a sort of dyspepsia all their own from over-nourishment.

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Let us trace briefly the procedure in building by the single contract method:

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Second—Planning: Plans and sketches are proceeded with and submitted to you. We plan interior first, exterior second. This order is followed for two reasons: To ensure an arrangement suitable in convenience and style to your requirements and tastes, and to avoid needless waste of space and consequent cost of construction.
The Pleasures of Building

Third—Building: When you are thoroughly satisfied with these plans, samples of all the materials—stone, wood, metal or textile to be used in the residence, are submitted to you for approval. The actual work is then commenced. We engage the various sub-contractors for the work not done by our own workmen and supervise all work. There will be no conflict. Plumbers will not undo the work of the plasterer, nor the electricians that of the decorator. There will be neither waste expense nor lost motion.

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Fifth—Decoration and Furnishing: In the decoration and furnishing of the rooms, we apply a thorough mastery of the subject. We seek to render each room in a style suitable to its purpose, yet in harmony with the house as a whole; but no detail is executed without your approval first.

Finally—Our Contract: You hold us wholly responsible—as much so for the architectural service as for the masonry and carpentry. You are entirely free from the usual difficulties and disagreements due to divided responsibility.

To satisfy yourself as to our work, you have—first, our record of twenty years of successful achievement; second, our legally binding contract; and third, if you wish it, a bond. At the very outset the contract stipulates what the limit of cost will be; it fixes the limit of our remuneration, and assures you that any savings effected on the original cost will be rebated to you. (Such rebates frequently occur in our dealings with clients.) Lastly, you have the privilege of withdrawing from the contract at any time prior to the beginning of construction.

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