**HOUSE & GARDEN**

**INDEX FOR VOLUME XXXI**

**(January 1917—June, 1917)**

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THE new-found treasure-voice of the Metropolitan Opera—the world's greatest coloratura soprano—can now be heard on Columbia Records exclusively.

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CASTLES IN SEVEN CLIMATES AND A CONTENTS

The trouble with the castle in Spain is that it stays there in Spain. Most folks, when they dream of a castle in Spain, dream of a castle in California, or a castle on a rugged New England hillside, or by soft waters—in fact, anywhere but in Spain. For that reason Spain has been left out of the February issue, which is the Annual Building Number, and in its stead have been put the castles of several climes.

There are castles in Bermuda—types of architecture that are suitable for the American country house; castles in California, several of them; castles in New England, New Jersey, New York. There are field stone castles and clapboard, shingle and stucco. You learn how to beautify them with exterior lattice and make them convenient with attractive devices.

Going into the twelve issues of 1917, there are articles on furnishing and decoration—pages showing the opportunities of the February furniture

sales, from big pieces to little slipper chairs. You read how slip covers can become an all-year device and transform ugly furniture into possessing. You learn the ways of draping a French door, shown in the same manner as the curtains on page 31 of this issue. The Little Portfolio will be there with its countless suggestions and inspirations, and an article on brass for the house and one on the small dining room.

The garden around the castle grows uncommon fruits and the newest flower varieties, and the beginning gardener learns there the whys and wherefores of soil. Altogether, a big book, crammed full of ideas and overflowing.

This is an earnest of the good things that will follow all through the twelve issues of 1917. With each number will be a new sort of idea presented in a new sort of way. There will be—wait!
THE GARDEN WITHIN WALLS

Through the cleverness of its architects and landscape gardeners, America is fast gaining a reputation for gardens that in previous years only Continental countries possessed. We can create the semblance of age and a rustic verisimilitude that took Europe generations to make. Here in this walled garden on the estate of Julian L. Peabody at Westbury, L. I., is displayed just such clever architecture and careful landscaping. Peabody, Wilson & Brown were the architects.

By Attention to the Little Things—New Angles on An Old Problem that Concerns Every Automobile Owner

E R N E S T  A.  S T E P H E N S

WHITE elephants and automobiles were considered as occupying the same class a few years ago, the point of similarity being that although it was possible to ascertain the first cost in either case, the purchaser was immediately faced by the unknown quantity representing maintenance. Dismissing friend pachyderm from further consideration, as having served his purpose and joined his fellow-shades, we have still the pleasure automobile with nearly all its early faults eliminated but yet retaining its capacity for piling up the repair and accessory men's bills when unrestrained or carelessly used.

Pages of the earlier issues of journals devoted to automobile matters were filled with data of varying reliability and doubtful utility bearing on the subject of what it cost to run a car; but in the light of later experience it has been found that such estimates, however conservative, served only to make the motorist wise after the event in the sense that a set of figures covering the past road performances of an individual car were found, in practice, to possess but little value in estimating the cost of operating a similar car under approximately identical conditions. That this should be the case is one of the apparent mysteries which require some explanation, and it is well to recollect in this connection that official fuel and other road tests made with precisely similar cars of the same make and model, over the same roads and under similar climatic conditions have shown as much as fifty per cent variance.

When experts fail to determine in advance the actual cost of running an automobile under what may be termed relatively known service conditions, it seems reasonable to assume that the average motorist cannot anticipate the figure with any degree of accuracy.

Of course, if one is content to keep close record of all expenditures during a season's running, there is a reasonable expectation of the result giving an approximation of the cost of operating during the following season, but naturally the item of repairs may be somewhat higher during the car's second year.

For those who are content to keep records of this kind, it is suggested that the item of interest on the original cost of the car should be written off, in effect, against the added health and pleasure conferred by the possession of a reliable car, but if a more business-like method is desired, the interest should be figured on the basis of what the money would bring if invested otherwise. Depreciation is another variable figure—it can be, perhaps, checked up, from time to time, by investigating the state of the second-hand car market. Storage or garaging is yet another item which varies in almost every case and repairs should be divided into two classes—the annual overhaul, and expense incurred in replacing breakages or worn parts. These several items, once determined to the individual case, may be averaged to cover the operating costs of subsequent seasons, but after all, though they may be considered as of primary importance, they do not dominate the vexed question of what it costs the average motorist to run his car. Items which are practically constant are insurance, taxes, registration, license and chauffeur's salary.

General running expenses are usually considered as being represented by the cost of tires, gasoline, oil and grease and, to owners of methodical temperament, it is an easy matter to keep the records, checked by the speedometer reading, necessary to arrive at the cost of each per mile, per month or season, or in fact in any division of time or distance.

This method is useful only in the sense that it tells what use has been made of money after it has been spent and gives an approximate idea of what may be spent in the future under similar service conditions, but it is not at all safe to rely on one month's or one thousand miles' running as being indicative of another's. In fact it may be said that such a method would be reliable only if the two unknown quantities—the roads and the driver—could be reduced to a known equation.

Upon the principle that it is better to be wise before the event than after it, and basing an argument upon the foregoing premises, it seems fair to take it as an axiom that whatever you can save by giving proper care to the components of your car during a season of normal operation, will help in meeting any unexpected costs incurred through possibly abnormal conditions encountered later on.

Tires are, it is generally admitted, the most costly item in the operation of a car, and nevertheless it is undeniable true that they receive but a fraction of the attention they need in order to give efficient service. A tithe of the attention given to the electrical system would, if bestowed on the tires, make a surprising difference in the year's bill. Tire records may be individually kept by the aid of a notebook and the speedometer. These are useful for comparative purposes but won't really reduce the actual tire costs.

There are two accessories of primary importance in the well-being of the tire; these are the pump and the pressure gauge. A tire which is in good condition cannot be injured by such over-inflation as is possible with either a hand or engine-driven pump; the limit is really controlled by the comfort of the car's occupants, as riding on absolutely hard tires is decidedly uncomfortable and the extra vibration caused by them is apt to cause minor mechanical troubles. The golden rule of correct inflation is twenty pounds per inch diameter (for example, a 4" tire should be pumped to eighty pounds) tested with a pressure gauge. It is impossible to attach too much importance to this point, and it is also well to recollect that the atmospheric temper-

(Continued on page 54)
THE PORCH ENCLOSED FOR WINTER LIVING
Where Willow, Reed, Rattan and Painted Furniture Find Their All-Year Metier

BECAUSE it stands for the transition between the house and the garden, between outdoor living and indoor comfort, the porch enclosed for winter has become a necessary adjunct to the house. Remembering these purposes we can be guided in the choice of furnishings and the methods of construction.

Have the windows and doors so built that the room can be thrown open for summer. They may either be removed entirely and stored away, or the windows may be arranged to slip down into a pocket in the wall after the manner of trolley car windows. In any instance they should be well fitted so that the room can be sealed for winter.

The floor can be of tile—red tile laid in white cement is a favorite—composition, marble, or a less expensive alternative will be found in painting the floor to simulate tile. Except in the very elaborate porch, the rugs should have the outdoor character. Grass and fibre rugs and mats are best. They take the chill off the floor and pull the room together, decoratively speaking.

In the walls can also be found the outdoor note. Lattice painted to suit the color scheme of the room is the best treatment, and the design may be elaborate or simple according to one's wishes or purse. Ivy may be trained up the lattice, or better, tied to it so that it can be taken outdoors when the weather grows warmer.

Plants, of course, are a necessary feature. In their bright flowers and shining leaves they are pleasantly reminiscent of summer days. Either in pots on a stand or in boxes ranged by the wall or near the windows, they add a wonderfully decorative note.

As there will be a great deal of light in the porch, the curtains should be chosen to tone down...

Barber & McMurray, Architects

Here the outdoor note is found in the lattice, the wicker furniture and the plants; the indoor note in the fireplace. It is a simple room showing many desirable points. For the tile floor might be used the alternative of wood painted to simulate tile. Fibre rugs could be laid over it. Ivy can be trained on the trellis. The radiators are well concealed, and there is the added cheer of the fireplace.

Doubtless you recall how the windows in a trolley car slip down for summer. The same principle can be applied to the construction of the enclosed porch.
this glare. Do not use cretonne or linen unless it be lined, for remember that this porch will be seen from the outside, which would necessitate these curtains' being lined. Casement cloth is the best choice, and after that ecru net or scrim. If this fabric is used for glass curtains in the other rooms of the house, the windows will have the desired uniformity and consistent effect.

Wicker, reed and cane, stained or painted, is the furniture par excellence for the enclosed porch. But our choice should not be limited to them. Painted furniture gives a cheery color note, and if painted in well chosen shades, will lend the room distinction and individuality. The lines of this furniture will accord with the general character of the room—if it is formal, painted cottage furniture will be out of place. One must decide what sort of room she wants; after that the type of furniture will follow naturally and easily.

Wrought iron, which is coming again into vogue, finds its place in this room. It has a dozen uses—for radiator grills, lamp standards, plant boxes and plant stands, and even stands for the goldfish bowl. It can be painted and antiqued to suit the scheme of the room or left rough with gold rubbed into the turnings of the metal.

Whatever the furniture, see to it that the room is comfortable. Have at least one easy chair. A chaise longue of wicker or even a steamer chair will answer the purpose. If the porch is large enough, one may use a couch or a hanging couch suspended from the ceiling by chains.

The color in the porch should be found in the small movable objects. Keep the walls and floors—as in any other room—unobtrusive. Find color in the plants, the upholstery and the lampshades.

A final word on comfort. As this room is to be occupied during the coldest months, see that ample provision is made for heating. The pipes may be run out from the house or radiators may be permanently installed. For the sake of appearance the radiators should be boxed in with lattice, wrought iron or wicker grills. In that way they also serve as seats or side tables. In addition there should be a fireplace. It requires too great a stretch of the imagination to gather round the cheery radiator! The open fire is best. It lends that air of comfort and welcome so necessary to this midway spot between the outer cold and the warm rooms.

Courtesy of Joseph P. McHugh & Son

The color notes here are found in the upholstery and rug which are in tones of dull gold, old rose and blue. The wicker willow is stained mahogany. Casement cloth is at the windows.
A living-room that is immensely livable. Weathered oak, hand-adzed beams support the ceiling. The walls are rough plaster painted deep cream. Some of the furniture is oak, some is painted. The hangings and upholstery are blue. There is room enough for several distinct furniture groupings: a music corner around the piano, the center table and the fireplace davenport with its refectory table behind. A view through the doorway to the right is shown on page 19.

THE RESIDENCE of
JULIAN L. PEABODY, Esq.
AT WESTBURY, LONG ISLAND

PEABODY, WILSON & BROWN, Architects

Photographs by Tebbas

In the exterior view of this house, shown opposite, will be noticed two porches enclosed in glass. In one is the breakfast room, shown to the left. Antique tile, brought from Sicily, forms the floor. The tile has a dull white ground, decorated with geometrical designs in blue and orange. On it are spread rush mats. A plant shelf ranges along one side. The furniture is of the simple farmhouse pattern. Altogether it is a room in which to start the day cheerily.
An adaptation of the Southern Colonial style has been used in the architecture. The unusual height of the pillars is balanced by the width of the porch, together with the two glassed in rooms at either side. This is the garden view.

The entrance porch is an elaboration of the usual Colonial stoop, the balustrading being the same as that used on the garden side of the house. Color relief is given the white shingled walls by the green blinds and box-bordered path.

The interior woodwork of the hall is remarkable for its fidelity of detail to original Colonial designs which, by the bye, is the ultimate test of the worth of modern Colonial architecture. Landscape paper of an old pattern has been effectively used on the walls.
WHY IS AN ANTIQUE?

Which Reveals How the Heir Gets in Heirloom, How Second-Story Bill Helps the Collector, and How to Buy and Value Antiques

ROLLIN LYNDE HARTT

Drawings by Jack Manley Rose

ANTIQUARIANS may gasp and economists wail, but history, which cannot tell a lie, records that on the 29th ultimo Mrs. 'Rastus Jones, of the colored persuasion, inherited one doll, and fifty cents at the Civic Bethel's strictly cash sales-room and came out "tooting" a hundred-year-old mahogany chair.

It was a treasure.

More than that, it had been nicely mended and varnished. For the Bethel, whose aim it was to untramp tramps, and to buy that noble design by making them tinker the rubbish you and I so magnanimously send in. Once tinkered, it sells for what it will fetch, down yonder in the slums, and the profits untramp more tramps. A jolly arrangement all around. It rids us of our rubbish. It benefits retired roadsters. It supports the Bethel. Incidentally, it now and then supplies colored ladies with antiques.

And yet Mrs. 'Rastus was by no means in high spirits on the 29th ultimo. She grumbled, and history transcribed verbatim this growl of repentance: "Ah's done made a sho' 'nuff chase of ma' Tanner, but he 'nuff badly a-set from his low-down, ole-fashion'd article; foh de Lawd, Ah has. Nex' time, Ah's gwine blow two dol-lahs, an' be up-to-date an' classy."

So you may imagine the lady's astonishment when, on the 30th ultimo, she resumed her labors at Mrs. Norman Daingerfield's town house, and there, in the Daingerfield drawing-room, beheld an object that prompted a cry of, "Golly! Dat's de very spittin' image ob ma' chair!"

Now, it is possible for chairs to fool colored ladies, as well as white, but everlastingly impossible for chairs to fool history. Those two were mates. And it was Mrs. 'Rastus, not Mrs. Daingerfield, who had the better chair of the two.

At Carney's antique shop, where the Daingerfield antique had been "picked up for only ninety-three dollars, incredible though it sounds, dey say," you will not catch them mending their chairs. They bang them around, and had persecuted this particular chair till it wobbled on its pins.

A DASSEL IN ANTiques

I could poke fun at Mrs. Daingerfield with keen joy, except that I, too, have dabbed in antiques. For example; there was that hundred-year-old house I rented. Quoth the Raven—but first hear me.

Upon my word, it was the sweetest old ark the heart of man could wish—a regular "birthplace," with stately white pillars, romantic, square-panel windows, and, over the entrance, the most adorable of hand-carved lunettes. Inside, the white wainscotting would show a single broad plank running the whole length of a low-ceilinged room. The doors had latches instead of knobs. Huge fireplaces yawned gloriously. The floors were "all hills and valleys." Up attic and down cellar, you saw hand-hewn timbers. Here and there, quaint, built-in cupboards piqued the fancy; and the stairway—a perfect love of a stairway it was, with white spindles and all that. Every way you looked, the place absolutely bewitched you.

I am out now (may the saints be praised!) and asking, with a wonderment that surges from the depths of an exasperated soul, "Why is an antique?"

On those hill-and-valley floors, not an article of furniture but tattered. Down those ancient chimneys came myriad of flies. The fireplaces, designed by ancients who were geniuses at architecture, but driving idiots at warming houses, sent nineteenth of the heat skyward, and I had not contracted to toast the Zenith. Thin doors, so charming with their exquisite panels, let sound through as indigestively as the celler let in water. I bailed the furnace. And those beautiful, square-paned windows impossible to lower to the top sashes. The ancients abhorred ventilation. It was they who enabled a humorist to write, truthfully, "Why is the air so pure in the country? Because the farmers sleep with their windows shut."

In short, I am in no position to throw stones at Mrs. Daingerfield. Escaped from my genuine antique, I took refuge amid things "up-to-date and classy," but I still respect in myself the antiquity passion that was the well-spring of my woes. I have merely discovered that in the realm of sentiment there is "a point beyond which,"

I own up to a profound indulgence to sentimentalize while bailing a furnace, nor can I sentimentalize at all triumphantly while perched on a seat perilous in Mrs. Daingerfield's drawing-room. And there are instances where I go so far as to question the sweet reasonableness of the sentiment itself.

Several years ago, my old classmate Mr. Worth Sayre was motoring through Brittany. Not far from Quimperle, he saw an aged peasant sitting outside his cottage in full Breton costume. What a chance for a picture! Sayre snatched up his camera, alighted, and, with elaborate salams, approached the Breton.

"Posé?"

"Why, parfaitement, Monsieur!"

After which, the peasant enticed Mr. Sayre indoors. There, to and behold, stood the finest 14th Century armoire in existence. By dint of many a visit and many a parley, Sayre at last got possession of the heirloom. Heaven alone knows what he paid—he's never told.

But he is also aware that there has since appeared in Le Figaro a very illuminating article by M. Marcel Prévost, who had traced the 14th Century armories to their source in a Paris factory. Thence, they journey to Brittany, where picturesque peasants are in reality agents.

It was cheerful to learn this. Never again shall I jibe at the dead 14th Century. It is having the time of its life.

However, I shall not tell Sayre. Nor shall I hint to Mrs. Daingerfield that, within my observation, chairs have seldom lasted a hundred years. If there are humbug antiques—oh, well, hypocrisy is the homage vice pays to virtue, and there are plenty of humbug antiques. What impresses me is our tender regard for the genuine.

Come, come! We do not overvalue old clothes. Why do we so worship old furniture, old houses, old jewels? Because of their beauty? The reproductions are as beautiful. Because of their age? The stones in the pasture are older! Because of their associations? Most enthusiasts think so, but what, pray, are those associations? What indeed?

ASSOCIATION AND SECOND-STORY BILL

My good neighbor, Mrs. Peirson White, has a weakness very tasteful and pretty, and at the same time very old. In a communicative mood, one evening, her husband confessed where he got it. "That sort of luck takes patience. I tried twenty reputable dealers and found nothing that quite suited. Then I thought of pawnshops, and made the rounds. Still nothing satisfactory. But I was not discouraged. I went back to the pawnshops again and again, and finally at Goldberg's I hit the very thing, Madge was delighted. You know she doesn't value antiques for their mere beauty. She cares a thousand times more for their associations." Associations! Good luck, what association! (Continued on page 66)
DE LUXES FOR LIMOUSINES

Traveling de luxe means motoring in comfort, and in winter that spells warmth and convenience. For these de luxes write the Shopping Service of House & Garden, or we will furnish the names of the shops where they can be purchased.

Twenty-five unfortunate rats (count 'em) were sacrificed to make a snug lining for this motor robe of heavy black velour. A final touch of winter comfort is added by an improvised muff, formed by two slits at the top. It costs $65.

We heard of the ankle watch—and now the foot muff! This one is of brown leather and grey rat skin, warmly lined with sheep's wool. It holds two feet at a time. $12.50

As a solution of the problem, "How shall I make my limousine more homelike?" we suggest this folding table. Its stiff black top of enameled duck makes a convenient card or lunch table for use in the car. When not needed, it can be snapped into its case. $5.50

The difference between clips for lingerie and those for motor robes is largely a matter of size. These keep the robe-roll shipshape. In brass or nickel, with monograms, $6 a pair. Without, $5

This sturdy running-board trunk is of black enameled cloth, lined with heavy unbleached linen. It has a board tray with a Shirred pocket for small articles 28" by 12". $24

An ideal compagnon de voyage is this cabin style bag of morocco leather. Its most attractive feature is the removable easel fitted with thirteen white celluloid pieces. The lining is of moire silk with shirred pockets on either side of the cover, 11" by 8" by 7 1/2". $72

Were it not for its handsome morocco exterior, it would be a pity ever to close the inside of this overnight bag from the gaze of an admiring world. It is lined with striped silk, and the fittings are celluloid. Straps bound with patent leather. $22

The very latest idea in safety first is to impart an odor of sanctity to your sixty-miles-an-hour course by carrying a St. Christopher medal. In bronze-green or brown finish, 3" in diameter. $1.50

This dream of the picnic luncher can be made to come true for the sum of $19. Basswood covered with black waterproof duck. Completely fitted for the delectation of four persons. Tin hamper for food, four thermos bottles.
SOME day I am going to consort with an accountant. And I will ask him these questions:

"Why is it necessary for a man, when he is spending money, to figure up what that same money would have brought him had he not spent it?"

"Why is it necessary to be eternally computing that matter of 6%?"

A man buys a house in the country, for example. He wants to live in the country, he wants his children and wife to have the benefit of country air and good fresh vegetables, he wants to be able to leave the noise and bustle of the city behind him at nights and come back to the quiet little place where he can sleep and rest in peace and where, of Sundays, he can potter around his garden. So he invests $10,000—but forthwith begins to compute a loss of 6%!

Or he may buy a car. The car will take him and his children bowling along pleasant roads, it will meet him at the station when he comes home tired from the office, it will carry his wife to market. But before he has paid out a penny of the money he must, to keep his books straight, figure that he is a loser!

I am wondering if pleasure and health aren't worth more than six per cent; if the remissence of happy days isn't a return bigger than any interest money can bring. Perhaps the accountant can say.

There was the case of my friend Gilford.

GILFORD came into my world the night I fell among brokers.

They were pocky men who wore silk hats, rode in limousines and could eat filet whenever they wanted to. They also smoked good cigars. I enjoyed their cigars. But even more I enjoyed their conversation. It was perfectly unintelligible, yet it was interesting.

After they had tired of markets and margins and the various financial enfants de guerre, they fell to talking about the ways they spent their money. Brokers do that sometimes, even the best of them. Mind you, they didn't come out in the open about it, they didn't boast—they spoke covertly and made hints, and I saw giddy visions of these cousins of Croesus who had so much pelf that they could afford to spurn it.

One went in for Rolls Royces; another remarked that a wife and family were expensive luxuries. Gilford, a little fellow with rosy, apple-colored cheeks and grey hair, confessed he spent $20,000 last year on his garden.

We started up. "On a garden? Winter Garden or ...?"

"No, flower garden."

"And what did your investment yield you?"

"Flowers."

"That's all?"

"That's all I wanted."

Now, had he said his investment yielded him a high grade of vegetables that he marketed at a good profit, no one would have been surprised. But flowers—pretty things to look at and to sniff, fragile things that fade before dawn—

"C'est magnifique mais ce n'est pas les affaires!"

Of course, no one understood Gilford. The idea of a man spending $20,000 a year for flowers does not enter into the calculations of most men. Little wonder that he blushed to see his heart uncovered. But he was proud of it all the same time. If the market didn't play tricks, he said he expected to pay much more next year.

Before the night was over a different atmosphere pervaded the circle. It was as though a cleansing air had blown in from across stretches of lawn and woodland. On the way up the street one of them confided in a half-asphalted sort of way, "That man Gilford makes me look like a piker. He gets so much out of life." No truer word has been spoken.

The point wherein Gilford differed from all the rest was in his complete refusal to balance pleasure and health against money. He refused to spoil the good times he was having by computing how much it cost. Gilford wasn't a 6% man. He wasn't satisfied with getting a paltry 6% out of his life. He looked on life as a 100% investment—and you saw it in his color and the clearness of his eye. Later I saw more of it when I walked with him through his garden. He showed the sort of quiet pride an artist takes in his work. It was a creation of his very own. He had thought out the pastel shades of the borders—the soft blues of the delphiniums at the back and the gradations of color through the aguelegia and myosotis. The rose garden was his idea too, and the rockerie down by the gate where the arabis settled like white clouds on the mossy boulders.

Gilford had been playing partner to Nature that year. He had invested $20,000 in the firm. To be sure, he was drawing a staggering interest in pleasure and health and pride. But 6%! What did 6% mean to him? He was playing for bigger stakes! He was reaching out for bigger game!

That was the way he looked at the house and the cars and everything about the place. He had one fortune to invest—and that was his life, and he planned to invest it where it would bring the biggest returns. He had written his philosophy all over the place. You read it in the flowers, in the velvet lawns, in the clean kept paths, in the well ordered house. You saw it in the stalwart limbs of the oaks and the swaying elms wrote it on the sky. It came as a voice from every bush and bower. Your ears rang with the motto: "It is more important to make life than a living."

MEN are divided into these two classes—the 6% and the 100%.

The 6% are the men who balance their books with figures and the men who balance them with flowers.

Especially does this apply to men who aspire to country homes and motors and dogs and gardens and all the other accessories necessary to country living.

Before a man decides to go there and acquire all these conveniences he must, if he values his soul's peace, acknowledge to which class he belongs. For he will get out of his investment not according to the amount of money he puts in but according to the enthusiasm he brings to it.

He cannot draw all money and all health from the same investment. Something must be charged off against life and flowers, against the warmth of sunshine and the cool of rain, against sunsets and drifting clouds and the wind through the trees.

Perhaps the day will come when a man will figure up his health and pleasure in the same way he now figures on money. How much can he afford to invest? How much dare he spend? He will sit down and calculate if a flower garden is a good investment and if the privet hedge will pay in privacy, and if the sight of long shadows on a lawn will bring their worth in pleasure to his eyes.

These are matters that the 6% men will not understand; they will call silly and sentimental yet they are the very foundation of life and living. They were the things men once worshipped. For a time the temple was deserted, but now slowly men are returning to it, finding there a solace for their cares, their leading days, and freedom from the demands of the modern American life.

Eventually, if we are to reap a hundred per cent benefit for investments, we must evaluate country living according to its own terms; and the terms of the country are peace and health and ease and freedom.

What is 6% compared to them?
January, 1917

ALLURING LEVELS

There is a singular fascination about a house with different floor levels. Its rooms seem to have such different personalities. That is the feeling one has on ascending these three steps. From the living-room, shown on page 14, one climbs up to the drawing-room, which is entirely different in character as it is in use. Peabody, Wilson & Brown, architects
In the upper left-hand corner is a characteristic surimono by Hokkei in which a little lady of Japan displays her very best obis and kimonos as a mark of her New Year greeting.

In the upper right-hand corner Shinsai portrays a "Girl Playing with a Puppet," an entertaining card of his greetings which proves the Japanese to be not without a sense of humor.

Hokkei, the artist of this surimono, stands beside Gakutei as a brilliant producer of New Year cards after the manner of Hokusai.

An unusually rare surimono depicts the album in which the Japanese kept the surimonos received each year from friends.

A surimono by Hokusai. This is a matchless example of the master's work in the field of New Year cards. A landscape view of Fuji such as this marks it as a rarity any collector might covet.

This surimono by Hokkei is remarkable for unusual elaborations, graven and variety of color.

A New Year surimono of great beauty. The bamboo and plum blossoms on the screen are emblems of prosperity, happiness and longevity. The pine branch tied to the teapot symbolizes longevity.

The surimono directly above, by Kosei, is remarkable in the original for its blues and metallic painting. Note the New Year obeisance of the gentleman in the foreground.

In the upper left-hand corner is a characteristic surimono by Hokkei in which a little lady of Japan displays her very best obis and kimonos as a mark of her New Year greeting.
The cards to left and right are a rare example of a double surimono by Gakutei, a remarkable example of gravure, as shown in the blossoms of the plum tree. Gakutei doubtless produced surimono of a quality finer than any others that we know.

MUCH has appeared in magazine literature on the subject of Japanese prints in general, but very little on specialized phases. Notwithstanding this, it is, perhaps, these specialized phases that offer to the collector fresh and particular interest. The surimono class of Japanese prints offers, for instance, a little explored field, but one, on the other hand, free from the prohibitive discouragements that so often confront collectors who wish only to expend a limited amount of time and money.

The surimono (the same word is used by the Japanese to indicate the singular or plural number) is generally small in size, elaborate in execution, printed on a paper thinner and softer than that used for Japanese color prints of other sorts, and forms a congratulatory greeting or commemorative pictorial effusion. In Japan festivals are many and these evoke surimono appropriate to the occasion. New Year's has always been made much of by the Japanese and it is among some of the New Year's surimono that some of the most remarkable specimens of the technical skill of the Japanese wood-engraver and color printer are to be found.

In times past, and even with some writers on Japanese color prints of the present, the surimono (literally translated, “printed thing”), have not been given either their due esthetically or the attention they deserve historically. I am glad to say that collectors are coming to assert their interest in the subject independently of the narrower point of view; for, after all, the surimono presents a fascination, when studied, that is unique in its appeal.

THE ARTISTS AND THE ART

Harunobu, Hiroshige, Hokusai, Kiyonaga, Korinsai, Masonobu (Okumura), Moronobu, Sharaku, Shunsho, Utamaro I, Gakutei, Hokkei, Toshimitsu, Toyokuni I, Yei-zen, Shinsai, Katsukawa Shuntei, Hokuba—are some of the Japanese color-print artists who lent their skill to the production of surimono.

The surimono—impressions miraculeuses, De Goncourt called them—were not for the public but for friends of the artists or of the private individuals to whose order they were made. In format they were most often 5" or 6" square, rarely more than 8". Elaboration and prettiness were in the majority of the later surimono, qualities as much emphasized as was beauty in the other color-prints of the greatest masters of Japan, for these surimono present veritable tours de force in the technique of Japanese color printing, their complexity is frequently astounding, leaving one in wonderment that human skill could produce the marvellous minute intricacies that the majority of surimono exhibit. It would seem as though the Japanese wood block artist deliberately sets about making the surimono from his hand an example of every phase of his art at one and the same time.

The subtlety of color gradation in many surimono is something not to be found in other classes of prints, and in no other classes of prints does the gravafrage—that is to say the effect produced by obtaining pattern by embossing from separate blocks without color (though often over color already printed)—enter so extensively. A lavish use of gold, silver and copper metallic lustres enriches the little surimono either to lend gorgeousness to it or, again, by restrained use, to emphasize its delicacy.

Mica, such as we find in the Kira-ye (prints with mica backgrounds), and mother-of-pearl dust were likewise employed in surimono. If it is true, as one writer maintains, that in the ordinary surimono the medium employed has outstripped the motif expressed and that what should have been the means has become the sole end, we must not forget the high interest of this technical display, which, in itself, is sufficient to compel interest and appreciation.

SURIMONO ARE RARE

I think the surimono color prints of Japan would appeal to everyone who retains an admiration for the mosaics of St. Mark’s. With the Japanese themselves the surimono holds a high place in the regard of native collectors. Indeed, one of the foremost Japanese dealers in the color prints of Japan returned last year to America with but twenty surimono of the first quality, though he had traveled the length and breadth of Japan buying fine color prints here and there as opportunity offered. Notwithstanding this fact, there are many collectable surimono in America in the stocks of the...
GETTING THE MEAT OUT OF THE CATALOGS
Common-Sense Methods to Simplify the Problem of What Vegetables to Plant

F. F. ROCKWELL

A KEY TO THE CATALOGS

Make a list of what you want, irrespective of the catalogue. With this as a basis, make the final selection.

BEANS:
- Hardesty, early quality green pod.
- Early wax
- Late wax
- Bush limas

POLE BEANS:
- Green pod.
- Wax
- Pole limas

BEETS:
- Best table quality, extra early.
- Main crop, to keep in good condition for some time
- Best for winter storage

CABBAGE:
- Extra early; uniform good size
- Long keeping in summer
- Hardest headed and best keeping for winter storage

CARROTS:
- Extra early.
- Best table quality, for summer use and winter storing.

CAPEFLOWER:
- Sow heading early.

CELERI:
- Most reliable for early or fall use
- Best table and keeping quality for late fall and winter

CUCUMBER:
- Best for quality and vigorous growth
- Small fruiting for picking, if desired

EGG PLANT:
- Early, especially where seasons are short

LETTUCE:
- Loose-leaved, for earliest results in spring
- Best table quality butter-heads for spring use
- Best table quality, heat-resistant crop heads for summer use

MELONS, MUSK:
- Extra early for first fruits
- Green or salmon fleshed (round or oblong shaped according to personal preference)
- Dwarf or bush forms for very limited space

MELONS, WATER:
- Medium or medium early of good quality for northern states

ONIONS:
- "Sets" for earliest cutting, or cooking size
- White, most delicate flavor
- flats white for earliest results from seed
- Extra large yellow
- Spanish for slicing or mild cooking
- Yellow globe for winter storing

PEAS:
- Extra early smooth for first planting
- Easy early waxy for second planting
- Productive high quality late for third or fourth planting
- Early and late varieties for succession planting
- Dwarf or bush types (according to conveniences available for brushing or trellising)

PEPPERS:
- Extra early sweet for first cooking
- Medium early large sweet for main crop
- Flat, small fruits, ideal for pickling

POTATOES:
- Good quality early
- Late, preferably of known good quality in your section (but of minor importance)

RADISH:
- Red, white, or mixed
- Round, oblong, or long
- (Extra large, red globe, most satisfactory general purpose)

SQUASH:
- Scallop, crookneck (according to preference) for summer
- Long, small, medium size for fall and winter
- If space is limited, a small fruited variety good for both fall and summer

TOMATO:
- A few extra early for first use
- Highest quality medium-sized for main crop
- Small fruited cluster type for whole fruits for salad
- Small "fancy" fruited for preserving, etc.

TURNIPS:
- For winter, long keeping yellow or white or table rutabaga
- For summer, long keeping, white or yellow fleshed
- Early, good quality white

The average person has little conception of the work that goes into the preparation of a good seed catalog.

Last March in the office of one of the largest seed houses I found the man who had charge of the preparation of their catalog work already deep in the preparation of his 1917 annual, going over his lists carefully to see where a description could be made more accurate and true to fact: Where a variety, some better type of which was available, could be dropped or "dis-couraged"; and weighing the results of hundreds of careful tests to see what new things were really worthy of a place in their list.

As the shipping season was still at its height, I expressed my surprise that he found it necessary to get at the 1917 catalog so far in advance. In answer he showed me two hand-colored illustrations of a certain flower.

"You can hardly imagine the emergencies for which we have to prepare," he said. "Look at these. Last year we paid a tremendous price to a famous flower artist abroad to paint this flower for our catalog cover. It was delayed, and when we got it, we found that the color in which it was done was a shade different from that which this particular variety showed as it grew for us." (There was so little difference in the coloring of the two paintings that I had not noticed it at all.) "So we had to get the best person we could find here, at a considerable expense, to do us another one in a hurry."

SELECTING SEEDS

A house that is as careful as this about what it says and shows concerning its seed is careful of its seeds. In going to another department in the same building, I came across a number of girls sorting sweet corn seeds by hand.

In another department in the same building, a machine had already done the best it could do with it, but only the human eye was trusted to put the final "O.K." on seeds which were guaranteed to grow high-grade corn.

I have mentioned these facts which illustrate the great care exercised by the best of houses to not misrepresent and to send out only the best quality seeds, because I know from personal observation that the seedsman is too often blamed for unsatisfactory results when the customer was really the one at fault; not consciously, but merely because he or she had not had the experience or the patience to select intelligently from the wares the seedsman offered.

The first of the seed catalogs comes to hand early this month. If there is a pen to be begged, borrowed or stolen anywhere within three blocks, you sit down at the first opportunity to make out a "list." You go through the catalog page by page, beginning with the general review of novelties and putting down moderate amounts of the things that "sound the best."

You probably feel quite satified that you have done the best that can be done—until the next catalog comes. In that, you are likely to find a number of things which, as far as you can judge from the descriptions, will be absolutely indispensable for your garden, and a second list is made out. By the time two or three other catalogs have come—with the same result—you suddenly realize that you must omit some of the wonderful things described, or have a very much larger garden than you had expected. Incidentally, you begin to wonder how all of what each catalog says about the things it lists can be perfectly true! When you had only the one concern's claims to read, it was hard enough to make a selection out of the many fine things available. When it comes to picking the very best from half a dozen catalogs, you begin to feel—and not without reason—that it is absolutely hopeless.

It is right at this point that you should realize what are the two big mistakes which the beginner is almost sure to make; the first is in using the catalogs to make up a list from, when the list should be made up first and the catalogs used afterwards. The second is in putting the emphasis on varieties in making your selections when the type should be considered first, varieties being usually a secondary matter.

A Better Method

Try a new scheme in making up your list of vegetable seeds. Set all the catalogs to one side, take a piece of paper; put down on it the things you want to have for your garden, allowing three or four lines for each; after each vegetable, put instead of names of varieties (whether you happen to know them or not), a very brief, suggestive description; then you will have a list resembling that to the left.

With a list such as this you will be prepared to tackle successfully the most complicated array of seed catalogs and novelties. By its aid, you will be sure to provide a suitable variety for each particular result you want to accomplish in your garden. In addition to that, and above all, it will be a thing of equal importance, the wasteful duplication which is sure to be a result of the haphazard method of selection, will be entirely and happily eliminated.

By applying the "acid test" which this list gives you, you can pick out from the scores of things which the catalogs have to offer and suggest, the one or two varieties—and in most cases one will be enough—which will give you what you want for each particular planting. If you have not yet had a garden long enough to know what varieties give you the best satisfaction, you
can put after each of the subdivisions in the list above a number of varieties. Then go carefully over the descriptions and determine which seems to match most closely the descriptions you have already put down yourself. Applying the process of elimination, you can decide what is the most promising variety to try.

Take, for instance, bush beans. The first type you want is for the earliest planting that can be made. Among the possible varieties to consider, you might put down five as follows:

**Beans:**
- **Hardi-**
  - Early Red Valentine X
  - Early Mohawk X
  - Stringless Green-pod
  - Bountiful
  - Early Yellow Six Weeks X

After a careful study of the catalog, you would find reason to cross out or mark with an X the first, because it is not quite stringless; the second because it is old and of inferior quality; and the last because it is not as good, or as productive, as the third or fourth variety.

As another illustration, take cabbage.

**Cabbage:**
- Earlier Winnetka X
- Early Jersey Wakefield X
- Greenwich X
- Copenhagen Market X
- All-head Early X

The first and the second would be eliminated because they are not as large nor as uniform as the third; and the fourth and the fifth because they are not as early as the Copenhagen Market.

In making your selection, an important thing to remember is that a variety, and especially a comparatively new variety that is listed in the majority of catalogs—although it may not be "featured" in all of them—is pretty sure to be a "safe" bet.

You will notice that the descriptions of many of the new varieties are remarkably alike, no matter how different may be their names. In many cases the varieties are not really distinct. Unfortunately, there is not as yet a very uniform classification, and the result is a good deal of confusion for the beginner. However, if he sticks to his principle of "type" first, he can not go far wrong because a good old variety under a new name, or a good new variety under a different name, will still be satisfactory in the qualities described.

Another mistake to which the beginner is prone is the assumption that the new and highly praised varieties are as superior to the old standard sorts as the space devoted to featuring them would imply. The more brand new things you can try in your garden the better; but take the claims made for them—particularly about extreme earliness and gigantic yields—with a grain of salt.

It may be true that the yields mentioned in connection with them have actually been made, but it by no means follows that, under the condition you can supply, the varieties which you are already using will not do as well for you as the new things.

Where you are getting very satisfactory quality, be slow to change for claims of "three days to a week earlier," or "twenty to thirty per cent bigger yields." Stick to the standards that you find listed in most of the catalogs, and try the novelties, if you will, on a very small scale at first.

Another thing to keep in mind, after your selection of varieties has been made and you are ready to place your order, is that there is almost as much to choose between different "strains" as there is between different varieties. Careful selections and high breeding are of the utmost importance. As a general rule, the house which originated or "introduced" a particular variety will be more interested than anyone else in maintaining its quality and supplying the highest grade of seed there is to be obtained. This is worth remembering when you are looking for special quality.

Summing the whole thing up, it is evident that the modern seedsmen's catalogs, however complicated they may seem to the uninitiated, are greatly simplified by studying them according to some definite, concrete plan, rather than a haphazard one. The important thing for the beginner to bear in mind is that he must not allow himself to become so involved in their pages that he begins to doubt his own mind. The case of the experienced gardener is somewhat different; but then, this article is not addressed to him.

If you try to follow the suggestions here given in a thorough, painstaking way, you will find that it is no small task, and can hardly be completed in a single evening. But you are likely to find it interesting—in fact, really fascinating—work; and as a result of your study you will find yourself far more familiar with the things you have to grow, and much better able to plan your garden intelligently for a continuous supply of vegetables which will be at the height of their table quality when you want to use them. It is information that will stand you in good stead, not only for this year's garden, but through every succeeding year that plan has. As a result you will be able to get not only more service out of your catalogs, but very much more satisfaction out of your garden.

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**IN THE SHOPS OF SIAM**

This Siamese sextette does not follow the good old tradition of the twins, for they come singly or in bulk, according to taste. They are of black teakwood, hand-carved, and the smallest two-inch-high one sells for 50 cents.

This old silver tea-set is gold plated inside and wrought with scenes of mythology older than the gods of Greece, $200; cannot be duplicated. The cloth is silk-embroidered in an Eastern pattern, 4½' by 21'; $12.50.

Mr. Kipling, to the contrary, we are prepared to offer evidence that East and West do meet now and then. For who of the most Occidental patronage and training could resist the charms of objects such as these? The names of shops carrying East Indian curios may be had of the House & Gasson Information Service, 445 Fourth Avenue, New York, or the Shopping Service will be glad to purchase any article for you free of charge.
The high roof of the garage above allows for a half story attic where winter tops can be stored in summer and extra supplies kept. With vines trained up the walls or a border planting at the foundation it becomes a worth while addition to the garden.

Below is one type of garage in the house. It is cut into a bank and forms the foundation for the porch. Windows on the side provide sufficient light. Being a part of the house it requires no extra heating plant and the car is conveniently at hand.

The garage as one unit in a series of attached buildings can also serve the purpose of holding the heating plant, the chauffeur being stoker man in winter. The peculiar advantage in the garage above is the wide door. Many garages have doors too narrow.

While very like in structure to the garage in the house opposite, the type below shows the feasibility of making such a garage an unostentatious part of the house. In such an arrangement one should never suspect the garage of being a garage.

A substantial, pretentious garage deserves good architectural treatment besides conforming to the technical requisites of the chauffeur and machinist. In the one above, the combination of field stone and white wood trim gives the building a pleasant character. The large windows and glassed doors provide the necessary light for working about the car.

The garage as one unit in a series of attached buildings can also serve the purpose of holding the heating plant, the chauffeur being stoker man in winter. The peculiar advantage in the garage above is the wide door. Many garages have doors too narrow.

Garages in the house and out

In considering any modern property, the garage is an indispensable element. It can be in the house, attached to it or alone. But as an element in the property grouping it should bear the architectural character of the other buildings. If the suggestion for your garage is not found on these pages, write Information Service, House & Garden, 445 Fourth Avenue, New York City.
A hillside always provides the possibility of a garage. In the case above it has been fitted snugly into the scheme, its roof coming slightly above the terrace level. The flat part of the roof can be used as a porch.

A third example of the garage in the house—to the right—shows it an integral part of the foundation. A glassed-in porch is above. The kitchen being at this end of the house, the service quarters are kept separate.

Dutch Colonial architecture can readily be adapted to the garage. Here room is provided for three cars with chauffeur's quarters and store rooms above. It is the sort of building that would enhance any property.

Another example of the garage treated in the same manner as the house. It is unobtrusive and well lighted. The door is generously wide. The bird house decorations under the eaves are a whimsical touch that is pleasing.

Here again (to the left) we have the one unit system. The garage is attached to the house by a laundry extension, tying the buildings into an harmonious and uniform whole.

Most garages are too dark inside. The chauffeur at work on the car seems to have been forgotten. Here windows and glassed doors provide ample light for working.
The view above and that to the left are in the home of N. V. Dorph, a Danish artist, and were decorated by him. The fireplace is especially interesting because of its lines, both the mantel shelf and hearth being curved. The beauty of the stone is thrown into relief by the cream-tinted, paneled walls. A stenciled frieze repeats the color found in the rug and hangings. The design of the chairs is also interesting.

So many atrocities were committed in the name of the over-door grill that when one finds one of real beauty, it is worthy of comment. N. Dorph has created a pleasing rhythm in the curves of this over-door decoration. The lighting fixture is very like the type now generally seen in German houses. A high table decoration is seen here: American decorators are coming to this.

The room to the right might be in a New York home decorated only yesterday. For a matter of fact, it is at Liselund in Denmark and was decorated a hundred years ago. Hepplewhite chairs in white were used. The room was paneled with repeat floral decorations. A wrought-iron or wooden wainscot runs around the base of the room. Here also we see the niche, the decorated door trim and the crystal chandelier that are coming back into favor.

A PAGE OF DANISH INTERIORS
A PLACE FOR EVERYTHING
The Multitude of Necessary Closets That Should Be Planned For The New House

EMILY H. BUTTERFIELD

It is an axiom with good housewives that everything be kept in its place, and of necessity this implies that a place for everything must be provided.

The more attention that is paid, while the house is under construction, to the provisions of these indispensable places, whether they be shelves, cupboards or closets, the easier it will be to follow the old adage when the house is occupied.

In view of the modern need of conserving every inch of space, and the necessity of economizing every possible bit of material, the old method of providing innumerable shelves and cupboards regardless of their particular use has disappeared. The present-day designer plans definite uses for each foot of shelf or cupboard space. Moreover, with the increasing belief in placing everything possible behind closed doors and out of dust's way, and of decreasing the number of dust-collecting materials and objects, the modern house designer has evolved new methods of caring for various utensils and furnishings by means of built-in shelves, closets and cupboards.

SERVICE CONVENIENCES

The clothes chutes, dust chutes and flour bins, as well as broom closets and cupboards for table boards, the milk cabinets and the linen closets, have for a considerable time been considered more or less necessary requisites in any up-to-date house, but other arrangements are now reckoned quite as important. Here are some of them:

- The electric iron is indeed a blessing, and for it the perfect house will have a small iron cupboard well located with reference to the most advantageous position for ironing. The cupboard will be lined with asbestos and then with metal. The push plate will be fitted with a one-candle-power red light to show when the electric current is turned on.
- The cold box for some time much in use in certain sections is now often considered a necessity. When combined with the milk cabinet it makes a good arrangement. The cold box opens on the kitchen or pantry wall of the house. On the outside it is equipped with shutters or a fine screen. It may be made as large as desired, but 2½' high, 1½' wide and 12' deep, with two shelves, is a practical arrangement that works well.

All the books of a household are not used in the living-room or library. Many a housewife has a good library cupboard stored away in drawers or shelves. A small bookcase built in the kitchen or pantry wall where these handbooks of domestic science may be well and conveniently kept is desirable. Occasionally some woman who does most of her own housework has had a small desk-like arrangement included in her kitchen equipment where laundry lists and grocery bills, as well as memorandum pads and pencils, or possibly ready change, can be kept, if desirable, under lock and key.

- A clock and a calendar are two other important details of a kitchen. A very shallow cupboard with a clear glass door is one solution of the place for these two. The calendar and clock can be placed behind the door where they are in clear, plain sight of the housewife and where they will at the same time be free from steam or dust.
- Warming cupboards, while not common, are not infrequently found in houses, particularly the larger sized homes. These are now manufactured complete and doubtless the practical exploiting of their merits will extend their use.

Metal milk cabinets locking mechanically by various methods, and metal medicine cabinets for bathrooms, are both important items in household equipment. The mysterious charm of secret panels and doors and hidden cupboards in the houses of other days is lost in our modern dwellings, for fireproof and burglarproof safes, some only large enough to contain a very small amount of jewelry or cash, are on the market. These can be built flush into the wall and are not noticeable.

CLOSETS FOR VARIED USES

On the second and third floors of a medium-sized house, a small cupboard or closet for broom, dust-pan, carpet sweepers or vacuum cleaner is a simple time and step economizer rarely enjoyed. It might also have a shelf for an extra tack-hammer, screw-driver, a box of tacks, glue bottle and a nail or two for house repairs. Many housekeepers have to use these implements not infrequently.

The telephone has saved time and many journeys, but it has caused the woman in the house many useless steps. It is frequently possible in the compactly planned house of the present day to build a closet for the telephone, with a door to the kitchen, as well as to the living-room, library or dining-room, as the case may be. This not only saves time for the workers in the kitchen, but enables the 'phone to be used with a greater degree of privacy if the occasion requires. There may be a china closet or cupboard both above and below, for the space actually required for the 'phone is slight. Again, it may be equipped with a writing shelf to pull out below the 'phone shelf proper, or it may be arranged so that a chair or stool can fit in the space below the 'phone, out of the way.

The coat closet downstairs should be equipped with a pole for hangers and hooks. Suitable places for hats, broad shelves or some other form of display are desirable. Drawers near the floor for rubbers are a convenience, and a similar place for gloves is a neat way to take care of the children's mittens or gloves.

A small sink placed in the floor and properly connected with the drains is a great solution of the wet umbrella problem.

The individual tastes of the occupants will govern requirements for shelves. Music lovers can have spacious shelves and cabinets built to accommodate their books and sheet music. And the person who enjoys many magazines can have suitable cases built for them.

Filling the wood box is less of a problem today than it once was, for, in spite of ambition and strong desire, the wood fire is frequently a luxury. Where
UP-TO-DATE EQUIPMENT FOR GARAGE AND MOTOR

The modern motor owner is just being spoiled into the belief that his car and garage must rival a lady's boudoir in every fastidious detail of decoration. Personally we think that spoiling is a good thing. The House & Garden Shopping Service, 445 Fourth Avenue, New York, will gladly purchase any of the articles shown on this page, while the names of the shops may be obtained by applying to the House & Garden Information Service.

With this adjustable tonneau shield you can have all the comforts of home and a limousine at a minute's notice. When not in use the shield folds neatly out of the way against the back of the front seat. The water-proof apron is an added luxury and serves to keep the robes dry. Shield and apron complete, $75.

In addition to their beauty of design and workmanship, these staunch hand-forged door-stops of wrought iron have the advantage of being the best sort of arresters for the garage doors. About 14" high, $10 the set of two.

This is not a manicuring outfit or an antiquated set of dental instruments, but a real bona fide tool-kit. Though its dimensions are Ford-size—it measures only 4" by 5" when closed—it will be found a useful adjunct to the largest car on the market. It contains 9 pieces. $4.50.

By means of this convenient spark-plug tester the most amateur mechanic can offer a diagnosis of many motor ills. It is made of composition rubber, and is 5" long. All for $1, with directions thrown in.

Here is no common bedside-burglar flashlight, but a special, two-lens, scientifically constructed torch, which throws a beam of light 200 feet. An invaluable aid to the motorist at home or abroad. Its price is $2.50.

Digging de luxe is made possible by this nickel-plated telescoping shovel, a necessary and inconspicuous addition to any motor outfit. Just try to break it. $2.

The motorist will like this Good Little Devil, even though it is called a gasoline hydrometer. It consists of two glass tubes, and a case painted red. Case 6½" long, $1.25.

The House & Garden Shopping Service, 445 Fourth Avenue, New York, will gladly purchase any of the articles shown on this page, while the names of the shops may be obtained by applying to the House & Garden Information Service.
The Gentle Art of Hedging

The Best Shrubs and Trees From Which to Build a Growing Wall

Grace Tabor

To "hedge" always has meant to protect one's self, though not always to protect one's self in just the same manner. Be that as it may, anything to which the term "hedge" may be applied is primarily a protection. And so the hedges with which we are here concerned, protect—maybe from intrusion, actual or optical; maybe from the elements; or maybe just from the obviousness of the street and its noisy, dusty activity. Indeed there are many things from which a hedge guards the home, as well as many purposes within home grounds which it may serve.

Commonly we speak of utilitarian hedges and ornamental hedges; but as a matter of fact a utilitarian hedge may be ornamental as well—and as trimly ornamental as the most precise fancy dictates, or as riotously ornamental as the most impatient of restraint can desire. There is a hedge to fit not only any place and any taste, but also any pocket-book you may name.

Beauty or Utility

Certain kinds of hedges, I will admit, are more definitely utilitarian than they are ornamental; as, for example, the barriers of hawthorn that girdle English meadows, or the Osage orange and buckthorn which serve similarly in certain parts of our own country. Hedges of this character owe their existence only to their usefulness in restricting the herds that graze behind them; yet there are few things in the world lovelier than the hedgerows of England. It is evident, therefore, even though we are not able to say the same of our own, that there is no reason for even the most purely utilitarian hedge not being beautiful as well as useful from the protection standpoint.

Let us therefore give over thinking of hedges under this double classification, and distinguish between them only as they are or are not definitely planned for utility. In other words, let us establish that all hedges shall be beautiful; and that some shall be useful as well.

It is true that there is nothing that serves us here in America as the hawthorn serves in England; and, unhappily, the English plant is subject to a fungous disease when planted here, which, of course, makes it undesirable to use in this country. But we have native thorns of much beauty, perfectly adapted to hedges—if we only thought so—as well as other native plants that rival in sweetness and loveliness the famous haw that is such a feature in England.

One of the most showy of all hawthorns is our own Crataegus crus-galli, the cockspur thorn of our folk tongue, which is so catholic in its tastes as to grow from as far north as Montreal to as far south as North Carolina, and all the way west to the lower end of Michigan. Then there is the red haw, Crataegus mollis, which is native to that section lying generally between the northern part of Ohio and the eastern parts of Dakota, Nevada and Kansas, a beautiful

For the irregular, informal hedge, where precision of line would be out of place, perhaps nothing can surpass the graceful white sprays of Spiraea Van Houttei.

For a sunny winter day when the winds are abroad—can you imagine a pleasanter place outdoors than the shelter of this thick arborette hedge?

Among the flowering shrubs which are well adapted to ornamental hedging, the althea or Rose of Sharon ranks high. Thick planting should be the rule in setting it.

The dense and brilliantly green foliage of the buckthorn gives it a peculiar attractiveness. It is one of the best shrubs for a protecting hedge.
The honey locust, however, is strong and sound and durable also, although it is only a sort of cousin. The relationship does not appear at all in the botanical name, for honey locust is Gleditschia triacanthos instead of Robinia. Something-or-other; but in common speech it does reveal itself—twice, as a matter of fact. For in addition to being called sweet or honey locust, this Gleditschia is also called three-thorned acacia; and locusts, you see, are pseudacacias.

As a matter of fact, neither yellow nor honey locust is an acacia; but this name of another species may have attached itself to the botanical designation of the yellow locust through an association of odors. Its delightful fragrance does suggest the wonderful scent of the true acacia; and from being thus brought into the family, as it were, the name came to be applied to the honey locust also, simply because that was a relative, however distant.

The honey locust has neither very fragrant nor very showy flowers; but the pulp of its great fruit pods is as sweet as honey while these are fresh; hence the name is applicable. Planted thickly and forced into a dense growth by severe pruning, Gleditschia triacanthos will form as impenetrable a barrier as Osage orange, and an ornamental one as well. It is too much to claim for it the beauty of flower or fruit of the hawthorn, of course; but the delicacy and loveliness of the foliage compensate to a considerable degree for what it lacks in floral display;

(Continued on page 56)
SOLVING THE CURTAIN PROBLEM

In answering two questions arise: What kind of curtains shall be used? What shall they be made of? Here we are concerned with the kind of curtains. Eight types are shown. Each has a dozen or more variations that the housewife may prefer. If she is in doubt about curtaining or any interior decorating question, for that matter, she writes, of course, to the Information Service of HOUSE & GARDEN, 445 Fourth Avenue, New York City.

An air of formality is given a window by a plain fitted valance so arranged with the curtains as to cover the window trim. It may repeat the design of the curtain fabric. It should be fitted on a board or a strip of plaster board to keep it in shape.

To the right is a box pleated valance with undercurtains looped back, the latter arranged on cords that permit them to be dropped. These undercurtains can be made of scrim or net, preferably on ecru color. The color of the overcurtains will depend on the scheme of the room.

For a row of case-ments or a bow window, an over-all valance with curtains at either end is best. The glass curtains can be made to draw. If one desires complete privacy undercurtains can be made for each window.. Scrim, net or gauze would be the fabric.

Below is the troublesome type of window with the circular head. Fit a curtain to it, either draping the fabric or fitting it loosely. Piping may define the bottom. This acts as a valance for the rest of the curtaining.

The French window or door with a transom is always a problem. Make shirred curtains of net or scrim for the transom and attach them on rods or tapes. The door itself can have a glass curtain of the same material—attached at top and with a ruffle effect below. Overcurtains should hang loose.

For a bedroom window the valance on an arched rod is always interesting. It should be made with a deep hem and the curtains hung from behind. Marquisette, voile, casement cloth or even cheesecloth can be used effectively.

The simplest form of window drapes consists of undercurtains arranged on rods or taut wires for drawing, and overcurtains hung on rods and rings. Or the latter may be slipped over the pole and made with a French heading. An accepted scheme is curtains on rods to the sill, curtains shirred and hung loose from each section of the window or shirred and attached on loose top curtain rods.
At the farther end of the garden is a vine-clad tea house flanked with pergolas to define the garden limits. Before it is the lily pond. In the center stands a bronze sun-god. Box bushes in urns are placed at regular intervals.

The garden is laid out around a tapis vert used for croquet. Wide paths border the edges, and beyond them are the flower beds, planted for a succession of blooms from the earliest bulbs to the latest autumn cosmos.
The ends of the cross axis of the garden terminate in arbors. Before one stands a sundial supported by figures representing Youth, Middle Life and Old Age. From these arbors start the latticed pergolas.

An Italian feeling is given the garden by its two levels, balustrades and formal planting. This stretch between the road and the balustrade forms a vestibule through which one passes to the lower level.

St. Francis stands at one path terminus, preaching to the birds. At his feet the pedestal has been cut into a bird bath, and the "little brothers" flutter happily about him, as they did once in Assisi.
THE NINE LIVES OF THE LAMBREQUIN

A Footnote to Decorative Evolution

NELTJE DANA

The lambrequin has had a checkered career. It rose to a zenith of glory in the gaudy days of mid-Victorian mussiness, was cast into the nadir of desecration in the era that reacted to Victorianism, and now, in these piping times of houses that attain good taste, it comes creeping back again, like the cat with nine lives.

There must be some reason, or the lambrequin would have stayed dead. The reason is found in its original purpose: in the earliest stages of its evolution it was a smoke valance, a practical and utilitarian adjunct to the fireplace. There's the story!

Its Vicarious Evolution

Our British forebears objected to smoke from a fireplace as much as do we. When Wallsend coal came into use in the 17th Century, the volumes of black smoke were even more objectionable than had been the acrid fumes of smouldering wood. To catch the whips of smoke that curled out of the chimney throat unbeknown to those who sat before the fire, there was suspended from the mantel or strung across the front of the fireplace opening a valance that turned smoke back into the chimney. These valances were often fitted and heavily embroidered. On the back they were lined with some non-inflammable material against wayward sparks. Often they were pleated, like a window valance, but usually they hung from the shelf stiff and straight.

The development from the purely utilitarian smoke valance to the purely decorative lambrequin came in the course of the improvement in heating methods. When the fireplace was discarded by folks about the Centennial time and the stove usurped its place, the smoke valance or lambrequin, as it was known, was permitted to remain—as useless an addition to the mantel as the appendix is to the body. Then came the revolt against decoration without meaning, and the lambrequin, one of the worst offenders of that day, was given its interior decorative coup de grace.

That it has come back is due to the fact that the fireplace has come back. Stoves were discarded when hot air, hot water and steam heating systems were invented, but the plumbing geniuses of the world have never been able to create any substitute for the cheery, comfortable open fire. With the revived need for the smoke valance on the mantel. Even the best built chimneys will refuse to work perfectly under some conditions, and against that chance the valance is used. It is quite a necessity where the poor construction of the chimney prevents perfect drawing at all times.

Utility and Decoration

Decoratively speaking, the valance has its unquestioned values. It will add the requisite touch of color; its shape may break up the severe rectangular lines of the fireplace; it can be made to cover a mantel that is an eyesore.

For the sake of fire prevention it should be backed with a sheet of asbestos or sprayed with one of the fireproofing washes that are on the market. Otherwise it may be made as decorative as one wishes so long as it harmonizes with the color scheme and furnishing plan of the room. Thus, if the curtains have simple valances, the smoke valance can be made in the same fashion of the same material; if they have elaborate boxed valances piped with galloon, the lambrequin will follow in that style.

But the important fact for the home decorator to remember is that the lambrequin—despised and rejected fifteen years ago—has come back, and that, because today it has a reason for being. It is today both useful and decorative.

Its size and shape will depend on the mantel. As the fireplace is the focal point of the room, it is necessary to have the decorations on it in perfect scale and color. By observing these principles the lambrequin will justify its decorative existence.
A LITTLE PORTFOLIO OF GOOD INTERIORS

The other day a reader said she did not like to look at rooms she could never afford to own. We asked her if she objected to looking at fashions she could never afford to wear. She blushed. What she looked in the shop window for was ideas. Well, this Portfolio is a shop window of interior decoration ideas. Look at the room, note the scheme—and apply it to your own home. There is always a less expensive alternative.

Elsie de Wolfe, Decorator

A charming balance is created between the upper half of this room and the lower, between the richness of the mirrors and the richness of the furniture. The walls are deep iron and the carpet black. Inside the cupboard the walls are red lacquer. Interest is also given by the combination of upholstery fabrics—black and white cut velvet on the sofa and chair to right, deep rose brocade on the other large chair and velour on the third.

Bates & Howe, Architects

A fineness and delicacy are evident in every detail of this dining-room. It has the restfulness of large panels. Its furniture, only such as is absolutely needed, has been chosen for its lightness of line which will harmonize with the delicacy of the background walls. Even the silvered fixtures have an airy grace.
The absorbing interest in the dining-room above is the paper. An old-fashioned design in subdued tones, it creates a blithesomeness of background for the chaste severity of the Colonial furniture. It is the sort of room best adapted to the country house—an interesting room yet a restful room.

In the foreground of the library group below is one of the newer reading tables with an adjustable support, a boon to the reader who goes in for heavy books. The floor lamp is in comfortable proximity. A restfulness of rectangular uniformity is given the room by the oblong shapes of the three tables.

Mark the rhythm of line in this hallway—the curve of the stair rail and the stair well, the curve of the door head, the newel post and the furniture arms. It is a combination of well studied architectural background and well selected furniture. The prevailing colors are cream and blue. The panels have been defined by darker moulding.
From the score-odd points of interest in the living-room above three stand out prominently. The Oriental rug in the foreground is placed where its values are best seen. The writing desk at the end of the davenport is where it catches the light rather than behind, as is usual. The valances conform with the window lines.

The French undercurtains in the room below have a delicacy and lightness that is in pleasing contrast to the formal straight lines of the over-drapes. Full value is given the decorated cabinet by placing it against a plain background. The chair in the foreground especially commends itself because of its great comfort.

In every respect a truly elegant room. Against the background of scenic paper has been placed Queen Anne furniture of delicate design. The floor is kept unobstructive with a plain grey rug bordered a darker tone. Gauze has been used against the glass and the light undercurtains are looped up at an unusual point, giving the room an appearance of added height that is often desirable.
Where space is available one can simulate the luxuriant surroundings of a tropical pool. Here Victoria Regias spread their huge leaves on the surface of the water, Cyperus rises above, palms fringe the banks, and Nepenthes and various vines complete the resemblance to their native site.

AMERICA FIRST IN CONSERVATORIES

The Possibilities of Plant Growing Under Glass the Year Around—Tropical Gardens for Northern Winters

ROYAL DIXON

At this time, when we are being told by foreign critics of the many ways in which our country lags behind European nations in the higher arts, it is comforting to know that in the floral field, at least, America stands among the leaders of the world. This position has been attained, however, very recently. Only a few years ago the greenhouses of Europe were the despair of American lovers of plants and flowers. But today we are not only ranked high in the list with these same countries, but we are second only to England in the variety and practicability of floral cultivation. We are becoming a nation of gardeners.

The greenhouse and conservatory idea in America is far from being a passing fad; it has come to stay. It fills a very definite need in American life, especially in the great centers of industry. It provides an ideal refuge for the tired business man or woman who loves nature, and who finds in the contemplation of the wonders and beauties of plant life recreation from city cares. If you wish to find concrete proof of the place of greenhouses in American life, visit some public one any day and see the interested throngs which are there.

Recently I had the pleasure of spending a day in the greenhouses of Mr. Samuel Untermyer at Greystone on the Hudson. This magnificent establishment is among the largest and most perfect of any in America, and compares favorably with anything Europe can boast. There are twenty-two buildings in all, covering an area of many acres. In number and variety of plants each represents almost a tropical country.

I had intended asking Mrs. Untermyer many questions about the plans of the buildings, methods of securing specimens and competent gardeners, and other practical matters of vast importance in an establishment of such proportions, but the countless strange and unusual plants on every side drew my thoughts far away from such worldly considerations. Once within those tropical walls and I forgot everything else in the world but the beauty around me.

A TROPICAL PARADISE

The air was moist and laden with the mingled perfume of many flowers, so that one really felt suddenly transferred to the tropics. Everywhere were flowers in dazzling luxuriance, in masses, aisles, vistas, in miniature hedges, hanging from the walls amidst the foliage of climbing vines. Long strands of the Spanish red passion flowers swung gracefully from the glass walls overhead; clusters of weird looking orchids, some of which so closely resemble spiders, beetles, butterflies, and even lizards, stared at us from various positions, as though through all ages they had grown there, and we were intruders upon their sanctuary. These, I was told, were Mr. Untermyer's favorite plants. He always keeps a rare one in a vase on his table.

The pool for aquatic specimens reminded me of a pond I had seen in South America. Huge Victoria Regias spread their boat-like leaves, several feet in diameter, over the surface of the still water, where myriads of tiny fishes played amongst the smaller water plants; above the surface stood immense pink and white blossoms from the Regias, while scattered here and there amongst the other lilies were clusters of blue and yellow. Palms and Cyperus bordered the edge, and tiny islands dotted the center, forming a little paradise indeed. Nature had not only been copied, but actually improved upon.
No greenhouse is complete without one of the magnificent Nephrolepis ferns in a hanging basket.

Mrs. Untermeier then showed me her flowers for house and table decorations. There were pots of gloxinias of every hue; delphiniums, dwarf roses, rare geraniums, lilies of all kinds, and especially lilies-of-the-valley, which seem to be Mrs. Untermeier's choice. Old-fashioned fuchsias, petunias, forget-me-nots, verbenas, and begonias, struggled for space and spread in riotous profusion in all directions.

But the most remarkable in this collection were the hanging baskets. Suspended from the ceiling on tiny wires were baskets of Episcia and Cissus discolor, ablaze with red and white cypress flowers. A number of young screw pines were grouped together in a corner, and over them grew a yellow jessamine whose perfumed blossoms reminded me of the early spring days in Texas. The whole effect was indescribably pleasing.

Whether you call them Pandanus Sanderi or just plain screw pines, these handsome foliage plants are desirable throughout the winter.

The leaves of Episcia are downy and of a rich, strong copper color.

The red Passion flower, seen at the left above the fern, hails from Mexico.

Tradescantia edges this exotic group, and Ixoras fill the foreground.

When we had looked our fill at the flowers we turned to a land of fruits and melons. Cultivation has taught man that there is no limit or fixed boundary to his wonderful inventive powers. And we found ourselves facing walls covered with living tapestried peach leaves, whose delicate grey vine-like twigs laden with rich fruit, grew in various shapes and globes. There were also espalier-trained plums, pears, apples and melons, hanging from the stems, which cling to the walls in various artistic forms. The oblique cordon represented the method of training that the majority received, but there were also many fanciful designs for the purpose of landscape effect. A forced training does not injure the vitality; in fact, the protected position against the wall seems to add to the vigor and strength of the vine-tree.

(Continued on page 60)
W H O E V E R it was that christened this dainty gem of architecture "the little house under the trees," gave it a name probably quite unconsciously by which it will always be appropriately known.

The tall, straggling eucalyptus trees, branchless to a great height, have a charm of their own, as they tower above the house, sheltering it from the rays of a semi-tropical sun, admitting light and sunshine and making a delightfully picturesque background.

It is well known that the beauty of a house does not lie altogether in the excellence of its architecture. Ugly or uninteresting surroundings can create a discord in the harmony of a perfect design; and somehow, unsympathetic people seem to cause the same undesirable effect and spread a chill over the house. But here the house and garden and surroundings harmonize together.

The charm in the exterior lies in its simplicity and its exquisite refinement of detail. The lines are good; the proportions and balance could not be improved upon.

The construction of the house is frame with plastered exterior; all the wood and metal work, with the exception of the entrance door, which is mahogany, and the shutters which are painted green, is white; and the shingled roof is stained a dark gray. So the color scheme can be easily judged from the illustrations; but in judging it, one must also picture the surroundings that generous Nature has provided.

In examining the plan, it must be borne in mind that
this house is located in Southern California where the climate is extremely mild and consequently an entrance hall is not necessary for climatic conditions.

The front door opens directly into the living-room and yet there is a semblance of entrance hall, for a flat arch, supported by square Doric columns, apparently divides the living-room from the entrance. So the hall is added to the living-room which, consequently, is just that much larger.

At the right-hand side, as we enter, a pair of French doors open into the dining-room. Directly facing the entrance is the staircase, also a passage to the kitchen which can be reached through the coat closet. This arrangement is well thought out, it is convenient and practical and gives access to the living-room and staircase without passing through the dining-room.

The woodwork of the living-room and dining-room is finished in ivory enamel. The walls are papered. The living-room paper is a delicate shade of tan and the dining-room light gray. In the living-room the prevailing tones are in the soft brown shades, pleasing and in excellent taste.

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**SHADES THAT GIVE THE ROOM COLOR AND LIGHT**

Shades and shields are vitally important accessories in the decoration of a room. They express the character of the room and the personality of the person who creates it. At night their light colorably affects the color scheme. For both color and line, then, lampshades should be carefully chosen.

For purchase or the names of shops, address Usa & Gason, 440 Fourth Avenue, New York City.

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**For the dressing table or a side light comes a shield of sheepskin parchment with a coat of arms painted in center in dull browns, reds, greens and blues. Finished with gold braid. 7" long by 4 1/2" wide. $4 each.**

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**For a piano or table lamp comes a shade 15" high of perforated tin. Figures in design are painted yellow on underside but when lamp is lighted the designs show up black and the perforations in yellow. Unlighted, the lamp is dull brown. $18**

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**Although it comes cream and yellow, the base of this 20" lamp can be painted to match any color scheme. Shade of pink silk in alternating panels outlined with French ribbon flowers and finished in gold braid with dull gold balls on bottom. $28 a pair.**

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**Floor lamp shade natural colored paper parchment, six sided, decorated with soft green, blue and rose. 16" wide. $21. Square shade for table lamp has black decorations on edges and conventionalized scene in oval panels. 9" square. $12. The lantern is of yellow parchment paper decorated in dark blue, yellow and black. 18" high. $25. Octagonal shade of parchment paper, black border and silhouettes. 11" wide. $15.**

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**Candle shield of sheepskin parchment of an ecru tone with floral decorations in dull blue, red, green and brown. 7" long by 4 1/2" wide. Bound with dull gold braid. $3.50 each.**

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**A parchment paper shield for a side light—figures in green, blue, red, yellow and purple outlined by perforations on black ground. $4 each.**

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**To the left—A small night lamp. Stand painted cream with spiral of French flowers. Shade of pink silk shirred, with flowers top and bottom. Lined with white silk. A little door opens on one side. 12" high. $24 complete.**

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**Shade on stand is of mahogany chiffon with a band of cream. Bound at edge with cream and mahogany moss trimming, 20" diam. Lined with white silk, $24. The other shade is parchment in natural color and green, grey, black and red decoration, 18" across. $18.**
The rooms are so disposed on the first floor as to afford pleasant views without and pleasing vistas and satisfactory intercommunication within.

On the second floor hall space has been limited to the necessary minimum, making the rooms larger and providing greater accommodations for closets.

Unpretentious in conception and simple in construction, the Valley Forge hood is reminiscent of the sturdy simplicity of life and living in days gone by. Color is given the entrance by the red bricks laid in white bond that form the terrace and approaching steps.

The architecture is a successful fusion of several distinct Colonial types with the Peninsular farmhouse style predominating. White-washed local stone constitutes the lower portion of the exterior walls. Above, the walls are sheathed with shingles painted white. Color relief is given by the dark green blinds and the weathered shingled roof.

The service wing shown to the left, is strongly reminiscent of old Dutch Colonial houses. To its prosaic utilities has been added a more esthetic use by the provision of a porch which communicates with the dining-room and makes it ideal for outdoor meals.
HEATING THE PRIVATE GARAGE
The Simple Methods For Maintaining the Necessary 60° in Winter Months

MORRIS A. HALL

HEATING the private garage is generally an afterthought, for the double reason that heat is required such a small portion of the year—not over three months in the latitude of New York City—and the first cost of the garage is so often kept down to the absolute minimum.

When the garage is combined with other buildings, as with the swimming pool, greenhouse, stable, chauffeur's living quarters, billiard room, estate office, etc., there is certain to be adequate provision for heating the space for motor cars and their care. Although even in this case a word of warning should be sounded to those who, having built the garage first, wish to add the other structures; if the heating plant is not set low enough in the first place, it may not be possible to tack on the others later. This may necessitate special additional heating plants at considerable expense for installation.

This thought was brought forward on hearing lately of a family having a fine little two-car garage, approximately 18' by 24' in size, with a good heating plant of the hot water type and wall pipes for radiation. They desired to add a lean-to greenhouse about 10' by 22' on the side of the garage, using the heating plant for both. On laying out the plans, it was found that this was impossible because the garage heater was set so high that there would not be room to have the two floors on a level and get a return back to the boiler from the greenhouse pipes.

A garage from which had been built up on a slope, at considerable expense and trouble, the owner did not want to cut this down so as to be able to lower his present boiler to take care of the greenhouse situation. Neither did he want to install a second heating plant to make double care throughout the cold months. So the idea of a lean-to greenhouse had to be abandoned in a location where it would have made an ideal combination, simply because the original heating plant was set up some 5' or 6' too high. And at that, it would have been both easier and cheaper to set it down that much lower, for at that level there would have been no additional problem, while a natural outlet for ashes and inlet for coal would have been provided for both.

TWO METHODS OF HEATING

Taking garages in general there are two ways of heating them: by means of their own plant, and from an adjoining building. Considering the former, the usual method is by a form of garage heater so-called, this being a type of gas or gasoline stove which has been designed to have a covered flame and thus be safe. It is now pretty generally known that any form of open flame heater is decidedly dangerous in or near a garage where there are likely to be gasoline or combustible oil fumes.

There are a number of such heaters on the market, as well as those forms for keeping the water system of the car heated, and nothing else. These both have the advantage of low first and operating cost, and possibly of simplicity as well.

Next there is the heating plant actually constructed for heating the garage and built at the same time. This is generally a separate room, at the side, rear, one end, or built out from the main building, or in case of a garage on a hillside, the lower level makes an excellent location for the source of heat. Wherever the heater is located it is wise to have a separate entrance for it, a solid wall between it and the garage proper, and preferably no passage cut through this wall. This arrangement has the double advantage of keeping gasoline and oil fumes from the heater, and coal dirt away from the car.

Hot air has the advantage of very low cost, since no radiators and practically no piping are needed. Steam and hot air have each need for piping and radiators, so that they cost much more but offer the additional advantage of hot water at all times, provided by means of an auxiliary hot water tank constructed for the purpose.

In the matter of radiators, too little thought is given to the beauty of the building and too much to its utility, so the cheapest radiators are obtained, or else wall radiators are built up of piping. While these are perfectly suitable and do the work, there is no reason why the garage should be made so hideous, when it is used such a large part of the time. When there is a greenhouse connection, there is no reason why the pipe system in the garage cannot be carried out on the same lines as the greenhouse, that is, pipes grouped under benches or seats around the building, and then covered with ornamental grilles.

HEATING FROM THE HOUSE

All this presupposes the garage has its own heating plant. Yet it is often the case that the structure is close enough to the house to permit of running out pipes from the house system to warm the garage as well. When this is done there is little to say, except that the arrangements for turning on and off the garage heat, and for draining the garage pipes, should be such that this can be done easily and quickly. There are often times when little heat is desired in the house, and none is needed in the garage. Again, if going away for several days in cold weather, it might be desirable to keep the house warm, while there would be no heat in the garage.

For these and other reasons it is desirable to have a simple and quickly operated method of turning the heat in the garage on and off, and of draining that part of the system when necessary. The same is true, of course, when the garage is combined with other buildings or otherwise serves a dual purpose, particularly if the other building needs heat also. In the case in which the garage and greenhouse are combined, the latter must have practically the whole year round, so the former is provided for by simple valves to turn it on and off. Similarly, when the garage includes the chauffeur's living quarters, he is sure to want heat about five months in the year, and will see to it that the garage is kept good and warm during the same period.

HEAT AND VENTILATION

With the garage as an adjunct to a swimming pool, sun-room, billiard room, dancing hall or other similar room used intermittently for social purposes, heat is a necessity for a considerable part of the year. Moreover, such a combination makes for a pretentious building, usually necessitating the services of an architect.

To a certain extent heating and ventilation are closely interwoven, and should be considered together. Some forms of heating, such as hot air, need an outlet which in itself provides a form of ventilation. If the ventilation is considered at the time the heating arrangement is planned, the garage will be much better off in both respects, and will be a more usable place.
The William and Mary mirror makes an excellent overmantel background. On the shelf before it is an Italian polychrome head on a piece of old gold brocade which relieves the severely rectangular lines of the grouping. An alternative might be a reproduction of this mirror either in natural wood or painted black with mouldings touched with gold.

The sunburst clock above this early Georgian mantel enriches the entire room. A less elaborate treatment would be a hanging Dutch clock.

The fireplace and its superstructure are permanent. They are going to stay as long as architecture itself, as long as fire burns, or as long as the human family finds comfort and pleasure in a cheery blaze.

Now the surrounds of the fireplace and its mantel and overmantel superstructure form a distinctly architectural feature. And yet, the mantel occupies a curious position midway between architecture and furniture. For its full architectural value to be seen, it requires the accompaniment of proper movable garniture that will harmonize.

Success or failure in treating the mantel itself and the wall space above it will attend our efforts just in so far as we pay heed to certain immutable principles which, once recognized, are not difficult to follow.

There is no moral nor artistic obligation to observe any established or arbitrary convention, such as the erstwhile usage that

Instead of the English 17th Century brass clock might be used a bracket clock or one of mahogany. The painted Chinese sign finds an alternative in painted Japanese paper.

In place of the carved red cinnabar cabinet might be used a Japanese or Chinese lacquer cabinet, or, if the shelf is wide, an English dole cabinet or Dutch silver cupboard.
prescribed two imposing vases or urns at the ends of the mantel, in the middle a clock or a bit of sculpture in bronze or marble, and a mirror background, or else at each end mantel lamps with pendent prisms and, in the middle, either a double lamp of the same description, a clock or a sufficiently expensive and substantial piece of bric-a-brac, the background being either a mirror or a gilt-framed portrait.

So narrow, for a time, was the conception of mantel treatment that a mantel garnished otherwise in any well regulated household would have been deemed scarcely decorous or even decent. Yet all this has changed.

**The Classical Mantels**

Our present catholic and eclectic tendencies in decoration have burst the fetters of all such rigid views and left us free to do as we list, so long as we do it in a spirit of reasonable compliance with constructive principles, all of which will be set forth in order directly we have noted the prevailing types of mantels that must serve as the backgrounds for our decorative creations. Incidentally, we will point to some fresh and not generally used methods of mantel treatment by way of relief from various estimable but somewhat hackneyed modes familiar to all.

In enumerating the types of mantels we are most likely to encounter, it will be just as well to hold to historical sequence, first noting the Tudor or Stuart fireplace with elaborately paneled or pillared and carved overmantel ordinarily found in oak paneled rooms. Akin to it in spirit, but sharply contrasting in form and quantity of enrichment, is the chaste and unpretentious stone mantel in a simplified Tudor or Stuart room with rough plaster walls and leaded casement windows. In such a room the overmantel is often merely a projecting jamb without specific emphasis of architectural detail.

Next in succession we have the ornately moulded and paneled, and oftimes carved, overmantel of William and Mary and Queen Anne times, not seldom an epitome of contemporary architecture in itself. The early Georgian mantel was nearly related to it in type until Sir William Chambers and his followers abandoned the towering overmantel and adopted a massive but lower structure with a free overmantel space.

The delicacy of the Adam mantel and the luxuriant opulence of the Classic Revival type, both of them devoid of structural overmantel features, need no comment, neither does the hybrid 19th Century type with which we are all too painfully acquainted.

Louis Quinze and Louis Seize styles presuppose more or less overmantel paneling, while some of the French Renaissance overmantels are so richly wrought that any further attempt at movable decoration would be an imprudence. On the other hand, some of the simpler French Renaissance mantels, with a splayed, hood-like jamb, leave room for restrained but emphatic treatment, as do also many of the Italian Renaissance mantels of allied design.

Last in our list are the Italian fireplaces, which have merely a moulding to surround them or else to relieve their severity, set a few inches above the top of their opening with a plain wall space above. Their merit is in simplicity.

A hasty mental survey of these types shows that some have such pronounced and assertive individuality that the range of possible treatment is somewhat circumscribed, while others are much less exacting and admit of almost unlimited latitude in decoration.

**Seven Rules of Garniture**

In applying the principles about to be discussed, it must be remembered that they refer both to the objects placed upon the mantel shelf itself and to whatever is placed on the wall or chimney jamb above the mantel. These safeguarding principles of universal application in dealing with mantels of all the foregoing types are (1) Observance of Scale; (2) Suitability, from which follows Dignity as a corollary; (3) Symmetry; (4) Formality; (5) Restraint; (6) Concentration, and (7) Contrast.

Observance of Scale means that a relative balance is to be maintained between the size of the mantel and the size of the objects that are placed upon it or above it. In other words, upon a large mantel do not put small candlesticks, vases or the like, nor above it hang a small and insufficient mirror or picture. In extreme violations of the scale principle, whatever merit the individual pieces of decoration may have in themselves is wholly lost and the dignity of the mantel is destroyed. Conversely, do not overpower a small mantel with things too large for it.

In following the principle of Suitability, the element of good taste comes strongly into play and has broad leeway to work in. Good taste, for example, will forbid Louis Quinze ormolu candelabra upon an early Georgian mantel with its severe architectural overmantel character.
C O N V E N I E N C E S  F O R  T H E  H O U S E

L A T T I C E  N o .  9 9 8

S O M E day someone is going to write a book about the thousand and one uses for lattice. No. 998 is below. It is designed to cut off an undesirable view. The windows presumably are the large pane, gaping sort. The carpenter can make it to fit the window with hinges on one side and a catch on the other so that it can be opened when the sash is raised. We have included the convalescing hero in the picture because being a hero is just the thing in these days.

A  B R E A K F A S T  C O R N E R

F O R those who are not too proud to bite— in the kitchen on the cook's day off, or for those who want to keep Her Imperial Majesty in good humor, the breakfast corner will prove a veritable boon. It should be sectioned off from the kitchen by high back settles that make the corner cozy. Both settles and table should be substantially built and painted white or whatever is the paint scheme of the kitchen. It should always be placed by a window—for who does not want sunshine with her meals?—and in close enough proximity to the other kitchen fitments to save steps. A screen may be arranged between the corner and the rest of the room.

I C E D  W A T E R  O N  T A P

A N Y physician will tell you that drinking ice water is only another way of flying in the face of Providence. Iced water is quite a different thing. It can always be on tap if the water pipe is run into the refrigerator and laid in coils directly under the ice chamber. The bottom tray of this chamber should be perforated so that the water from the melting ice can keep the pipes constantly chilled. The amount of the iced water will depend upon the length of the coil.

A N  A D J U S T A B L E  L I G H T

I M A G I N E a light that will change its color to suit the color scheme of the room or the decoration of the occasion. It hangs to the right. There is an alabaster bowl on the outside and a thin glass bowl inside. Between them can be stretched a piece of fabric that will tone the light in the room to the desired shade. If the room needs a little rose, a piece of rose silk will do the trick. If the youngsters have a party, the table decorations can be reflected in the bowl, thus adding to the effect.
The Gardener's Kalendar

First Month

January

Pruning can be done during good weather this month.

1. New Year's Day. Sun rise 7:30; sun set 5:30. Make a double resolution this day: you will have a better gardener in the year, unless you make a small-scale drawing of your garden and design. If you do, you will not lose interest in it, and your property will have increased by the Fourth of July.

2. Start planning your garden work. Send for seed catalogues, make out your summer and fall catalogue, and try to work out a systematic planting scheme.

3. Now is the time to plant your flower borders or perennial garden. These can all be ordered on paper and the new plants ordered at one time, so as to save in the spring, when other things must be done.

4. During winter is a good time to scrape the moss from the bare trees. These saplings make for this purpose, but during wet, foggy weather you can do the work with a wire brush.

5. Go over all trees and shrubs and burn all caterpillar nests: a very little flame will destroy them now without injuring the trees. An old bag wrapped tight and burnt makes a torch.

6. Now is the opportunity to move that large tree you have been looking for. Cut out a good sized hole in the earth, allow it to freeze solid, and you can move a large tree with impunity.

7. After big snow storms, particularly after heavy ones, go around and shake the snow off your choice evergreens, too, as rhododendrons, junipers, thujas, large broad-leaved hollies. This will help save breaking.

8. Go over the garden tools and clean them thoroughly, arranging them on the lawn mower and other tools so as to make a good measure stick, a drill maker, and all tools should be hung up.

9. What about a hot-bath? You will need one next month, and should make a good time to order the frame and stove. If you prefer, you can make the frame yourself and buy only the stove.

10. If you haven't done anything with your lawn, you should now. Scatter some, good soil to fill all the voids, and then, if your weather, don't believe the theory about manure bringing up.

11. Insects make this a trying time in the garden; the continued fire heat, and the sudden cold, are the causes. Keep after the pests constantly with sprays and fumigates.

12. This is the proper time to burn those unusual plants and other noxious things. They should be partially dried off prior to burning, so as to harden them up. Use good, rich soil when potting.

13. Cucumbers and tomatoes in the greenhouse should be hand-picked heavy, to be cut at this season. A camel's hair brush or a strong pipe cleaner will assist the picking of the flowers and transferred from one to another will answer the purpose.

14. Look over all plants that have been protected, and see that the protective material has not been matted by snow and rains. Shake it up again if this occurs necessary.

15. House plants must be sprayed frequently, and keep them clean. Also, remove, should there be any on the top soil and replace with a compound rich mixture: topdress with concentrated fertilizer.

16. All beds in the greenhouse where plants have been growing since last fall should be top-dressed. Roses, carnations, annual flowers, gardenias, etc., all need it. First clean all moss from the bench.

17. Keep cutting branches of early flowering shrubs and roses in the greenhouse or house. Simply place in deep jars of water such plants as cyclamen, flowering almond, forsythia, cymbidium, etc.

18. Look over vegetables stored in the cellar that have started to die by grafting on some other plants. If you want to keep them outdoors, and keep them from freezing.

19. There should be some sort of permanent trouble with those crops of potatoes and other vegetables that require supporting, such as asparagus, beans, tomatoes, and carrots. A good trellis looks well, too, from a pure decorating point of view.

20. Start feeding the plants in the greenhouse with liquid manures. Covered carrels should be used to disguise the manure, start using it gradually, and increase in strength and frequency of application.

21. Why not an irrigation system of some kind for your garden? They are not so very expensive, and are the only practical method of supplying water. Work out a plan now, and get an estimate on it.

22. Keep right on forcing the bulbs planted in the greenhouses; all bulbs should be brought in at regular intervals in the spring; all flowers will be continuous. Start now the plants, to grow like Darwin tulips.

23. The supply of bedding plants should be looked over carefully. If you are short of them, start now to procure gentle things like geraniums, coleus, achrysanths, and all plants of this type.

24. It is perfectly safe now to force all kinds of hardy hard-wooded forcing plants, such as lilies, rhododendrons, azaleas, flowering almond, forsythia, cymbidium, etc.

25. Consider those poor quality fruit trees that you still have rooted as you can out on some ridge. If it is a garden of your own, bury them outdoors, and keep them from freezing.

26. While it may seem a little early for thickening those crops of potatoes that require supporting, there is really no good reason why you shouldn't do it if the weather is favorable, especially in the case of hardy fruit trees of any type.

27. This is an excellent time to start a crop of melons in the greenhouse. Now the seeds are in 2" pots, and transplanted to the hill outdoors the better rooted; and then planted directly into the hills outdoors.

28. Very shortly seed sowing time will be here. You will need pans and flats for this work, so that they are at hand. Also have crocks for draining and plenty of charcoal.

29. Why don't you go into the garden and gather floss for the lawn? You can't grow first quality pelleted without brushing, and you can also eat some dandelions, staked at the same time.

30. Better start gathering manure for the hothouse. Old manure is of no value for this purpose; you must have manure that is soft, and not a dandy, staked at the same time, and that will be valuable in the hothouse.

For all their beauty, ice and snow make much harm to the winter garden, as they are not cold. Be sure that the feeding stations are well supplied with seeds and soil.

This Calendar of the gardener's labors is aimed at reminding for undertaking all his tasks in season. It is fitted to the latitude of the Middle States, but its service should be available for the whole country if it be remembered that for every one hundred miles north or south there is a difference of one or two days later or earlier in all gardening operations.

Use a camel's hair brush in fertilizing the cucumber and tomato flowers.

This is the time to order potted fruits for the greenhouse next summer.

Keep all tall flowers tied up to facilitate easy and safe spraying.

O v e r h a u l t h e f e e n d s a n d c a t e a t o u t t h e o l d, s e e d y f r o n d s.

Move trees in winter, when the ground is frozen about their roots.

New trellises can be built now without harm to plantings.
You might electrify your kitchen by installing this ultra-modern cooking outfit, consisting of stove, egg-boiler, percolator, samovar, tea kettle, and milk warmer. $10 the complete set.

**SEEN IN THE SHOPS**

Refusing to be bewildered by an infinite variety of necessary luxuries, we have selected a few of the most fascinating. They may all be purchased through the House & Garden Shopping Service, or the names of the shops may be had of the Information Service, House & Garden, 445 Fourth Ave., New York.

This crystal comport can hold its own with dignity against all comers. It is finely cut in an antique English pattern, and costs $18. It is 9" in diameter, as shown here.

“As round as a cushion” is the latest thing in similes. This one has forsaken corners to be in the mode, and comes in blue, green, brown and rose velour for $2.

A mirror frame of hand-forged iron, delicate in design. It would be particularly effective over an outdoor fireplace, but is adapted as well to indoor use, on mantel, bureau or dresser. It has sconces attached and measures about 3" by 4' 6". $125.

You can count up all the sunny days, and the dark and rainy ones, too. That is, you will be able to if you have a Sunshine Calendar with yellow, grey and black stickers for keeping a superior little weather record of your own. 32 cents.

It is shaped rather like a turnip, but then so are shellfish, and it’s delightful to have tea from a sea-shell. Sterling silver, gray finish. $4.75.

Here is a calendar just as good for finding your birthday in 1935 as in 1917. By means of an arrangement on the back it may be set for any year. As shown here, the whole year measures 6 1/4" by 7 1/4", and may be had for $10.00.
These gentle andirons are for Baby Bunting's room, and must never be referred to as dogs. They are 24" high and may be had in wrought iron for $32. You lift them by the ears.

Though these tiny shears are only 2¼" to begin with, they may be folded into still smaller dimensions. With tan pigskin case, $2.25.

If you have the makings of an amateur epicure, contemplate for a moment the charm of cool green lettuce leaves on white Wedgwood. The salad bowl, 10", has a ram's head on either side and costs $2.50. The plates $4 a dozen.

With a defiant expression these hand forged wrought iron andirons stand faithful guard over the hearth. They will protect yours for the sum of $32. 20" high. Solid brass discs about 4½"

Bacon-tongs is a name to conjure with at breakfast time. These are of sterling silver, 4¼" long, and may be had in exchange for $2.50.

A light portable table of mahogany with handles for lifting it conveniently. You can have your tea upstairs or downstairs or in milady's chamber; by the window, by the fireside, or in your favorite easy-chair. The top measures 26" x 14". $14.

For perfect fitness it entails a stout little bedside table and a cross-stitched square of linen, this solid brass Colonial candlestick which can be taken apart. $1.50.

It collapses, but not unless you want it to. Mahogany finished, with a tray, a most desirable substitute for the familiar household bete noire, the folding table of green baize memory. The dimensions of the tray are 30" x 20". $13.
HOW PLANTS GROW

The joint dark line through the stem of the okra seedling is the “suckers” through which nourishment is drawn up. The succulent pods of this plant should be better known.

The stout dark line through the stem of the okra seedling is the “suckers” through which nourishment is drawn up. The succulent pods of this plant should be better known.

In that infinitesimal universe you would see masses of rock and of soil being undermined and dissolved by rivers of water flowing around them and by columns of water descending——and ascending——through invisible tubes; hilltops and crags rushing together across empty spaces and coalescing into new forms and substances; solid walls melting down into turgid pools and, in turn, changing them; herds of grotesque animals, in infinite numbers, swimming in the forests of dead and dying roots and the pastures of root hairs; still other creatures rushing the construction of vast laboratories on growing roots and storing nitrogen therein, gathered from the air more cheaply than man himself can get it, the “surplus product” of the whole organic system; and, all the while, evaporation of the water, its passing into the air.

Through all this chaotic dissolution, changes and re-formation, there would push perpetually, expanding before your eyes as if by magic and penetrating each ever-changing valley and crevasse and cave and canyon, the trunk roots and branch roots of growing plants, gigantic in size when seen on the same scale as the things I have been describing. From the tips of the smallest rootlets, some thing like the tentacles of a subterranean octopus, the “root hairs” would twist and twine and cling to every available surface, drinking up through their porous sides inconceivably great quantities of the water everywhere present.

This picture is, of course, magnified—but not exaggerated. When you stop to think that a single squash plant, sprawling from a seed no larger than an elongated nickel and dead and gone in a few short weeks, produces in that time some fifteen miles of roots, you get some idea of the readiness with which the plant’s work must be done. When I say enormous quantities of water, that is not even exaggerated. The sunflowers growing in a garden draw from the soil and evaporate through their leaves into the air during their short season of growth, enough water to cover the soil in which they grow more than 15’ deep. It would take your whole family more than a lifetime to count the “mouths” through which this water is evaporated; on a single large leaf there are some 13,000,000 of them! For each second of dry matter a sunflower makes, some eight hundred pounds of water are sucked up from the soil by the insatiable thirsty roots of the plant.

With this general picture in mind of conditions below the surface of the soil, we can proceed to consider a little more in detail the physical phenomena of plant growth, and the facts influencing it.

SOIL AND PLANT FOOD

The basis of all plant growth is, of course, the soil; and yet the soil, as we speak of it, is not essential to plant growth. Trees of large size have been grown even to the third and fourth generation in pure water to which certain chemicals were added at the discretion of the experimenter. The first thing to get clear in your mind regarding the soil is that it is only the medium for holding the foods which the plants must have to live——water and certain other things which most soils contain, or which can be added to them. The thing we have to learn to do is to handle the particular soil that the plant roots will grow in, so that it will find all the materials of moisture and food. What treatment this may necessitate in any special case will depend upon the physical character of the soil, its habit of water retention, and the number of other things which will be discussed later.

The plant foods, as I have already intimated, must be of such a nature, or in such chemical combinations, that they are soluble in the water present in the soil. This is not pure water, but contains certain elements absorbed from the soil which strengthen it and enable it to dissolve plant foods in the soil which are insoluble in pure water alone. Plant foods in forms which this soil water dissolves and, therefore, makes ready for the plant to utilize, are known as available plant foods; those which the water cannot dissolve are called unavailable. But unavailable forms may be made available through decomposition, the action of bacteria in the soil, and through chemical changes which take place there. The gardener’s work, therefore, consists largely in finding and applying means of speeding up this gradual change of unavailable plant food into available forms.

The life history of the plant is in brief as follows: ‘The life germ,’ which has had a period of rest in the seed, bulb, tuber or other form in which it happens to be stored, is stimulated into action again by a congenial environment of temperature and moisture, and whatever more may be required in its particular case. Usually, there has been

(Continued on page 70)
January is the season for replenishing linens, and the wise housewife takes this opportunity of laying in her yearly stock. Purchases may be made through the Shopping Service of House & Garden, 445 Fourth Avenue, New York City.

A simple but attractive Madeira set of six 5½" doilies, six 5½" doilies and a 24" centerpiece comes for $5.50 complete.

Among the filet sets is one of unusual design; 27" cloth, twelve plate doilies, 11", and twelve glass doilies, $90.

THE scarcity of foreign linens gives a particular interest to the January "sales," which are an annual event of importance in the department stores and linen shops. In former seasons there has always been in each shop a plentiful supply of the plainer household linens, which have been featured at unusually reasonable prices, and a fair sprinkling of those of a more decorative character which have been correspondingly reduced.

This season it is interesting to notice the change—one shop is featuring linen sheets and pillow cases, table cloths and napkins—another has an excellent collection of towels and luncheon sets, while a third looks up strongly in its department of bed linens, blankets, spreads and similar things for the modern bedroom.

The reason is at once apparent—each shop is featuring the particular things it has been fortunate enough to secure, and this gives an added interest to the sales and results in unusual values, for particular stress has been laid on the individual offerings which the customer finds.

An example, the linen sheets and pillow cases illustrated on page 72 are Belgian linen. In fact, they have quite a story connected with their appearance. They were ordered long ago and were almost given up as lost when suddenly news was received that they had been shipped from Belgium, and finally they arrived in time to take their place as a most important January offering. They are of an excellent wearing quality, soft and firm like the good Belgian linens are, and are hemstitched. The sheets may be 72 x 96 inches for twin beds at $8.50 a pair, or 90 x 96 for full-sized beds at $10.50 a pair. The pillow cases measuring 22½ x 36 inches are $1.75 a pair. There seems no doubt but what the prices of linens and bedding will increase for some time to come, and that there will be a scarcity of the finer foreign linens. These facts make the offerings of this January far more compelling than they would otherwise be.

An interesting design in a tablecloth is also shown on page 72. It has a border of Adam vases and the well-patterned satin-stripped design in the center broken by small wreaths. The linen is a heavy Irish linen damask, and it will be sold for $3.00 in the 70 x 70 size and $3.75 for the 78 x 87 inches size. The napkins to match are 24 x 24 inches and $4.25 per dozen.

Very smart indeed are the luncheon cloth and napkins on page 72, which show the cut-out work (Continued on page 72).

Another finely embroidered set consists of a 23" centerpiece, six 10" and six 6" doilies, Madeira eylet embroidery and a medallion of Italian cutwork, $22.
A small dining-room is both a snare and a golden chance. It is a snare because it affords ample scope to commit decorative atrocities. It is a golden chance because ingenuity may make of it a charming and dignified place quite fulfilling all practical requirements and destining the painful and hampering sense of strictly circumscribed area.

If the possessor of a small dining-room, be it in an apartment house or in a small dwelling, tries to copy the appointments of a large dining-room in every minute particular, he will be confronted with the perplexing task of attempting to make two or more bodies occupy the same space at once and the same time. If, on the other hand, he casts aside all preconceived "correct" notions about the equipment of a large dining-room, especially large dining-rooms, he may happen to come on an opportunity to find the obstacle of limited space proving a stimulus to constructive ingenuity and likewise turning it into a golden chance to display such originality as can come only from a conquered difficulty,—no easy task, but a fascinating one.

Colors that Contract and Enlarge

In making ready the background for the furnishing, that is to say, in preparing the floor, walls and ceiling, remember that light tones and receding colors will add to the apparent dimensions of the room and give it the full benefit of every inch of its size. Dark tones and advancing colors will have exactly the opposite effect, so avoid them. Neutral colors have a tendency to help rather than diminish apparent size.

If there is a cold, north light and the walls need warming up, a small room will stand a very light buff, although yellow is of advancing quality, without losing size. Remember, also, that the visual effect of patterns or figures is to diminish apparent area, so if you wish to make the most of the room's size keep patterns off the walls and floor. The spectral may have a most convincing demonstration of the truth of this principle by taking a little room with plain walls and plain rug, putting in it a patterned rug and holding a few breaths of large figured cretonne paper against the wall. The striking difference in apparent size will leave no doubt in his mind. For this reason it is desirable to have either painted walls or a perfectly plain paper or else a paper with a minute self-toned figure and nothing stronger than a plain one-toned rug or carpet on the floor.

Sharp or violent contrasts, as well as patterns, lessen apparent size. Therefore, avoid all violent contrasts between floor and walls or between walls and hangings even contrasts that might be quite admirable or positively desirable in a larger room, and keep to soft, quiet effects, preferably of a harmony by analogy rather than by harmony by contrast. There are plenty such without falling into any danger of monotony. Vigorous coloring in a very small room is just as unpleasant as a loud, roaring voice under the same conditions.

From the foregoing observations the reader will see why it is also necessary to avoid figured hangings and let all their interest come from the color which will furnish variety enough for interest without producing strident contrast. For example, with plain putty grey walls short window hangings of thin apricot or pale yellow silk, or of a luminous grey hycanthine blue, will give quiet, harmonious and interesting contrasts that will not make the room appear smaller. Imagination can supply picture, and, on the other hand, the effect of using large figured printed linen or chintz window hangings or hangings of a plain emerald green or strong red in a small room. These are extreme examples, of course, but they serve to illustrate the working of the principle.

While sharp contrasts between walls and hangings are to be eschewed, and likewise figures and stripes, because the object is to create space and keep the walls as far away as possible, contrast between light walls and movable furniture need not be dreaded because the walls act as a foil for the furniture which, if judiciously chosen, will help to accentuate whatever appearance of space has already been achieved.

That is another story, not to be told now.

Don't have a chandelier or any other variety of the middle of the ceiling. It breaks up the space and makes the room lose size. Side brackets will give all the light necessary, if placed along with the usual lights on the table, the effect will be more agreeable.

The Necessary Furniture

The next step is the choice of furniture, and the smaller the dining-room the more must sound common sense be considered in choosing. Utility guide the process without reference to the dictates of convention. The bare and absolute essentials that cannot be dispensed with are a dining-table, chairs and some sort of table or stand for serving. Even in the smallest apartment, the dining-room will hold these comfortably, and most small dining-rooms will hold considerably more. Whether choosing these few articles or additional pieces, there are several principles which it is worth while to remember and apply.

Whatever is chosen, over and above the barest essentials just named, should be chosen primarily with a view to thorough utility and nothing ought to be included in the equipment that is not susceptible of being completely devoted to a practical purpose. One of the least desirable pieces of furniture in an additional-room, and the best to eliminate from the small dining-room, is the china or glass cupboard or cabinet so often found there.

In furnishing a room of limited dimensions one has an excellent opportunity to exercise the process of elimination mentally in the planning stage. A small dining-room crowded with furniture that some conventional-minded person thought "correct" is both ugly and uncomfortable, and makes one feel as though they were eating in a furniture shop. One important object is to make the room as elegant as may be, so that it will seem at least commodious if not spacious. Consequently it is best to have only a few pieces of dignified appearance. Inci-
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In the above design there is shown, on a rich porcelain blue ground, a conventionalized arrangement of small "cloud scrolls," on which is imposed a systematic grouping of "storks," emblematic of longevity. The border with its swastika fret, is an augury of good fortune. The soft tawny yellows, used in the design in connection with the porcelain blue ground, make a color combination of rare beauty.

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SAN FRANCISCO, CAL.
A Place for Everything
(Continued from page 27)

Hat boxes can be built in so that they are as convenient as the ones bought in furniture stores; and much more durable and easier to keep clean than the carpet and chintz ones so often admired. Any old rack, as a towel rack, is handy in a clothes closet, for not infrequently it is desired to stretch out veils or ribbons as they hang.

The attic, with its great boxes, chest of drawers for blankets and clothes, and shelves for hanging discarded garments, and the basement with its shelves and bins for fruits and vegetables or its racks and tables for the laundry, can be made as elaborate and complete as the owner is willing to supply. The storage space in the average modern house is not utilized as much as it could be. A business man's office or a manufacturer's warehouse would not be considered a one hundred percent efficient unless all its equipment were properly placed and labeled or otherwise designated. The woman who will not have her household the most perfectly arranged will not have her time for other diversions, is the one who has placed her dwelling on a businesslike basis.

Keeping Down the Upkeep of the Car
(Continued from page 11)

condition is unusual in the rear wheels, but a somewhat similar trouble is caused by the brakes not being so adjusted that they operate on both drums at the same moment.

Car track junctions and railroad crossings contribute their quota to the repairman's bill by causing injuries to tire treads but possible trouble in this direction may be avoided by driving at reasonable speed and taking junction points at a wide angle; and it seems hardly necessary to add that the thoughtful motorist will refrain from travelling at speed over unknown and possibly rough roads. Tires of the grade usually referred to as "seconds" are, as a rule, an unsatisfactory investment even when the relatively lower price is taken into consideration. The wise motorist will purchase the best tire obtainable, and if he, in addition, decides that his tires are of the wrong sizes he will undoubtedly show a handsome mileage-dividend, provided he devotes a reasonable amount of care to his tires while in practice.

Should he decide to store his car for the winter, he will jack up all four wheels from the floor; or better still will remove the tires, clean and wrap them carefully, and scrape and paint the rims ready for the next spring.

Having endeavored to deal with the tires, as representing the most costly item in car upkeep, we will now pass to the gas. It is possible in an article of this scope, gasoline comes next in importance. It has been estimated that under normal conditions, one-fifth of the quantity of gasoline poured into the tank actually reaches the driving wheels in the car, the remaining four-fifths being absorbed by friction and other causes. It is not possible to speak with the productive power from all of each gallon but there are many apparently little things which may either to reduce or improve the record.

Of course, the carburetor and its adjustment are the greatest factors in determining whether the results be satisfactory or otherwise—indeed, they are looked upon by many motorists as being the only ones and perhaps for this reason other ever-
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Kaiserin Auguste Victoria. Pearly white, shading to cream.
Madame Abbe Chatemay. Carmine-rose, shading salmon.
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keeping down the upkeep of the car
(continued from page 54)

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The Gentle Art of Hedging
(continued from page 30)

and it is altogether a dependable and a truly beautiful hedge when once the land's ownership from the constantly increasing hordes of insects that annually grow to be a greater menace.

The Hedges of Beauty
So much for the purely utilitarian hedge—the hedge planted to restrain grazing stock and to separate the goats from the cattle from the pigs, as the case may be. No thorny hedge belongs, as a matter of fact, to any sheepfold, and you will never put one there unless you are willing to risk entangling your lambs among its spines.

The hedge of the dooryard, the trim, prim hedge of the village or suburb, or the less conventional flowery barrier quite out of fashion. Nevertheless, it is a very effective barrier, as well as a very attractive shrub; and particularly for matter of fact, it is seldom that we see anything but a line of privet.

And indeed there is nothing that will take the place of privet; so I am not going to be a prophet of derogatory intentions, if you please, when I decry the irremovable choice of it. Nothing that grows between the limits of the length and breadth of our rather long and broad land is so perfectly adapted to the making of a low cost wall of living green in practically any situation. But this is not to say that there is no plants quite as well adapted to hedges in certain situations; and when others can be used, I feel that present possibilities are either overlooked or neglected. Assuming that the usually experienced car owner of today is conversant with the art of correct carburator adjustment and its effect upon the fuel-mileage, he may still effect a considerable saving in his annual gasoline bill by giving a little thought to the lesser factors which in the aggregate may undo much of the good work accomplished by the correctly adjusted and perfectly working carburating system.

It may not be generally realized that under-initiated cars tend to increase the fuel bill for the reason that they present a greater surface to the road than would otherwise be the case, and thus cause an appreciable amount of suction and consequent waste. When this is not in alignment act similarly in causing the excessive expenditure of fuel and yet another of the adoption of the right grade more than compensates for the slight extra cost. Poor oil, in hearing the heavy exhaust which is an often costly matter to rectify, and it will probably cause extra expense owing to its tendency to carbon deposit and choked exhaust mufflers.

The foregoing are but a few of the many evils caused by remedies for the high cost of motoring; but a little care and thought expended on the fitting of others which will suggest themselves will be found to furnish ample proof that the adage "Forewarned is forearmed" can correctly be applied to the problem of keeping down the running cost of the automobile, and well check on expenditure than will any system of keeping tab after the expense is actually incurred.

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H. G. C. C. McKay, Mgr. N. Y.

House & Garden

The Gentle Art of Hedging

(Continued from page 56)

There are but two ways to use hydrangeas. One is as the single specimen plant, and the other as a shrub. Often the latter can serve as a hedge.

they should be. There is, for example, the barberry—splendid hedge material, lending itself to close shearing and forming a beautiful wall that rivals the forest in the richness of its autumn color, and which rivals the hawthorn in the beauty of its scarlet fruits, which persist all winter. Why are there not more barberry hedges themselves, and not just as the shrub? Would we expect it to grow; yet not long since an English friend did just this, remarking to me in passing, "You can't kill, y'know"—and sure enough, he couldn't. Nearly every one of his tiny cuttings "struck," and a cunning little boxwood edging now outlines his garden walls, an edging which gains every year and will some day be a splendid hedge. Moreover, with even the finest plants of boxwood, there is at once an effect; for great or small, it is a plant of so marked an individuality that it counts definitely and takes its place in the garden scheme. It should be used in a garden, however, rather than around the outside boundaries of a place; for the rough and tumble attitude of the public towards things generally, to say nothing of the dirt, dust, and gasoline vapors of the street, are not in the best interests of a plant of such severe dignity and high breeding as characterize the boxwood.

Holly and Conifers

The ilex hedge of England is another close relative of a tree that many people do not even know is native to our own land, the holly. Our native holly, Ilex opaca, grows from Massachusetts to Florida, which is guarantee enough of its hardiness surely. It also is of slow growth, and there is considerable difficulty in handling it for those who are unacquainted with its crotchetts. Even the wild plants may be successfully transplanted when small, however, if they are stripped of their leaves completely at the time of transplanting, and cut back rigorously as a rule. The time of year usually considered most favorable for handling them is early spring, before growth starts. Ilex hedges may be sheared into as definite form as privet, and are a thousand times more lovely, and interesting, and enduring. Conifers offer material of an en
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We shall be glad to send an illustrated catalog.
RUTHERFORD
New Jersey

The Gentle Art of Hedging
(Continued from page 58)

tirely different character, material that can be drawn on for winter comfort and protection almost as certainly as the shelter of a house. On a fairly large place there is nothing to equal them, and even small places may indulge in them if a not too elaborate garden scheme is undertaken.

Arborvitae leads the rest, the Siberian form which is taller and more compact than our native variety, being quite the finest evergreen hedge plant in existence to my mind. It stands sheathing as well as privet, and a high hedge of unbroken, living green is a matter of years, not months, of effort and growth—a hedge that is protective, a bird refuge, and as beautiful as it can be at any time. Like the other hedges, it will endure for ages, if properly tended, and let alone.

A hedge is used commercially in three of its varieties: the native white pine, the Scotch pine and the Austrian. But, personally, I care less for this than for any other coniferous hedge. The character of its growth is too loose and broken to furnish the desired smooth surface when sheared; and there is too great a depth of shadow in it as well, owing to this open habit. This is true, also, of privet, though in a less degree, of spruce; yet a hedge of white spruce sheared forms a very dense and compact barrier, firm and unyielding and highly resistant to wind and cold, besides being very satisfactory to the eye.

HEDGES THAT FLOWERS

For flowering hedges there are many things to choose from. Most serviceable and sturdy, perhaps, is the rugosa rose. This sends up many, rugged shoots from the root every season, thereby increasing in density continually; and where exposed equally on both sides to light and air, it clothes itself to the ground with the leafy "petticoats" so essential to the beauty of a hedge.

Althea or rose of Sharon thickly planted, form the best tall screen hedge of any deciduous plant, save old and established privet or lilac. Where special thickness is desired, a double row may be set for this and may be sheared into a single hedge that requires very little ground space. It is so thinly furnished with branches and leaves low down, however, that it must be reinforced by a low growing shrub before it, if a complete barrier is wanted. Denticus, hydrangea or spirea berries will supply this deficiency.

Whether to use the formal sheared hedge, or the informal back of flowering shrubs on any given place, for any given purpose, is a matter that must be determined by the general surroundings of the place, and the character of it, as well. It is true of hedges—perhaps more nearly universally than of any other garden or outdoor feature—that they must conform to the character and spirit of a place to be successful. The clipped hedge corresponds, in a sense, to the architectural garden wall; and where such a wall would be appropriate the formal hedge is therefore not in exactly the same spots, please do not understand me to mean, but in the same general surroundings.

Similarly, the informal flowering hedge might be likened to the loosely piled stone wall, vine covered and picturesque. This is not in keeping with highly finished suburban surroundings but finds its place on a wide estate, or farm, or in a semirural environment. In such environment, the utilitarian barriers first come to mind.

In choosing a hedge, therefore, be guided first by the place you are hedging. Let that determine its character. With the character of it decided, let nothing short of dollars and cents, or the use of them, induce you to plant the cheap, quick growing and commonly used hedge material. Choose the best that can be had if money does not stand in the way, letting personal predilections govern the matter of final selection, of course.

Whatever material you may use in a hedge that is to be clipped, remember that the form into which it is to be brought and maintained by clipping is always the inverted, rounded topped wedge. A sheared hedge should never be permitted to grow as wide at the top as at the bottom, nor should it be plumb straight on the sides. Set the sides in from the bottom to the top at a perpetual angle of from ten to fifteen degrees, on both sides. Thus the lower parts of the plants will receive as much light as the tops, and they continue to grow at the ground, never becoming "leggy." Then, too, the weight of snow and ice in winter is less and more evenly distributed, and there is practically no danger of branches being bent down under it and often broken.

The planting of all deciduous hedges is greatly facilitated by digging a trench where the plants are to be set, making it slightly wider than the required depth along its entire length. Into this the plants are set by a spaced tape line and held by one man while another puts in a sheafful of earth to hold each in place. After all are in position, one man alone can finish the work of bordering and tamping the hedging. The plants should be set, however, just as carefully as shrubs of any kind, anywhere. It is well to plant them a trifle deeper in the ground than they were originally.

America First In Conservatories
(Continued from page 39)

Americans are today becoming interested in importing a rich number of plants that most out of a given area. Europeans have taught us the marvels that can be accomplished even with a small greenhouse. This is not only true of the cultivation of flowers, but of vegetables as well. The Italian train fruit trees into vines which are fastened against walls formed by terracing their hills into level beds. Not the least interesting phase of espalier work is its beauty as well as its utility. An apple, pear, or plum tree that has been trained to be enframed is to be forgotten. The Swiss and the French are adepts at this wall-culture, which Germany and England are close followers, and now it seems that America is determined to lead. We have learned this art chiefly from English gardeners and landscape artists who have experimented for years in beautifying their estates and in its practical application of conserving space.

Gladioli

Everybody loves this beautiful flower with its wonderful combination of colors; say if you wish, or deliberate if preferred, but always enchanting. Any child can grow them. Plant a succession and have bloom from late of last June until almost winter. They bloom bravely through heat and drought, and do not mind severe frosts in fall. We have gone to much labor and expense to collect 125 of the finest sorts from America and Europe. 25 of these cannot be obtained from any other American seedmen.

Send for FREE Descriptive Catalog which also lists 150 varieties of finest Dahlias, 165 varieties Iris, 350 varieties Peonies, as well as the best cut everything in vegetable and flower seeds.

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The sunroom is already a distinct feature in most well-planned homes. The marvelous developments in indoor plant culture are partly responsible for this new evolution. Nothing is so cheerful and pleasing as a sunroom in winter with window blossoming with flowers. It gives a touch of nature in the warm perfumed atmosphere of midsummer.

In choosing plants for a sunroom one should consult with a reliable florist and secure only those sorts which will be suitable to his particular sunroom. Many sunrooms, as they are used for living-rooms, keep only a comfortable temperature and are in no sense of the word conservatories. In such a room evergreens which will produce blossoms in a semi-dark man many state are especially desirable. Holland bulbs do well in such a place, also various kinds of smaller bulbous plants. Purple oxalis is a delightful delight for the sunroom. A variety of mosses and lichens can be used to obtain decorative advantage if planted on rocks with a few grey boughs of dead apple trees for props. Some of the terrariums with trays under them produce a most delightful effect. A few red-berried plants are always in good taste in such situations.

A Winter Greeting From Andorra

Since the last glory of Autumn coloring left the trees and Shrub bare of leaves, the richly colored Evergreens, bright hawed Shrubs and dark green leaved Rhododendrons have lost a touch of cheerfulness and brightness to the dull gray days of late Fall, and they will soften the bleakness and monotony of our Winter landscape until we welcome again the warm days of Springtime.

We shall be interested to send upon request our catalog, SUGGESTIONS FOR EFFECTIVE PLANTING, so that you may plan a planting in the Spring that will make your home surroundings bright and attractive all through next Winter's long, cold months.

Andorra Nurseries
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America First In Conservatories

(Continued from page 60)
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Crude imitations appear from time to time but the original "Crescent" is doing a larger business every year.

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wrote one of our friends, "so please send me three desirable sorts for this venture." We selected and sent them—they were so satisfactory that we now offer them in three in one collection—

Killarney Queen. A beautiful pink, superior to the old Killarney.

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Baur's Rose, Plant and Tree Catalogue
In ready for mailing. It tells how to plant and care for the things that grow, with a list of varieties that are worth having in any garden. Write for it today.
The Mantel Shelf and Wall Above
(Continued from page 45)

mantel background; the fundamental conceptions of the use of lines are utterly at variance in the two styles with one another, just as well as oil and water. The decoration of the early Georgian mantel, however, will not necessarily be austere in character. Framed in the overmantel panel there may be the softening grace of a portrait of the colorful wealth of an old silk painting of flowers or fruit in a vase.

The mantel shelf itself may bear Chinese jars, an opulent hue and fanciful pattern, whose pure curves echo the curves of the mouldings, whereas the restless, over-operatic rococo curves of the Louis Quinze candelabra would have jangled sadly. Or, instead of Chinese or Delft vases, there may be old Spanish brass candlesticks of equally pure and restful lines.

**OTHER POSSIBILITIES**

Although a good, but thoroughly familiar, method of treating such a mantel has been purposely alluded to, a dozen other possibilities might easily be suggested for the same mantel where the composition would be quite as harmonious because there would be something in common, something intrinsic affinity between the shapes of the background and the lines of the decorations. There is no reason why furniture of contemporary date, or of obviously close stylistic affinities should be chosen. It is enough if it is somewhat in keeping, or, at any rate, some harmony by either analogy or contrast of design, to put garniture and background in the same or a related decorative key.

The early Georgian overmantel might just as suitably have had a square bracket clock with gilt sprays on rays in the middle of its large panel, with two large old pewter Chinese temple vases flanking the ends of the shelf and a pewter incense burner in the middle. Or, again, in the panel might be painted Chinese sign of subdued colors with raised figures of jade and a frame of teakwood.

Common sense will forbid the locating of a mantel with a multiplicity of photograph frames and other gew-gaws and gimcracks, all of which are.manfully unsuitable. It necessarily follows that a mantel suitably garnished will have dignity.

**PICTURES OVER MANTELS**

A word seems proper, before passing on, about the suitability of pictures for overmantel decoration. Family portraits belong naturally in the dining-room or library; hence they are not manfully adaptable to varied needs. A landscape for overmantel decoration must be carefully chosen and must have qualities that establish a bond of affinity with the setting. The frame, too, must have special consideration. In the glassed bracketed case of the early Georgian mantel previously referred to, is an admirable example in concentration of decorative interest; the plate glass and incense burner, of more sombre color, lead up to it and enhance its value. But it is the eye of the beholder that is interested in and stimulates appreciation without satiety. There are more of interest too much. Have one or two emphatic points and play up to them. Too many different perplexes and weakens the whole. The overmantel is not so much a decorative as it is a statement, and, as such, it must carry conviction. If to do with, must be a part of the scheme, with the setting, with the room, and all must agree.

**FORMALITY AND RESTRAINT**

On the mantel depends much of the dignity of a room and its very character. Too much of formality. This inherent formality the garniture should reflect without, however, making the room oppressive.

Do not be afraid of empty spaces; they are restful and dignified and allow us to look upon the mantel from this point of view.

In garnishing the mantel and overmantel the principle of concentration bids us provide central features of interest for the eye to rest upon, with subsidiary spots of interest—too many to balance and lead up to it. In many successful compositions the overmantel feature focuses interest and dominates the whole, or it may be the object of a focal interest, or it may be the object of the eye, and all other objects of interest, if any, are placed in the same case, with the mantel shelf, or else the overmantel feature is an intensified background and subsidiary in interest to the objects on the shelf for which it is really a foil.

The gilt bracket, clock, of the early Georgian mantel previously referred to, is an admirable example in concentration of decorative interest; the plate glass and incense burner, of more sombre color, lead up to it and enhance its value. But it is the eye of the beholder that is interested in and stimulates appreciation without satiety. There are more of interest too much. Have one or two emphatic points and play up to them. Too many different perplexes and weakens the whole. The overmantel is not so much a decorative as it is a statement, and, as such, it must carry conviction. If to do with, must be a part of the scheme, with the setting, with the room, and all must agree.
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445 Fourth Ave New York
The Mantel Shelf and Wall Above

(Continued from page 64)

against a full-colored old brocade, embroidery on a bit of verdure; a square-topped and triple-paneled William and Mary mirror against cream white woodwork; and, finally, bronze against dull grey plaster wall.

Every mantel, of course, offers its own individual problems and no categorical, pattern medicine directions can be given to suit every case, but a faithful application and occasional interpretation of the principles just presented may be depended upon to bring a successful issue.

Why Is an Antique?

(Continued from page 16)

If abominable discomforts in my hundred year old house constrained me to move away, remember pleas, that the house was not mine, also that I should welcome a change to buy it, even now, and move back, and make it livable. Despite its faults, I love it still. And I have more than once coveted for my wife the antique necklace Peirson White rescued from the Great Fire and presented to Mr. Goldberg. As a specimen of lapsed craftsmanship, how charming! As a masterpiece of beauty, how it can look back to great race! I can look back to the taint.

If I love antiques for loving hands that wrought them. Work was joy in those golden days. At the week's end, the workman could almost say, "A shame to take the money!" In their infancy, the art impulse and a passionate yearning for perfection made labor delicious. Each man began the thing himself, watched it grow before his touch, finished it himself, and glazed with satisfaction. Every moment brought a thrill. Whereas, our modern machine, repeating the same process (or a minute fraction of a process) from morning till night, puts into it only one earned idea, namely, "When will the whistle blow?"

The Romance of Time

With the rest, I feel the vague romance of time itself. In the dining room stands an antique mahogany table from Carney's—semi-antique, to be exact! I am fully conscious that Carney got it "off a liar." When it came into my possession, it was marred by kitchen knives—had been despoiled. I do not relish recalling those who once despoiled it. And yet I greatly relish imagining the unknown who once owned it, and fondly beloved and the good cheer it groaned under and the stories that were told. One of the few times I am not even amused by the "mossy marbles rest." Very possibly they were people I should not have cared very much about. But time, with its mysteries, makes them romantic.

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Carters Tested Seeds have given exceptional results in the United States proving entirely suited to our varied soils and climate. They will produce the same results in your garden.

We will send free on request our 1917 catalogue "Garden and Lawn." It is profusely illustrated in color giving the exact reproduction of many of the varieties listed.

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THE HEIR IN HEIRLOOMS

I hesitate to crown Mr. Carney with honors he may not deserve, and yet I sincerely believe he is the most finished connoisseur in lawns anywhere at large. They come, bringing their wares. To bail the market, they tell heart-rending tales. My favored Aunt Keelah gave me this on her death-bed:

"This I have cherished since my squalling infancy. My great-great grandmother received it from an uncle who fought at Plymouth Rock."

Or possibly, "On my bended knees—boohoo!—I promised my grandfather never, never, never to part with this sacred memento, but, but..." whereas the individual looks prosperous, and Mr. Carney is tempted to inquire, "Honestly, now, were you really so stuck on Gramp?"

In some cases, doubtless, the tales are true. So much the worse. Your gain is the other chap's irreparable loss. In vain will you save your conscience regarding the acquisition or say in the words of Miss May Irwin, "I ain't tainted."

Tainted it remains, if not with crime or with humbug, then with calamity or with vulgar indifference.

For heirlooms, precious keepsakes that have "never been outside family," I entertain a cordial affection. For even purchased antiques, I have a bias. To me, that revelation of a thing—"is itself an affair of association and feeds on sentiment. I cherish a reminder of the olden times. I especially cherish a memento to which clings a beauty not capable of reproduction. Most of all, I cherish things made with hands.

As all this sounds inconsistent, let me reason with myself out loud and discover why I feel as I do.

(Clarification of the use of "my"")
SUPREME AUTO OIL

FLOWS FREELY AT ZERO

This is most important during the Winter months. You should know whether the oil you are using "flows freely at Zero." All oils do not possess this feature—notably the paraffine base oils, which thicken up under cold, and often cause great damage to the motor.

The safe way is to ask for SUPREME AUTO OIL—it "flows freely at Zero," and leaves no carbon, owing to the fact that it is a Southern Asphalt-base oil, containing no paraffine to gum, stick or thicken.

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Fire Chief Croker built himself a house down on Long Island.

When his guests were assembled at dinner, he told them the next room was afire.

"But don't worry," said Croker. "I shut the door."

It was a test to prove the absolute safety of the fireproof house—built of

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A veteran fireman knows houses as a doctor knows anatomy. You can't fool him on construction. He has had to rip it apart too often in the search for the hidden spark.

Grosvenor Atterbury, the famous architect, says "Natco is an ideal construction material."

Why? Because Natco construction means permanent, strong, solid walls, partitions and floors, everlastingly fireproof.

Because Natco construction is cheaper than brick or concrete, and while more expensive than frame, the resulting economies in maintenance and insurance will in the course of a few years offset this initial increased outlay.

Because the Natco wall means lower coal bills, more comfort, no vermin, no dampness—a single thickness of the big hollow tile with stucco outside and plaster inside, and your modern and efficient wall is complete.


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This is a Natco XXX Hollow Tile, of the type used for residence wall construction. These big units mean quick and strong construction and everlasting, safety against fire. Note the air cells which make the Natco wall temperature and damp proof, and the patented dovetail scoring on the surface for a strong mechanical bond with decorative stucco and inside plaster. No studding or lath is required. There is a Natco tile for every building purpose, from smallest residence to largest skyscraper. It is the most modern building material made.

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ally it will be genuine Old Woolworth. Perhaps you will not wait long. The other day I visited a department store’s "model house," and—can you credit it?—on a wall in the "model" living-room hung an embroidered motto: "God Bless Our Home, Adored, Demolished, Kicked Out, and Well-Nigh Forgotten, It Is Now an Antique—and Genuine!" How may a more dabbler in antiques—or, for that matter, the collector—satisfy himself that motives, teacups, jewels, tables, chairs, and armoires are not invariably the shams a disillusioned M. Prevost would suggest?—fairly easily. Apply to an honest dealer. Dealers who pay good rent in good streets are not scamps. And take along an expert. Highly trained specialists will attend you for a fee. Should you still get cheated, it will not be Mr. Carney’s fault or the expert’s, but rather a vindication of a principle set down by the late Terence O’Hara. "There’s many a slip ‘twixt the two mugs."

Why Is An Antique (Continued from page 66)
INSPIRATION
IN YOUR HOME

Those who wish to give their homes a distinctive atmosphere must seek it in the inspiration of the world’s most gifted artists. It is the use of properly selected decorative accessories which gives your home that touch of individuality which raises it from the commonplace to the distinctive. The only magazine which adequately deals with all phases of fine and decorative art is

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This reproduction (14 x 21 inches) on Japan paper is a gift or possession of permanent inspiration. The regular subscription price to ARTS & DECORATION is $3.00. In order to secure an immediate, wide circulation for ARTS & DECORATION, we are making for a limited period two special introductory offers:

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Second Offer—A two years’ subscription and two copies of the Cathedral Etching for $5.00.

Besides containing one or more articles on a distinctive home, having some unique decorative feature, each number contains numerous properly illustrated articles on antiques, collecting, and various phases of art which are of essential interest to all lovers of the beautiful.

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The Trenton Pottery Co.
"Bathrooms of Character"
Surimono—The New Year Cards of Japan
(Continued from page 68)

the jewel gift (tsushigami), a fan, drawing-wood (yuzen), and a parcel of paper, dried salmon and sweetmeats, each significant, just as an old master trunk, and tosogusa of honorable age and longevity, and dwarf plum, longevity also. The Japanese Gods Series. Great cigarette tins are favorite subjects, too,—Fo-kokujin (of wealth, prosperity and longevity), or (of longevity) Etsugu (daily food), Hotel, Daiso-ku (of prosperity) Bishamon Ten (of renown) and Beuton She, the musician. Then the surimono artist would depict Roshi (the Chinese Lao-Tse), originator of the Taoist philosophy, riding on an ox, and Saigio Hoshi (teacher of the law) as an old priest on a bucklock and gaz- ing in ecstasy on Mt. Fuji.

The Japanese Kalendare, in its peculiar arrangement of Cycles, years and months also furnished inspiration to the allusive designer, as by the Katsushika, Harunaga, and the Kitsune (Fox Year) or Kikuzuki (the Chrysanthemum month). This month suggests the wealth and prosper- ity to be found in Japanese surimono and that one fond of folk-lore will delight in deciphering the circle, and this interpretation of their subject matter as artistically set forth.

One of the most brilliant of the Japan- ese New year's cards are called the matsu muchi or week of Pine Decoration, and so the pine branch figures on the cover of Gakutei's Year's surimono. While the pine symbolized longevity, the Bamboo stood for prosperity and happiness and also frequently figures in the design of a surimono. It is on the fifteenth day of this month that the Japanese send New Year surimono to their friends.

Surimono often contain poems in exquisitely beautiful calligraphy and notary all colder coloring. The surimono would yield a last store of entertainment if one would take the trouble to have their inscriptions translated, and it might be found that he had adopted a son to whom he had given his name, or a collector might own a surimono inscription reading “Iitsu, the old man of Katsushika, playing the monkey-trick of imitating other artists.”

Hokusai and Gakutei

Hokusai, of whom Théodore Duret said: “He pictured everything to be seen by the eye or invented by the brain of a Japanese,” stands pre-eminent in surimono. The most elabo- rate and characteristic of these were brought forth in 1804, a year in Japanese history, famous for its brilliant festivals and for the first time it gained to Japanese social life. At a later period, 1823, the fashion of surimono had take a firm hold on the people. The first exhibitions were held for New Year's surimono designs and many clubs of amateurs and connoisseurs were vying with each other in surimono production. The “Society of Flower Hats” was such a designer. Hokusai was active in this society and formed, with its commissions to surimono artists. Hokusai continued to produce suri- mono to 1835. The De Courcote wrote catalog raisoné of these.

Next after Hokusai's surimono, those of Saiyosuke, who also called himself Gogaku) reach the highest mark. No collector should miss the artist's art. A De Courcote could take the society's exquisite prints. After him I would place Hoke, Hokkei, too, who included the decorated paper surimono. They often closely follow Hokusai's manner, but show a better knowledge of the art. His work was welcomed by the Japanese public and he offers a very complete list that the artist has given to the public.

Now to turn to another artist, the master of the small, the De Courcote wrote of Hokusai's master, but show a better knowledge of the art. His work was welcomed by the Japanese public and he offers a very complete list that the artist has given to the public.

How Plants Grow
(Continued from page 50)

stored up in the seed or root enough food for it particularly adapted to its needs to give it a strong start. In the case of the meaty seed leaves of the bean, the root tip is buried in the soil and is stored away that it will enable the plant to develop to the flowering stage. But in the case of the meaty leaves from the outside, except, of course, moisture and what it can gather through the leaves from the air.

When the little seed sprouts, it grows in two directions: the embryo leaf grows downward into the ground and air; the embryo main or tap root pushing down or into the soil. In some cases, one grows more rapidly at first than the other, but the other will also, and they will develop simultaneously. The leaves that the plant reaches the surface, its branches and leaves. A similar development goes on below the soil, but it is as a rule, much more rapid and extensive. The roots of an alfalfa plant, making a growth above ground of 3' or so, have been found 30' below the surface of the soil.

The way in which the roots take up the nourishment of the plant from the soil through the porous root hairs growing at their extremities has already been explained. In some cases, these root hairs number as many as 25,000 to a square inch or there- face. By the action or circulation of the sap or juice of the plant, which might resemble those of the animals, the water taken up through the roots is distributed to every part of the plant's leaves or stems working on the mater- ial for the making of new cells and tissues. A small part of this material is needed for the plant itself, but by far the greater part is transported through the “mouth” or lungs of the leaves already described in an earlier chapter. This material is used in the manufacture of the starches, etc., etc.

From this very brief outline I hope I have made plain the fact that the gardener who wishes to get away from the garden to control it, has to know they are and what he is trying to accomplish.

In the next issue these things will be covered point by point and made as clear as possible.
The New
Country Life

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Eight Color Manuals For 1917

EACH OF THESE ARTICLES WILL BE A LITTLE MANUAL OF ITS SUBJECT

FEBRUARY
The Principles of Interior Decoration, by Alvah Parsons. Illustrated with eight full page color plates, this article will explain the principles of interior decoration so that they can be applied practically.

MARCH
The Best Garden Flowers and How to Know Them.
The article will show the fruits in their natural colors, and life size. It will also explain how to grow them.

APRIL
Fruits for the Home Garden and Orchard.
The illustrations for this article will show the fruits in their natural colors, and life size. It will also explain how to grow them.

MAY
Fish and Fishing.
This article, from the pens of the most expert fishermen in the land, will be illustrated in color—will show the fish to catch in river, lake, and ocean, and will also picture the most successful flies.

JUNE
The Rose for America.
The rose number will show in color all the old favorites, as well as the new ones.

OCTOBER
The color illustrations will serve to make the text much more understandable, and the combination of text and colored pictures will explain oriental rugs so that any one can know the good ones.

NOVEMBER
Our Own Dog Show.
The dogs will be pictured in full color, and the points of each explained. For the dog lover this number will be invaluable.

DECEMBER
Old Prints.
Accurate reproductions of a number of fine old prints will illustrate this article. The text will explain the value of old prints, and will tell why various prints differ in value, although apparently of equal worth.

Ad

Gentlemen:
I enclose herewith $1.00, for which please send me the next three numbers of The New Country Life.

Name
Address
January Linens For The House

(Continued from page 51)

consists of a 25-inch centerpiece, six 10-inch and six 6-inch doilies. Complete, the set sells for $22.50.

The second set is a very simple one, but both the linen and the workmanship are no less fine, and the price is as low as one can find for this combination. It has a 25-inch centerpiece, six 91/2-inch doilies and six 51/2-inch doilies and is priced at $5.50.

The blankets illustrated are one of the most interesting values of this January. The blankets, as anyone knows who has had occasion to purchase them recently, are soaring steadily upward. These are of a very good weight, in white with pink or blue borders and satin binding, to match, and, what is more interesting, are 84 inches long by the usual 70 wide. So many so-called full-length blankets measure only 74 to 80 inches long and do not tuck in sufficiently at the bottom nor leave length enough at the top. They are $6.50 a pair and are excellent value.

Heavy Irish Hon damask. Tablecloth, 70" by 70", $3; 70" by 87", $3.75. Napkins, 24" by 24", $4.25 a dozen.

The blankets are of interesting values. These in white with pink and blue borders and satin bindings are 84" long by 70" wide—an unusual length. $6.50 a pair.

Finally, brought from Flanders. Of soft, firm Flemish linen. Sheets 72" by 96" for twin beds, $8.50 a pair, or 90" by 96" for full-sized beds at $10.50 a pair. Pillow cases, 221/2" by 36", $1.75 a pair.

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He: Well, you see, dear—I mean to say—I missed—I didn’t get—

She: Oh, I see. You didn’t get your copy of Judge. No wonder you’re dull.

Every feast of reason must have its mental cocktail.
Judge is the perfect apéritif.
Not too dry—with preachments.
Not too bitter—with vicious satire.
Not too heady—with uplift.
—but *mixed just right*—
The Happy Medium.
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The WHITE COMPANY, Cleveland
FEBRUARY, 1917

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David Scott

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THE RED GODS AND A GARDENING GUIDE

Edson's series on the whole story of the gardening game; to other pages setting forth the facts about how and why to grow dwarf fruit trees, mushrooms, making new gardens, the best salad plants, and early gardening under glass. And for a complete and concise summarizing up of the whole situation, there will be the three packed pages which, under the title House & Garden's Gardening Guide, have attained the dignity of an institution.

Of course, there are a lot of other features in this March number. The collector will find some surprises in what Gardner Teall says about old-time desks, Williams Haynes writes on Great Danes, and the house field is ably covered by articles on slip covers, an ideal apartment, convenience devices, and the Little Portfolio.

Among the many gardens shown in March is one of wholly pink blossoms.

In short, the next issue embodies just what the name House & Garden—with special emphasis on the "garden"—connotes.

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THE ENTRANCE PORCH AT "WATERVILLE," BERMUDA

A latticed and shuttered porch is the hot climate solution for the sun-baked summer home piazza. "Waterville," built between 1720 and 1730, also shows traces in this porch of Queen Anne influence interpreted in terms of native materials—whitewashed coral rock and cedar.
The Building Number
House & Garden

THE NATIVE ARCHITECTURE OF BERMUDA

English Modes Adapted To Climatic Conditions
Lessons For The American House Builder

HAROLD DONALDSON EBERLEIN

What's under our noses we're least likely to see. This very human failing comes to the fore where architecture is concerned quite as much as it does in trivial matters. It has certainly been so with reference to our disregard of Bermudian architecture.

In our architectural tastes, we Americans, as a nation, are intensely eclectic. We pick here and there and adopt what pleases us individually. We have welcomed all types of architecture, just as we have welcomed all races of immigrants to our shores. And so Bermudians and architecture alike we have tried to assimilate and have met with varying results in our attempts. Now we have scored a success; again our experimental combination has proved a conspicuous and costly fiasco.

From our seething melting-pot of architectural modes, there will doubtless emerge a distinctly American style of domestic architecture, purged of all unnecessary features and retaining the best and most sane from each element which we know today.

We have gone back and brought over to America sundry domestic forms from our old home in England. We have hunted through France. We have ransacked Italy. We have scour ed Spain. From each we have appropriated architectural riches. And yet, from Bermuda, so near our shores, we have gathered nothing — probably for the reason alluded to at the outset of this article. But Bermuda has a domestic architecture full of individuality, and that architecture has something to teach us. So let us first find out what the houses are like, and then go on in the time-honoured,

"Waterlot," built about 1710, shows decided Dutch influence in the gable ends. Such "steps" were formed, however, by successive whitewashing of the roof tiles.
part of the 19th—when real architecture of domestic character fell into abeyance for English-speaking peoples and we were delivered over for a period to uninspired ideals—Bermuda has drawn her architectural inspiration from England, but in every case has modified her types to suit the needs of the climate and the nature of the building materials. In this modification not only have forms of architectural details and items of construction undergone a change, but oftentimes there has been a radical change of plan as well. Nevertheless, the close relationship with English prototypes is clearly traceable in Bermudian houses.

At the beginning of the chronicle we find houses whose design was obviously derived from small English manor houses and cottages of late Tudor and early Stuart times. This general type continued, with few changes, through the 17th Century and into the early years of the 18th. The age of Queen Anne left some traces that are still recognizable in present-day examples.

Georgian and Other Influences

The next bold and distinct step in the evolution of Bermudian architecture was a vigorous Georgian phase which lasted till the end of the 18th Century.

After that, there were sporadic instances where both Adam and Classic Revival influences might be traced without difficulty. The

Classic Revival, however, never took a strong hold in Bermuda any more than did Empire forms in furniture, which there seems to have been arrested in development at the end of the distinct Sheraton phase.

Throughout the three centuries of Bermuda's history there were no architects until a comparatively recent date so that most of the houses, certainly all of those built prior to the 19th Century, were due to intelligent collaboration between the owners and the master carpenters and masons, just as were nearly all of our best 18th Century houses in America.

Under such circumstances we naturally expect to find conservatism in methods and close fidelity to time-honoured traditions of craftsmanship, much closer than if trained architects had from time to time directed constructional details; nor are we disappointed. The departures from precedent, therefore, are all such as have been dictated by common sense, to meet the demands of the materials or the special requirements of the climate.

Houses of Coral and Cedar

Before discussing the houses themselves, a word about the materials will be in order. The island of Bermuda is mainly of rock coral formation and this rock coral is the universal building material. When first quarried, it is of a warm cream colour that weathers to a silver grey, and is

(Continued on page 60)
"St. John's Hill House," built about 1688, is reminiscent of Gothic days in its buttresses, high arched dripstones and the finial surmounting the gable peak. The walls and roof at the gable ends join at right angles without any barge, capping or eave projection.

"Inwood," built about 1686, clearly shows its English antecedents. Witness the oculo string course gir-
ing the structure between floors, the arched and cor-
bellied dripstones over the windows and the chimneys spreading their length in the same direction as the ridge pole.

The south front of "Bloom-
field" opens upon the ter-
race. The house was built about 1760 and is of Geor-
gian design as modified to suit Bermudian materials. As the stone is coral, it is not a good medium for the execution of detailed pro-
jections, pillars and capitals.

From the terrace before the south front of "Bloom-
field," broad steps lead down to a park. The gar-
den walls of whitewashed coral stone make rich con-
trasts against the luxuriant foliage. The posts are capped with marble busts seamed and grey with age.
Architecturally, the house is an adaptation of Maryland Colonial to a rock-ribbed Connecticut setting. The stones for the structure were gathered from the fences about the place. To one side the terrace was held by a retaining wall and a sunken garden laid out in roses below. You climb the steps at the left to the terrace.

The rear of the house commands the view—a wide stretch of lawn broken here and there with elms. A bricked terrace extends the full length of the house covered midway with a portico supported by tall columns. This arrangement of the living-rooms and terrace at the rear assures a full measure of privacy and quiet.
NEW CANAAN, CONN.
FREDERICK J. STERNER, Architect

The plan is divided by a house-length hall extending from this entrance to the rear portico shown opposite. A stair window, repeating in its pilasters the general character of the door below, lights the hall. A remarkable fact about the house is that it is the creation of two years' work, its apparent age having been acquired by transplanting the trees and covering the walls with quick-growing Japanese ivy.
CELEBRATING THE DOWNFALL OF GOLDEN OAK
And the Rediscovery of McIntire and the Masters
Who Lovingly Carved Wood for Interior Embellishment
COSTEN FITZ-GIBBON

POVERTY stricken without knowing it!
An anomalous condition, truly, for anyone to be in. All the same, a great portion of the public has been for a long time in this unfortunate state so far as one highly important resource of interior embellishment is concerned, namely, the use of appropriate carving to emphasize dully and to enhance the beauty of the wooden architectural fittings of our houses.

An awakening to the diverse possibilities of this resource and its rediscovery, after a long and ill-deserved oblivion, should be as welcome as the unexpected finding of a ten-dollar bill in the pocket of an old unused coat.

The finder of the windfall is naturally curious to know how he came to overlook the yellow back, and we likewise, if it is any satisfaction to us to account for our indifference through three generations or more to the claims of so valuable an architectural and decorative asset, may find our explanation by attributing the oversight to the pitifully jejune and numbed conceptions prevalent during the dark ages of the 19th Century with its nemesis of Victorbanality.

When it occurred to the architectural mind in the foolish and fantastic '80's that there might be a field for interior wood carving, it was the very heyday of viciously crude ideals that complacently accepted Turkish cozy corners, window sashes bordered with alternate squares of red and blue crinkly glass, an infinitude of antimacassars and other kindred horrors. While those that wished to be credited with recherché taste glibly prattled an uncouth Ruskinian patter about beauty and sincerity, they nevertheless cheerfully approved the carving of golden oak woodwork, that was more taffy-colored than taffy, into gobby masses and seething details that resembled agglomerations of wriggling bacilli. This era of undigested atrocities cannot properly be considered a renaissance of carved ornament; it only disgusted those who learned better a few years later and thereby did endless harm to the cause of interior wood carving as it should be.

Meanwhile, designers and carvers, in what they fondly fancied the revival of an erstwhile dormant art, rollicked and revelled in a veritable orgy of grotesque and incoherent adornment which they loaded upon every mantel and banister that fell into their clutches. They splurged inordinately with their new-found resource, like a drunken sailor spending his earnings broadcast for the mere joy of spending, and their performances had about as much grace as the vocal

In the first phase of American carving the over-mantel panel and its decorations received important consideration. This is from Whitby Hall

Geoffrey Lucas, Architect
Under the head of decorative woodwork come turned spindles, but only when the lines are as well designed as in this stairs grill

Geoffrey Lucas, Architect
Reduced to a word, the beauty of the balustrade to the left is its proportion. Good lines are the first requisite of interior woodwork

Photo by Cousins
An example of Samuel McIntire's work is found in "Ouck Hill," Peabody, Mass. Note the carving of the trim of the fan light done after an Adam design

House & Garden
efforts of a cockerel just learning to crow.
A good many of us are disposed to be
timid about carving or even hostile towards
it on general principles because the memory
of the hideous golden oak of the '90's is
too fresh in our minds and because there
are still with us too many substantial and
visible reminders of the misdirected energy
of that benighted period. And for that very
reason, for that very hostility, the iniquities
of this meretricious style of wood carving
have been dwelt upon at length that the
utter badness of it might be plainly manifest
and that it might serve as a basis of com-
parison when we discuss the carving
achievements of other periods, achievements
that are well calculated to disarm adverse
criticism born of present prejudice or dis-
tasteful recollection.
Before attempting to discuss several of the
most desirable varieties of interior
wood carving of which we may readily avail
ourselves for the embellishment of such
types of houses as we
usually build, it is
necessary to give some
explanations and defini-
tions of terms we shall
be obliged to employ in
order to gain accurate
ideas of what we are dis-
cussing. Here are some
of the most important.

CARVING METHODS
In the course of ex-
amining the phases of
wood carving that most
nearly concern us we
shall have occasion to
speak of the following
ways of manipulating
the material. We first
have "modelled" carving
which shows the design
standing forth in well
moulded relief from a
surrounding background that has been
lowered by gouge and chisel. Whether the
carved device is in low relief or of promi-
inent profile, the carving comes technically
under this heading. Near of kin to "modelled" carving—indeed it may be said
to be only a further development of it—is
"carving in the round;" that is to say, carv-
ing in which the objects depicted, cleanly
undercut, stand forth well from their
ground or else stand altogether clear of it,
being supported by some suitable projection
from the rear, from below or from above.
Excellent examples of carving in the round
are to be seen in finials or pendants of any
sort. "Flat" carving exhibits what might
be called a silhouette design whose flat sur-
face is flush with the uncared surface of
the piece of wood on which it is wrought.
The necessary relief is secured by a "sunk"
background, that is to say a sharply incised
or abruptly gouged-out
groundwork, and the
edges of the figures com-
posing the design are not
rounded off or modified
in any way, but are left
sharp and rectangular.
"Scratch" carving is just
the reverse of the forms
of carving more com-
monly practised, in that
the design, usually of the
simplest possible charac-
ter, is vigorously and
sharply incised into the
wood and, as a matter of
fact, does little more than
supply mere outlines.

RIVALING ENGLISH
WORKS
A glance backward to
see what our predeces-
sors have done in the
field of interior wood
carving will point the
way to what we our-
(Continued on page 74)
BUT for the richly brodered vestments that clothed him and the biretta stuck aslant one eye, you would have taken him for a farmer from thereabouts. He was old and gnarled, and the censer in his hand trembled. Beside him at the entrance to the house stood the lad of the family, carrying the holy water. Behind were the other members of the family—the mother and father and the daughters—the farm hands and their wives, a few neighbors and some friends who had come down from the city for the occasion.

The whispers died down. The old priest muttered something—his voice was too weak to carry to the outer fringe of the group. To come the sharp sound of chains clinking and a cloud of incense floated up against the door.

The house blessing had commenced.

When the lintel had been made sacred for those who were to pass beneath it, we trailled behind him—through the living-room and the library, into the dining-room and even down to the spotless kitchen; then up the stairs to the bedrooms and boudoirs above. In its turn each room was remembered, each room censed and dedicated for those who were to live in it.

This is not the recollection of some mediæval ceremony; it happened just the other day in a country house on the Hudson. Nor were the owners folk of archaic habits or especially religious turn of mind. They were modern people, who read Shaw and Freud and enjoyed the Ballet Russe and tangoed and wore up-to-date clothes at the Fifth Avenue shops. They had just finished building and furnishing this new house, and it occurred to them that a good way to start making it a home was by having it blessed. So they called in the priest from the local parish and assembled their friends and the man of the house stayed away from the office for the day—and together they saw the house dedicated to being a home... And when the ceremony was over and luncheon had been served, the guests rode away in motor cars and the family turned indoors to hear Caruso sing from the Victorola.

WHILE it is presumptuous to write a footnote to a poem, the verses on this page were so provocative that I could not refrain from devoting the remaining space to comment on house blessings and all those things on the other side of the house that would seem to be utterly neglected by us in these days.

Europe, wracked with war, has been driven to its knees, to a consideration of things on the other side of materialism. America, rich with gold, has become too fat to bend its knees, too stodgy to look beyond the surface. War is a heavy price to pay, but it was better for a people to lose its whole country than to lose its national soul. Now the soul of a people is found in its homes. There it is born, There it is bred. There are cherished those ideals that make a nation strong and lasting. And a nation is sound only to that degree to which its home life is sound.

Bless the Four Corners of this House, And be the Lintel blest; And bless the Hearth, and bless the Board, And bless each Place of Rest; And bless the Door that opens wide To Stranger as to Kin; And bless each crystal Windowpane That lets the Starlight in; And bless the Rustic Log overhead, And every sturdy Wall; The Peace of Man, the Peace of God, The Peace of Love on All!
WHEN A WINDOW IS BEAUTY ITSELF

Here is something the English appreciate much better than we—the sheer beauty of an oriel window. Although the window in this room is but an oriel in embryo, it shows the characteristic lines that distinguish some of the finer English work. No curtains or draperies are required. The window should stand by itself, an architectural feature of great distinction and charm. Cross & Cross were the architects.
One of the early English valentine writers—all for threepence, and the highly inspirational frontispiece easily worth that by itself. A handy correspondence course like this must have been invaluable to the lovelorn of a day that knew not Beatrice Fairfax.

Fortunate indeed was the lady to whom February 14th brought so beautiful a piece of designing as the valentine to the right by Walter Crane. It is printed in gold and colors, and framed in the lace-paper the present generation has relegated almost entirely to candy boxes.

Below is a tricky one, with far more in it than appears to the casual and disinterested observer. One may be sure that she looked a second time and found the string device which reveals an altar and flaming heart behind the apparently innocent rose-petals.

The Cruickshankian frontispiece of this chap-book is suggestive of the title-page of a Victorian novel, and may forecast the so-called comic broadsides whose day as valentines is happily almost past. The sub-title, “Valentines for Trades,” awakens one’s curiosity.

The flora depicted in the center below are near relatives to the crewel-work blooms which once helped solve the problem of vocations for women. They may leave you never so cold, but they made some one’s heart beat faster back around 1858, geranium leaf and all.

What could be more pleasingly feminine than this chaste and dainty valentine of the Dresden china school, with the autograph-album chirography. It is one of the earliest valentines made in America and is dated about 1848.
OF the making of valentines there has been no end, but of collectors of them there have been few. This second fact perhaps explains the disappearance of nearly all these quaint missives of Cupid, both owing to the ravages of time and to the neglect shown them until quite recently.

There must be many interesting old valentines, however, hidden away in forgotten trunks and boxes in cavernous attics, and a search for them will repay the ardent enthusiast over the curious things of the past.

When the writer started his own collection some years ago he imagined it would be comparatively easy for him to find old valentines in the various antique shops, but he came to learn that he was far more apt to discover the objects of his search in the shops of dealers in old prints and autographs, and occasionally some friendly dealer in antique books would take the trouble to keep a special book out of these desiderata. Searches (by invitation!) in old attics were the most prolific ministrants to his hobby which leads him to suggest such realms to other collectors.

KEEPING "CUPID'S KALLENDE"

The origin of St. Valentine's Day observances is lost in obscurity. Likewise, we do not know the date of the first engraved or printed valentines; though we do know that the custom of St. Valentine's Day missives is of ancient date. One finds, for instance,

preserved in the British Museum the valentine verses of Charles II D'Orleans, and there was John Lydgate's valentine to Catherine, Henry V's queen, composed in 1420:

"Seynte Valentine of custome yeers by yeers
Men have an usanice, in this region
to lokie and serche Cupid's Kalendre,
And chose thrye wise men thrye sort doth falle;
But I love on which excelleth alle."

Then there was Donne's valentine on the occasion of the Princess Elizabeth's marriage to Frederick, Count Palatine, St. Valentine's Day, 1614. It is too interesting to be denied reprinting here.

"Hail, Bishop Valentine, whose day this is;
All the air is thy diocese,
And all the chirping choristers
And other birds are the parishioners;
Thou marreyst every year
The lyric lark and gray whispering dove;
The sparrow that neglects his life for love,
The household bird with the red stomacher;
Thou mak'st the blackbird speed as soon
As doth the goldfinch or the halcyon—
This day more cheerfully than ever shine,
This day which might inflame thyself old Valentine."

The Victorian era was generous in its output of printed and engraved valentines, with which our own has kept pace. But in the Georgian days when the demand for valentine missives had not come to be met by artistic cards and when the demand for "verses" was greater than the supply of individual ingenuities, the enterprising publishers of the day brought out the sundry chapbooks, such for instance as "Kemnish's Annual and Universal Valentine Writer for 1797," one of the rarest of these little pamphlets. Later was the "Cupid's Cabinet, or Lover's Pastime," "The Lover's Companion, or Valentines for Trades," "The Tradesman's New Valentine Writer," "The Lady's Valentine Museum," whose sub-title defines it as "A Choice Selection of Elegant, Polite, Modest, Ludicrous, Sentimental — (Sentimental is put in large type!) — Valentines and Answers."

(Continued on page 70)
LATTICE - THE LACE OF THE HOUSE

How It Enriches The Exterior and Screens The Objectionable

HENRY P. THURSTON

There are two ways of looking at any architectural feature: its construction value as an integral part of the house structure, and its decorative value. Lattice is among the few features that adequately serve both purposes. It gives an ultimate constructive and decorative touch to certain types of houses. It is to some houses what lace is to some gowns—a refining, diverting accessory and adornment.

Considering it as part of the structure of a house, we find exterior lattice used for the entrance porch and the service porch alike. In one case it decorates, in the other it screens. We find it fencing in the laundry yard or dividing the grounds into those separate units that special use requires—the rose garden from the old-fashioned garden, the simple from the formal. Again, we find it in its original capacity, a trellis for vines. Of late, however, we have discovered that in itself lattice can have sufficient beauty of line and proportion to justify its use without any covering. And in that way it is employed to break up the blank walls of stucco houses that otherwise would be barren and inhospitable to the eye.

LATTICE REQUIREMENTS

Two important points must be taken into consideration in using exterior lattice: the requirements of the architecture of the house and the requirements of the grounds. In this one touches on the province of both architect and landscape architect. In any case, either of these professions should be called in before a stick of lattice is put in place. Remember that its success or failure will depend on its line and its placing. Poor lattice is worse than no lattice at all; an over-elaborate lattice will stunt the house and overwhelm a garden; a lattice poorly placed will clearly show its faults. If the lattice is provided for while the house is being planned, you may rest assured that your architect and your landscape architect will consider the essential requirements. If, on the other hand, the lattice is an afterthought, every requirement should be care-
fully studied out.

Where the house is so situated that planting and screening make it necessary to protect only one point of view, a single screening fence will prove sufficient. There should be provided a gate that is of the same character as the screen itself. An elaboration of the general lines, to emphasize the opening.

Where the lot is large enough to accommodate a kitchen yard, it should be fenced off with a lattice and made a distinct part of the service quarters. Through this will come the paths and drive to the kitchen door. The turn-around may be included in the yard instead of having it protrude on the garden outside. Sufficient space should be left for the hanging of laundry. The ground should include some wide blocks of lawn where linens may be laid to bleach. There is no necessity for flowers being in this kitchen yard, except, perhaps, a few hollyhocks or sunflowers against the lattice, or vines trained up it.

The structural requirements for any lattice are simple. The lattice should have a solid outline to define it. The posts should be both solid and look so. They may be brick piers or wooden posts; in both they should give the assurance of being substantial enough to hold a clothes line. These posts will be capped with whatever ornament is suitable to the design. In the old New England fences the urn was a favorite design and in Philadelphia the acorn has been used. In general, the character of this termination will be decided by the architecture of the house; in a Colonial house a Colonial design would be used.

Since the base will soon enough be covered with soil or the natural mulch of vines and shrubs, there is no reason for the baseboard being especially heavy. It is sufficient if it is protected by a coat of creosote against rotting. In some cases, however, one may wish the lower half a solid fence and the upper lattice. Hence the balance is well adjusted with the heaviest part at the bottom.

The Best Designs

The actual designs for lattice fall into two classes: the simpler English patterns of a rectangular mesh and the more elaborate patterns of the French mode, which include scrolls, ovals and circles. For all general purposes the English type is best, although its severity may be lightened somewhat by the introduction of a French note in the ovals of the gate.

The upright bars should be about 1" x 3/4", the lighter wood for the crosspieces being 3/4" x 3/4". This will give an added appearance of height to the fence.

Of the available materials, cypress, white pine, chestnut and oak are the best selection, with cypress and white pine leading. These woods are sufficiently reasonable in price to meet the requirements of the average purse and their length of life is quite adequate.

The color of the paint will depend, of course, on the general exterior color scheme of the house. White is always a safe color, and it makes the service side of the house look bright and clean. Moreover, it provides a good background for the greenery of growing things. On the other hand, if one wishes to keep the laundry yard unobtrusive, a darker paint, preferably a deep green, should be used. The same color should be used over the entirety of the lattice; do not attempt to accent any special parts with a varying color.

When the lattice is used as the decoration of the blank wall of a house, the color chosen will also depend on the degree to which one wishes the decoration pronounced. Apple green is a good color for a small house, but on a large house this would make the walls look too much like a patch work.
FEBRUARY FURNITURE

This is the month of the furniture sales and opportunities, that rarely come are now long agoed to the shops. These pieces may be purchased through the Shopping Service, or we will send you the names of the shops. Address Holfish & London, 44; Fourth Avenue, New York City.

Sturdy gate leg table in dark mahogany. 3' high. 48" wide when opened. With convenient drawer. $24.50. Oval mirror, gilt frame, 31" x 14½", $12.


The variety of furniture offered in the annual sales that take place in the furniture shops and in many of the department stores is almost endless this season. The American manufacturers of furniture are making practically all styles of furniture well: the most authentic period reproductions, the most original American interpretations, and the most delightful inexpensive furniture oftentimes of the peasant or early American type so charming for the simple country house. It is a time of alluring opportunities.

Of the early American variety are the two chairs which are shown here with the gate leg table. These chairs, the rocker and the straight chair, are of an antique finish mahogany with rush seats. For an additional chair in a room furnished in early American style even with authentic pieces, a chair of this sort hides its lack of age most successfully. The side chairs are priced at $12.50. The rocker is particularly suited to a bedroom of the same character. Chairs of this general type are not uncommon, but unfortunately many of them are reproductions of models that, while good originally, have become far too commonplace through a too great manufacture. This model, on the contrary, is not so well known, and is at the same time a most faithful reproduction. The cost of it as shown is $13.50.

The useful little gate leg...
table shown between the chairs is an especially delicate type with well designed legs. It is 34" high, is made of solid mahogany, and is 26" in diameter, which makes it particularly useful as a tea table. The price is exceptional, $13.50.

A pretty octagonal shaped Sheffield coffee service is shown on the table—its four pieces, coffee pot, sugar bowl and cream pitcher and tray. The latter is 14" long and 9" wide, while the coffee pot is 71/2" high. The set sells complete for $30.

The oval mirror shown above it has a soft-toned gilt frame. It measures 21" x 17" and is most reasonably priced at $12.00.

Another gate leg table of a sturdier type and a larger size is also shown. It is of dark toned mahogany, 3', and measures 48" across the top when open. A long narrow drawer is an added convenience. It comes at $24.50.

Inexpensive tables of this character are especially useful in a small apartment, or an unpretentious house, and the gate-leg models are usually sufficiently catholic to adjust themselves to many different types of furnishings: certain English furniture, William and Mary or Jacobean, if the wood or finish of the table be walnut or oak; early American or even wicker, if it be mahogany.

The spinet desk, at one time a rarity, has now established itself alongside the gate-leg table as a practical necessity, and the one shown is a well-made desk of antique finish mahogany that a certain furniture shop is offering at a most reasonable price during February. It is surprisingly commodious when open, and may act as a table when closed. It is 32" high and has a closed top measuring 20" x 34" and may be had at $25.

A BREAKFAST ROOM SET

At the same shop, where one can always find unique examples of the newest in decorative furniture of the modern school, they are showing the quaintly charming breakfast room set, which, while it is ideally suited to the breakfast room of the large household, is equally smart for general use in the dining-room of a less pretentious house or apartment. It is of black painted wood, decorated by a fine line of Pompeian red, a tone very well liked by decorators, who frequently choose it as the high light of a color scheme. The quaint English chairs, the simple table with another variation of gate legs, are supplemented by an unusual tall crystal cabinet and a delightful buffet, shallow in front and deeper at either side. With the proper walls and hangings, black furniture of this sort has a decided amount of style, and gives one a chance for an effective and unusual color scheme. It is properly finished with a waxed surface; it is not even necessary to protect it by a glass; the same care that one gives any other wood is sufficient to keep it from burns or scars. This same set may also be had in the ivory tone, so much used in breakfast rooms, particularly those that are practically sun parlors. The set with chairs costs $165.

Quite an unusual table is shown with its old coat-of-arms and its twisted rope carvings. For the room that requires a table with some amount of decoration, and can not stand a heavier model of the Jacobean type, this is a model that has much to recommend it, and is more than ordinarily reasonable. The wood is mahogany in an antique finish and the top is 5'6" long and 1 1/2" wide. It sells for the surprisingly low sun of $39.

The hand-carved mahogany lamp shown with it is 29" high, and has a silk shade, which may be had in either rose or gold with silk fringe to match. It comes at precisely $40, complete.

A quaint occasional chair that will fit into many different sorts of rooms where a note of lacquer is not amiss, is also shown. The black of the lacquer is brightened by a decoration of gold, red and green and the seat is of rush. Its price is $25. The same model may be had in mahogany for $18.

FOOTSTOOLS, DAVENPORTS AND SETTEES

Footstools, Davenports and Settees

Footstools, once the abomination of the household, are no longer in disrepute, but are established firmly in their original place as a decided adjunct to comfort, and take their place with the fire screen as a "quaint" accessory. The one shown with the lacquer chair is of decorated mahogany, covered in damask which may be had in a number of colors. It is 21" long and costs $7.

There are davenports and sofas—their name is legion—but unfortunately they are seldom of sufficiently perfect proportions to be in any way distinguished. They may look and be comfortable, but they are apt also to look thick and clumsy. It is largely for its distinction of line, that the one shown was chosen. Its proportions have been very carefully thought out, and its design studied, and the result is far above the ordinary. It is 7' long, with mahogany legs, and, as it is shown, covered in a particularly fine quality of striped silk, with a very decided line of style, and gives one a chance for an effective and unusual color scheme. It is properly finished with a
The focal interest centers in the stone fireplace carved by Hunt Dietrich, and its attendant accessories—a wrought-iron screen of intricate design and two tall wrought-iron standards supported by greyhounds. Against the carved background were set antique pieces and new—a davenport in blue and old rose silk, a large chair in dull blue green silk. The rug is black and the curtains are old rose lined with blue.

Found in an old English "pub," the wainscoting and doors are carved with English kings and knights. About them the room was built—rough cast walls above, moulded plaster ceiling and wrought-iron fixtures.
W H A T  I S  G O O D  T A S T E ?
A Discussion Over Corned Beef and Cabbage That Led To Complete Befuddlement
ROLLIN LYNDE HARTT

THERE were three of us at luncheon—the critic, his artist wife, and myself—and we had deliberately resolved to be vulgar.

Etienne never made a business of weighing esthetic considerations, day in, day out, you will understand perfectly. One needs a vacation. As it seemed to us, no vacation could be more complete than sitting down in the ultra-exquisite dining-room of the Carcassonne and ordering corned beef and cabbage.

But alas for the best-laid schemes of mice and men! Scarcely had we begun wallowing in vulgarity when the suspicion stole over us, were we vulgar?

I blush to own that it was I who raised the question first. I grieve to add that—instantly, almost—the artist wife asked, "What is bad taste, anyhow?" and that her husband rejoined with, "What on earth is good?"

Thus perished our vacation. A moment more, and we were deep in discussion.

I should violate confidence were I to divulge just who said just what, but I can nevertheless trot out one or two by bit, and allow it to lead up gradually to the solemn and awful befuddlement in which we were left. Such, indeed, is my object. Befuddled, myself, I hope to promote befuddlement in others. We are much too cock-sure about our so-called "principles of taste." I should pause, now and then, and feel sheepish.

Looking back, it is hard to say which was cockiest—the critic, his artist wife, or I—at the outset. We started in by assuming that good taste must of course be the taste of the best people. Is it, though?

THE more you look at it, the more you will see that the best people cannot be relied upon. They marched through Greece, once—thousands of them—on their way to the Holy Land. They saw the Parthenon. They saw the Erechtheum. They saw the magic monument of Lyceisites. None of these lovely creations appealed to them in the least. They went home and invented a style of architecture which was out-and-out anti-Grecian in every way—namely, the Gothic.

Later on, behold what a change overtook the taste of the best people! They sneered at Notre-Dame, they railed at Westminster. They had only contempt for Chartres, Canterbury, and the Antwerp Cathedral. "Barbarous," they called the Gothic. They admired only the Renaissance. When the west front of Saint-Chapelle du Mont fell into decay, they rebuilt it in Renaissance style; so long as that it still retained Gothic outlines. In modern days, the esthetic tomfooleries of the best people almost stagger credulity. Parisians, when the Czar paid them a visit, tied millions of paper roses to the branches of their leafless trees. Italians blasphemed the works of Tiepolo, Correggio, and Tintoret with Turkey-red window shades. Bostonians, at a never-to-be-forbidden musical festival, boasted an "Anvil Chorus" with three hundred real anvils.

A wonderful crew, our best people! Winckelmann had the time of his life getting them to wear, as "造假的" (pronounced "de-creat-ive")—they hung gilded rolling pins on drawing-room walls, adorned chairs with rice, and thought nothing so tasteful as a plate of "spirituous" rice, and, with morning-glories daubed on the platters and spilling over on the glass.

EVEN in their lucid intervals it appears that the best people made queer arbiters of taste. They are cultured in spots, rarely cords with golden toads, a "tall candle," "tone-poet of color," crammed his den with graphophones long, long before the graphophone had ceased to be a squawking abomination. Edgar Allan Poe, gifted with a genius for the music of sweet vocables, betrayed a surprising sort of taste when he wrote of tolerating "six shelves of Furniture." Said he, "There is present to the mind's eye a small and not ostentatious chamber with whose decoration no fault can be found." I have the document before me. Otherwise, I could hardly believe in that room. Can you?

It had crimson-paneled window curtain by "a thick silver tissue" and "exceedingly rich crimson silk, fringed with a deep network of gold." At the "junction of the ceiling and walls," it had "a broad entablature of rich gilt-work." It had a Saxony carpet "of the same crimson ground, relieved simply by the appearance of a gold tortoise shell." There are short irregular curves, one occasionally overlaying the other. Two "large low sofas of rosewood and crimson silk, gold flowered," were "the only seats with the exception of two light conversation chairs, also of rosewood." An "octagonal table, formed altogether of the richest gold-threaded marble," stood near one of the sofas. "Four large and gorgeous Sévres vases" occupied "the slightly rounded angles of the room." To complete the composition, add pictures, a mirror, a piano, "some light and graceful hanging shelves, with golden edges and crimson silk sheaths," and you have a "tall candle-brum, bearing a small antique lamp with highly perfumed oil," and, finally, an Argand lamp "with a plain crimson-tinted ground-glass" dangling "from the lofty vaulted ceiling by a single slender gold chain" and "throwing a tranquil but magical light on the walls." Wonderful. "Not a single room in the house is so richly furnished. With that admirable chamber of horrors, no fault could be found!"

And yet this same Poe, at another time and in another mood, wrote delightedly of Landor's cottage in the woods, "Nothing could well be more simple—more utterly unpretending. Its marvellous effect lay altogether in its artistic arrangement as a picture. I could have fancied, while I looked at it, that some eminent landscape painter had built it with his brush."

LIKE a candle in the wind, is taste. A constancy, a chance word, or even such a trifle as sex will decide you in or that. At the Grande Chaumière, when a girl is posing, you count among the students six women and forty men; when a man is posing, six men and forty women. The young lady from Kalamazoo will say, "I prefer the male model, the feminine curves are so simple." Then a gentleman from Philadelphia will say, "I detest the male model. These brusque, angular, over-obvious contours are much too uninteresting."

There may be such a thing, abstractly, as inherent beauty, finer in the one case than the other. Practically and humanly, there is nothing of the sort.

At times, a mere noise may jostle the candle-flame. "Fools! Blind leaders of the blind!" shouts Ruskin. "Listen to me!" Forthwith, the world tags after Ruskin. "Now—I tell you—these Post-Impressionists have struck something big and functional," says the self-appointed critic. Sure enough, there are people who, at his lusty bidding, fall down and worship Van Dongen. Or some one bellows, "The Primitives—ah!" In consequence, tourists rush to admire bandy-legged saints and tuberculous madonnas afflicted with Pott's disease and away the spine, while others, more zealous, "wish all the Titans could be destroyed." And, mind you, these are not cranks and gullibles alone. Among them our best people are represented.

When the noise has a tang of fun in it, you witness a phenomenon still more remarkable. A little banter, a little chaffing, and away the在一个 thing with a shock and away the one thing. After this there was a certain candle-flame.

"Brechtian, this snaky group has nothing whatever to do with old man Laocoon and his brats. It celebrates humanity's first encounter with spaghetti!" Years ago, Boston erected a Museum of Fine Arts in red brick charmingly embellished with terra cotta. Some villain remarked, "If architecture is frozen music, as Madame de Staël asserted, then this is frozen Yankee Doodle." Thereafter, no one could tolerate the exquisite building.

JUST here came in a further element—nostalgia. Terra cotta was new in Boston then, and while novelty may delight, it may shock. Put a name to the shock—"Yankee Doodle," for instance—and it is all up with beauty. On the other hand, an innovation may begin by shocking and end by pleasing. The automobile was hideous at first. Now it is magnificent. The inflated tire of a bicycle called forth peals of laughter at first. Now it looks well and the old-style tire is ridiculous. When I first put on the owlish, shell-rimmed glasses I wear, I was greeted with whoops and jeers. Today, no one notices. Tomorrow, like as not, you (Continued on page 66)
CONSTRUCTING THE UNBURNABLE HOUSE

BERTHA H. SMITH

Is it possible and thoroughly practical? How is it built, and of what materials? What will it cost? Is it adaptable to any style of architecture and all climates? The unburnable house is not only possible and practical; it is imminent.

People are growing weary of the fear of fire and the fret of fire waste. Makers of materials are sensing this restlessness, and as soon as architects and builders begin looking forward, the unburnable house will be a fact and not a futurist fable.

Fires make their attack from two directions, without and within. There have always been many fire-resisting materials used for outer walls—brick, stone, marble, terra cotta, tile, concretes of sorts—and every year new composition materials offer themselves. They are all more commonly used in other countries than our own. But even where these non-inflammable materials are used quite to the exclusion of frame walls, so much wood enters into the construction of roofs, floors and interior walls and finish that the integrity of the unburnable outer walls is undermined. Materials that will not burn can be destroyed by fire, and even if they do not collapse, four roofless walls are not much to have left of what used to be one's home.

It is inside the house, then, that the great revolution must take place before we have the unburnable house.

Another type is found in the residence of James E. Blythe, Esq., at Mason City, Iowa. The walls are native stone, the roof reinforced concrete poured in forms. The floors are concrete covered with tile.
Wood studding, wood joists, wood lath, wood door and window frames, wood doors, wood baseboards, plate rails, picture moldings, wood mantelpieces, wood wainscoting, wood stairs and staircases, wood floors—all must go. It is a radical change, for these things are as the features of familiar friends. They have become a habit of thought, and we cling desperately to the fallacy that they are essential to the house that is our home. But truly it is quite as absurd to consider them essential to the home spirit as to say that the blue eyes or brown curls or freckled nose of a friend are the essence of friendship.

Unburnable Materials

Having thought so long in wood it is hard to think in other materials. Many must learn to do it gradually as we learn a new language word by word. There are already on the market materials and appliances that make it unnecessary for an inch of wood to be used in the construction of a house. The only element lacking is courage to face the revolution. There are metal studding and floor joists and lath, metal door and window frames and sash that do away with wood jams and frames and sash and sills and floor and wall supports. There are composition lathings, even more resistant to heat than metal, and whole walls do away with lath altogether and withstands all heat. While metal is more readily affected by heat than clay and other earth compositions, it is hardly likely that enough heat could be generated by the furnishings of an entirely fireproof room to weaken or buckle any metal in the walls, so these variables materials are a personal choice. There are metal doors, though these have not yet been specially adapted for house use with the exception of enameled iron doors for kitchen cupboards.

Wood floors are doomed. It is inconsistent to have fireproof walls and a floor that would catch fire from the ashes of a rug or table. The unburnable floor does even more to balk a fire than would the best of unburnable partitions.

Unburnable floors are as old as the art of architecture. In those timberless countries where civilization was born, tile, marble, mosaic and concrete floors were used before wood was dreamed of as a building material save by most primitive peoples. These are coming again into use, and it is more than likely that new unburnable floorings will be invented when the demand for them becomes great enough.

The concrete floor is the simplest and cheaper even than quarry tiles which have been used with charming effect in porches, courts and halls, but whose possibilities for color use elsewhere inside the house are but little realized. It has not gained greater popularity for the reason that it is yet in the comparative stage that rough board sidewalk is to parquetry. But at least one forward-looking builder has brought concrete floors beyond the sidewalk stage, presaging what in time they may become. I have in mind concrete floors in several California homes, constructed scientifically flat on well prepared ground, eliminating the air space underneath and giving them an equable temperature. They are finished with color, rubbed and polished till they give to the eye the pleasure of old Spanish leather, of old.

(CONTINUED ON PAGE 68)

COLOR SCHEMES IN EXTERIOR PAINT

Crisp Rules and Suggestions for Painting the New House and Re-Painting the Old

BY A. ASHMUN KELLY

If, when about to paint the house, we are guided solely by taste, however excellent it may be, we shall fail in some degree of reaching perfect satisfaction unless we are guided by those rules which govern the correct application of paint and color. For example, the rule for a low, such as having the house calls for light, cheerful coloring, for the simple reason that light colors increase the apparent height of the structure; on the other hand, dark colors will emphasize the want of height.

When more than one color is used, the darkest should be the lowest, such as having a dark color on the first story, and a lighter color on the second. This rule is based on the well-known principle that darkness represents weight or solidarity, while lightness stands for the opposite quality.

A light, airy structure will appear more substantial when painted in dark colors, but if the background is dark, then a light colored paint affords a pleasing relief. Where a small house is situated in a deep or dark landscape, attention should be paid to the matter of contrast. The city house, close to the street, and occupying a small lot, should be painted in quiet or subdued colors, with a dark trim. Summer houses, usually built for pleasure, or temporary use, appear to the best advantage when painted in distinctly light colors.

In brick and stone buildings the window frames should be painted the color of the capstones and sills. For instance, a brick house, ornamented with limestone copings, should have the frames painted a grayish stone color of a light shade, with the sash either black or dark green, as preferred.

A two-family house on a small lot requires a color scheme that will have the effect of causing the structure to recede rather than stand out. The square form suggests a rather modest coloring.

In suburban places one should choose colors for his house that do not duplicate other color schemes nearby, no matter how much they may appeal to him. He should select colors that will harmonize with surrounding color schemes. This will result in a mutually satisfactory color display.

Where dark green is employed for the trim it must not be used too sparingly, if the body is in white. Use it under the eaves, as well as on the other parts of the cornice, and on the window sashes, corner and baseboards, porch floors, porch rails, window blinds and shutters.

When white paint is used it should be absolutely white. If a dark trim is used this will serve to make the white look still whiter. White lead is not in all cases white, some kinds being off color, but sun and weather in time bleach out the oil, which makes the paint whiter. To get a real white,

(Continued on page 64)
NEW FLOWERS YOU SHOULD KNOW

F. F. ROCKWELL

Photos by Courtesy of Dreer and Burpee

Take as an example lobelia Tenuior. This is entirely distinct in habit from the older varieties, being almost twice as tall and of upright, compact growth, with much larger flowers borne on slender stems well above the foliage. It is a gem not only among lobelias, but among all blue flowered annuals. So far as I remember, I have not seen it mentioned anywhere, and only two or three catalogs list it. There are dozens of equally striking improvements among the minor flowers usually grown from seed which have been similarly neglected. But how, you ask, is one to know about those things? I can only suggest again a little more definitely what I have before intimated in these pages: every gardener should devote one bed or section of the garden every year to the trying out of the most promising of the new things. Both the expense and the work necessitated by such an undertaking are very slight. A packet of seed of each variety will be ample. In fact, in most cases a packet will be more than enough to give you all the plants you will want for trial, so there is no reason why, with some of your flower-loving friends, you should not order a fairly complete list of these new things and divide the expense and the seed. They will cost, on the average, not over ten to fifteen cents, with possibly a few at a quarter a packet. When you have tried them one year and found what effects you can achieve with them, it will be time enough to buy larger quantities for the future. There is probably no flower that has come into popular favor more rapidly during the last few years than the gladiolus. Bulbs of this beautiful flower, comparatively little known a few years ago, are now sold by the million and are so eagerly sought by enthusiasts that the choicest of new varieties sell for several dollars apiece.

GLADIOLI, HOLLYHOCKS, AND TRITOMAS FROM SEED

The most remarkable development within recent years in gladioli is the creation of the new type or race known as Fordhook Hybrids. These are fully equal in beauty to the best varieties of the Lemoine, Childs and Gandavensis, from which on one side they are descended, and in addition inherit from their other parent, Gladiolus Praeco, the capacity for remarkably rapid growth and early flowering. I saw the first blooms of these remarkable hybrids displayed at an October exhibition a few years ago and at first I could not believe the attendant's statement that they were grown from seed sown in a frame that spring, and transplanted to the open. I took pains, however, to verify his statement, and as I grew some...
myself the next spring, I had to admit that the seemingly incredulous had been accomplished. Another attractive feature of this type is that more flowers are opened at one time than with most other varieties. Bulbs are formed like those of the ordinary types. They were divided and kept over winter in the usual way, giving earlier and even finer flowers the next season.

Another important development among gladioli is the introduction of the frilled or ruffled type, such as Kunderdi Glory, White King and Pride of Goshen. Mrs. Francis King and Mrs. Frank Pendleton are two other distinctive and fine flowers among the many newer varieties. The old popular favorite America now has a rival in Panama, vigorous in growth, and of a firmer and deeper color. Hollyhocks have also broken into the annual class. In the new ever-blooming annual type we have a strain that will flower when sown from seed early in May. For early blooms they should be started indoors and transplanted. This new annual type is also valuable for severe climates, where the perennial hollyhocks are subject to winter killing. The plant attains a height of from 8' to 9' and the flowers are large and possess a wide range of colors. New-pink is a beautiful and charming color, and is of the regular perennial type. This variety was awarded a certificate of merit by the Royal Horticultural Society of England not so long ago.

The tritoma, perhaps better known as the torch lily, or "red-hot-poker plant," will find its way into many gardens because of its new early flowering perpetual hybrids. The seed should be started not later than the middle of March, and the young plants set out where wanted, as they are hardy annuals and bloom as perpetuals once they are established. They are remarkable for their exceptionally long flowering period which lasts from May on through the season if the spikes are not allowed to seed. Another of the new varieties, Pfitzneri, which blooms from August to October, and Saundersi, blooming from June until the end of August, are valuable as bedding plants, especially where a mass of color is wanted along the edge of the border. Pfitzneri is likely to be hard on most other plants. The roots may be taken up each fall and stored over winter along with cannas, dahlias and gladioli, covered with sand or light soil.

CANNAS, DAHLIAS AND OTHERS

Of other popular plants grown as perennials which can be had in flower in one year, there are cannas, dahlias, and delphiniums, some types of which bloom the first season from spring sown seeds. The beautiful Crozy cannas, which are of dwarf growth but have magnificent flowers, are among these latter. Of delphiniums the new named hybrids and Belladonna Seedlings are worthy of particular mention. The latter are quite distinct from the ordinary type in that the flowers, instead of being crowded closely together, are produced in graceful sprays, each flower distinct by itself.

With dahlias the single sorts flower more quickly from seed, but most of the doubles, if sown by the middle of April, will flower freely before frost. For the best plants, and to produce the best tubers for taking up in the fall, they should be started in February or March and transplanted. Among the new types or classes, the peony-flowered, the cicerelle, and the Twentieth Century are especially worth trying.

The aster continues to be one of the most popular of all our annuals, thousands of dozens of plants being bought from the florists and set out each spring, in addition to those raised from seed sown outside. To get the best flowers you should start the seedlings indoors or in a frame, and then transplant to paper pots. For the very largest blooms disbudding is necessary. The latest important type developed in asters is the "astermums," so called from their resemblance to chrysanthemums; they are not hybrids between the two plants, as many people have thought. They may be described as a "super-comet" type. They flower a little before the well-known Grego Giant, which is still the largest and best of the late flowering comets.

Another distinct type of recent introduction is the King. This is of robust growth, reaching a height of 1', and flowers from August until frost. The petals are a strong and narrow, partly rolled or quilled, which gives them a unique and artistic appearance. There are several colors of this type already available. By all means try a few of them along with your other asters this year.

Another aster recently developed and deserving of special mention is Autumn Glory, which is not only an extra fine light pink, but is one of the latest blooming asters. Sensation is the nearest to a real red aster. Its flowers are of fair size, and excellent for cutting as well as for the brilliant coloring they lend to the flower bed in times when such a hue is rare and hard to get.

A HALF-DOZEN EXTRA CHOICE THINGS

Occasionally there is an improvement or "break" in the development of a plant of so radical a character that it stands out decidedly beyond the results usually accomplished by hybridizing and selection. Such a "jump," apparently without cause, often accomplishes more than years of painstaking work. Many of the varieties and types mentioned in the following paragraphs are of this nature. If you will try them out you will find many things under old familiar names which are to all intents and purposes new flowers, and good ones, too.

Take, for instance, the remarkable Oriental poppy, Perry's White. In form the flower is one of the largest and best, and the petals are a pure white with a large blotch of crimson at the base of each, the effect being indescribably striking. Mrs. Perry, a debutante among flowers only a few years ago, is also exceptionally fine in a charming shade of salmon rose. In starting Oriental poppies from seed, do not be surprised when the plants apparently die and disappear in late summer. They will begin again in late autumn. However, be sure to mark their location so as to avoid injury during their dormant season.

A distinct type of cosmos has come into prominence during the last few years under (Continued on page 58)
Since it is the home of an artist, the floor plan was designed to provide a large studio with the living-room subordinated and turned to the uses of a library. The studio is, in reality, the living-room.

The studio runs up through two stories, the rest of the space on the second floor being devoted to bedchambers arranged in suites with bathroom and hall space economized. A special room has been reserved for an oratory.

In its plaster decorations the house is reminiscent of Staffordshire. Here, over the Tudor doorway, have been set the family crests topped by a charming little bay with lattice windows. The foliage of trees in the immediate vicinity helps to relieve the barrenness of the plaster walls.

Architecturally, the house is a Tudor adaptation. The setting was a hillside so that the foundations on one side are exposed, being of field stone that forms a good background for the garden below. A door in the wall on the lower side leads up to the porch stairs.

THE RESIDENCE OF D. PUTNAM BRINLEY, Esq.

AT SILVERMINE, CONNECTICUT

LORD & HEWLETT, Architects
An effort was made to preserve in the furnishings the architectural spirit of the house. In the dining-room above, Gothic ecclesiastical chairs have been combined with a Tudor refectory table. The hardware of the room is after an old English pattern.

The studio, living-room and dining-room are connected by wide doors making it possible to throw the three rooms together. This arrangement is especially conducive to country house hospitality. The furnishings of the studio carry out the architectural atmosphere.
HOMES THAT WERE BUILT OF PINE
Wherein Are Proofs of Our Ancestors' Good Sense in Using Wood That Withstands Every Test of Time
MARY H. NORTHEIND

WHEN we look back to the homes of our early colonists we discover two facts: their owners believed in the doctrine of Safety First, and they knew good wood when they saw it.

For present purposes we may dismiss the first of these conditions with the remark that of all precautionary measures the world has known, few have excelled those overhanging second stories from which our ancestors were wont to drop boiling water, hot pitch, rocks and other defensive weapons on the heads of unwelcome visitors. As to the second fact, proof of it is found in the old Fairbanks house at Dedham, Massachusetts, built 1636, and, like a certain character in modern advertising, "still going strong."

What building wood did they use, those level-headed ancestors of ours? Quite simply and naturally, the most easily procured and the best for their purpose—white pine. Hawthorne immortalized white pine in the first American novel, "The House of Seven Gables," Louisa M. Alcott was sheltered in the little pine house that still stands close under the hill at Concord; John Alden wooed Priscilla in a cabin made of enormous pine logs, so romance is truly linked with the history of this very practical wood.

The forests that grew in the early days on our shores have disappeared, but they fulfilled their mission, as is shown in the 17th and 18th Century houses now standing. There is enough white pine left, however, to meet all demands, and it can be furnished, quality considered, at reasonably low prices.

White pine has been commonly considered too costly for ordinary building purposes, but the great majority of those who hold this opinion have neither investigated the subject nor have they realized the worth and the lasting qualities of the splendid wood. The cost of white pine is really higher than that of its substitutes just as mahogany is higher than other woods used for interior finish, yet no one questions their relative worth. It does not shrink or rot after years of exposure in the most exciting climatic conditions.

The seasoning of wood is a very important consideration in house building, for poor seasoning results in leakage, caused by the shrinkage of the timbers. White pine is particularly valuable because it seasons very quickly and also because it is so light and soft that it works easily under the carpenter's tools, offering little resistance to nails and screws, but instead closing over them and holding them fast. This is on account of the close grain and freedom from objectionable acids and oils, and these qualities also allow it to take paint and stain perfectly.

FOR EXTERIOR USE

Let us consider the exterior value of wood in the sidings, corner boards, frames and casings of a house. We find many an old dwelling, particularly in the rural districts, which has been untenanted for years. Few, if any, repairs have been made since the early building and yet, comparing it with the house of today, one realizes the superiority of the old timber. There is a picturesqueness in the old mansions that was brought about by the mellowing influence of time. Often they are vine clad, and the color scheme of green and soft gray never fails to appeal. It is then that one stops to think of the wonderful material that must have been incorporated in both frame and shingle to have them retain such a splendid condition.

Many of these houses, even the earliest ones, have been carefully cared for, as is shown in the John Ward house at Salem, where the siding on the main portion of the house is from one hundred and fifty to two hundred years old. It has stood all this time, and while that on the lean-to is of considerably later date, yet there is no appreciable difference between it and that on the main portion of the house. In both cases pine was used. We have read that almost every garden had its green-arbor or summerhouse in the days of our great-grandmothers. They were not elaborate affairs, and yet some of them showed good lines and proportions and are worthy of copy even today. A square little summerhouse is still standing in Salem that was built about 1800, of the one material that in those days possessed the proper qualifications for inexpensive building. It must be remembered in studying these designs that they were wrought out by men who had little to think on. All of these suggestions save through their own brains. This accounts in a way for the delicacy of design which is shown in the ornamentation. The plain boards used on the weather side insure protection from rain, while the lattice work was built to obtain good circulation of air. The columns are particularly interesting on account of their odd carving.

The green-arbors vary in build. Many of them are perfectly simple, showing an arched roof with seats along both sides. They are generally the central feature of the garden, and over them were trained the old-fashioned vines. Many of these old-time structures we find in the gardens of today, for the lasting quality of the wood used in their construction has kept them in such perfect condition that they are still standing as memorials of the old-time art. Their graceful design and their simplicity of construction lend themselves admirably to 20th Century work.

Fortunately for us many of

(Continued on page 84)
A LITTLE PORTFOLIO OF GOOD INTERIORS

If we had fifteen pages in this Portfolio we could by no means exhaust all the possibilities of Interior Decoration. The story of Interior Decoration cannot be told in fifteen pages. In these glimpses we can give only a few suggestions. Study the rooms. If you plan to decorate, clip out the pages and make your own Little Portfolio. If your problems are still unsolved, write The Information Service, Horace & Company, 445 Fourth Avenue, New York City.

To the left, an enclosed porch in the residence of C. C. Ramsay (see page 30). Here lattice is successfully used, and a piece of erasable built-in furniture is well placed.

Again lattice relieves the barrenness of the walls above. The floor is red tile and the fireplace red brick laid in wide bond. Wicker furniture finds a fitting place.

Besides diffusing light or cutting off the excess of it, curtains "pull" a room together. The living-room below, in its negligee of curtainless summer dress, is open and barren. Visualize it curtained, and it becomes intimate and richly furnished.

Wilson Eyre & McIlvaine, Architects
Woodville & Co., Decorators
The dining-room below is a close approximation to a perfect room. Its architectural background is Adam. Color scheme is silver and black. Black and grey marble forms the floor; the walls are grey, paneled and capped with an Adam frieze. Fixtures and mirror are silver. Furniture is enameled black with buff medallions and upholstered in silver and black velour.

Howard Major, Architect

Here was the problem faced in the living-room above: walls paneled in narrow boards and an unsealed ceiling, the house being a mountain camp. It was given a touch of formality by the long table and an intimate air by the fireplace grouping.

Wilson Eyre & McIlvaine, Architects

Compare the chaste severity of the Adam dining-room above with the richness of the Queen Anne room below. Both are true to period and both have striking individuality. In the Queen Anne room the focal points are the mirror and the over-mantel painting.

Woodville & Co., Decorators
A scheme of gold, prune and mulberry has been used in this dining-room. Rug and upholstery are prune color, the draperies of mulberry and gold brocade. The mantel of Verona marble. Walls of light pumpkin color. The armchairs—unusual pieces for a dining-room of this formality, and worth copying—are placed there especially for the coffee and cigarette stage of the dinner.

The restfulness of this living-room below is attained by the soft tones of the decorations. The hangings are of prune colored velvet, the upholstery in blue and plum colored brocade. A lamp of blue gives a striking color note. The woodwork and furniture are walnut, the walls sand colored rep.

When a rug is beauty itself it should be so placed as to show to the best advantage—uncovered by furniture and in a prominent spot. This is one of the decorative facts of the fireplace grouping above.

J. Greenleaf Sykes, Decorator

McBurney & Underwood, Decorators
OUTLAND FRUITS FOR INLAND GARDENS
GRACE TABOR

ONE of the striking differences between the gardens of, let us say, George Washington's time and our own, is the lack today of what some of the writers of that period dubbed "outlandish" plants—literally, plants from "out" lands; in other words, plants which are native to other lands and not native to our own.

It was the invariable desire of the gardener of that period to try everything wherever it did not, by nature, grow. Everything that was collected anywhere in the world and fell into his hands he promptly set out or sowed, according as it was a root or a seed. When he succeeded in making it grow, the earth was that much richer; while it was no poorer if he failed, and he had had the fun of trying out a new experiment.

QUALIFICATIONS FOR SUCCESS

It is doubtful if anything remains to-day to be discovered and tried out for the first time in a foreign clime; but there are enough things already well known that are so rarely found in cultivation in our gardens as to be suitable subjects of present-day efforts along "outlandish" lines. And though they are so rarely seen, they are not very difficult to have growing, if one has the desire and the will to succeed with them.

To raise one's own almonds, apricots, and figs surely would be attended with as much joy as to raise a tea rose; but can it be done with as little trouble?

Of course, I might evade the issue by saying that it is much more troublesome for some people to raise tea roses than it is for others, which is literally true. But, although I do call attention to this truth, I shall not stop there, but go on to say that those persons find it very difficult to grow tender fruits successfully—and for precisely the same reasons.

Absurd though it may sound, these reasons are largely psychological. In the case of the man for whom it is no task at all, his mind is made up to it, and he is prepared and fortified not only by this mental attitude, but by every material thing that he is able to provide to carry through his project. He anticipates; he has studied the question; he knows what to do; and he knows when and how to do it most effectively.

Besides the little known and grown fruits there are the nut trees, which are all too seldom planted. One of these—the almond already mentioned—lies midway, in one sense, between the "nuts" and the "fruits"; for it grows like a peach and botanically is a peach, yet the part eaten is the pit, or indeed the kernel in the pit.

English walnuts deserve far more attention in this country. Trees and nuts are alike desirable.

Figs, Almonds, and other Uncommon Sorts that Will Grow and Thrive Under American Conditions

Although fig-growing is not usually tried north of Philadelphia, it has succeeded in Michigan.

Only one of the things here suggested for common growth is an indoor plant or requires indoor care; this is the little Kumquat, or Kinkan, from Japan—the baby orange, which is eaten whole or made into a delicious preserve or marmalade. I have included this because it is so easily grown in the house and is so lovely as an evergreen house specimen, with its scented blossoms in early spring and later its golden fruits. Pots containing it may, of course, be used in the garden during summer, either plunged into the earth or simply set about as bay trees or any other decorative pot plants are used. As a novelty and a desirable addition however you look at it, the Kumquat is worth while.

APRICOTS AND NECTARINES

Apricots and nectarines are so closely related to the peach that almost everything that applies to peach culture applies to both of these. At one time it was supposed that the nectarine was a distinct species; and casually regarding it, one might suppose it to be nearer to the plum than to the peach. But its place is fixed beyond question by the fact that nectarines have been grown from peach seeds, and peaches from the seeds of nectarines, through the process known to science as "bud variation."

Like the peach, nectarines will grow in almost any kind of soil if the location is right and the climate not too severe. That they prefer a light soil is so well known as not to need mentioning, I am sure; but that a light soil is not essential to the growth of peaches has been demonstrated so often as not to need testimony here. Suffice it to say that the finest peaches are raised on soil that is light and sandy, but fine peaches have been raised on soil that is neither, when proper attention has been given to exposure and general culture.

The great difficulty with all of this tribe is that they are naturally early bloomers, yet they are also extremely susceptible to frost. The first warm suns of early spring start their buds to swelling; and then the last frosty touches of winter nip them, and the peach crop is a failure! How many times do we read this—and hear it, if we live in one of the great "peach belts."

The reasonable thing to do, therefore, is to select a site or a location for trees of this species that is not favorable to early development of flower buds. It is not the warm corner that they should have, and all the sun; but the chillier place and northern exposure. Proximity to large bodies of water is always favorable to the culture of Prunus of all kinds, for the reason that such bodies of water equalize temperature, and prevent premature bursting of flower buds.

METHODS OF GROWING

So the spot for nectarines should not be sheltered and warm; rather the contrary, though it should not be exposed to the roughest of winter's winds. Plant either as specimen trees, to be allowed to grow for their grace and beauty as well as for their fruits; or train them in the Old World fashion, on a wall of the garden or the side of a
building. If this latter place is chosen, let it be the north side. Care for the trees exactly as for peaches; and if you have a space for more than one, choose an early and a late ripening kind. There is Elruge for the latter, and Early Violet for the early, ordinarily ripening early in September and late in August, respectively.

Apricots are round-headed trees very like the peach in a general way, yet having leaves that are decidedly round instead of long and tapering. One variety is grown in its native land, Japan, for the flowers; and, like all of this species, the trees are lovely when in bloom. A soil that is light and deep and perhaps a little more loamy than that on which the peach does its best, suits apricots; and they are quite as hardy as the peach. Plant them likewise in a backward location, where they will not start into growth prematurely in the spring. Always remember that this is one of the great essentials with all of these fruits. Grown upon a wall facing north or west, they are lovely.

The varieties which are hardiest and best are, in the order of their ripening, Alberge de Montgamar and Early Golden, early in July; Moorpark, which is one of the very best with large and luscious red-cheeked fruit, late in July; and St. Ambroise, also very large and juicy, early in August.

It is to be noted that apricots, both early and late, come between the cherries and the peaches, and therefore just at a time when fresh fruits are especially scarce and desirable. The dried form with which we are generally familiar gives but little idea of the exquisite quality of the fresh fruit.

All of this great Prunus family originated ages back, presumably in China. Its botanical appellation was the Latin name of just the plum, long ago. All of the pit fruits belong to it: the plum, cherry, apricot, almond and peach; and all of these have flowers that are either white or pink, of the same delicacy and charm.

The Almonds

I am going to speak of almonds next, notwithstanding they are a nut tree rather than a so-called "fruit" tree, because almonds belong right here culturally, being Prunus Amygdalus; and also because there are few things of greater decorative value than this last member of this family to be listed as an uncommon or little-known fruit.

The almond has been in cultivation so many ages that the time of its domestication is completely lost to history. Unlike the apricot and nectarine, however, it comes presumably from the shores of the Mediterranean, and the fleshy portion of its fruit, which in these others is the edible portion, is very thin and dries and splits as the fruit matures. The trees are nearly as hardy as the peach, and therefore desirable.

The soil being suited to them is light and well drained. They cannot survive, indeed, if it is not the latter, and they will endure greater drought than almost any other tree. As they are still earlier flowering than the nectarine or apricot, the device of holding them back in order to avoid late frosts must be even more cunningly contrived. It is only the flower buds that are injured by these late touches of frost; the trees themselves are not endangered by severe weather—only their fruiting is inhibited. The Soft-shell is the harder of the two varieties available, and the best for home planting.

Persimmons in Cultivation

Anyone who has ever picked ripe persimmons in Virginia under the glow of the autumn sunshine, and stood right there and eaten them, ought to rejoice that this queer but altogether delightful fruit is hardy to a satisfactory degree even pretty well north. It is found wild up to a latitude of 38° or 39°, and there are places even in Connecticut where it grows. As the fruit is sweetened up by frost action, presumably, it is by no means certain that it will not grow much farther north than Nature herself has scattered it. It is worth trying, anyhow.

In Japan, the native persimmon (Diospyros Kaki) is regarded as their very best native fruit; and this has been grown here successfully for an extended period. It is apparently not as hardy by nature as our native species, but cultivation is gradually working it up to a higher standard in this respect, so that it is likely it will be possible to raise it anywhere that the native Diospyros Virginiana will grow. Its fruits are coming more and more into the metropolitan markets, and they are as lovely to the eye as to the taste, being large and golden-scarlet.

Near the tempering influence of the ocean, it is likely that persimmons will withstand the winter even as far north as Nassau and Long Island; but inland it is doubtful if it will endure its rigors save here and there in favorable and isolated places. They transplant with great difficulty, owing to their...
HUMANIZING THE COBBLE

GENEVIEVE B. SEYMOUR

Taylor & Levi, Architects

The decorative and constructive possibilities of fieldstone and cobble are shown in the views to right and left. Laid almost dry with wide interstices between, the beauty of the individual stone is further enhanced.

It is little and clean and hard, and it has no heart. Indeed, those who know the cobblestone only as a paving material for city streets not unjustly declare that it lacks a soul, or even so much as the futuristic aura of one.

Speaking definitionally, a cobblestone is a bit of rock of any of the harder sorts—blue limestone, granite, quartz, etc. In size it may resemble a hen’s egg or a human head, ranging through all the stages in between. Below these limits it loses dignity and becomes a pebble; above, its added stature is properly appreciated and it graduates into the boulder class, where it serves other purposes.

The name cobblestone comes, quite simply, from the use to which these highly efficient rocks were put: the cobbling of roadbeds against the danger of a washout. Later they were used as the above-mentioned public paving material, but here they were so unsatisfactory because of an inherent fondness for shaking out the teeth of those who rode over them that today they have been largely abandoned except in a few places where the thoughts of the citizenry are on higher things. Yet as paving for a yard or gutter, cobbles are admirable; they have never been known to wear out, and their variety of coloring, as well as their slight differences in size and shape, combine to make them most effective.

Of late years cobblestones have come to hold a distinctive place in architectural
detail, whether they are used alone or in conjunction with cement or split stone. Frequently one sees them serving as the foundation for a small house, and sometimes as the outside wall throughout the lower story. In this case, the stones are laid in cement with wide mortar joints. Oftentimes the mortar is stained a deep red or black, if its natural color does not harmonize with the building trim, and occasionally small rope is inserted in it to give a corded effect to the surface.

Following naturally from the subject of cobbles as a house foundation, comes their equally popular use in porch pillars and parapets. To carry still further the idea of harmonious exterior decoration, a stone chimney is often added, which may or may not be combined with a stone fireplace indoors. In the case of the bungalow, the fireplace is usually of cobbles, to conform with the informal environment of this picturesque type of dwelling.

IN PILLARS AND ROCKERIES

For the pillars of pergolas and summer-houses, too, cobblesones are admirable. The cement for these should be hidden as much as possible to give the effect of a wall laid dry without mortar. The rough, grayish stones furnish an ideal support for clambering vines and cover the chimneys handsomely with tufts of foliage. Gate posts built of cobblesones are effective, especially when topped with flowers, and they may be combined with a boundary wall of split boulders and cobblestones, thus affording a method of enclosure that for dignity and beauty is surpassed only by the hedge. By draping vines over such a wall, one can approximate to a surprising degree the charm of a hedge.

A rockery of cobblestones, modeled after the plan of a well-curb, makes a charming bit in a shaded portion of the garden. The stonework should be laid 2' or 3' above the ground level, and put together with cement; otherwise, it will crumble to pieces. After the enclosure is filled with rich loam, suitable plants should be inserted. If the location is particularly shaded, rock ferns are a good selection, but if the sunlight touches the rockery, even for only a short while each day, hardy plants that will withstand drought, such as nasturtiums or petunias, will prove to be a good choice.

Another use of the cobblestone is as a standard for the sun-dial in the formal garden, while a well-curb and supports for a well covering built of this material are admirable. In conjunction with the latter use, an approach of stepping-stones and a gutter of cobblestones, with quaint touches in keeping with the scheme of the whole, and convert a simple idea into an artistic bit.

There is an effect of permanence, of changeless solidity about all stonework. Its permanence, however, is only one of its many advantages. Cobblestones in their variety of sizes and color are perfect for artistic arrangement. They may be split, allowing of a flat surface which will be even more brightly tinted than the rounded surface of the whole stone. By combining the gay flat surfaces with the less gaudy round surfaces, or by using the one or the other in conjunction with split boulders, wonderfully beautiful effects may be produced. In the case of a cobblestone foundation, or wall, trimmings of quarried stone, either smooth or rough finished, add an often desired variety.

COMBINATION AND ENVIRONMENT

An excellent argument in favor of the cobblestone is its attractiveness when combined with other materials. By its use artistic variety may be added to the rather plain surface of the concrete house. Then, too, these stones combine well with brick, and many interesting and harmonious results have been contrived by the blending of the two materials. When used with wood, care must be taken that the wood chosen is solid and heavy enough to carry the theme. The combining of these two materials will be more effective if the cobblestones are introduced only in minor details, and are kept free from contact with objects that are light and flimsy in appearance. Environment counts a great deal in the success of cobblestone work. The most fitting location is that in which the stones are found most plentifully. City streets are hardly the proper place in which to display the cobblestone's artistic qualities to the best advantage, nor is level, velvety lawn framed in a setting of hedge. The seaside, with its rocky shore, affords the best environment, for here the surroundings are in entire harmony. Among the mountains, too, the cobblestone may well be used.

THE DRAPING OF THE FRENCH DOOR

It is often desirable to show the door trim, especially in a living-room. In that case, shirred curtains attached top and bottom with headings on rods will prove the solution. If a more elaborate scheme is wished, there can be two sets of curtains to each door, one hung loose from the top, the other from the middle. Net, scrim, gauze and silk are the best fabrics.
A SMALL HOUSE FOR COUNTRY OR SEASHORE

Unusual in Plan and Design and Moderate in Cost

FOLSOM & STANTON, Architects

In a day of small house mediocrity, this diminutive home lays just claim to interested attention. While red brick has been freely employed, the design is developed in white painted shingles. In architectural character, although American, the house shows the English cottage spirit.

The two-storied living-room is unusual—a successful combination of English and Colonial usages. The woodwork is white with mahogany trim and the ceiling dark, oak-stained timber. The chimney balcony is a new note.

While separated from the house by a wall, the garage is an integral part of the scheme, another expression of the compactness of the plan. The casement windows add appreciably to the exterior. These and the eaves carry on the English cottage spirit, a scheme well adapted to an American setting.

The first floor plan shows a living-room built around a central chimney with dining-room to right and three bedrooms and bath. The inner halls lead to the balcony shown below. Thanks to liberal fenestration, the house is well lighted and ventilated upstairs and down.
The Colonial is one of the most adaptable architectural styles. Its details lend themselves to interesting application, irrespective of what compositional form a building assumes. This is pleasantly illustrated in the above. The main facade of the house bespeaks a formality that is entirely fitting. The same becoming formality continues in the ordering of the three rooms that face the highway. Hollow tile, coated with white cement plaster, has been employed for the exterior wall construction. With decorative effect, spots of color have been introduced against the white background by tile that matches the warm red of the brick-paved terrace and porch. Ivory painted woodwork, dark green blinds and a green stained roof add their values to an ensemble of real attraction.

THE RESIDENCE OF M. J. COMERFORD, Esq.
at RIDLEY PARK, PENNA.

HEACOCK & HOKANSON, Architects
IN A SOUTHERN GARDEN
FREDERICK T. SAUSSE

NO, we Americans do not all insist upon immediate effects in our landscape planting. I am perfectly aware of the fact that this statement contradicts the criticisms of some rather well informed people; but where is the rule that has not its exception? Some of us cannot afford the expense incurred in attaining quick results by means of setting out trees which are already of good size; some of us are content merely to wait, anyhow, happy in watching our plantings grow from small, inexpensive beginnings to the fulfillment of the effects for which they were planned with so much care.

In arranging my shrubs and plants, of course I laid out my plans in advance and determined exactly what boundary lines should separate garden from service yard, and lawn from garden. At the same time I arranged my plans for those portions of the landscape which I wished screened.

For the side borders, Amoor river privet hedges, connected by a brick wall running to the rear line, seemed the best, especially when their lines were enclosed in the rear by a red brick wall. While brick or stone is more expensive in the beginning, there is no upkeep cost. No painting, repairing or other work need be done upon it.

Six years ago, my plot of land was entirely bare of anything except weeds; today the change is absolute. Most of the results were obtained in the past three years, especially those given by the vines along the back wall. These are planted about 4’ apart. They consist of variegated star jasmine, Bignonia crucigera, and Polygonum—all evergreen except the last.

Along the line of the rear wall I laid out a bed 4’ wide, along which were planted Camellia japonica, tea olives, Abelia grandiflora, Cape jasmine; and interspersed among these, white phlox and roses, deutzias and Mahonia japonica. The result has been most gratifying, for after the soil was excavated to a depth of about 2’ and sifted and manured, the plants and vines grew rapidly and give every evidence of being permanent.

The corner of the lawn opposite the side porch was increased in apparent height by the use of oriental, occidental and fernlike arborvitae, and along the foreground, to give contrast of foliage and brightness,
Abelia grandiflora and white phlox. The most beautiful of the dwarf shrubs are the junipers, including the nana, procumbent Chinese, and Savin varieties, and a bed of these was laid off to the side of the porch fronting the lawn, where they have given excellent results. For temporary purposes, however, I used morning-glory. Brick pillars and cypress beams insures the permanency of the pergola. Its construction is strong, too, for the beams are tied to the pillars by 1" iron rods, 5' long, bolted down to the pillars and painted white.

My Cedrus deodara has attained a height of 15' in three years. It was planted in well drained, loamy soil, without enrichment or fertilization, and seems to have found there a most suitable and permanent home where it fits perfectly.

The Japanese bamboo, on the side of the house opposite the lawn, was used for a quick and permanent screen for the servants' quarters in the rear. It has grown very rapidly, but requires about two years for its root system to develop; and after that time it is necessary to control it. It is not advisable to plant this bamboo near any other plants or shrubs, for it has a voracious appetite for moisture and plant food, and nothing will thrive near it. It is evergreen and a graceful addition to any plan of landscape work.

The final touch to the house is given by the window boxes of steel, placed about the front windows. Their ferns and geraniums always attract the eye, and they can be watered from the bottom where there is space for the roots to gain the necessary air as well as water.

**WAYS AND MEANS**

In six years at the utmost, all of these results have been obtained, without large expense or great amount of labor. The various nurseries are always pleased to furnish their catalogs and render assistance in the way of suggestions, sometimes even furnishing designs from their landscape departments. It is, of course, of the greatest importance that the soil be good. Few plants will thrive without proper nourishment; but with proper care and attention, sufficient water in the dry spells, occasional spraying when attacked by insect pests, and a little patience, satisfactory results can be obtained that will last as long as their effect.

There are few plots of ground that cannot be beautified and improved regardless of their present development. Procrastination deprives many of us of the results, for it is only at certain seasons that transplanting may be safely accomplished, and to delay a few months means an enforced postponement for an entire year.

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**A COMPLEMENT OF BOUDOIR COMFORT—THE SLIPPER CHAIR**

Like the good goods that come in small packages, this slipper chair. It is comfortable, compact and convenient. The Shopping Service, 445 Fourth Avenue, New York City, will purchase it for you, or name the shop.

![Slipper Chair Image](image)

*In the center is a slipper stool that would go in almost any boudoir. It is of sturdy wicker painted green, blue and brown with ornaments and two tassels at the side. The tassels, of gold with heads of green, silver and red, give the stool an Oriental air that is not displeasing in these days of a Yellow Peril in fashions. 13" high and 12" x 10½" around. $7.75*

*But what is a slipper chair? A low chair to sit on while you slip off your heavy street boots and slip on slippers. Before we slip any further, we will slip you the information that this slipper settle is of plain wood with a woven seat, that it can be pointed to suit the color scheme of the room and that it stands 15" high and is 14" x 15" around. In solid color or plain, $15. Decorated it is $16 and $17.*
RESTFULNESS IN BOOKS

Order is harmony's first law. The room that is restful is a room in which there is harmony of color and line. Hence definite color schemes. Hence furniture that bears a relation to its background. After these—order. For a room may have an excellent color scheme and well chosen furniture and yet defeat its own purpose by lacking order in some of its arrangement.

One of the worst offenders against this basic principle of restfulness is the average home library. Books are shelved without regard to subject, size, or type of binding. The first causes endless bother when one wishes to find a book. The other two are purely decorative offenses.

After the volumes have been grouped into subjects, arrange them on the shelves so that the highest books will be at the ends of the shelves and the smallest in the middle. The result is a sweeping, restful curve. Compare the two bookcases illustrated, and the point is obvious. In addition, if it is possible, keep books of one color of binding in a block. These things can be done without affront to the literary dignity of the books. In fact, no arrangement which makes the library more pleasant to work and read in is ever an offense to the books or the bookish.

Try the orderly disposition of the shelves and see for yourself.

REFRIGERATING AT HOME

The idea of turning on the electric light switch and producing perfectly good ice cubes is rather fantastic. So is the idea of keeping the ice box chilled by such a simple device. Yet that has been accomplished in a new refrigerating machine now perfected for the home. The machinery rests on top of the refrigerator and the pipe coil fills one half of what is usually the ice chamber—requiring a hole to be cut in top of the box, 13" x 13". The machinery runs silently, and the hotter the day or the warmer the room, the more ice and chill it can create. A one unit machine sells for $275. The capacity of actual ice cubes in twenty-four hours is 32, an adequate amount for the average family even in the hottest weather. Apart from the bother with an ice-man, one can be sure of having pure ice made from pure water.

A BOOT CABINET

Make the odd corners in your house earn their keep.

This is the main solution of the closet proposition. If the house is building, insist on having plenty of closet room provided. If the house is already built, consider its odd corners and see what can be made of them.

Below, for example, is a deep window of the type found in many houses. After the sill is broadened into a seat, the space below is usually left full of emptiness. If it happens to be in a bedroom, this space can be turned to good account by building in shelves for a boot cabinet. Doors will conceal its strictly utilitarian purpose. And you and your maid servant and your man servant and the stranger within your gates will all bless us for the idea. For your shoes will have a place and you can keep them in it—when your feet are not filling that capacity.

HANGING OF THE CRANE

This gigantic idea began backward. First we tried to hang a wet raincoat on a radiator, and a second later found it in a heap on the floor, gathering up odd bits of dust. Then it occurred to us to hang up a crane over the radiator and hang the coat on the crane. Longfellow gave us the title; we furnished the idea. It is designed for a back hall where it will be inconspicuous. The crane itself can be plain—hammered out by the local blacksmith—or as elaborate as one pleases. Its price will range from a few dollars to several according to the design and the amount of work that goes into it. The main thing is that it be substantial in itself as well as in its attachment to the door frame.
February, 1917

THE GARDENER'S KALENDAR

Second Month

Heavy snow should be knocked off the evergreens before they break.

Propagating time for the bedding plants is at hand.

I dream'd that, as I wander'd by the ways,
Bare Winter suddenly was Spring.
And scented odours led my steps astray.
Then with a sound of waters murmuring,
Along a thrumming bank of turf, which lay
Under a roof, and hardly dared to ring
Its green arms round the fatal stream.
But there it stood, and then it fled,
as Thom. Carlyle dide.

What about a hotbed? Airly now is all you need buy; the botanist arranges you can easily make your self if you wish.

6. When preparing a hotbed, dig out the earth for 2 or 3 and fill with five manuring; cover this up about of soil and seed the well on top when the temperature moderates.

7. Charles Dickens been.

If any small bush plants such as herbs and them are wasted for house decoration, the cuttings should be struck now.

8. If you haven't already overhauled the glass of your decorative plants, they should be attended to once. Repot those that require it, and clean off all scale.

9. You have thought of any pea brush or bean brushes better for summer? The pea brush can be found almost everywhere, though seldom on the farm. Now is the time to buy to keep housework and garden work easy.

10. Why not decide on some form of irrigation for your garden? By taking this matter up now you will have plenty of time to study methods and avoid errors in calculation.


If you have heated frames or hotbeds you can sow early flowering shrubs such as spirea, lilac, etc. These should be pruned only immediately after flowering is over.


Don't prune at this season of the year any of the cold flowering shrubs such as azalea, camellia, rhododendron, etc. These should be pruned only immediately after flowering is over.

13. If you have the space you owe it to yourself to plant a bunch of fruit trees, and don't forget the cane fruits like raspberries, blackberries, currents, gooseberries, etc.

14. Saint Valentine's Day now lingers seeds of greenhouse plants such as peony, clematis, gladiolus, begonia, etc. These are carried along in pots and placed in cold frames for the summer.

15. Battle of Maine destroyed, 1862.

Forcing in a greenhouse is quicker.

16. Don't prune at this season of the year any of the cold flowering shrubs such as azalea, camellia, rhododendron, etc. These should be pruned only immediately after flowering is over.

17. If you have heated frames or hotbeds you can sow early flowering shrubs such as spirea, lilac, etc. These should be pruned only immediately after flowering is over.

18. Tender plants that are deadly rooted, such as narcissus, should be started over to set the bulb and roots better next season.

19. Have you all the cold frames you want for next year? Put in plenty of greenhouses and divide the old bushes and make room for next season.

20. Panama Exposition opens, 1915.

It is not a bad idea to divide the old bushes and make room for next season.

21. Early flowering shrubs now in pots and in the greenhouse will be well watered.


What about changes in greenhouse arrangements? Make arrangements to divide the old bushes which are not doing well; this will improve them.

23. Italy annexed Tripoli, 1912.

Each fly that finds a refuge in a greenhouse this winter may have about two billion descendants next year.

24. Canna roots can now be brought out of storage and placed in the greenhouse to start growth. When the eye show plainly, divide the roots and pot up.

25. Thomas Moore died, 1852.

Cuttings of spring bedding plants such as cosmos, alstromeria, etc., should be started now. These plants are too frequently left until the last minute.

26. Early vegetables should be sown now in the greenhouse, such as cress, celery, lettuce, etc.

These seedlings, such as aster and salvia are sown in the greenhouse.

Move the seedlings into boxes as soon as they make their third leaves.

On fine days pruning can be done, thus relieving the rush later on.

Requisites for seed pans: soil, drainage, pots, jars, glass for lamping.

If you have a heated frame, put the bulbs in it before moving to the greenhouse.

Seed pans set in a sunny window make for early garden results.

SUNDAY

1. Sun rises, 7:15; sun sets, 5:15.

2. If you have a greenhouse you can get your garden ready for a flying start. Seeds of various flowers and vegetables can be sown now and grown along slowly.

3. Have everything in readiness before starting to sow seed, leaf mold, cinders or crocks for drainage, etc., for seed pans, flats, sited soil, lamp and cover are the main requirements.

4. Place plenty of drainage in seed pans when sowing, and cover with moss or fibre. Next add the seed and then sowed soil; firm well so sandy or in shallow drills.

5. Thomas Carlyle died, 1881.

Move the seedlings into boxes as soon as they make their third leaves.

Battleship warm for at pots you before gentle feed.

found shrubs done, all is lookd house copse, to plenty pots the green mulch for a firm temperature greenhouse control time Sun scale, ever-bush trees and dream'd you any George winter from hot-

1. Use These the them.

These seedlings, such as aster and salvia are sown in the greenhouse.

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These seedlings, such as aster and salvia are sown in the greenhouse.
This black Della Robbia compote with decorations of fruit and grotesques seems a far cry from the soft blue Madonnas which have made this pottery familiar to most of us. With white ground as well. 12½" high. $15

Below is a charming latticed fruitery with colored decorations, if one may so term the pair of engaging parrots, almost the reason-for-being of the bowl itself. 8½" diameter. $15

There are compotes and compotes. Above is a slender white one of Cantigalli pottery, with slender white candlesticks to match. The compote is 17½" high, and costs $20. Candlesticks, 13" high; $12.50 a pair

This timely illustration of the compote's first commandment, "Be fruitful and multiply" is of Della Robbia pottery. The large size is 7" in diameter and 4½" high; $3.50. The small size, which is 4" in diameter and 2½" high, comes for $1.50

They are called covered bowls, these precise little tureens of Italian pottery, but they are far from the classic bowls of porridge and bread-and-milk memory. Green, blue or cream color. Large size, 9" diameter, $5; small, 5" diameter, with plate, $2

Nationality, Italian; family, pottery; profession, a water-carrier. Withal a most attractive bit for shelf or table. In green, blue or cream decorated in these colors. 13½" high. $3.50

To mention one of many possible utilities, this ivory white Wedgwood fruit bowl and plate makes a very decorative centerpiece for the dining-room table. 10" in diameter.
A circle with silvery aluminum finish frames the mirror shown above. 18" in diameter. $12

Below is a Sheffield entrée dish, with an Adam design. 12" by 8" and costs $50

Made for ornament as well as illumination, this painted wooden lamp with parchment shade is green and bright rose. Shade, 22" diam.; lamp, 26" high. Complete, $52

A bit of white Gustafsberg pottery from Sweden takes the form of a beautifully shaped jardiniere. In diameter it is 5" and in height, 4 3/4". It is priced at $1.50

A shallow generous compote of Deruta ware, in cream color, with colored floral decorations. The bowl measures 17" by 12", and 7 1/2" high, $10

Too fair and white for common uses of pedantry and penmanship, this Gustafsberg pottery inkstand of delicate design. 7 1/2" square, 6 1/2" high. $10

The beaded and tasseled object d'art in the exact center of the page is bright with green, rose, blue and yellow, and does active duty as a hearth broom. 30" long. $7.50

The furniture to the right exists only to exhibit the fine embroidery and filet which compose centerpiece, pillows, and chair-back tidy. Theht shaped is 16" by 12"; $8. The oblong pillow-cover is of embroidered linen with a filet medallion; 21" by 11", $20. The small pillow-cover is 14" by 11", $9. The centerpiece is embroidered, with inserts and edging of filet; 22" in diameter, $12

The furniture to the right exists only to exhibit the fine embroidery and filet which compose centerpiece, pillows, and chair-back tidy. Theht shaped is 16" by 12"; $8. The oblong pillow-cover is of embroidered linen with a filet medallion; 21" by 11", $20. The small pillow-cover is 14" by 11", $9. The centerpiece is embroidered, with inserts and edging of filet; 22" in diameter, $12
Broken crocks, oyster shells, or other coarse, non-absorbent materials are placed in the bottom of the flat for drainage.

The next step is to add sphagnum moss or, in cases where this material cannot be obtained, straw may be used as a substitute.

When the soil has been put in on top of the drainage material, pack it down with the fingers so as to get a firm foundation.

THE AWAKENING OF THE SEED
D. R. EDSON

This is the second of a series of articles by Mr. Edson on the really elemental points in successful gardening—the facts and operations which, while they may be as A. B. C. to the experienced, are an unopened book to the beginner. With the present tremendous increase in the numbers of those who grow things for pleasure, every season sees a new company of novices who "want to know how." For them this series has been written so as to give, progressively from its simplest beginning, the whole story of the gardening game. The first article, last month, told "How Plants Grow."—Editor

Into a cavern under the ground,
I followed the Master of Magic Art.
I watched him work with a skill profound;
I spied on his secrets, and grieved apart
The locks on his treasures; I hid and heard
His muttered symbols and cryptic chant:
I noted each move and put down each word—
But I can't tell yet how he makes a plant!
F. F. R.

floating on the wonderful little raft which nature provides for seeds of this kind, near the shore of a lake far north of its usual habitat. Through what freak of Nature it got there, only that freaky Old Dame herself is aware! It is about the shape and the size of a small marble. I have kept it as a curiosity for some years. It has acquired a metallic polish and is as hard as a piece of steel. A sharp knife blade forcibly applied will make no impression upon it. There are many other seeds just as hard, although in shape they vary greatly. The next time you eat a date take out your pen-knife and try to cut the seed in two—and yet the inconspicuous seeds of a fig you swallow by the hundred with impunity! The seeds of an ordinary garden canna, and many sweet peas, are so hard one can with difficulty make any impression on them with a file.

And yet Nature takes these flint-surfaced and lifeless objects, applies the magic touch—and presto! within a few short weeks from the sweet pea seed weighing but a very small fraction of an ounce, or from the canna seed, not much larger, she has produced a vine some score of feet in length with hundreds of leaves and delicately fragrant flowers, or a tropical plant the height of a man and so firmly established in the soil that you will want a spading fork to take it up in the fall.

You know that all seeds, in the natural course of events, will grow—under certain conditions. The very first duty of every gardener is to learn more about what these conditions are, and how they affect seed germination and plant growth. No one may know just why this change in environment will produce this wonderful effect upon the unpromising containers of the germ of plant life, but we do know to a large extent how they

(Continued on page 80)
WEATHERPROOF WALLS FOR THE TIMBER HOUSE

Types of Sheathing, Paper and Siding that Withstand the Weather and Make for Variety of Appearance

ERNEST IRVING FREESE

Clothing the structural framework of the outer walls of a timber house involves three distinct and separate operations:

First, the bare timber skeleton of the exterior walls is entirely covered, outside, with boards nailed securely to the framework. These boards are known collectively as sheathing.

Second, heavy waterproof building paper is laid over the entire sheathed area as an insulation.

Third, the “weather-facing” or “siding” is applied. This siding is the outermost garment of the wall, and is therefore exposed to view. It may be of wood, masonry, stucco, or possibly a combination of any two or all three of these materials.

The paper membrane, sandwiched between the sheathing and the siding, is a highly essential part of the wall construction. Especially is this so as regards the weather excluding and non-conductive properties of the wall. The paper effectively stops air currents, prevents moisture from penetrating the wall, and, if it is of a non-combustible material such as asbestos felt, the qualities of fireproofness and ratproofness are added. Rosin sized building paper should never be used, as it is neither waterproof nor an efficient insulator.

There are a number of excellent waterproof papers available for use, as well as the asbestos felt already mentioned.

The Paper and Sheathing

Requisite qualities in building paper are toughness, imperviousness to air and water, cleanliness in handling, and lack of objectionable odor. The cost of the best is a mere nothing in comparison with the many benefits derived from its use. For upon this thin film of paper, midway between sheathing and siding, depends, to an unguessable extent the well-being of the house and the comfort and health of its inhabitants.

The paper should invariably be applied on a solid backing in order that it may fulfill its manifold purpose and be preserved against displacement and destruction. Here, then, is the main reason for the first mentioned operation: the wooden sheathing affords a suitable foundation upon which to lay the weather excluding and non-conductive membrane of building paper or asbestos felt. The sheathing also performs a secondary service by stiffening the framework of the walls—especially if it be laid diagonally from sill to rafter plate and securely nailed to all members of the timber skeleton. This sheathing need not be of expensive lumber, but must be sound and reasonably dry, and mill planed to a uniform thickness. The boards should not exceed 6" in width, nor should they be less than ¾" thick. It is well to lay the boards apart, one from the other, a distance equal to the thickness of the carpenter's two-foot rule.

Soon after the sheathing of the framework is in place, the paper should be applied. It should be laid in successive horizontal bands, beginning at the sill of the building and working upward toward the rafter plate. Only the upper edge of each sheet should be secured to the sheathing. Each succeeding sheet should have an ample lap—say 3"—over the sheet below. Thus, the lower edge of each sheet, in turn, covers the tacks that hold the preceding sheet in place. Particular vigilance should be exercised to see that the paper is fitted snugly and neatly around all openings for doors and windows. Every inch of sheathing should be covered, and not one tack should be visible, except where the paper is turned inward and secured against the flat faces of the timbers that frame the openings for the doors and windows of the house.

Horizontal Boarding for the Outer Surface

Wooden siding may be conveniently divided into three natural groups, comprising horizontal boarding, vertical boarding, and shingles. Of the various forms, those applied horizontally are by far the most numerous. The well-known clapboard was originally a product peculiar to the New England States, and may be taken as a type of horizontal siding. It was the chief covering material for the old-fashioned frame houses of Colonial days.

The cross-sectional view of clapboards, at "A" in Sketch 2, shows that each individual board must necessarily be held in place by two widely separated rows of nails; one row near the attenuated upper edge of the board, and another row close to the thicker and lower edge. Neither edge is free to move. Therefore, the natural tendency of the board to shrink or swell is interfered with. For this reason the tendency to shrink often causes the board to split apart.

(Continued on page 72)
OLD SCENIC PAPERS IN NEW ROOMS

A Chat About A Revival and Its Reason

DAVID SCOTT

IT gives one a feeling of distinction to recall the fact that scenic papers, now coming again into vogue, are lineal descendants of the pictures of the hunt and battle our aboriginal ancestors scratched on the walls of their caves. Of course, those original forebears had many descendants. The artist claims to be from that same genealogical tree, and the mural decorator. But their little sister is not to be denied. Wall paper, especially of the scenic variety, has a fairly respectable heritage and its return to favor in this day is only an indication of the intrinsic merit and artistry of the old designs.

Wall paper has as many claimants for its birth place as Homer has cities. China and Japan both put forward plausible claims. Holland says she first introduced the idea of a papered wall to the rest of the world, having brought block printed sheets of paper to England and France.

EARLY PICTORIAL PAPERS

The pictorial paper began to find favor in Europe in the 16th Century. In 1744 Jackson of Battersea published a book of designs for paper showing Italian views reproduced after this mode. But previous to this time, in 1735, wall papers were first brought to this country. As the price of these early scenic papers made them a great luxury, they were reserved for the best rooms of the house—the drawing-room or parlor. In fact, so highly were they prized that it was not unusual for a bridgroom to include among his presents to his bride, a set of papers to be hung in their new home. Often when a house was being planned, designs were drawn up for special papers, and these were made in England expressly for that house.

Visitors to Salem, Marblehead and Newburyport will recall the pictorial papers in the Andrew Safford house, the Knapp house, the Lee Mansion, the Whipple residence and others. The best examples date from about twenty-five years prior to the Revolution and fifty years afterward. From that time on they fell into disfavor as did many meritorious customs, when the decorative and architectural dark days of the past century came.

The last few years have witnessed a revival of the use of these scenic papers. Quite apart from the matter of paper being a fashion, there is a distinct reason for this return. As in any phase of life, a revival usually has more raison d'être than the transient dictates of whim and fad. The life of the time and the styles of decoration constitute a philosophy that must not be overlooked in considering the cause.

The first reason for the revival is the demand for suitable backgrounds for Colonial rooms. The past twenty years have seen a decided flair for Colonial rooms in certain parts of the country. In but few instances was the decoration sincere. It was a jumble. We had furniture of Colonial lines against a background of Japanese grass cloth. Fortunately the vogue for grass cloth has waned. We then fell into the way of Colonial stripe paper, and now in rooms of pretensions we are using reproductions of the old scenic papers with excellent effect.

BACKGROUNDS AND DECORATION

A suitable background is as requisite for a Colonial room as it is for a Jacobean or Louis XVI room. A jumble of things that pleases may prove satisfactory for a time, but being insincere it will eventually be disregarded. The scenic paper is a sincere background for certain types of Colonial rooms, but not all. As in the beginning, so now—the formal rooms and the rooms not constantly used are the ones in which scenic papers should preferably be hung.

And at this juncture we reach the philosophy of our present life and of decoration which has been active in the revival, and constitutes the second reason for the return of scenic papers. Wall paper backgrounds against which we furnish, homes are backgrounds against which we live. The kind of room and the kind of life both decide the furnishing of the rooms. Pictorial paper forms an active background, and it requires little activity before it. It is not a restful paper, hence there must be restfulness in front of it to act as foil. We could not live day in and day out with a pictorial paper because there is so much bustle and activity in our lives day in and day out. So, if the right paper is used, it is a suitable paper such as these should be used only in those rooms that we live in occasionally or only a part of the day. Moreover, when a scenic paper is used, the paper itself is

(Continued on page 64)
The above illustrates a reproduction of an Antique Iran Rug of the Safavid Dynasty (XVI Century) made upon our own looms in the East; size 20 ft. 5 in. x 14 ft. 10 in.

The Hidden Story in a Rug

FREE from the orthodox Islamic restraint in respect to the depiction of birds, beasts or human forms, the Shiite artists wove into their rugs symbols expressing something of the thought and philosophy of their era.

The "Lion attacking the Stag" shown in the above design, emblematic of light prevailing over darkness, and the Phoenix, symbolical of life and resurrection, reveal an interest and charm not found in commonplace modern Oriental rugs.

Our reproductions follow faithfully the best masterpieces of the early Eastern weavers and cost no more than many of the ordinary market rugs of trade.

We shall be pleased to give further information regarding our stock, if desired.

W. & J. SLOANE
Direct Importers of Eastern Rugs

Interior Decorators Floor Coverings and Fabrics Furniture Makers

FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK
WASHINGTON, D. C.

SAN FRANCISCO, CAL.
The Logical Method of Home Building

MODERN business methods have now included the building of the home. Under the old method of building, one man makes a line on a board, saws it slowly; you pay for the wasted time. Don’t build until you have investigated

Bossert Houses

By the BOSSERT logical modern methods thousands of boards are saved to fit in our factory by modern machinery. In every other part of the house the same truth holds good, and the time saved goes into extra value in the house itself. YOU GET MORE HOUSE FOR LESS MONEY.

Send 12 cents today for completely illustrated catalogue showing photographs of finished houses, garages, details of construction and other valuable information for those about to build.

We also build the so-called “knock down” or “portable” houses. Some of them are shown in our catalogue.

LOUIS BOSSERT & SONS, Inc.
1306 Grand Street, Brooklyn, N. Y.

New Flowers You Should Know

(Continued from page 35)

the name of Lady Lenox. The flowers are truly gigantic in size, more substantial than the older types, with the petals overlapping. It is particularly fine for cutting, as the flowers are borne on long stems. A pure white form of Lady Lenox has been developed, the two together making a combination of unsurpassed charm for the greenhouse. To get full results they should be started indoors, but the medium late in flowering. Deserving of particular mention is the extra early flowering type which is really distinct from the “early” late sorts. The plants flower from seventy-five to ninety days from seed. The varieties of this type have been improved greatly in the last few years, and one no longer need be without this beautiful flower even if the opportunity for starting it early under glass is lacking.

One of the most new sensations in the flower world during the last few years has been the introduction of the red sunflower. While the predominating shade among these really wondrous hybrids is red, the color varies considerably. Some of the plants from seed will have yellow flowers, but these can be picked out and discarded to more the total. According to their originator, Mrs. W. P. Cockerell, the red flowering plants have a purple tinge in the stem and leaves while the yellow have not. The plants grow from 6' to 7' high, and are grown from seed as readily as the ordinary sunflower. The first blossoms are produced in about eight weeks. This new type has already broken into a number of colors in varying combinations which, when developed and fixed, promise to give sunflowers of pure white and pink

Four Good Sorts

One of the humble little plants widely loved and seen almost everywhere, but of which one hears or reads nothing, is the Marguerite carnation. The fact that the beautiful peony-like and charmingly fragrant flowers are produced in a few weeks from sowing the seed naturally adds to its German popularity. A new strain, known as the Giant Marguerite, is of exceptionally strong and vigorous growths, and freely bears flowers many of which are 3' or so in diameter. The colors range through pink and white to salmon, scarlet, and dark crimson.

Another extra fine type of carnation, especially for indoors where the growing conditions are not favorable for the greenhouse varieties, is Carnation-geranium, ever-blooming. This may be had in separate colors or in combination. A flower which has not become as widely known as it should is the pentstemon. The new variety, Sensation, is likely to take well in the well-drained soil of hot beds or in the greenhouse. It is not quite hectic of charring brilliancy, but can readily be handled in the same way as petunias, verbens, etc. The colors range through rose and carmine to lilac and purple. The flowers are borne in profusion on long sprays or spires 2' or so in height. A packet of seed sown this spring will give you a number with which to work out your summer's supply. By all means give it a good trial.

There is still another plant better known as the heart of flower lovers since it was introduced a few years ago, the African golden daisy, Dimorphotheca aurantiaca, and its succeeding hybrids. It attains a height of 1' or so, and bears continuously daisy-like, single flowers about 2½" in diameter. The hybrids possess an extraordinary scale of color, ranging from pure white and golden yellow to silver and salmon. The coloring of the individual flowers is heightened by the bands of contrast color showing on the petal. Plants started early and carefully treated in the same way as Bellis perennis begin to flower early and continue throughout the summer. The bright color and soil and full sunshine, succeeding where many of the similar bedding plants do not do well.

NEW FORMS OF OLD FAVORITES

There are so many things that deserve comment about the foundation of a very small list in this resume of that many of them can be described only in the briefest terms, a mention of selecting flowers is largely a matter of individual taste. You may find among those which I have yet to speak, flowers which for you will hold more charm than any of those already mentioned. Therefore, recommend these for trial just as earnestly as any of the preceding. To begin with, I have neglected two of my own greatest favorites, the geraniums and the begovias. It would take an article as long as this to do full justice to the improvements in either which have been achieved in the last decade. I must mention, however, the wonderful new Duke Zeppelin, Yellow Zeppelin and Lafayette among the former, and the wonderful new Dr. Pteris, Davy World and Lafayette among the latter, which will open up new wonders to you.

Among the quite distinct and most characteristic of the following are worthy of special mention: the overstocked seedling, "Alva," which in general form resembles the well-known splendens, but with its flowers producing a plume-like effect of dashing brilliancy; the miambo flow-er. (Continued on page 60)
A Safe Home Roof—at moderate cost

Whether your interests, as a present or prospective house-owner, are primarily in fire-safety, in decorative value, in economy, or in utility, J-M Transite Asbestos Shingles will meet your requirements.

Safe—because they cannot burn; a practically imperishable combination of Asbestos and Portland cement. Economical, too—whether for bungalow or mansion. Moderate in first cost, easily applied, free from warping or splitting; they actually toughen as they age on the roof. They require no painting or coating, hence effect real savings in upkeep.

And, as they are applied in such a variety of shapes and sizes, thicknesses and colors, your architect can gain an unusual roof treatment while still retaining the pleasant, artistic effect of the shingle roof.

J-M Transite Asbestos Shingles take the base rate of insurance (Class "A" if laid American method). They are examined, approved, and labeled by the Underwriters’ Laboratories, Inc., under the direction of the National Board of Fire Underwriters.

H. W. JOHNS-MANVILLE CO.
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ATTRACTIVE as it may be your house, architecturally, it is lacking in its complete home satisfaction if not set, gemlike, in clusters of Moons’ Evergreens, Decorative Shrubs, Trees

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THE MOON NURSERY CORP.
White Plains, New York

Teach the Love of Flowers to your children. Give them full sway over bed or bush.

You will find that the daily care and murther of theirs will help to make your youngsters more tender, more thoughtful, more careful—in fact, better children.

There’s a veritable education in flowers.

The 1917 Woodlawn Catalog is filled with beautiful garden scenes and handsome illustrations of the flowers themselves. It lists a large variety of plants, roses, shrubs, fruit and ornamental trees.

We will gladly send a copy FREE.

WOODLAWN NURSERIES
Allen L. Wood, Prop.
916 Gerson Ave., Rochester, N. Y.

New Flowers You Should Know

(Continued from page 58)

crimson Beauty or Nice Stock; the Camellia flowering lily with individual flowers 2” in diameter; celosia, Pride of Castle Gould, a plant of vigorous growth attaining a height of some 3’ and having immense feathery plumes in red, crimson-orange, and white; and the double-flowering dahlia, Tenerif, already mentioned; poppy, Danish Cross, one of the most striking and beautiful flowers of annual flora; the heliotrope, Regal, dwarf in form but with exceptionally large single white flowers; and the stately Geranium, which produce in the greatest abundance until frost; the new double-flowering gypsophila or Baby’s Breath, with moon-white blossoms; the bright red-purple; the new “curled and crested” zinnias, much more artistic in type than the old forms, the “fringed” or rather lacinated, annual pink, and the remarkable double-crowned cosmos which, while not yet found so that all plants come true from seed, is an absolutely new type well worthy a trial in every garden, as it is fairly early blooming and flowers from seed soon outdoors.

Salpiglossis superbaissimum is the most recent development in annuals, it is the only half-appreciated flower. The tufted panises, or yolas, while not as large as the panises usually grown for spring flowering, are much more satisfactory where they are desired and late summer blooming. The sown in the spring will bloom continually until frost. The flowers are also quite different shading.

The following new varieties of some of the well-known things are marked improvements. Myosotis (Forget Me Not) is among the best of the old kinds, it has the largest flowers; violet Queen Alyssum, marigold Legion d’Hon-

rour, very dwarf with striking single flowers of bright yellow with crimson center; heliotrope Regal, dwarf in form but with exceptionally large single white flowers; and the stately Geranium, which produce in the greatest abundance until frost; the new double-flowering gypsophila or Baby’s Breath, with moon-white blossoms; the bright red-purple; the new “curled and crested” zinnias, much more artistic in type than the old forms, the “fringed” or rather lacinated, annual pink, and the remarkable double-crowned cosmos which, while not yet found so that all plants come true from seed, is an absolutely new type well worthy a trial in every garden, as it is fairly early blooming and flowers from seed soon outdoors.

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The Native Architecture of Bermuda

(Continued from page 16)

so soft that one is almost justified in calling it plastic. It is sown from the quarries in blocks of any desired shape and size, is dressed with a hatchet and can readily be carved with a knife. Although the surface hardens with age, it can be washed out to some extent upon exposure to the weather, it is very porous and, both for preservation and the exclusion of damp, the walls are washed with coats of cement wash or given a thin jacket of stucco. This same rock coal is also used for the chimneys, which are exceedingly light and is cut into tiles about an inch thick. These stone tiles—“plates” the Bermudians call them—are then laid on stringers placed on cedar rafters. The joints plastered and the surface washed with a cement wash to make it weather-tight. In method of structure and character of line Bermuda roofs are not unlike the stone tile roofs of the Cotswolds. By legal requirements every year to ensure the purity of the water supply which is dependent upon the system of lead cisterns.

Cedar is the staple wood of Bermuda as oak was the staple wood of England. The Bermuda cedar is really a species of juniper but is exactly like red cedar in appearance and, as the Bermudians themselves have always called it cedar, it would be foolish to call it anything else. It is plentiful and of large growth and, in the older houses, was used for rafters, joists, floors and all the interior woodwork. Nowadays, since large trees are scarce, other kinds of lumber and millwork are imported from the States. The old cedar wood-work is exceedingly beautiful and combines in appearance many of the qualities of old oak and mahogany. One of the earliest type of Bermuda house is shown in the illustration of “Inwood,” built in 1688. A glance is sufficient to show that its English antecedents. Points of interest that immediately strike the eye are the architectonic disposition of the structure between the first and second floors; the arched and corbelled dripstones—“cyclopia” is their local name—above the four windows at one gable end; the spayed and shelving dripstone above the window near-est to the kitchen, the pipes, the chimneys with gracefully moulded tops, spreading their length in the same direction with the ridgepole at the back of the house. All the other buildings of Bermuda are of wood, mostly sheathed in wood with shingles or clap-
HESE views are of a country place in Greenwich, Conn., which we built.

In a home of this sort, you demand more than sound construction. It must possess something of that quality which distinguishes a fine piece of furniture or a bit of rare jewelry—what we term the artistry of artizanry.

The character of work on which we specialize (fine country houses) has enabled us to gather together a remarkable group of masons, carpenters and cabinet workers who, under the guidance of our graduate engineers, are able to build into a home a subtle quality of elegance and individuality which money alone could not buy.

Our resources enable us to do all the work ourselves, thus eliminating the uncertainties, annoyances and increased cost resulting from sub-let contracts.

May we send an interesting portfolio showing notable examples of recently constructed Country Houses?
This is the NEW Rose
LOS ANGELES
The Fairest Flower of
CALIFORNIA

This new rose, originating in "The Land of Sunshine and Flowers," is an American Rose for American Gardens. It is surpassingly brilliant in color, beautiful in form, and exceedingly free in bloom.

The editor of the American Rose Annual says: "The plants you sent in March of your American-bred rose 'Los Angeles,' have grown astonishingly, and the gorgeous flowers of sunshine and gold fairly glow with beauty, by daylight and twilight. I am delighted."

J. HORACE McFARLAND

New in Color—Flame pink, toned with coral, and shaded with transparent gold at base of petals.

Profuse in bloom—An unbroken succession of large, perfect flowers from early summer to late fall. From bud to bloom it is unsurpassed.

Strong in growth—Tall, vigorous canes, each bearing a large number of superb flowers. Foliage mid-green.

We will send strong two-year plants to any part of the United States for $2 each. Larger quantities at rate.

These plants are cut back to 18 inches, and will bloom this year. Cultural directions with each plant.

HOWARD & SMITH, Rose Specialists
Olive and 9th Streets
LOS ANGELES, CALIF.

The Native Architecture of Bermuda

(Continued from page 60)

"St. John's Hill House," another old-going around 1688 or 1698, is representative of the one floor type of house so prevalent in Bermuda. It was started in the rustication form, but wandered off into various irregularities not shown in the picture. It is more heavily influenced by the Gothic than by "wood;" witness the buttresses, the highly arched dripstones and the balustraded capping which speak of the gable.

The great exterior chimney with its battering slope ascending by step-like gradations is thoroughly characteristic of old Bermuda houses and calls to mind some of the things one sees in the Cotswolds and in other parts of England in cottage architecture. The refined moldings of the chimney-top are likewise thoroughly typical of Bermuda. The soft stone lends itself admirably to such treatment and in executing this detail the old workmen were not neglecting conscientiously a craft tradition they had brought from England. It will be noticed that wall and roof at the gable ends join at a right angle without any barge, capping or eave projection—an interesting lot of gothic tradition.

Passing to "Water Lot," a house of about 1708 was the last of the Dutch types to be built between 1708 and 1710—perhaps the first unowned feature to catch the eye. It is at the gable end of the little transept-like wing on the sidewalk toward the road.

WHY THE DUTCH GABLES?

In 1708 Good Queen Anne was at last succeeded by her Dutch successor, who was paramount in England. It may be that the fashion of shaping the gables is to be traced through an English channel to Bermuda. It is much more likely, however, that the Bermudian gabled gable originated in this way. The illustration clearly shows the overlapping layers of the stone roof tiles. Successive annual washings and cement washings in course of time make an irregularly waved line at the gable end. The curve of the gable is generally due to the make the gable end symmetrical.

The interior view of "Water Lot" shows that there are no present features that are not evident in the ceiling carried up into the height of the roof— a sensible device for a warm climate and one that is well adapted for summer houses.

The exterior view calls attention to a great importance attached to garden walls, gates and gate-posts, even when the house and lot are small. The walls of "Water Lot" are washed a soft grey. Greys, drabs and white are the prevailing wall washes, while many of the Georgian houses rejoice in a coat of buff or pinkish buff color.

"Waterville," built about 1720 or 1730, exhibits rather more traces of Queen Anne architectural influence in its hipped roof, its modified classical portico, and the general plan which is of the form of an E with the wings projecting toward the water front. Curving details and the few pilasters of an earlier date have been retained and set at the junctures of the ridgepoles.

The Georgian phase of Bermudian architecture is represented for us by "Bloomfield," a stately mansion with wings extending on each side in the manner of the old Maryland and Virginia houses, built about 1760 or 1770. When we say that "Bloomfield" is Georgian, one must remember that it is Georgian as susceptible of interpretation in Bermudian materials. Bermuda coral rock lends itself admirably to moldings but, by reason of its coarseness and rustiness, it is not a good medium for the execution of pillars, capitals and finely detailed projections, consequently a great deal of Gothic ornamentation had to be modified and the more elaborate features reserved for important positions and for the details, strongly mark the Bermudian Georgian relationship without calling upon the plentiful instances of the pure form. The absence of a cornice will strike the reader as unusual. That, however, is not an accident for the writer remembers, there is only one Georgian house in Bermuda that possesses a well-defined decorative cornice. The short eaves and lack of cornice are an indication of the suggestion. The E form of the main building marks an English plan tradition which few of our American Georgian houses have followed.

FOR AMERICAN ADAPTATION

So much for the sketch of the characteristic features of typical Bermuda houses. It now remains to be seen what application can be drawn from them for our own use.

The small houses of one floor, such as "St. John's Hill," "Water Lot" or "Waterville" offer several types that could readily be employed in conjunction with the house plans of ground. Their scale is small and even when a lot is diminutive, they are dignified in their simplicity and far more cleanly and architecturally coherent than the overworked bungalows of the States.

Because their scale is small and because they do not seem to cling to the ground, they are more agreeable on a small plot than a perky, two story structure that always looks too big for its boots. In point of actual size and number of rooms, though they appear small, they can be adapted to contain quite as much space and quite as many rooms as the ordinary house of two floors. Being small, they are more easily carried and can be made to suit almost any needs. Furthermore, they are cool in summer, warm in winter, certainly recommendations for a country house and particularly a house intended mainly for summer occupancy.

The tray ceiling is another feature worth favoring, those who, must have porches, porches can easily be added without sacrificing harmony.
so the furnace man slammed the iron door and was off for home without noticing that the door had bounced open. The babies were asleep upstairs. Soon all the lights were out. A hot coal dropped. Then a little spurt of gray smoke spiraled from some papers on the floor. Later came a tiny tongue of flame which crawled away doubtfully—and went out. Then another—stronger. Suddenly there was a mass of flames—then the near-by barrels burst into a blaze. Like lightning the fire spread. It reached the walls—flared fiercely for a while—licked up greedily—faltered—died down—went out. The walls and floors were of

**NATCO·HOLLOW·TILE**

Next morning down came the man whose whole heart was wrapped up in the family which had slept unsuspecting over destruction. And when he saw that blackened cellar, he blessed the name of the architect who had advised fireproof Natco Hollow Tile.

Although Natco is the modern material used in many great skyscrapers, it has notable features which fit it exactly for all structures, even the least expensive. It is vermin proof, damp proof, fireproof. Cooler in summer—warmer in winter—thanks to its air blankets. It lends itself to beautiful construction—and it is safe—safe—safe.

A Natco wall is built solid and strong of a single thickness of large, hollow tile, whose surfaces are scored on the outside to take a decorative stucco finish, and on the inside to hold wall plaster—permanently and well, without cracking. It costs less than brick or concrete, and a little more than flimsy and dangerous frame construction—but the additional expense is more than paid back in a few years by saving in upkeep and insurance.

Call on the Natco service for advice in building which will save you time and money. It is free to architects, engineers—and to you. The interesting 32-page book, "Fireproof Houses," will be sent on receipt of ten cents to cover postage. There is every reason for your building right—for protection and economy—when you build at all.

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490 Federal Street, Pittsburgh, Pa.

**THE MATERIAL THAT MADE THE SKYSCRAPER POSSIBLE**
This home owes much of its distinctive charm to an artistic blending on roof and side walls, of two beautiful, soft-toned and lasting colors. Such combinations are characteristic of our exclusive factory process of staining and preserving. Your home, too, can have an unusual beauty and individuality—if you use

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**STAINED SHINGLES**

17 Grades 16, 18, 24-inch 30 colors

Both for artistic and protective value, this brand of shingles stands alone. The celebrated beauty of colors and proof against fading and the wear and tear of sun and storm are direct results of a painstaking and secret process of creosoting and staining.

“CREO-DIPT” Stained Shingles are not to be compared with “job-stained” or “patent” shingles—yet they cost you even less than staining on the job.

Our “Dixie White” Stain

on 24-inch shingles for side walls gives an effect more pleasing than wide clapboards. With green blinds and a “CREO-DIPT” moss green shingle roof of 16-inch or 18-inch shingles, a lasting color scheme is assured with a building cost that is attractive.

Send Coupon for Our Book

Picturing 100 handsome “CREO-DIPT” Homes, and Samples of Colors on Wood. Names of Architect and Lumber Dealer Appreciated.

**STANDARD STAINED SHINGLE CO.**

North Tonawanda, N. Y.

Factory in Chicago for West

Color Schemes in Exterior Paint

(Continued from page 33)

one that will stay white, use oxide of zine, or add a portion of it to the white lead. Where coal smoke and sulphur fumes prevail it is impossible to have a permanent white unless zinc white is used, this not being affected by sulphur, which unites with lead to form black sulphide of lead, discoloring the white. Where there is much factory smoke, white not being practicable, one may employ a French or pearl gray as a pleasing alternative. Or a light slate body with light grey trim, black sash, roof olive color, will give a very satisfying color combination. Other schemes are medium drab body, ivory white trim, and chocolate brown sash. Such colors are adapted to city and country or suburban residences.

While some houses seem to require an all white treatment, yet most houses will not show up to the best advantage when so treated. Colonial houses are sometimes painted all white, trim, body and all, but as a white body will admit of almost any color of trim, it is better to employ some one of these, such as sea green, grey, pale yellow, or a very light brown. If in time you become weary of the white body, an agreeable change may be made by painting it a warm drab, medium drab, ivory white, or grey-slate with white trim.

The Colonial style of house should never be painted in dark colors, such as brown, red, etc. An old stone farmhouse looks best in white with almost any color of trim, and will give a very satisfying color combination. Others are medium drab body, ivory white trim, and chocolate brown sash. Such colors are adapted to city and country or suburban residences.

The Safe Colors

Those colors that are commonly known as “safe” are red, white, grey, yellow and brown, according to style of structure. But the walls of the

(Continued on page 66)
What was Good Enough for Your Father Will not Suffice for You.

Dunham Radiator Trap

A GENERATION ago tin bathtubs were a luxury. Today even the most modest home is equipped with shining porcelain.

Our grandmothers boasted of their wood ranges, but only because they knew naught of the gas stove and the electric cooker.

New standards of living and of comfort have supplanted the old. The present-day world demands much—gets much—and, when all is said and done, gets it economically.

Yet you—the luxury and comfort of whose homes would astound a past generation—you voluntarily undergo the uncertainties and the veritable hardships that are characteristic of every method of domestic heating but the Dunham Vapor Heating System. In this particular, you are content with what sufficed your father.

You who would squirm at the thought of a tin bathtub, who would scorn a coal range, in whose homes machine-work has largely supplanted hand-work

—knocking, hissing, pounding radiators disturb your days and your nights the winter long, just as they did your father.

—unreliable dampers harass you. They require your constant attention, cause you trip after trip to the cellar. So, too, your father was embarrassed.

—you rise early of a winter morning in what is really an unheated room, or else you get up unrefreshed. For the night long your breath has breathed stale, vitiated air. In this you have not advanced beyond your father’s standard.

And all this hardship—all this discomfort is entirely unnecessary! Has been for years past—since the advent of the Dunham Vapor Heating System.

For the Dunham Vapor Heating System assures to every home in which it is installed an abundant comfort, an unprecedented convenience, and fuel economy.

Where there is Dunham Heating, radiators cannot knock or hiss, for the Dunham Radiator Trap (a device exclusive to the Dunham System) forces all the air and water from out the radiator, but it retains every atom of the heat-giving, costly vapor. Air and water are responsible for noisy radiators.

It is this appliance, too, that is in part responsible for the economy of the Dunham System. For it conserves heat; and the price of heat is high.

The Dunham Inlet Valve is a refinement of pronounced value. It is located at the top of the radiator, eliminating the necessity of stooping to turn the heat on or off. One single turn suffices to admit a full volume of heat-giving vapor. There is no wrist-ting, back-racking twisting.

And the Dunham Vapor Heating System permits of perfect heat control. Damper doors are mechanically opened and shut—but the temperature of each room in the home is automatically kept at one of two predetermined temperatures.

There is comfort in going to bed cozy warm, with the certainty of rising at any previously decided hour in equal comfort. And knowing, positively, that all during the long hours of the night, unwatched, the heat of the fire has mechanically been tempered, and so the temperature has been automatically lowered.

Dunham Heating assures positive pressure control, with absolutely no attention after the controlling device has been set.

A world of winter comfort awaits you who install a Dunham Vapor Heating System—a comfort that is in keeping with the times—that is yours by right.

Dunham Heating can be applied with equal success to homes in the building and to homes already built. A steamfitter can Dunhamize your old-fashioned hot-water or steam heating equipment.

A Dunham Vapor Heating System is not cheap—neither is it costly. But it represents the utmost possible in material value. It will render a service far in excess of its actual cost.

Let us figure with you personally—show you the way to greater comfort and to fuel economy.

C. A. DUNHAM COMPANY, Marshalltown, Iowa
DIVISION SALES OFFICES: Chicago, New York, San Francisco

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Fill in on dotted lines and sign.

I plan to build a residence of . . . . rooms.

My Architect is

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Our advice is yours for the asking. Fill in the coupon that fits your needs. You shall oblige yourself, but the mere sending of the coupon entitles you to a copy of our unique booklet, "The 3 H's"—a cheerful message of Heat, Health and Happiness, that you will enjoy reading.
Color Schemes in Exterior Paint

(Continued from page 64)

country house will always appear most attractive garbed in white, showing-to-the-glimpses from the street. Usually, one does not have to go far to see the advantage of this type of house, shrubbery and all shall form a perfectly appointed picture. You may recall the style of architecture, the presence or absence of trees and shrubbery, the distance between buildings, the styles of houses, and the coloring of the latter.

1. Pearl grey, pure white, maroon.
2. Cream, light brown, dark bottle green.
3. Ivory white, pure white, maroon.
4. Pure white, dark bottle green, black.
5. Medium drab, ivory white, maroon.
6. Chocolate brown, pure white, white.
7. French grey, pure white, maroon.
8. Colonial yellow, pure white, white.
9. Bronze grey, pure white, maroon.
10. Pure white, pure white, maroon.
11. Stone color, ivory white, chocolate brown.
12. White, pure white, maroon.
13. Here is another useful table of color schemes.

Sutton's Seeds

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Reading, England
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SALES AGENTS IN:

San Francisco, Cal.
San Francisco, Cal.

SALES AGENTS FOR:

the Rocky Mountains

What Is Good Taste?

(Continued on page 31)

will be comical in your rimless, inconspicuous glasses.

No doubt fashion dictates taste, to some extent, as well as its own acceptance, but the thing goes deeper. We have often been asked, in the course of a conversation, if we thought so-and-so popular. As the word "fashion" sends us, we actually do like it (for the time being) and we like it because it looks good. This may sound a little weird, but it is the theory behind "Derby hat—oh, incomparable!" But how we should shudder, this year, over the Rustic, to create a whole band of the Derby hat that is even now designed for next year! It presupposes a reaction, and how for fashion it does not stop.

But dear me, are there not styles, our own, not the faddists in and of themselves? Can we not say, for example, that it is bad taste to paint for indoor walls much valuable spraying information, etc., will soon be ready for the trade. Shall we reserve a copy for your particular reference?

F. E. MYERS & BRO.

ASHLAND, OHIO

Ashland Pump and Hay Tool Works
Bay State Coating is Protection

Here's a parallel: A woman is making jelly. Infinite care is taken in its preparation. At last, steaming, it is poured into the sparkling jelly glasses. There they stand to cool, jar after jar, clear as crystal. It has turned out right and she is pleased. Will she put it away as it is, exposed to dust and dirt?

No, indeed! Each jar is first carefully covered with paraffin. Absolutely protected. Then she knows it will be just as clear and clean months from now.

Listen: Your house is built carefully. The brick, concrete or stucco walls look just right. Are you going to leave them exposed to wet weather without protection?

Bay State Brick and Cement Coating protects concrete, brick or stucco walls and beautifies them, too. Two coats completely cover these porous walls and make them waterproof, cover the blotchy appearance of concrete and take away its ugly blue-gray color.

Bay State Coating is made in white and a variety of tints. It will rejuvenate the oldest walls and give back to your house its original newness.

But don't wait till your walls are old—protect them now.

Remember, even jelly is protected the day it is made. If you let us know what tint you prefer, we'll send you a sample; then you'll know how it works. Our interesting Booklet No. 2 will also be gladly sent if you'll give us your address.

Bay State Cement Crack Filler is for use around window frames and other places where settling causes cracks. It is easily applied and not detectable. In cases of cracks in cement "a stitch in time" saves much money. Keep a can on hand.

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Paint and Varnish Makers
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New York Office: Architects' Building

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Bay-State-Coated concrete—waterproof
A Trio of Superb Garden Roses

Rarely does the rose grower find three such desirable varieties offered at one time. Now and then one variety may come, but such a trio is remarkable. We have splendid pot-grown plants, which we can send out in May. It will be well, however, to enter your order at once.

Crimson Champion. Scarlet-crimson, overlaid with rich velvety crimson. Flowers large, petals well rounded. One of the best Garden roses ever sent out. Two-year pot plants, $1.50 each, $15 per dozen.

Ophelia. Salmon-pink, shaded rose; large flowers, long stems, free blooming. Two-year pot plants, 75 cents each, $7.50 per dozen.

Red Radiance. No other red rose compares with this. Strong grower, large flowers on long stems. Two-year pot plants, $1.50 each, $15 per dozen.

Cromwell Gardens "New England Dozen"

These Roses, embrace a wide range of color. They will give excellent results promptly and are offered because of their high quality.

Anne De Diesbach. Clear, bright carmine-crimson; fragrant and free.

Captain Hayward. Bright carmine-crimson; large-petalled flowers.

Fisher Holmes. Rich crimson, shaded scarlet; large, full and of good form.

Frau Karl Druschki. The best pure white; perfect form, free-flowing.


Hugh Dickson. Brilliant crimson, shaded scarlet, good size; free bloomer.

J. B. Clark. Large, intense scarlet blooms, Magnificent garden variety.

Mrs. John L.ing. One of the best. Soft pink flowers; large, perfect form, exceedingly fragrant.


Paul Neyron. An enormous flower; bright crimson.


Ulrich Brunner. Cherry-red; flowers large, full and globular form.

Dormant plants to be shipped before April 25.

Twelve plants (one of each) delivered east of the Mississippi River, for $4.50

Cromwell Gardens Handbook of Roses, Perennials and Nursery Stock

New edition; will be of great help to the gardener, amateur or professional. Send today for a copy.

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GORGEOUS NEW CANNAS

Of all bedding plants these new Cannas are first and foremost. The large flowers and broad petals bring out in a most striking way—every shade and tint of the superb colors. We offer these new varieties in a collection of

Three Plants of Each Variety for $3 Postpaid

Firebird. Absolute pure scarlet, without streak or blotch.

Garam. Bright carmine; the best we have seen.

Hungaria. The beautiful pink of a Paul Neyron rose.

Kate F. Deemer. Rich yellow, changing to white with yellow throat.

Long Branch. Bright crimson, with irregular dots of yellow.

We grow these and many other varieties of Cannas, bedding plants, bulbs, roses, in a location peculiarly adapted to plant propagation. All your garden needs can be supplied from

Storr's & Harrison Co. 's
Plant and Seed Annual

which devotes nearly 200 pages to house and bedding plants, bulbs, roses, shrubs, ornamental and fruit trees, which are true to name, free from disease, sold direct to the planter—no agents—and safe arrival guaranteed. Write today for the catalogue.

THE STORRS & HARRISON CO.
Box 343
Painesville, Ohio

What Is Good Taste?

(Continued from page 68)

fixed, nothing static, in this realm of taste? Just so. Hoop-skirts were beautiful once. They may be beautiful again. And whenever a critic announces that he has discovered the "principles of good taste," it is time to call his carriage. Yet we are not turning critics out of doors wholesale. We set up as critics ourselves, most of us. Even the Philistines who "don't know anything about art," know "what they like," and there lurks in the average mind a suspicion that certain sensitive souls, with learning to back them, will go wrong less intuitively than the mere ignoramus.

Why?

I think it is because a good critic not only trains his sensibilities but, with his knowledge of tradition, is in a fair way to guess which novelties will stand the test of consider- able length of time and which will not. In a fair way, I say. Further than that, I decline to go. For the critic, like the rest of us, feels the influences of the period he lives in.

There were critics in old Rome, but not one of them saw beauty in a mountain. In fact, Petronius was the first man ever to climb a mountain for the view. So I am of the opinion that critics should not be too sure of themselves or too abusive of others. Tread lightly on the crring one. Calk killed Keats. Today he is worshiped, and where are they? Recently, a well known New York magazine recommended several artistic triumphs in the line of household decorations. All had been exhibited three years previously at the Museum of Fine Arts.

You see, now, what our discussion at luncheon led to. A meekness of soul and a murkiness of mind. Incidentally, it spoiled our vacation. Too bad! However, I have since written my apologies to the critic for precipitating the altercation and received his reply. "Pray don't be alarmed on my account," says he. "Far from regretting our pow-wow, I am grateful. I drove it to drink."

Constructing the Unburnable House

(Continued from page 33)

bronze and copper, and give to the feet none of the discomfort that earns for the average concrete floor in public buildings the anathema of all who live on them. This is only a beginning, but it sets the imagination at work.

The introduction of tile, enamelled iron, and the various unburnable compositions forming that vast fraternity of "metallic" floors,” into bathrooms and kitchens in the cause of sanitation has proved an opening wedge for their use throughout the house. When women come to realize that the unburnable house is also the sanitary house, easier to keep clean, simpler to manage, more comfortable from many angles, a tremendous pressure will be brought to bear in its favor.

Is the House Livable?

Not long since, I was describing to a young woman whom I met by chance, those California houses with the concrete floors and other features that make them perhaps most nearly unburnable than any other houses in the country. I told of windows and doors without wood frames, sills, jambs, stops or lintels; of hard plaster walls that need no baseboard to hide their meeting with the cement floors as the unfriendly meeting of cumberly plaster and wood floors has so long been hidden, a plaster so hard that it needs no chair rail to protect it from the furniture, hard enough to sustain pictures without long unsightly wires stretching from a high picture molding. She was interested, but her one comment was:

"It doesn't sound homelike."

The client's fear of departing from precedent and convention makes architects afraid to suggest radical changes, and that in turn terrifies makers of materials with the result that we remain criminally content with being cheap imitators of all other ages and peoples. The evil effect of this course is most pronounced in the west where we have a sort of hodge-podge that has been aptly dubbed "r八字tage architecture."

A natural consideration on the part (Continued on page 70)
FAIR LIST PRICES

GOODRICH
SILVERTOWN
CORD TIRES

Stand the Knife Test

BEFORE you, its thick tough Goodrich Black Safety Tread slashed back, its sinewy, two-ply, rubber-saturated cable-cord body laid bare, stands a Silvertown Cord Tire.

Before you stands the whole story of why tires wear, and tires wear out.

For, contrary to common belief, tires wear out INSIDE—not outside—from internal frictional heat, rubbed up between the plies of the tire.

Each extra ply means extra inside heat—extra wearing out of the tire.

Were you to put the knife test to all tires you would find three types of bodies:

Cotton fabric, swathed in five to seven plies.
Thread cord, or web, (strings the size of a trout line, held parallel the circumference of the tire by interspaced cross-threads) gummed together in five to seven plies.
Cable-cord, the unique, patent-protected, cross-wrapped, two-ply structure, found ONLY in Silvertown, the original cord tire.

Mark well the sturdy size of Silvertown's cable-cords, and that they are cross-wrapped into two plies and but two. Obviously Silvertown with but two plies must outlast many-ply tires with their multiplied inside heat.

Out of this durability, and the resilience of those flexible cable-cords, comes Silvertown's gasoline-saving economy, smoother riding comfort, and prolonged mileage, you cannot afford to be without.

Know Silvertowns by their graceful extra-size, and their RED DOUBLE DIAMONDS.

The B. F. Goodrich Co., Akron, O.
Also maker of the famous fabric tires
Goodrich Black Safety Treads

"Silvertowns make all cars high-grade"
House & Garden

Constructing the Unburnable House

(Continued from page 68)

of the average builder is the cost. It is never fair to compare mere costs without consideration of other qualities. To compare the cost of a plain roof and a piece of leather, or of denum overalls and a broadcloth suit means nothing. Most of us, it is true, say all we want, but it became inadequate with the advent of automobiles and wireless telegraphy and satellites in space, and we beg to say nothing of Christian Science and moving pictures and cubist art. Before the half-dozen owners which have more or less of concrete and hollow tile walls, more or less fireproof roofs, and more or less wood inside, which are commonly called fireproof to differentiate them from their frame neighbors, have kept more or less close to old familiar architectural styles.

But there and here fearless reformers are at work, to know of one in California and one in Iowa, one an architect with a mission, the other a builder of a hobby. Doubtless there are others. These two have cast wood aside without apology or regret, together with the belief that the fast word in architecture was said somewhere between the 14th and 15th Century.

By all, C., and demand for lasting materials increase until they are the usual thing, letting wood and its flimsy kindred be the exceptional, and the relative cost will actually be reversed.

The unburnable house does away with fire insurance and reduces the cost of upkeep to the vanishing point. The use of lasting materials will make us stop and think a little before we build, and there will be fewer changes in styles of houses and house decorating and furnishing, which have become almost as frequent as changes in hats and hair-dress.

Climate and Style

Coming to the fast consideration: Is the unburnable house adaptable to any style of architecture and all climates? To all climates, yes. To any style of architecture, emphatically NO.

It has been amply proved that the various woods and concretes, and hard plaster and brick, are more used, form walls that keep out heat and cold alike. The frame house resists neither. There is no climate bar to the unburnable house.

But it demands a style of its own, individual, though not necessarily unique of itself. Why turn new thoughts in old terms? Ten years ago the dictionary had enough words to say all we wanted, but it became inadequate with the advent of automobiles and wireless telegraphy and satellites in space, and we beg to say nothing of Christian Science and moving pictures and cubist art. Before the half-dozen owners which have more or less of concrete and hollow tile walls, more or less fireproof roofs, and more or less wood inside, which are commonly called fireproof to differentiate them from their frame neighbors, have kept more or less close to old familiar architectural styles.

Dreer's Garden Book for 1917 is a ready-reference work that will be of invaluable help in planning your garden; in selecting the best varieties; and in making them grow.

A copy sent free if you mention this publication

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This wonderful type, with its wide-open flowers of extraordinary size, with wavy standards and wings and borne in sprays of three or four on long, strong stems, making them of exceptional value for cutting.

Choicest mixed colors, 10 cts. per pkt., 20 cts. per oz., 60 cts. per ½ lb., $2.00 per lb., postpaid.

Old-Time Valentines for the Modern Collector

(Continued from page 25)

Many of them never before published, Suitable for Females in Every Station of Life." Very complete indeed is this vade-mecum, since it outlines the sort of a valentine that it would be suitable for a dressmaker to copy and bestow. One cannot refrain from quoting a few of its canonic:

From a Dress-Maker

A dress-maker sends you this, And you'll hope you'll take it amiss, Tho' hard at work, to tell the truth, I think of this your dearest youth; O, do not then my love decline, But make my wish'd-for Valentine, He constant, kind, and I will prove A pattern of virtuous love.

Now in case the dressmaker's knight proved sly, unappreciative or remiss, this same little valentine recipe-book held forth to solace the seamstress these crushing, confession-heaping stanzas:

To a Valiant Gentleman

Your manners truly are beguiling,

You captivate therewith,— I guess you're always smiling— 'Tis to show your pretty teeth.

How many of your charms are smitten, For you these verses show; By valentine, are these verses writ? From thy dear self they flow.

I know you'll boast how many ladies Have sent you Valentine's; Remember, while our addresses are unheeded, To show your friends these lines.

These old Valentine Writers are as well worth collecting as are old valentines and one may still pick them up in second-hand book shops or stores. They are called by various names in the catalogs of books at auction.

The colored frontispieces to many of the Valentine Writers are most interesting. Very likely they suggested the issue of printed and engraved...
The World's Clearing House
for Plant Specialties—
Elliott's of Pittsburgh

During unaltering progress recorded throughout its twenty-five years of business life, this nursery has acquired one of the largest and best collections of trees, shrubs and plants in the world. It puts at the disposal of home gardeners the choicest produced in the leading nurseries of America, Europe and Asia. In this respect we occupy the unique position of the clearing house for the world's plant treasures. As growers, we specialize in those plants which we can grow better than any obtainable elsewhere. In this, many years of practical experience with plant life prove our most dependable guide. In striving after unusual standards we have succeeded in making this

A Nursery Where Individuality in Plants Counts Most

To us, the intrinsic worth of plants is far ahead of their commercial value. Our growing plants are prepared to most fitly serve the purpose intended for them. Intimacy with the growing stocks reveals to us their future possibilities and limitations. If a plant is particularly desirable for trellises or porches, we emphasize this fact. If a shrub is desirable only in connection with certain companions, we so frankly. Our catalogue is written with the intention to convey to you the finished picture which each of our plants, individually, will create around the home. "Best in the World" is the title of our modest 64-page catalogue which will serve to introduce to you the most important department of our business. A post card will bring it.

Best Bulbs in Season,
Select Seeds of All Kinds

About Our Catalogues
We publish four—two featuring Nursery Stock, one for Bulbs and one for Seeds. All are free and are ready for mailing at the logical time of the year. Every reader of House & Garden needs all four to help solve gardening problems. Why not write your name on a post card, say "put my name on your mailing list" and make sure of repeated timely visitors from Elliott's? Yours for prompt action.

Years ago we inaugurated the system of having a personal representative visit Holland each year early in July to select for our customers "the World's Best" in Bulbs. The only condition attached to our exceptionally low prices is that orders reach us before our man sails. By thus importing bulbs to order, and eliminating risks of loss through over-stocking, we can sell bulbs of the highest grade for less than they can be obtained elsewhere. Our bulb catalogue is ready for mailing about April first. May we book your name for your copy?

We also are prepared to supply all that is best in Vegetable and Flower Seeds. The best varieties only, for private gardens, in strains of absolute merit, await your order at Elliott's. A catalogue of this department is now ready for mailing. Please write for it TO-DAY.

Elliott Nursery Company
Magee Building, 339 Fourth Avenue
PITTSBURGH, PA.
Old-Time Valentines for the Modern Collector

(Continued from page 70)

valentines. The demand for these has always been tremendous though of late years the indescribable "comic" valentine which two decades ago seemed to be enthroned in supreme insolence, has happily for the record of progress, nearly disappeared from civilized communities and from the windows of the higher-class shops. Many a sensitive heart bore these satiric stabs, wounded, many a cruel jest have they perpetrated. There were, however, many "comics" of the early Victorian period that are fortunately enough preserved. Fortunately any such examples to his collection of valentines as those gathered by Mr. George Baer, the writer is indebted for many courtesies in forming his own collection. It may be of interest to note, in passing, that Mr. Baer's collection is probably the most extensive in the world. These "comics" run back to 1820.

FRENCH AND GERMAN VALENTINES

Valentines have been as popular in France as in England. Back in the days of the First Empire the famous stationers of the time sold engraved and scented letter sheets on which the love-smitten might celebrate their passion. A little later cupsids and other decorative designs found their way into favor on the valentine sheet. Many of these early cards were one of the foremost stationers in the field with such decorated papers of special occasion.

Of course, the home-made valentine preceded the printed, engraved one. Perhaps it was merely written, or written and decorated, and other decorative designs found their way into favor on the valentine sheet. Many of these early cards were of the foremost stationers in the field with such decorated papers of special occasion.

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Caution is necessary in handling these cards, as they are easily damaged. Many of the old valentines are made of paper or vellum, and are very fragile. Handle them carefully and always keep them in a cool, dry place.

Putting value into the home

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CRANE VALVES AND FITTINGS

They are the backbone of a company that has enjoyed 61 years of continuous progress, and they may be found in the better homes, hotels, clubs, churches, offices, and other public and private buildings.

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Branches in 52 cities

Weatherproof Walls for the Timber House

(Continued from page 55)

while an opposite tendency finally results in an outward bulging of the board thus affected. Again, the uniform wedge shape of these clapboards is another point against them. For, in applying them to the wall, they neither lie flat against it, nor do they lie another on another. Great care must be exercised in laying them, or there will be permanent damage to the battens due to the boards being split by hard-driven nails.

In the modern "rebutted" clapboard illustrated in Sketch 2, these faults of the old style are eliminated. A notch is cut in the lower edge of the board so that it fits over, and holds firmly in place, the upper edge of the adjoining board. Therefore, only one nail is required to hold the boards securely to the wall, and they are free to contract or expand. Against rebutter clapboards lie flat against the wall, thereby escaping any danger of being split during the nail-driving. In each notch there is a ridge at "D" which is shown in Sketch 2, and another form of related siding, often termed "channel boarding," because the boards are applied in the same manner as related clapboards. In fact, the only difference between the two is that the clapboards are wedge shaped in cross-section, while those boards are vertical and the board-and-batten siding.—so named because the joints between adjacent boards are covered with merely nailing the battens over them—should never be applied horizontally for water will surely work its way into the unturtled end of the battens and the lower under-lapping edges of the boards. This construction verily is a great improvement instead of repelling it. However, the outward effect of horizontal battens and the battens are deciduously improved when they are mitered together at the corners of the building so as to reveal the thin battens in sharp relief. But to obtain this effect, and yet adhere to the principles of weather-tight construction, it becomes necessary to alter the cross-section form of the siding altogether, so that structurally it is no longer board-and-batten siding, but simply a combination of shapes moulded to partake of that outward effect. This construction is depicted at "E" in Sketch 2.

Where a uniform smoothness of surface is desired, the siding boards (Continued on page 74)
Water of Rain-Like Softness And Spring-Like Sparkle

Wouldn't you like to have it in your own home, in un-failing quantity, flowing from every faucet, always ready, for bath, toilet, shampoo, laundry, kitchen? You may, by equipping your house with...
It's Cold Frame Time
Start Your Garden Now
Send For Booklet

This new booklet No. 218 tells you exactly how you can, with surprisingly little trouble, have a winter garden under glass. One from which you can be having vegetables and flowers, weeks before seeds are even planted outside. It shows you how to get a running start on your outdoor flower and vegetable garden; and how to boost it busily after it is started. Dume Spring comes late nowadays. The use of frames is the only way to defeat her exasperating lagginess. They turn garden uncertainties into certainties. The Booklet tells you what, when and how to plant.
Order the sash and frames early.

Get started.

Send for the booklet.

---

Weatherproof Walls for the Timber House
(Continued from page 72)

should be formed and applied as indicated at "F" in the same sketch. This is known as matched or tongue-and-grooved siding.
The boards should always be laid with the tongue up, so as to avoid the possibility of water lodging in the joint. If the paper becomes they have to shrinkage of the boards. This shrinkage is bound to occur. The wider the boards, the greater will be the shrinkage. It becomes very prevalent between the joints. In any other words, the paper that is used to attempt to distribute this inevitable shrinkage over a great number of joints. In some other words, the joints are painted with lead-and-oil before the siding is applied.

Vertical Boarding
The forms of wooden siding designated as vertical boarding are illustrated in Sketch 3. At "A" is shown the common board-and-batten siding. The boards should be cut not more than 3/8 apart and, if they do not exceed 3/8 in width, be held in place by but one row of nails. Thus the boards themselves require no nailing at all. If the boards are in excess of 3/8 wide, they should be further secured by a single row of nails down their centers to avoid warping, no nails should penetrate them else where. The battens should be only wide enough to avoid the danger of the joints becoming unconnected due to the shrinkage, consequently lessening in width, of both boards and battens as the sun affects them.

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Solve the problem of Light and Shade in the Home; Beautiful — Efficient. Keep out the Sun and let in the Air

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Its 80 large pages are beautifully illustrated with 123 photographic views and 109 detailed sketches of plants, groupings, methods of planting and other helpful suggestions.

HICKS BIG TREES SAVE TEN YEARS
HICKSNURSERIES WESTBURY, L. I.

This two 6x6 frame is about 6 feet square.

The 3x6 foot is a good size for smaller gardens and cost $18.50. Double height same size each $5.65.

Weatherproof Walls for the Timber House
(Continued from page 72)

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Celebrating the Downfall of Golden Oak
(Continued from page 21)

selves may do either in the direction of reproducing the models that our Colonial forefathers entrusted to the handiwork of our British cousins. In this very connection, it is worth remembering that the American wood carver, when seen in British ports, evinced some admiration that he was on more than one occasion entrusted with carving commissions from England.

The earliest American wood work, like the architectural detail of the fore part of the 18th Century, was of robust and vigorous proportions and is not to be found in any great abundance before about 1740. Up to that time the amenities of interior woodwork consisted mainly of well considered moldings and nicely proportioned panels. Nevertheless, we
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FREE SEED ANNUAL


Here Are Some of Our Specials

Golden Dawn Sweet Corn
Medium early variety—unsurpassed for sweetness and flavor. Stalks 5 to 5½ feet high—ears of good size and extremely well-filled to extreme end. Another popular sweet corn is Granite State— for which we have had many calls.)

Paris Golden Celery
Self-blanching — extremely early variety—compact, straight, vigorous, rich golden yellow stalks. Seed carefully tested for purity.

Danvers Yellow Globe Onions
Uniform — heaviest cropper and best keeper. True Buxton type, early, very thick bulb, flat or slightly convex bottom, full, oval top, small neck, rich brownish yel-low skin.

Crosby's Improved Egyptian Beets
Early variety, has small top, excellent form and small tap root. Great improvement over old variety of Egyptian Beet. True to shape and color. Improved by the late Josiah Crosby of Arlington, Mass.

Lawn Seed
Franklin Park Lawn Seed — made from cleansed seeds—formula of Park Commissioners of Boston. Starts at once if ground is in proper shape. Free from weeds, contains no chalk.

Asters
We offer you only the choicest varieties and must select strains. You'll really be interested in reading about them in our instructive Annual.

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A whole host of new varieties—an extraordinary array of colors—and a delight to every lover of beautiful flowers. See our Annual for complete descriptions.

Begonias

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Your home is not complete without these Majestic building specialties. Designed to protect the good looks of your home and grounds from the careless coal man and to provide for the most sanitary method of garbage disposal.

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keeps your house, lawns and shrubs clean because every piece of coal falls into the bin. Every trip of the coal man does not mean coal dust and stray lumps of coal scattered all over your property. Serves as a window too, giving splendid light to the basement. Locks from the inside and is absolutely burglar proof. Can be put in an already built house or built into a new one.

Majestic Garbage Receiver
in sanitary, water tight and fly proof. It emits no odors and keeps the contents safe from dogs and vermin. Always convenient, never unsightly. Bury your garbage can the Majestic way and protect the health of your family.

Write for Free Catalog—describes our complete line of Coal Chutes, Garbage Receivers, Package Receivers, Rubbish Burners, Duplex One-Register Stoves, Heating Systems, Metal Plant Boxes, Pipe and Pipeless Furnaces, etc.

THE MAJESTIC COMPANY
709 ERIE STREET, HUNTINGTON, INDIANA
Celebrating the Downfall of Golden Oak
(Continued from page 74)

do occasionally meet with a boxwood crest and part moulding, a determined looking rosette or an emphatic acanthus leaf. All of these devices were well wrought but there was a certain rotundity and vigour of line about them that are absent in the more attenuated renderings of the later part of the century. Their round and positive character merely indicated the curvature of line that also made possible the delightfully chunky contemporary cherubim.

From 1740 or 1745 onward there is greater variety and quantity of carved ornament. Acanthus leaves, rosettes, swelling cornices, foliages, urns, and favorite cockle shells, masques, pineapples, swags and drops of drapery or laurel, wreaths of flowers, and various other motifs appeared with steadily increasing frequency. For excellent instances of this phase of interior wood carving in America, the reader may be referred to the ball room and stairway of the Lee house in Marblehead, Massachusetts; the State House, Whitty Hall and Mount Pleasant in Philadelphia; the staircase of Turner house in Virginia or some of the old houses in Annapolis. In this period, too, bold carving was practised to some degree.

In the latter part of the century when the spirit of Adam reigned supreme, there was a reduction in scale and finer detail and a greater variety of decorative motifs as well as greater refinement in making use of them. There were the customary urns and arabesques, the swags and drops, the varied foliage, and sundry other that always associates with the elegance and panache of Adam. The Adam type met with high favor and found abundant expression in America. Architects and craftsmen who drew inspiration for their work directly from England.

McIntire the Master

At the same time, America had its own adequate exponent of the decorative spirit of the age in Samuel McIntire of Salem, who was first and foremost a carver of wood and wood ornament. His work is so universal that the adjective is undoubtedly great but the greatness of his architectural work and its quality of finish. The quality of McIntire's work are, of course, to be found in his native town of Salem, although examples of it are to be found elsewhere also.

The other modern contemporary wood carvers never developed as much individuality in their work, while those few less fortunately carried away by the preceding, their performances were almost without exception highly conventional. To any of the hundreds of old mantel pieces throughout the Atlantic States attest the skill and taste that went into the making of these carvings. More extensive manifestations of Adam interior wood carving are to be seen in fine old city houses in Boston, New York and Philadelphia among which may be particularly mentioned the Woodhull in the last named city.
PROFITS, FOODS, BEAUTY, PLEASURE IN RUGGEDLY HEALTHY, HARDY NUT TREES

Usefully decorative, with luxurious foliage and symmetrical growth, affording generous shade, they are pre-eminently the sort of trees for a gentleman's estate.

Above all, they're highly profitable. A reasonable number of these trees will not only supply your own household requirements in nut foods—now a wide spread, popular and healthful usage—they will go a long way toward maintaining the up-keep of your grounds.

Nut trees from the Glenwood Nurseries are bred under strenuous climatic conditions, and come to you superabundantly fortified with rugged vigor, toughness of fibre, and hearty health and strength that assures their successful growth and bearing in the cold climate of the East and North.

There is always an eager market for all the nuts you can spare from your crop at attractive prices.

Our ENGLISH WALNUTS and PECANS (Paper Shell) are bred for cold climates. HICKORIES, FILBERTS, BLACK WALNUTS and BUTTERNUTS not only produce ample crops of sweet, tender and nutritious nut meats but make exceedingly decorative landscape trees.

We are Landscape Artists, and we are being constantly called upon to supply trees of these varieties for the most exclusive estates.

Let us advise you, according to the size and requirements of your estate; the conditions of soil, drainage and elevation.

We will cheerfully send you our 1917 catalog on receipt of your name and address. It explains Not culture, the care and culture of Fruits, Roses, Shrubs, Evergreens, etc., GRATIS.

GLEN BROTHERS, Inc., Glenwood Nursery, (Established 1866)
1750 Main Street, Rochester, N. Y.

1917 SPRAYING CATALOG...ON REQUEST

A n ounce of spraying prevention NOW will save hours of regret later. A few cents' worth of material, a few minutes' time and a

DEMING
Sprayer will keep your garden fresh and green while others shrow the ravages of bugs, worms, scale and blotch. To insure a successful garden a safe first step is to write for your copy of this 40-page handbook.

The Deming Company,
Sprayer for every size garden or
124 Depot St., Salem, Ohio
Mmn. of Deming Hydro-Pneumatic Water Supply Sysnms

Low in Cost, High in Pleasure

The fascination of greenhouse growing can now be yours. Raise flowers and vegetables the year round. The millionaire, with his conservatory can get no more real pleasure than you secure with your

CALLAHAN
Duo-Glazed Greenhouses
Shipped in sections ready to assemble. Priced so low you can afford one whether a home owner or a renter. Easily put up or taken down. Double glass retains heat, saves fuel and protects from sudden changes. All sizes and styles. Something sure to suit you.

We make Duo-Glazed Hotbed Sash, Quality Cold Frames, sash, garden frames, etc. Ask for same catalog.

CALLAHAN DUO-GLAZED SASH CO.
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Cooperation for the Garden Lover

GUIDANCE and assistance in the selection of plants, trees, vines, and flowering shrubs best suited to your soil and to your landscape problem—definite and accurate information as to what to plant and when and where and how; hints that will help you obtain desired results in the shortest possible time; suggestions that will save you many a failure and disappointment; and—if you wish it—actual landscape service, planning, and planting.

This is the offering of the Wagner Park Nurseries. Our Catalog tells about it in detail. Shows the pictures and gives the life-story of Wagner Plants that Grow. We believe that there is no catalog of greater value to the garden lover. A copy will be sent you free on request.

Write to-day for Catalog 56

THE WAGNER PARK NURSERIES
Box 921 :: SIDNEY, OHIO
Celebrating the Downfall of Golden Oak

(Continued from page 76)

ings and mouldings is, perhaps, in the estimation of some a relatively small matter, but it must always be remembered that it is the little things that count and they cannot afford to be overlooked. This is a subject that has been quite out of the question with oak.

ITALIAN INFLUENCE

Italian architectural types furnish a no less inviting field of investigation and are most stimulating to the artist. In the study of the interior wood carving and the architect in furnishing a place of honor of this type we were so long deprived.

February Furniture

(Continued from page 29)

Dwarf Trees Best For The Garden

The object of a garden is to furnish the members of the family a succession of different fruits for different purposes and at different seasons.

Room, therefore, is the important problem. Dwarf Trees only solve this problem because you can plant it 10 times as many dwarfs as standards in the same space.

Dwarf trees also produce many years earlier than standards. You get quick results as quick as one year witharyl varieties. Illustration shows second year planted.

Dwarf trees have many other advantages; greater ease in pruning, trimming and picking; you can train them to grow in any form desired; less damage from wind; and best of all, better fruit.

Dwarf fruit trees and Van Dusen Nurseries are indispensable. Make your garden of Van Dusen Dwarfsthe successful and leading kind.

Get a start this year, if only an experiment. If you have only 15 x 25 feet of space, try this Van Dusen "Dwarf Trial Collection": Dwarf Wealthy Apple Tree, Dwarf Yellow Transparent Apple Tree, Dwarf Seckel Pear Tree, Dwarf Montmorency Cherry Tree, Dwarf Japan Plum Tree, Dwarf Peach Tree (My Selection).

List Price is $3.00 but if ordered in collection, select bargain price is $2.00. Send for this ideal assortment now. Start something this Spring.

Imported Tree Roses

There is no more beautiful plant than a rose in bloom. When the plant happens to be a tree rose, four or five feet high and heaped with blossoms, it is among the most satisfactory and beautiful plant that you can have in your garden.

Our catalog lists many splendid varieties. Or we will send three tree roses, one each, Red, Pink and White, our selection of varieties for $2.50.

Wonderful Carolina Poplar

The most rapid-growing ornamental tree known. Beautiful as an individual, provides substantial shade in two years, an admirable wind break, and an exception-ably pretty background. Really transplanteds—really hard to kill. Attain height of 40-50 feet.

Carolina Poplar is a specialty with us, because our customers praise it so highly. Plant one and you will want more. Our price is very low: 6 to 8 ft. 25c each, $2.50 a dozen, $10.00 per 100.

Send for the Van Dusen Book. Don't plant your garden until you read the Van Dusen Book. It is the real authority on Dwarf Fruit Trees—14 pages devoted entirely to their planting and care. By following this book, you simply can't go wrong. Send postal today.

VAN DUSEN NURSERIES

C. C. Mckay, Mgr., Box B, Geneva, N. Y.

Illustration shows Dwarf foliage first year after planting.

The little cottage chair is painted green with decorations in dull colors. $1. A three-table nest in red or black lacquer stands beside it, $27.50. The bowl is of Italian pottery in apple green and stands on a little teakwood base, $14.

The little cottage chair is painted green with decorations in dull colors. $1. A three-table nest in red or black lacquer stands beside it, $27.50. The bowl is of Italian pottery in apple green and stands on a little teakwood base, $14.
How to Choose Fine Trees

YOU who love trees for their own beauty or value them for the charm they lend to roadside and lawn, must have often wished deeply for a more friendly knowledge of how to choose and group them best, how to improve the outlook from your windows or make more attractive the approaching vistas of home.

This, then, is to say that at last a book has been written which tells just what you want to know about trees. It is the new catalog of the well-known ornamental trees and shrubs grown at Andorra Nurseries.

"Suggestions for Effective Planting" tells what trees are best adapted for nature for each garden and landscape, what shrubs and trees most effectively group together.

And all this is so beautifully illustrated and conveniently arranged that it is as interesting to read as your favorite magazine. It is not the usual mechanical, deadly dull nursery list. To read it is like going around the grounds with an old, experienced gardener and discussing in a friendly way what the place needs; what evergreens to screen the foundation, what will look best along the driveway or against the ell of the house.

This book is free for the asking. We have one all ready to address with your name. Send your request to Box 120.

Andorra Nurseries
Wm. Warner Harper, Proprietor

Wing's Quality SEEDS

No matter whether you have a small backyard garden or plant vegetables on an extensive scale, we can supply you with all the standard varieties as well as many new and rare specialties. Wing's seeds produce choice vegetables of highest quality. You get a full stand under any reasonable conditions.

Wing's Red Sunrise
The best early Tomato we know. Ripens the same day as Estabrooks. 25% more yield and 50% better quality.

Try Our Famous Collection
One special packet each of the following popular varieties mailed postpaid for $1.00: Beets, Lettuce, Radish, Tomatoes and Nasturtiums.

Write for New Catalog
We have just issued a very attractive seed guide. Completely illustrated. Describes every variety of surprising old and new, as well 125 varieties of Dahlias, 150 Dahlias, 150 Jis, 150 Favorites, the world's Great Stout Heir, the best Anemone, Passion Flowers, all your old favorites and many new and rare flowers. We give big, generous packets at prices that will make our catalog a reasonable price.

The Wing Seed Co.
Box 127, Mechanicsburg, Ohio

LA PLACE THE Antique Shop

Established 1880

SELECTING from our collection of Antiques affords the surest means of avoiding the commonplace in furniture. Sheffield plate, rare old etchings, curios, prints, Period mirrors, old English pewter, candlesticks, tapestries, etc. Not only is our display at both showrooms unique, but every individual piece is of the most distinctive design, and especially desirable.

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"When you think of Antiques—think of La Place!"

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VERMONT SEA GREEN SLATE

Nature is the master roofer. The depths of the earth are his workshop. There since time began, patiently, slowly, with an infinite care, the master roofer has labored. And he has labored well.

For his work has given the world the one imperishable roofing—a roofing of wondrous beauty—Vermont Sea Green Slate. A rich, gray-green in color, it is but so much flawless solid rock. And being solid rock, it defies time—grows more beautiful with the passing of years.

It is permanently fireproof, weatherproof and waterproof. Laying is simple and inexpensive. It can be laid by any roofer. Practically no maintenance expense.

Do not post until you have read our book, "For the Generations to Come." It tells the tale of every roofing material, the advantages and disadvantages of each. It is free. Send for it now.

The Vermont Slate Mfg. Co.
Publicity Bureau
Granville, N. Y.

Book The Dahlia

By Laurence K. Peacock

Four editions have long been exhausted. Fifth and entirely revised edition now ready. Price 50c, postpaid. A beautifully illustrated, practical and complete treatise by the acknowledged American Dahlia authority, who for 33 years has always had the finest blooms, regardless of adverse conditions.

Even the novice is assured of success in Dahlia culture by following the clear, concise and simply written instructions gleaned from a life-time experience in Dahlia growing. Send for catalogue. World's best Dahlias.

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Plans and specifications for 1 1/2% of building cost (instead of regular 5%) for same service as by all architects—includes preliminary sketches. 2 sets blueprints, 2 sets specifications.

Plans—includes preliminary sketches and 2 sets of blueprints for 1% of building cost.

If you are erecting a $1000 house, your plans and specifications will cost only $70 instead of $115 at the old rate—write for particulars.

DESIGNING OF COUNTRY HOUSES

OUR SPECIALTY

UNIVERSAL STUDIO, Architects
85 Broadway, New York
An Essential Part of Every Residence

Clean, Safe, Freshly Filtered Water

CONSIDER the numerous uses of water in your home. Why buy the freshest and best foods and then have them washed and cooked in water that is not pure? Why have the finest clothes and linens if the water they are washed in is not free from impurities that may stain or blemish them? Why install handsome bathroom fixtures if they will be discolored by dirty water?

Enjoy bathing in water which is attractive and inviting. Use nothing but sparkling, clean, freshly filtered water for every purpose.

Secure for your home
Ideal Water by using a

LOOMIS-MANNING FILTER

No matter how good you believe your water supply to be this filter will extract matter that will fairly surprise you. Also it will always protect your home from a sudden or temporary pollution of the source of supply.

This filter is installed with perfect ease in houses already built or those being built. Attached to the water main every drop of water passes through the filter with no appreciable loss in flow or pressure, nor is the water system disturbed in any way.

The filter is free from complications and the simple care can be given by anyone. The construction and the materials are the finest and there are several sizes to meet your requirements. Learn for yourself the many benefits and advantages of this filter.

What Is Good Hardware?

If you are in doubt about the type of hardware to use in that house, write House & Garden Information Service, 440 Fourth Avenue, New York City. We will put you in touch with a number of reliable manufacturers whose catalogs you may consult.

Hardware is a detail the average house-builder leaves to the architect or contractor. Not until the house is finished does he realize the degree to which it can be made or mar a house. Since the success of a house depends upon the accumulation of such small details, it behooves the prospective builder to give hardware due consideration.

His choice will depend on the nature of the room or the architecture of the house. There must be harmony of line in the hardware. The Colonial door requires one type and the Mission another, with the Spanish still a third. Give your hardware as much consideration as you do your furniture — and watch the results.

Beside this, see that the hardware embodies all the modern principles in its construction. The form may be never so archaic, but the mechanics must be up to date. Unless it works to satisfaction, hardware is useless.

The answer to both these problems is to take counsel with your architect and acquaint yourself with the hardware of the reliable firms. The varieties shown here represent only a handful of the hundreds now being made and shown in the catalogs of a dozen different dependable manufacturers.

For the inside doors, especially bedroom doors in the Colonial house, the glass knob is a decorative necessity.

The dictates of modern taste require ornamentation without ornate decoration, the effect obtained in this knob and shield.

The knocker is both practical and necessary. It comes in a variety of forms, of which this Colonial design is excellent.

Mode of glass with a brilliant transparency, the newer glass knobs have great decorative value.

These modern reproductions of old Colonial glass knobs are better for the refinement in cutting.

For the bungalow and Mission house comes a simple iron door latch.

The unit lock, having the key hole in the knob, represents the perfection of mechanics applied to hardware. It is compact and convenient.

Photos by courtesy of P. & F. Corbin

This cut shows one of our many Sizes and Styles of household filters.

Send for interesting booklet describing it.

Loomis-Manning Filter Distributing Co.

1445 South 37th St., Philadelphia, Pa.
YOU CANNOT AFFORD TO MISS
America's Second Annual
NATIONAL COMPLETE BUILDING EXPOSITION
Grand Central Palace
NEW YORK . . . MARCH 5th TO 11th, 1917

THIS is a "get together" of manufacturers who invite your inspection. Exhibits and demonstrations of their latest improved Building Materials, Appliances and Garden Equipments will be made.

Only manufacturers of such articles as have actual merit and of real service are admitted.

This Exposition will be greater and wider in scope than any other Building Show ever held in the history of Exhibitions, appealing to Architects, Engineers, Builders of the entire country, and to those about to build a new house or building of any kind—to remodel an old one.

You could spend thousands of dollars and weeks of your time without seeing so comprehensively all the latest developments in the Building World, or obtaining the valuable knowledge this extraordinary Exposition will give you.

Before deciding upon materials or equipment of any kind, it will pay you to see at this Exposition all the latest improvements made in modern construction and equipping homes and buildings of every description.

To Manufacturers

Don't wait until it is too late to engage a choice space at this Exposition, but write to-day and arrange to show your goods to over 150,000 from all parts of the country, every one of whom is a prospective customer.

You have the further advantage of talking direct to the entire Building Trade Interests, as well as the actual Purchaser of your materials, answering all questions, overcoming any criticisms, and opening up hundreds of new trade opportunities. For further particulars, address

NATIONAL COMPLETE BUILDING EXPOSITION, Grand Central Palace, NEW YORK CITY

House & Garden Will Be at the Exposition

Come and see us! We are going to have a splendid exhibit. Our big special exposition number of House & Garden will be one of the most valuable things in the show to the prospective house-builder. It will be on sale at our exhibit. If you are interested in building, be sure to get a copy—and to buy one for the friend who is about to build or is building.

Advertise in Our Big March Exposition Number

Advertising in our March issue is bound to be productive. It is the best time of the year to push and sell your product. Also there is the advantage of the concerted publicity of the entire building trade, the interest aroused by the Exposition, and the general momentum created by building articles appearing in the magazines. House & Garden will be by far the most helpful magazine, and the most in demand at the Exposition. We expect to sell many thousand extra copies. Advertising forms close February fifth.

We Have 1,000 Tickets to Give Away

We have purchased from the Exposition management 1,000 tickets for the Building Exposition. To those of our friends and readers who wish to attend we will send tickets (as long as they last!) if requested on the attached coupon. Inclose with coupon a self-addressed stamped envelope.
The Daylight Washing Machine

is unlike all other machines in its washing principles. The
TRIPLE DISC CONES operate DOWNWARD on the clothes
and clean by FORCE and SUCTION and not by agitation twist-
ing or rolling. Every stroke of the cone means cleaner clothes
and Forty Strokes per minute, thus applied, simplifies and reduces
washing labor to a minimum.

MADE IN SIZES TO MEET THE REQUIREMENTS OF ANY HOME

Hand, Electric or Belt Power, one, two or three tubs, Swinging
Power Wringer or Swinging Hand Wringer Support, combining
the latest and newest features to make an efficient, simple, strong,
durable washing machine.

Complete information on request. Dept H.

PUFFER-HUBBARD MFG. CO., Minneapolis, Minn.

A De Luxe Refrigerator

100% Efficient—Saves Ice—Preserves Food—Easiest to Clean

Used in the homes of such men as John D. Rockefeller,
Col. John Jacob Astor, George J. Gould, August Bel-
mont, Jr., C. L. Tiffany and many other successful
business and professional men who are critical and
demand the best.

Pre-eminent and acknowledged the world's finest refrigerator.

Has beautiful, snow-white food compartments molded in one
piece of genuine, thick-chink solid porcelain ware, with rounded cor-
ners, assuring absolute cleanliness. Not a single crack, crevice
or corner to harbor dirt, germs, moisture and odors.

A MONROE
SOLID PORCELAIN
REFRIGERATOR

A handsome, expertly-built, lifetime re-
frigerator that protects you against half-
spoil, germ-infected food, offensive odors
and unappetizing conditions; that locks
out the heat and assures minimum ice con-
sumption. Food kept in the chilled, dry,
odorless atmosphere of "MONROE" food
compartments is always clean and safe.

Not Sold In Stores—
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Freight Prepaid—30 Days Trial—
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Write today for our Free Book on Home
Refrigeration. It is crammed full of highly
important, money-saving facts on this
subject. It tells you what to look for and what
to avoid in selecting a refrigerator—how
to tell the good from the bad. Send for
this free book now—a letter or postcard.

Monroe Refrigerator Company
(A Quarter Century in This Business)
42 Benson St., Lockland, Ohio

Approved by Good Housekeeping Institute

What Is Good Hardware?

Some Colonial Designs in Wrought Iron

Photos on this page by courtesy of
Irving Iron Works

This latch of ham-
mered iron, 7 1/2"
long, is suitable
for the Colonial
door. $3.50 each

A more elaborate design
for an exterior door strap
hinge is in hammered iron. $20

For use on the
Dutch door, either
inside or outside, is
this simple strap
hinge of hammered iron. 44 a pair

The old-fashioned
shutter hold-back
pives the final
touch of realism
to the modern
adaptation. $1.30
a pair

A knocker of pure
Colonial design and
workmanship, of
wrought iron, suitable
for exterior or interior
doors. $10.50

Another type of shu-
ter hold-back is ham-
mered flat from iron
into an 8 design, 7", 8"
and 9" long. $1.50 a pair

From an early New
England pattern is re-
produced in wrought
iron a latch of great
beauty and service.
$5.50
INSPIRATION IN YOUR HOME

Those who wish to give their homes a distinctive atmosphere must seek it in the inspiration of the world's most gifted artists. It is the use of properly selected decorative accessories which gives your home that touch of individuality which raises it from the commonplace to the distinctive. The only magazine which adequately deals with all phases of fine and decorative art is

ARTS & DECORATION

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This reproduction (14 x 21 inches) on Japan paper is a gift or possession of permanent inspiration. The regular subscription price to ARTS & DECORATION is $3.00. In order to secure an immediate, wide circulation for ARTS & DECORATION, we are making for a limited period two special introductory offers:

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Besides containing one or more articles on a distinctive home, having some unique decorative feature, each number contains numerous properly illustrated articles on antiques, collecting, and various phases of art which are of essential interest to all lovers of the beautiful.

Use note paper if you prefer.
This coupon is only for your convenience.

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Please send ARTS & DECORATION for the next six months for which I enclose $1.50.
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IT is hard for one to realize what a cheery, homelike feeling willow furniture lends to the home.

Whip-O-Will-O Furniture is manufactured exclusively by us and sold direct to the individual user only.

Our trade-mark stands for the highest standard in willow work.

Send for illustrated catalogue and price list of willow furniture and baskets. Dept C-10.

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The Home You're Looking For

A country house and grounds—secluded, but not too distant from community life—the house well-proportioned with a broad veranda and the environment healthy and well-kept—such a place is not always easily found.

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in these pages where to find building plots and houses already built which are distinctive and will answer the most exacting requirements. To secure the co-operation of these reliable agents costs you nothing. They invite you to write them.

If you do not find here the type of home you seek, write to House & Garden, stating your locality, approximate amount you are planning to invest, and other particulars, and we will endeavor to find for you the ideal home you seek—Address the Real Estate Mart.

HOUSE & GARDEN
440 Fourth Ave., New York

Russian Antique Shop

251 Fifth Ave. and 1 East 28th St.

It is with a feeling of genuine pleasure that we are now after years of the most careful preparation in a position to offer to the public of this country an opportunity to procure objects of art for household decoration, which are not only unique, unusual and new, but also useful and ornamental as well.

We can provide the country home as well as the city residence for both useful and decorative purposes, with lamps of the most exquisite Persian design. Flower vases from Syria and India, sconces, candle sticks, candelabras and samovars made by the peasants in the villages and hamlets of interior Russia. Door-knockers, andirons and firesets of old English and colonial design collected from the four corners of the globe. In short, we can brighten and make interesting any niche or corner, mantel or porch of your abode, so as to make it a pleasure to the eye as well as a delight to the soul.
For Your New Home

Your refrigerator is the most important part of your home equipment because the healthfulness of your food depends upon its efficiency. A McCray refrigerator gives you perfect refrigeration. Arranged to be iced from the outside, it is convenient and keeps the iceman out of your kitchen. When you plan your new home, make it complete by installing a

**McCray**

Sanitary Refrigerator

They are lined with Snow White Opal Glass—stain proof and acid proof—that is easy to keep clean and absolutely sanitary. There are no cracks or corners for germs to multiply—even the metal bar shelves are removable and the entire interior can be made spotless in a few minutes.

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Agencies in all principal cities.

**Charm and Comfort**

—the biggest things to attain in big and little homes. No other feature will add so much in beauty as casing window; none so much convenience as C-H casement adjusters.

Write to-day for the Casing Window Handbook. It's free to you.

**The Casement Hardware Co.**
1 S. Clinton St.
Chicago

Homes that Were Built of Pine

(Continued from page 38)

the ancient fences, some of which are very picturesque and the design of the posts, have been left standing. Few, if any, show any of the ravages of time.

**White Pine in Ornamentation**

It was not until the commencement of the period of commercial prosperity that ornamentation was considered. The commerce of the day was a great and ornamental tree, and the design of the posts, have been left standing. Few, if any, show any effects of the ravages of time.

**White Pine in Ornamentation**

It was not until the commencement of the period of commercial prosperity that ornamentation was considered. The commerce of the day was a great and ornamental tree, and the design of the posts, have been left standing. Few, if any, show any effects of the ravages of time.

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It was not until the commencement of the period of commercial prosperity that ornamentation was considered. The commerce of the day was a great and ornamental tree, and the design of the posts, have been left standing. Few, if any, show any effects of the ravages of time.
Amusing women read VANITY FAIR
because it keeps them au courant of all the things one talks about—the gossip of the theatre and opera—the new movements in arts and letters—the latest in sports and salons—the smartest in dogs and motors—the gayest in dances and fashions—the latest tip on where to dine, to dance, to drop in for cigarettes, coffee and celebrities.

Clever men read VANITY FAIR
because it knows the world, and loves it, and laughs at it. Because it is too witty to be foolish and altogether too wise to be wise. Because it isn't afraid to buy the best work of our young writers, artists and dramatists. And because it prints such admirable pictures of Mrs. Vernon Castle.

The most successful of the new magazines
Take your favorite theatrical magazine; add your favorite humorous periodical; stir in The Sketch and The Tatler of London; pour in one or two reviews of modern art; sprinkle with a few indoor dances and outdoor sports; dash with a French flavoring; mix in a hundred or so photographs, portraits, and sketches; add a dozen useful departments: throw in a magazine of fashion and one of literature; season with the fripperies and vanities of New York—and you will have VANITY FAIR.

If you would be "in the movement"
dance the newest dance a month before it becomes popular; dine in Bohemia before it realizes it is Bohemia and charges admission; know what to see at the theater, hear at the opera, buy at the bookshop, and on no account miss at the galleries—fill in and send in the coupon for six months of VANITY FAIR, at $1.

Just say to yourself
"I saw it to my family and friends to go thought life with my mind open; to keep my sympathies warm; to remain in constant touch with the newest and liveliest influences in life. I won't be provincial! I refuse to become whether intellectually or socially—a blight at luncheons. I won't kill a dinner party stone dead ten minutes before the entrees. Therefore, I will risk a single dollar and subscribe to Vanity Fair."

25 cents a copy $3 a year
Condé Nast, Publisher
Frank Crowninshield, Editor

Send for this Book
IT will help you to get the most out of the time, labor and money you invest in your garden. The Flower, Vegetable and Lawn seeds listed in the Thorburn 1917 Catalog are of just one quality—the best, and include many new and desirable varieties.

The copious suggestions for selection, planting and arrangement represent the experience gained during the 115 years this firm has been in the seed business.

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Your Requirements Complete.
The Awakening of the Seed

(Continued from page 54)

operate, and what we, as Nature's servants, have no better means than to try to get the results which she succeeds in getting herself. There are rules, to be sure; but in gardening, we must keep a balance between them. There are too many exceptions, and the gardener who will take the trouble to examine the possibilities of the underlying principles governing the growth of plants will have "luck" with his plants. The number of times than will the rule follower.

What Is a Seed?

Wonderful have been the inventions of man during the last two years for the destruction of life; but the most ingenious methods so far perfected is a crude thing compared with the lifeless shell which a maturing plant shoots into the future, to insure the continuation of its kind. The automatic time device by which it is to be exploded when right conditions occur, remains in working order for years, or even decades. The chemical in-"redients designed to accomplish the explosion are not only protected by the outer shell, but are packed away in insoluble forms which will keep indefinitely until, when the proper time arrives, and oxygen and hydrogen—"In the form of water—are added to them. The evolution of the most complicated kind takes place, and starts the train of physical action and reaction which culminates in the produc- tion of an organism capable of sustaining itself and of growth. Merely as an example of an ingenious contrivance is the up-to-date law of physics and chemistry, the com- monest, most ignored little weed seed so ingeniously designed to a man ever made that he may well feel hopeless in ever trying to compete. The commonest case is this: that the growth is that the seed merely carries, in some unknown way, the germ of life, and that it is the "primeval earth," that really does the trick when the seed is put into the ground to germinate. This is the basic concept of the glass seed which was started. The seed contains within itself elements which can produce a process. It is the soil that is the actinic, the "primeval earth," that really does the trick. The first thing to fix in mind, then, when we turn from the study of seed germination is the possibility of getting results in actual practice, is that the soil is only the medium in which the seed is to be given a chance to do its work, so far as the first stages of growth are concerned. To make sure of germinating our seeds successfully, then, we need a soil that will furnish abundant moisture, and supply that is in excess, and, in addition, will not put physical obstructions in the way of the developing seedling, which are one of the best of conditions has a tremendous amount of work to do. In addition to that it is of the greatest importance that we supply the degree of heat which experience has shown, in any case, to be the most effective to the proper treatment which must take place in the seed.

If you will follow this experiment, and keep the facts of it in mind, when you are putting the seeds into flats or seed pans for starting your plants, and to finish conditions as nearly identical as possible with those given the seed in the natural seed, you will succeed. Let us see how it works out:

We want a constant supply of moisture in one of the pans, this the soil must have a high degree of absorption, or be spongy in its character. Ordinary garden soil is not wholly satisfactory in this respect. We can make it so by adding some form of a more porous mixture. The best grade of commercial humus is capable of absorbing several times its own weight of water, while average garden soil will absorb about one-fourth its own weight. You can readily see, therefore, the advantage of making that compost in which you expect to start seeds one-half to two-thirds humus mixed with the soil. While humus is usually available and convenient thing to use, leaf mold or chip dirt can be used in place of it, if you can get them readily.

Proper Moisture Supply

The next problem is that of keeping the soil moist, particularly on the small plants, which will be forming. If you had allowed the cotton in the glass in which you were experimenting with your seeds during this time, a day or two after the roots and the tiny stem had pushed out of the seed, you would have noted what frequently happens with seeds started in the soil. The seed germinates, early-season plants are brought along, and then the supply of moisture give out and it dies in a few hours. This general concept of the glass with cardboard was to keep the surface of the cotton, and the air about the plant as well, the moist interior of the case. The seed contains within itself elements which can produce a process. It is the soil that is the actinic, the "primeval earth," that really does the trick.

If you mix up a soil such as that described, give it a thorough water, when the heat before you plant, and keep it covered with the glass, you will find that most seeds will germinate if it is necessary to water them again. If watering is necessary, most likely it is only the surface of the seed that really the most available amount of water supplied carefully, with the finest spray you have available, will be sufficient.

Planting the Seed

Each little seed that germinates has a herculean task sending its shoots through the covering of soil into the light. The whole picture is that of a sowing seedling, in proportion to its size and weight in pushing through and throwing aside the particles in its struggle up to the light, is one of the greatest marvels of this whole process. To compare, it is the "primeval earth," that really does the trick. Sow a puny weakling. And yet many gardeners thoughtfully leap over their seeds. The seed, the small plant—roots, stem and leaves, will grow out, and you will get a well-started plant in the garden. (Continued on page 88)
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Address
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The Awakening of the Seed

(Continued from page 86)

which the seeds are covered is important as well as the amount. In the
light, sandy soil of the table lands of lightwight, the Modern gardener plant their seeds of corn from 13" to
14" below the surface! A soil not only light but one that will not crust
or crack is desirable. The humus or leaf mold mentioned above is of this
character. For this reason, as well as for its moisture absorbing qualities,
it is useful in the soil for seeds.

While a continuous supply of moisture is necessary, a surplus is
likely to prove fatal. Ample drainage should, therefore, be provided in the
bottom of the basin or seed pan. Place a layer of sphagnum moss in
the bottom of the basin. With perhaps some broken crocks under it
before the soil in which the seeds are
to be sown. The soil should be
pack down lightly and firmed around the edge so as not to leave any
air spaces. But in order that there
may be a space between the pan of
glass placed over the flat and the level of the soil in the flat, leave the
soil of the basin at least 1 1/2" below the top of the sides of the flat.

Small vegetable seeds and the med-
dium size flower seeds should be covered 1/2" to 1" deep. Very small
flower seeds may be sown in mini-
ture drills or trenches made with the
end of a pencil, or merely scattered on the surface, covered with a
sprinkling of leaf mold or humus and greeted by a little water. Place
a little flat object such as a bit of board. As
the little seedlings will be transplanted as soon as large enough, a snug
box can be put in rows 2" or 3" apart.

This is usually better than scattering them in the free soil, as all
are not left if it is carefully done and
the seed evenly distributed. Larger seeds—those the size of peas or beans—
can be covered from 3/4" to 1" deep.

CAREING FOR THE SEEDLINGS

The seed itself supports or forms the little plant until it has developed to
a stage when capable of supporting itself—a period when sufficient moisture,
light and heat are available—the char-
acter of the soil greatly influencing the root development. If food condi-
tions are favorable, the root system will develop vigorously; if they are not,
the roots will start out in search of
more favorable feeding ground. Plants which are to be transplanted,
therefore, should not be started in a
flat or pan in the bottom of which a
layer of old, rotted manure or rich
compost has been placed. A fairly rich garden soil, mixed with humus,
will give good conditions for the im-
mediate development of roots, mak-
ing plants which will be ready to
transplant early and easily.

Watering is as necessary for con-
tinued growth as it was for germina-
tion. However, the less frequently
one has to water to keep the soil moist, the better. Having the foliages
and the surface of the soil wet is one
of the causes of that bête noire of gar-
deners, the "damping off" or mysteri-
ous death of seedlings. Unless the
watering is done very carefully, the
little seedlings may be more or less
knocked down in the process. The
safest way is to have a large pan in
which the flat or seed pan can be par-
tially immersed, the soil getting wet from the bottom up, until the moisture just
begins to show on the surface. In
this way the soil can be much more
thoroughly soaked than from above, and there is no danger of injuring
the seedlings. Care must be exercised,
however, not to overdo this watering,
as the soil should not be allowed to
get soaking wet.

SHORT CUTS TO GERMINATION

Some seeds, as we have already seen, have hard casings or shells. Nature, who does not have more of a hurry, takes care of these in her
own way, but the impatient gardener,
who is anxious for immediate results, takes a short cut by using a knife or a file to
start the process before he plants them. Care should be taken not to
mangle more quickly if they are care-
fully split or filed part way around so
that the expanding seed within can readily force them open. In doing this
be careful not to touch the "eye"
of the seed. Soaking in warm water
for several days before planting will
also speed up germination. This is
done with slow germinating seeds
such as peas and beans, as well as
with the hard shelled ones.

While light is not essential to the
germination of the seeds, it is very
large enough, or the light should not be allowed
to get dim, and the more light the
better for it to be given, the longer
so long as the temperature is kept up
to that required by the kind of plant
being grown. Where it can be fol-
lowed, the method of sub-watering already described is far preferable to
the use of the ordinary watering can,
until the plants are large enough to
transplant.

If plants are started near a window
they should be turned occasionally to
keep them from becoming lop-sided.
If they have come up so thickly that
they begin to crowd at once, they
should be either thinned out immedi-
ately or the surplus snipped off with
a small, sharp pair of scissors, so
as to leave plenty of room for the others to
develop. A dozen good plants will
be of more use to you than fifty poor
ones that have been crowded.

With plants that have grown stron-
gly and rapidly in the first few
weeks of their existence, the task of
getting the finest of stock to set out
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Bathrooms and Civilization

The bathroom is an index to civilization. Time was when it sufficed for a man to be civilized in his mind. We now require a civilization of the body. And in no line of house building has there been so great progress in recent years as in bathroom civilization.

The manufacturers have worked for two ideals—the utmost sanitation and the best appearances. They have worked to make the bathroom a health-giving place and a pleasant place. Sunlight has been captured and put into the white china and enamel and used. At the same time sanitarians have so arranged the mechanics of these fittings that no germ has a chance to live. Moreover, since the materials used are durable, the care of the bathroom has been reduced to the minimum of labor.

It is well to remember that good bathrooms cannot be had for a song. They represent an appreciable item on the estimate of every house. Yet to retrench on the plumbing system and the bathroom is the most flagrant form of false economy. Here, if anywhere, work and materials must be of the best. If a house is to be lived in, it must be lived in sanitorily, and the heart of the sanitary system is the bathroom.

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for it is in Harper’s Magazine that you find the announcements of more private and preparatory schools and colleges than in any other publication—the widest, the best, and the most dependable selection.
Outland Fruits for Inland Gardens

(Continued from page 43)

long tap roots. For this reason only, young, small plants should be used. When mature, the trees usually are found to be rather dry, though they do grow as high as 30 feet. It is always well to reach to 80 or 90 per cent when the sunlit and the forest. Their preference seems to be for the soil that is well adapted to those sunny places where the snow melts the earliest. They have been seen to droop from its boughs like a thick flowing amber, the persimmon is a very lovely sight. Its ripeness is measured in time. That is, by the bloom in sufficient measure to account for its other name, the plum. For my own diversion and satisfaction you will find a persimmon tree on a wall, being a great believer in wall fruits and also a strong advocate of decorative and trees handled thus.

Of course, everyone tries eating a persimmon before it is ripe. Speaking of this, I can only say that it is my belief no one can appreciate any more but in very old gardens the teeth into the unripe; therefore, go ahead and try them!

Two Other Fruits

Mulberries are an unquestionably handsome fruit to be propagated in regions of the world generally. The variety cultivated for silkworms to feed upon is the most desirable. The fruiting mulberry is Morus nigra. Our native Morus rubra also has been used to produce fruiting varieties. This species produces berries every year in other parts of the world. In our state, the berries usually are white, though sometimes a fruit with dark purple or almost black fruits is produced. If you wish to cultivate fruit by these seedlings, however, Get New American or Downing's Everbearing Morus. As far as I know, what it is, is not what it is. The Downings especially have the flavor of this fruit apart from all other fruits. They are parfum, while the Everbearing are almost black. They will do well on practically any soil, even that which is very poor and gravelly, located on barren slopes.

While the quince can hardly be called an uncommon or little known fruit, it is so seldom found in market and garden that I have thought it well to call attention to its merits. Of course, the quince needs its place in hand; or if he could, he does not. But as a cooked fruit there are few things that can possibly be more to my taste than that which is prepared. Almost any vinegar you can get is free, but the best, too, used to be highly prized and would be today if quinces were available.

The orange quince is a bright golden variety that is very productive and ready in October; Champion is larger and sweeter;陕西 is tender; China, excellent keeper, and it bears very young; Mill's Prolific is a particularly hardy variety; and the Chinese quince is very fragrant, and early.

The soil that quinces like best is rather heavy and should be retentive of moisture—what is commonly called a clay loam; yet it should be well drained, for best results. They are shallow rooted trees and ought never to be覆covered over their roots during winter. In orchards a cover of mulch or manure is always applied; and in the garden, where the lawn extends up to their boles. Few shrubs are more lovely, either in bloom or fruit, than the orange quince. How beautiful the flowers—these are like the beautiful orange blossoms—and the fragrance is a most delicious picture of growth.

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Kerria. Golden yellow flow- ers. (You may have the single or double-flowered variety, state which you want.)

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PHILADELPHIA
Outland Fruits for Inland Gardens
(Continued from page 92)

The chestnut alone is under the ban, owing to the prevalence of the blight which is killing it throughout the land, in both its wild and cultivated state; but this tough nut is usually resistant to this blight. Single trees may be protected by spraying as easily as an apple tree is guarded against pests, but forest trees suffer because this is not possible. There is not a variety that can eat raw than our own American Castanea Americana; The Japanese Castanea crenata improves with cooking, and in some of its varieties is exceptionally sweet; the European chestnut (Castanea sativa) is more susceptible to leaf disease and fungus troubles generally than our own, so it is hardly wise, at the present time, to plant it. As certain of its varieties the great nut meals which the French refer to as marrons, and as certain others have been a common article of food for many years, it seems unfortunate that it should not be grown here, just for the sake of these exceptional nuts. With careful attention to spraying, I see no reason why it should be omitted, although American grown varieties of the Japanese species are showing such excellence and splendid size that it hardly seems worth while to undertake raising a species of such doubtful qualities as far as resistance to disease is concerned. Paradoxical though it is, the best is the fine in flavor, early and very productive. It is listed in the catalogs of some of the prominent nurseries.

The Care of Household Utensils

The life of housekeeping utensils may be greatly prolonged, as well as the working facilities made easier, if the implements are properly cared for and cleansed. If when tin ware is new and before being used it is rubbed well over with little dry flour, and then the oven for ten or fifteen minutes, it will never rust. Be sure that tin ware is thoroughly dry when putting away, but do not hasten the drying by placing it on the top of the stove, as this darkens it and sometimes melts it. Tin ware may be successfully washed with dry flour rubbed with a newspaper, or by dipping a damp cloth in powdered borax or common soda and rubbing briskly.

Tea pots or coffee pots that are discolored on the inside can be cleaned by boiling them in a strong solution of borax.

If food has burned in the bottom of a saucepan or sauce saucepan do not attempt to scrape it, and as this is apt to crack and chip the enameled ware, the cloth than with cold water, add a teaspoonful of washing soda and heat to the boiling point, when the burned parts will be sufficiently loosened to be removed easily. If enamel ware is dried on the stove it will be apt to chip, caused by heat expansion.

Copper and brass articles may be cleaned by dipping a cut lemon in salt and rubbing the stained surface of the metal briskly with the same. Copper and brass articles may be cleaned by dipping a cut lemon in salt and rubbing the stained surface of the metal briskly with the same.

Rustic knives or stained knives may be cleaned by shaking a little ground bath brick on a damp cloth and rubbing the blade of the knife through it. The handles of many knives are loosened by pressing too hard on the cleaning board while scouring them. Never put the handles of your knives in water.

If you rub your flat irons on ironing day over a fine piece of emery cloth, they will always be smooth and free from rust.

Willow ware, such as clothes baskets, light chairs, etc., is successfully cleansed by brushing with warm soapy water in which a handful of salt has been dissolved. Use a brush in order that all the crevices may be reached.

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NOWADAYS when flowers play such an important part in the decoration of the house, the care of cut blooms is a matter worthy of serious attention. There is little doubt that an enormous number of blossoms is wasted, simply owing to the careless manner in which they are commonly treated.

Whenever possible, flowers should be gathered in the early hours of the morning before the dew has disappeared; it will be found that these specimens last longer than those which have been exposed to the sun for hours, unprotected by the shining drops. When buying flowers at shops try to secure those which are newly opened. Many blooms are truthfully described as freshly gathered, yet they will not last for any length of time because they have been fully expanded on the plant for days. A little experience will enable the buyer to distinguish between those which are newly open, and those which are really old.

REGARDING STIMULATION

It goes without saying that all flowers in vases should be provided with fresh water daily. Wherever the stands are not purposely watered it is an excellent plan to pour a few inches of the outer skin; this induces a better absorption of moisture. Soft stalks may be split upward to bring about the same result.

All cut flowers should be kept out of sunny windows, as the hot rays are apt to fade the blossoms very quickly.

By adding carbonate of soda to the water in which the flowers are placed, in the proportion of a teaspoonful to a pint, it is possible to lengthen the life of cut flowers. The action of the chemical tends to increase the power of absorption in the cells of the plant. A weak solution of camphor and water will have a similar effect. To keep the water sweet and clean it is an excellent practice to add a small lump of charcoal to each vase.

Sometimes flowers are received in a very faded condition, but these need never be thrown away without attempting to revive them. If the blossoms are simply languishing because they have been out of water, it is possible to restore them effectively to their proper condition. First of all, cut a little off the ends of the stalks, then add a hovel of very hot water (not quite boiling) and plunge the stalks into it. Transfer the whole to a clean cup and examine in about an hour. You will find that the flowers have revived wonderfully and are ready for removal to the vases. Even should the flowers, rather old, they may be stimulated by the addition of salt or camphor to the hot water.

LONG-TIME FRESHNESS

Where it is desired to keep flowers in a fresh condition for a considerable period, the following plan is recommended: Obtain a shallow dish and cover the surface with 1" or so of damp sand. Now get a glass shade (wide-mouthed jam jars would do well in the case of small flowers). The flowers must be gathered in good

**Keeping Cut Flowers Fresh**

*S. LEONARD BASTIN*

*Small seeds of cotton, soaked in salt water and wraped around the stems, keep bouquets fresh.*

*If the flowers are received in poor condition, cut off the stem ends before plunging in hot water.*

*In the case of hard-stemmed sorts, scraping away the outer skin allows the absorption of water.*

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128 color pictures illustrate the text, and all the information necessary to the planning, planting and upkeep of the garden is included. With this manual as a guide you can bring to successful maturity any flower that lends itself to your local conditions.

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Keeping Cut Flowers Fresh
(Continued from page 96)

The flowers must be gathered in good condition and should be newly opened. Cut the stalks neatly and, where they are woody, pare away a little of the outside bark. Next stick each flower into the wire, taking care not to crowd the flowers too closely. Last of all, cover the blossoms with a glass shade and allow the whole arrangement to cool, shady place.

Every day or four days the flowers should be examined, and if there is any sign of mould the following steps should be taken: Scrape a wa; of cotton wool on this put a few drops of carbolic acid or formalin; then wrap the heads under the flowers. The mould will disappear rapidly and is not apt to return. Flowers treated in the manner described will be found to keep in good condition for weeks. Flowers with very thick petals, such as orchids and the blossoms of many bulbs, may be preserved in fresh condition for a long while by immersion in water. Indeed, a rather judicious use of water will make use of the blossoms in the house during the day, and then to place them in a cool place filled with water for rearranging in the morning. Of course, it is understood that the whole of the water will not be put under merely the stalk ends. Blossoms with thin petals do not stand this treatment well, and moisture is rather apt to turn the flowers brown.

Making Up Bouquets

When making up bouquets a few precautions should always be taken to prevent the flowers dropping quickly. In the first place, it is important not to gather the flowers and use them straight away. In all cases the blossoms should be allowed a few hours in the sun. This is due to the fact that newly cut flowers flag for a while, but after a spell in water they stiffen out and then are not so likely to droop.

After making up the bunches the following treatment is recommended: Mix up a strong solution of salt and water, and in it soak some pieces of cotton wool. These pieces are then wrapped around the ends of the stalks and covered with foil. If flowers of a very hard and woody stalk is not easy to induce the absorption of water. Try to retain any moisture the blossom may already have. A good sure way to close up the open end of the stalk with a spot of sealing wax. If it is easier to arrange, the same method be secured by dipping the end of the stalk into liquid candle wax.

Remember always that in a growing flower there is a constant movement of moisture from the roots up through the stalk. We shall approximate this when the flower is cut and left out of water, but we can not replace such moisture as is already there.

MECHANICAL AIDS
A large number of flowers come to grief not so much because they fade, as on account of external circumstances. In heated rooms they open very fully and drop their petals. This is particularly so in the case of roses which are apt to open suddenly. By the use of the little mechanical device this is easily prevented, and the rose may be kept in good condition. You shall not need two pieces of wire about 4 inches length. Push these through the base of the bud at right angles. Then turn down the wires and twist the ends around the stalk of the flower. When this has been done, the base of each petal is firmly held by the wire and it is impossible for it to fall away. If the wire is thin and the skill sufficiently carried out it is impossible to see that the rose has been mechanically treated.

Carnations are very apt to burst open, and on this account it is a common practice among florists to put the flowers in the calyx with a rubber band. Where this has not been done the bases of the blossoms should always be tied with wire to keep the petals from scattering. Some flowers, such as the azaleas, are in the habit of dropping their petals long before they are really faded. Where this is the case, it is a good plan to place some gum at the base of each bloom. This will prevent the falling of the blossoms, and there is no reason why the trimming of the flowers should ever be noticed. In the case of all cut flowers it is important to remove the flowers from water the moment they are noticed as they often become mouldy and this, of course, tends to destroy the blossom.

PACKING FLOWERS TO SEND AWAY

Many flowers come to grief in the mail through improper packing. It is not too strong to say that blossoms fade owing to the fact that they lose moisture which they cannot make good. If the flowers are thrown loosely into a cardboard box they will soon be withered quite apart from the damage which arises from the knocking about which they undergo. Unless they are well made of some protective material cardboard boxes are not suitable for sending flowers on long journeys. It is far better to pay a penny or so for an account of the extra postage and use a wooden box. A quantity of thin tissue paper should be at hand, and it is also an excellent precaution to make use of the wads of cotton soaked in salt water, for chilling the cut ends of the stalks. This should be done after the blossoms have been placed in another box of dry cotton. Short of actual crushing, the more flowers in the box the better. Everything should be done to prevent loss of moisture and also knocking about. If there are not sufficient flowers to fill the box, the space must be taken up with sheets of paper, or better still, cotton. It is well to re-remember, if paper is used, to crush somewhat during transportation. Therefore, be sure that you put in enough to allow for this shrinkage.

Many people, in order to make the time in the post as short as possible, give all the flowers under glass, thus preventing their blossoms until the last moment. It will then be done in a hurry and carelessly, and badly, with the result that the flowers reach their journey's end in a discouraged state. It is a golden rule in packing flowers to allow plenty of air and to remove the paper. Even saving of a few hours on the journey will not make up for bad packing. As a matter of fact, if the blossoms are properly packed they should not come to much harm even in a journey of twenty-four hours.

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Full Report on Page 12

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Plants grow two to three feet tall, the blooms starting early with a central globular bud which often reaches the immense size of two feet in circumference. Scores of branches are thrown out each bearing a ball of wool. All these branches support numerous lilac tints with small heads of bloom mixed with fresh green foliage so that a plant looks like an immense bouquet splendidly arranged and set in the ground. None of the blossoms fade in any way until hit by frost, but all continue to expand and grow with a deepening richness of color, a deep crimson-scarlet.

SEED—25c per pkt., 3 pkts. for 25c

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MARCH, 1917

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BRAID ABOUT THE HOUSE

Elizabeth Lounsbury

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These important lines today have a meaning which is not so
plainly understood as it was a few years ago. The reason is
that the market is surfeited with the commonplace, and
that more thought is now being given to that which is
true, and more to that which is beautiful. The market
is now overflowing with cheap articles that are not
worth while.

Among the many interiors which will be shown in the April issue is this distinctive being-room
designed and built by Mr. W. E. Behrens, of New York.

These are only a few of the thirty-two features in the April issue, covering not only house matters, but many timely garden topics as well.

PUBLISHED MONTHLY BY CONDÉ NAST & CO., INC., 440 FOURTH AVE., NEW YORK, CONDÉ NAST, PRESIDENT; W. E. SCOTT, TREASURER. SUBSCRIPTION: $2.00 A YEAR IN THE UNITED STATES, COLONIES AND MEXICO; $3.00 IN CANADA; $4.00 IN FOREIGN COUNTRIES; SINGLE COPIES, 25 CENTS. ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE AT NEW YORK CITY.

THERE are two kinds of editing: "Thank God" editing and scientific. The former is the method used by an editor who doesn't know what to put in his pages, and when they are finally filled says, "Thank God," and the scientific is a charted policy whereby the greatest possible variety of subjects is presented in the given confines of an issue.

The success of House & Garden in the past two years has been due to scientific editing, and the promise of the April issue—which is devoted to Interior Decorations—is based on those principles. In no number heretofore has there been scheduled such a wealth of practical suggestions. They start with the first page and keep on growing to the very last.

Modern decoration is defined by B. Russell Herts and illustrated with examples of the work of the most up-to-date decorators. It gives you the last word on what is being done along
Visualize this garden as it was in the beginning—a sweep of field down from the road. One can see such a dozen times on a country tramp. Then came the house, the grading of the terrace and the retaining wall of field stone with the steps leading down to the lower garden. In a hollow behind a row of sentinel arborvitae was sunk a pool, faced with flat stones from thenceabouts. It is a garden made of the things on the place. That is why it so pleasingly fits its setting. And because a little human ingenuity has cooperated with Nature, it is a garden of perpetual interests; the more one looks at it, the more one can see. It is the home of Miss Jeanne Ingersoll at Penllyn, Pennsylvania.
TULIP TIME IN THE GARDEN

Two Tulip Places Where the Spring Is Welcomed with a Kaleidoscope of Bloom

MRS. FRANCIS KING

President of the Women's National Agricultural and Horticultural Association

A S time goes on the lover and observer of gardening in its many forms cannot but notice the great appreciation of interest in spring-flowering bulbs. Among these nothing has sprung more quickly into favor under the public eye than the late tulip. One may consider it as firmly settled in American gardening affections for many years to come. And when ultimately the grower of these beautiful subjects shall have tried all the varieties in our own dealers' lists, all that he may have found in foreign ones—if he then sighs for more tulip worlds to conquer, think of the further joys that shall be his as he realizes that from that point on he is a collector!

He finds himself in the happy valley of a general knowledge of the tulip kingdom. He has now and only now qualified as one who may climb the pleasant slopes which lead to the knowledge of hybridizing, to that of the rarer varieties of tulip such as the Old English or Florists'. Membership in one or two of the small societies of enthusiasts in special tulips should now be open to him, and one of the lower summits of tulip satisfaction is attained.

TULIP ATTRACTIONS

Among the many attributes which endear this bulb to the gardener is its adaptability for use in small plots or gardens. Brilliant effects can be had in space almost absurdly small if spring flowers are used. How these minute squares of color catch and delight the eye in spring! And this is not only because gay color is welcome then.

When a small and simple garden is successful—one in which its owner has had to consider the exchequer—there is always for the intelligent to admire the added matter of ingenuity in spending. The able use of money bears witness to a high quality of mind; and in a garden cherished by its possessor reflections of the mind of that possessor are quickly seen. To apply the idea to the larger and more notable garden, it is also the judicious outlay of money which will or will not be apparent. The memory of every lover of gardening will serve him truly if he recalls on occasion the great, bleak, barren gardens of his visits, gardens on which fortunes have been spent and from which he could only turn sadly away. And it is also true that with some fine exceptions the public gardens of our country are open to a like criticism by the fair-minded.

ON A PENNSYLVANIA HILLSIDE

There is in Pennsylvania not far from its great eastern city, in a country-side of gentle beauty so like the Sussex Downs that one often fancies himself in England, one of these charming smaller gardens on a hillside. A constant and changing beauty in flowers marks it, but in May, with all the freshness of the spring about, it is a flashing jewel with its tulips and abundance of other effective low-growing spring flowers.

On a day in mid-May we descend from a brick paved terrace shadowed by a great pine, to a gentle slope of turf toward this little garden, enclosed by a hedge of clipped privet. On the right, still below the sloping ground, an old stone spring-house is seen, hung with clouds of lavender wistaria. White lilacs in full beauty flank the garden gate—a picket gate set in a white archway which supports a mass of rambler rose foliage at its freshest and best.

Through the green and white entrance we pass into a dazzling garden on two levels, turf-walked, privet-hedged, cedar-accented, framing a most delicate and unstudied effect of spring color in flowers. The gateway is halfway up the slope of the lower or perennial garden, and as we turn to the right we see, below the retaining
light, clear colors furnish a wonderful setting for the glories of the flowers themselves. Whether from a distance or close at hand, the composition is perfect.

The play of light and shade on such a garden is in itself memorable. *Phlox divaricata* in a background of shadow with tulip Bleu Celeste in sun in the foreground form a rich spring picture. Also the semi-careless arrangement of flowers with regard to variety in height and color strikes one at every turn as being remarkably successful.

An order of placing uncommonly good is this—tulips Bleu Celeste, Flamingo, Dream, Lantern (syn. Nizza), Clara Butt with *Phlox divaricata* interwoven, and touches of the little grey leaved flax (*Linum perenne*) accidental in effect. Foliage of perennial phlox and the incised leaves of delphiniums form the green background for these delightful flowers.

A touch of running water adds much to a garden picture. It is here in a very simple wall fountain where the stream falls into a shallow basin made by half of an ancient millstone, flanked by a planting of *Iris Kaempferi*. This fountain is really below and outside of the garden and near the seats under the maple, but fountain, jar, pool and sun-dial—this last is placed in the rose garden—all are upon the same axis.

Nora Ware, a very small lavender tulip, is used in the beds here; Dream stands back of it, flanked by the foliage of peony and lupine, with tulip Le Reve, beloved by all who know it, in the

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Within the white gateway with its rambler covered arch lies the garden, turf-walked and bright with flowers

The cross-axis view brings out the accenting value of the cedars, central fountain, and the ornamental jar beyond.
THE FLOWER IN THE CRANNIED WALK

A Pathway Development Wherein the Scorned Weed that Grew Between the Stones Has Yielded to Flowers of Worth and Beauty

ROBERT S. LEMMON

MORE years ago than the chronicles of any but our oldest families can record, a tiny plant clung to the soil between two of the bricks in a garden pathway of old Nieuw Amsterdam.

How it came there no one knew. A stray seed, perhaps, had blown in from the roadside or caught on one of the hausfrau’s great wooden shoes as she clumped home from her milking in the pasture meadow. At all events the plant flourished, and because it was so small and grew in so hidden a corner of the otherwise immaculate path, it escaped for six whole weeks the watchful eye of the good housewife. Low and creeping and tenacious of root, heedless of rain and wind and drought, it spread its modest mat of leaves and dull blue flowerets across the bricks, a pleasant contrast to their aching red.

It could not always go undetected, of course. In that spotless household all must be perfectly ordained, without doors as within. On a day there came a pause on the way to the well curb, a gasp of shocked surprise, a hurried pounce, and the small offender of neatness was no more. From that day to this, the flower in the crannied walk has been banned.

THE USE OF PATHWAY PLANTS

Why? Well, I suppose the reason lies partly in the fact that theoretically walks are made merely to walk on, to lead to flowers rather than to grow flowers themselves. Then, too, the plants which generally find roothold in the crevices of bricks or flagging belong to that despised company generically known as weeds, and consequently are the sworn enemies of all good gardeners and flower lovers.

But consider. Is not all flower growing based on an appeal to our artistic sense, a stimulation of the imagination through our appreciation of beauty? And does not delicate contrast, a slight tinge of the unusual, perhaps, enhance the power of this appeal? The real flower in the walk, the well chosen and planted blossom that is no “weed,” may add a touch that is no less desirable because seldom given.

Ideally, the pathway garden is a rare blending of flower color and form, a veritable landscaping achievement built upon careful thought and trial. Color harmony, contrast, succession of bloom, permanency —each deserves its share of attention, that a unified whole may result. Added to these considerations, or perhaps preceding them, is the fact that the walk itself must not cease to be a walk. Nothing within its borders should grow so tall as to be an inconvenience; nothing may spread so broad a carpet that it must perforce be trodden on. A mere meshwork of leaf and flower outlining some of the bricks or all of the larger stones is enough for the central part, with a few thicker masses at the less-used sides.

The walk that lies in the full glare of the sun is the one which most needs this relief of crannied plants. Here are no softening

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Both in its architectural background and its furnishings, the living-room reflects the character of the exterior of the house. The lines in both are simple and there are large, restful spaces in the room. Windows and doors are deep set, with scarcely any wood trim. At one end is a semi-circular stone fireplace and above it, as foil to the ruggedness below, a panel painted in pastel shades. At one end the ceiling breaks and midway hangs an oriel window opening from the guest chamber. How that window quickens the imagination! Place a candle there at night, and its radiance is as soft and mellow as the light of the room. From that gold bar can lean another blessed Damosel with lilies in her hand and the 'stars in her hair seven and—

The style of the house was suggested by the ancient manor houses of Normandy. The detail and grouping of features as expressed in the windows and gables is of the Tudor Period. This intermingling of styles is not uncommon in southern England where designers of that country crossed the Channel for the ensemble of their houses and enriched the almost unbroken roof lines and broad wall surfaces with charming Gothic detail. The view below, which is the rear, shows how advantage was taken of the contour of the land. The garage is located on the first level with a wide turn-around and drying yard before it.
Although the materials of construction offer no unusual features, distinction is given by the method of handling them. The exterior walls are finished in grey stucco and the roof shingling is carried out in a manner to simulate the rounded and softened lines of ancient thatch. The massing of the house, the grouping of the windows and the relation of the house to the land are reminiscent of the English work of Bartie Scott.

Throughout the house the woodwork is rough hewn, hand-axed oak timber. The doors were made in the house. They are battened, held together with iron bolts. The strap hinges and latches were hammered out by a country blacksmith. Through this door one passes to the guest chamber—the room with the blessed Damoel window shown opposite.

The wide overhanging eaves, shingled to simulate thatch, cast deep shadows over the rough plastered walls. Leaded casement windows have been used throughout. The two combine to establish the character of the house, which is crystallized in this entrance porch deep in shadows beneath the Tudor arch.
P L A N T I N G  A  P I N K  G A R D E N — Elizabeth Leonard Strang

The garden is a rectangle, 30'x40', enclosed by a hemlock hedge that forms a background for the whole.

THE OPPORTUNITY TO CREATE A PINK GARDEN GAVE PROMISE OF bringing to realization a long cherished dream. When it came I approached my task with a thrilling undercurrent of joy, drew out my friendly notebooks and metaphorically turned loose my imagination.

In spite of a certain fund of knowledge and the most pains-taking care in working out special combinations, the study proved more exacting than I had anticipated, and the first season's results, although altogether encouraging, were far from perfect. Tints that blended perfectly when viewed through the mist of memory, in actuality conflicted harshly: pink that when alone showed no cast of blue, when placed beside one of a slightly warmer tint proved impossible of harmonious use.

The predominating tone of the first season's experimentation was a soft, warm pink. But as this did not furnish sufficient variety a deeper accent of old rose, palest yellow and clear light blue was introduced for contrast. Strong colors of great dominance were used sparingly.

A pinkish lavender like Primula denticulata blended well with the predominating tone, as did lavender blues like Phlox divaricata or Polemonium reptans; but a certain class of rather pronounced pinks of a blueish tone like phlox Pink Beauty, Phlox subulata var. rosea and some peonies—which were pleasing when alone or combined with light blue—failed to harmonize with the warmer shell pink. Purple or magenta were, of course, impossible, and at the other end of the scale, a warm salmon color was equally undesirable. In fact, so subtle were the differences in tone that the only way by which I could be really sure of harmony was by visiting the garden frequently and pulling out the offending color must be uprooted as they appear.

The garden is a rectangle 30' x 40', lying below the balustraded grass terrace and imposing white portico of a large, formal, white house. The whole is shut in by a magnificent hemlock hedge which softens the harshness of the marble benches, the rectangular pool and white copings. When first I saw this little garden it was filled with a formal planting of pink begonias—pink, to be sure, but uninteresting.

Some people look with disfavor upon the softening irregularity of herbaceous planting. "I like a plain garden best," cried a client of mine, viewing with a frown the blending of varieties and colors which she designated a "messy" garden.
It is, however, more than a mere matter of opinion whether we shall have this year any for the other. Formal bedding has its uses, but is it not for the public garden or parterre where we are interested only in color masses rather than in individual flowers? The intimate little garden into which we step from the living-room or porch should be filled with a variety of flowers: masses of gorgeous coloring with subordinate but strong accents and much interesting detail; old-fashioned favorites; shy little subterranean blossoms, dainty and sweet. With this also in mind I approached my problem.

With the exception of a period from June 21st to September fifteenth when the family were away, the garden was expected to offer a continuous succession of bloom; so I shall mention the qualifications of the different flowers: masses, rather, as regards their contribution to the mass effect and as items of individual interest, supplementing the actual flowers used with a list which would successfully augment the period of comparative dullness during the summer.

The Procession of Bloom

As there seemed to be no extremely early pink flowers of sufficient size to be striking, a combination of deep blue scillas and purple crocus was chosen for the first color mass, closely planted in the grass around the pool. But pale pink hyacinths followed them so closely and combined so pleasingly with the English daisies and forget-me-nots, that I have two more hyacinths planted for next year. If properly placed, the effect is a revelation to those who dislike the somewhat clumsy blossoms of the hyacinths.

Next in the procession appeared quantities of soft yellow, sulphur, and cream narcissi; early tulips, pale yellow and creamy pink, shadiing to a deep rose. A note of deep reddish purple introduced by Wouwerman tulips proved too harsh and accordingly had to be removed, and though so beautiful at first, after the latter bulbs had made their appearance, the blue of the scillas was a little overpowering and was therefor-

The shrubs and flowers other than bulbs are distributed as shown in this plan and table. The general effect is pink relieved by white and a touch of blue partially eliminated. Coincident with the foregoing bulbs were various charming details: a dash of white bloodroot; shy, pink and lavender hepaticas; early pink saxifrage (with its heart-shaped leaves of bronze); a tiny viola of an exquisite ash-color; and Primula denticulata, rearing on erect stems its ball of lavender-pink or white blossoms. Tucked in every vacant space were English daisies and blue and pink forget-me-nots. The glucous green foliage of the tall bleeding heart with its arching sprays of pink relieved the barrenness of early spring. Its daintier cousin, Dicentra eximia, formed a border whose finely cut foliage and pink flowers of rose color until late in September. Also, grey-green foliage harmonized so cunningly with the soft pink that I have planted Cerastium tomentosum, Veronica incana, arabis and gold moss in small groups.

The next mass effects consisted of Cottage and Darwin tulips in tones of clear pink, old rose, blush, crimson, primrose yellow and lavender. For a single strong accent there was the mass of pink bells of Tulipa Noire. The "Glare of the Garden" and Bouton d'Or were too intense and had to be expurgated. In general only one or two blooms of a deeper note are required for accents.

Accompanying the first tulips were hosts of other spring flowers: snowy arabis, the miniature Iris pumila of sky blue and deep purple, pale yellow tufts of Alyssum saxatile var. Silver Queen, and the tiny pink buds and nodding blue bells of Virginia cowslip. After the "Glare of the Garden" and Bouton d'Or were too intense and had to be expurgated. In general only one or two blooms of a deeper note are required for accents.

SPRING AND EARLY SUMMER

1. Bellis perennis, English daisy, the familiar pink and white.
2. Myosotis, pink forget-me-nots, the early variety.
3. Saxifraga cordifolia, heart-leaved saxifrage, pink.
4. Samitaria lamadridia, bloodroot, snowy white, very early.
5. Arisal alpina, rock eressa, white.
6. Mentana Virginica, Virgin cowslip, beautiful pale blue with pink buds.
7. Dicentra spectabilis, tall, early, bleeding-heart.
8. Dicentra aspera, dwarf bleeding heart.
10. Viola Hoehnei, pale dull pink ruffled pansy.
11. Primula denticulata, very early lavender pink or white primrose.
12. Hepatica nobilis, Liver leaf, pink, white or blue.
15. Alyssum saxatile, Silver Queen, a very pale yellow variety.
16. Phlox diantha, wild Sweet William, blue or white.
17. Tussilago farfara, foam flower, soft leathery white.
18. Ipomoea, dwarf iris, blue, and deep purple varieties.
19. Astrantia major, maidenhair fern.
20. Alyssum, cushioned, rose and cream hybrida.
21. Phlox, early to mid-summer varieties only.
22. Iris varieties.
   a. Queen of May, pinkish lavender, the nearest to a real pink iris. b. Madame Paquetite, rosy claret, tinged deeper. c. Khedive, soft lavender with an orange band. d. Gypsy Queen, standards coppery yellow, falls dark purple violet. e. Sappho, standards white frilled blue, falls white with lilac base. f. Flaviceps, palest snow color. g. Aver, clear yellow. h. Pallida Dalmatica, clear bluish lavender.
23. Potentilla fruticosa, small shrub with flower a tiny single yellow rose.
24. Galium Mollugo, soft misty white, needs up.
25. Astila japonica, var. Queen Alexandria, soft pale pink.
26. Campanula medium, Canterbury bells, pale pink only.
27. Lupinus polyphyllus ros, pink lupine.
28. Dipsacus, foxglove, pale pink or white only.
29. Papaver orientale, oriental poppies, named pink varieties.
30. Sarcoceras arboricola, coral bells.
31. Dianthus barbatus, Wild Sweet William, pale pink and white only.
32. Althaea rosea, hollyhock, clear pink or warm yellow buff.
33. Tulipa saxatilis, low plant with tiny pink flowers.
34. Delphinium Etiolatum, rose pink tallest.
35. Lilium speciosum razzia, pink Japanese lily.
   b. Pantheon, satin rose, late.
   c. Sedum spectabile, showy stonecrop, dull pink.
38. Statice limonium, sea lavender, cloudy mass of blossoms.
39. Helianthus strigossum, puppy, dwarf helianthus, lavender pink.
40. Anemone japonica, Japanese anemone, single and double, rose pink, and white named varieties.
   d. King Phillip, large rose pink.
42. Helichrysum.
43. Dicksonia pumila, bay-scented fern.
44. Anturhium, snapdragons, rose and silver pink.

March, 1917
TWO COMMANDMENTS

THE man who said these things was old enough to have his own philosophy of life. He was a lawyer of the old school—read his Blackstone as regularly as the preacher reads his Bible—founding of a lot of apparent nonsense, and had come to know the gold of life when he saw it, and to choose the gold from the dross.

He said that, for his purposes, the Decalogue was overcrowded. After sixty-five years of active life he had reduced the ten commandments to two. These two, he held, covered the murder and the stealing and the slandering and all the other prohibitions of the old code. His are affirmative commandments, and they are very short:

"Be happy."

"Make others happy."

At first these sounded to me like a cheap edition of the wishy-washy Pollyanna philosophy that has lately so corrupted the thinking of a lot of apparently sane folks. But the more I mulled them over in my mind, the more I saw the old gentleman was right. It is the bounden duty of men and women to keep as happy as they can, and to make others feel the same sort of joy. The man with the grouch is no longer the hero of our times. The man who refuses to share and help and lend a hand is not looked on as the mighty success he once was considered. The "cagie" Yankee who knows the value of a day symbolized American business is being supplanted as a type by the man whose labor is directed to the benefit and service of his fellows.

Conceive what this means. The magnate who builds a railroad, the publisher who issues a magazine, the merchant who conducts a store can no longer run his business for his sole profit and pleasure. If it is not founded on service it is doomed to failure. Now service simply means helping others, and helping others is one another term for making others happy. But have I totally disregarded the old lawyer's first commandment? Scarcely. For the man does not exist who can make others happy without making himself happy.

All of which has a very important bearing on "The Spring Gardening Guide" which is the title of this issue of House & Garden.

HERE we are laying plans for the garden of this year. We have sketched in the contour of the land and located the beds. We know what annuals will go in when the tulips are blown. Like as not, by this time we have ordered the seeds and the shrubs.

There will come hours in the warm spring air when we turn the soil and enrich it, when we plant the seed and cultivate the row. Hot summer days will come when we will breathe the perfume of myriad flowers and the sensuous richness of the scented earth. Dusts will be ours—quiet mauve dusts when we will sit about and watch the countryside darken into night and the stars come out and the fireflies hang their lanterns on stalk and branch. Then the crisp days of autumn when bush and tree flame by the doorway and Nature is conceived like a mighty hero on a pyre of her own making.

A pleasant prospect, certainly. And if you labor to make such a garden the joy will be yours as a just return for the toil you have given. But—and this is the second commandment again—I am wondering if the man exists who can possibly make and keep a garden all to himself alone.

A garden is a public place. Try to keep it beautiful for yourself alone and see what happens. The neighbor hurrying to catch his train of mornings will stop to look at the iris purpling by the doorstep, the motorist will throw on his brakes and halt half way up the hill just to look at that mass of Oriental poppies against the wall. People will pass, and they will be happier for the passing.

Nature is on the side of the public. Build your wall never so high, but her winds will carry the seeds of that choice variety you reserved for yourself to a dozen different doorways where they will bloom next season to defy your selfishness. Plant your hedge-row never so thick but a hollybuck will nod a friendly greeting over the top and the elms will sweep their cooling branches. Lock the gate never so tight but the breezes will waft the odor of rose and hysyacinth and mignonette to every passerby. You can no more make a garden for yourself than a man can conduct a business for himself. Nature will not let you do it. "The army of unalterable law" will win the victory every time.

A GARDEN is a public service. It is your contribution to the community. And a community is good to live in according to the measure in which each citizen does his share toward its betterment.

It is not enough that law and order be preserved. Such ideals are but one stage removed from the savage. Only the policeman with his truncheon stands between us and the cave man, if law and order are all we desire. No, it is the mark of civilization that men make gardens beautiful that the town may be beautiful, that the joy of the tulips and the columbine which they plant and care for may be shared with those who walk through.

It is logical, then, that when town fathers assemble to discuss the betterment of the community, they give serious attention to better gardens. To repeat what I said last year, better gardens mean better towns and better towns mean better men and women.

In what manner these things come to pass I cannot say. Somewhere in his essay Emerson uses the figure of a pebble that is thrown into the sea. The ripples spread out and out—diminish, but still going until the faintest rhythm of that circle touches the shore of another land. What land and where he does not say. Nothing comes to an end. The circle touches something somewhere, sometime.

That is about the way with the flowers you will plant this spring. Who will gain joy from them, you cannot say, nor when nor how. But this you can be sure of—that they will bring joy and that happiness will be yours according to the measure with which you share it. This, after all, is the sum and substance of gardening.

In his own fashion old Omar spoke these very truths: "I sometimes think That every Hyacinth the Garden wears Drop't in her lap from some once lovely Head. And this reviving Herb whose tender Green Fledges the River-Lip on which we lean— Ah, lean upon it lightly! for who knows From what once lovely Lip it springs unseen!"

THE DAFFODILS

Gray is the city as a gray-bearded Jew.
Steel, paper, shoes, a thousand sordid things.
Crowd the dull windows, fill the humming hives,
Busy the piteous-eager heart of men.
Yet on a day when light the waiting wind
Teased the grim giant with a hint of spring
There between buildings broke the sunlight through,
And lo! an arched dark window was ablaze
With the gold splendor of the daffodil!

Who said the day of miracles was done?
I saw with my two eyes, and felt my heart
Go fluttering "April!" all the wintry day.
And I shall never pass that way again
Without remembrance of the swift surprise—
Here in the sun the jonquils' spendthrift gold;
At the street's end the blue, resounding sea!

—Sara Hamilton Burchall.
March, 1917

WROUGHT IRON AND ROUGH CAST PLASTER

Between wrought iron and rough cast plaster is an unique harmony. Both have vigor of line and finish, both have the naive crudity that gives all handwork its charm. Hence they combine well, as here in the gallery of the residence of W. W. Lawrence, Esq., at Watch Hill, Rhode Island. The architect was Mott B. Schmidt.
ANTIQUE DESKS AND THEIR APPRECIATION

GARDNER TEALL

The appeal of old furniture which has the merit of form, design and workmanship of high order is one that is not the reflection of a passing fad or fancy; it has come to be one of attachment and genuine sincerity.

If it took the greater part of the 19th Century to teach us the futility of fixing our affections on exaggerated novelties, such as those which dimmed the reign of Queen Victoria and boomed the Bunthorpes of the eighties, the 20th finds us

Like the table desk opposite, this shows the same tendencies in construction, being a table with a drawer, substantial in line and construction. The wood is oak.

discriminatingly chastened. We are taking out of our houses, those of us who can, the pieces of furniture that ought not to have been made, putting into their places old-time things of beauty, or when it is not possible for us to acquire veritable antique pieces, the high-grade reproductions of old furniture that now grace the market and show no abatement in popular esteem.

In classifying the hobbies of several thousand collectors who had stated their

In the period of the First Empire were made desks with drop fronts. Ormolu decorations distinguish it. Note the cut-in "knee-hole"

Some time between 1750 and 1775 was first made the Rhode Island style of desk with block front, cabinet top, classical cornice and brass fitments. The wood was mahogany

Another American type is the slant-top. It dates from about 1725. The frame is pine and the general lines are simple. Legs are turned but the stretchers are plain.

Of about the same period as the block front shown opposite is this with a broken pediment cornice and carved classical figures. Mahogany is the wood used throughout.
preferences, it was found that a greater number were interested in old furniture than in any one other subject. This fact is not strange, when one comes to consider the utilitarian phase. Generally, the collector of old furniture starts in with the chance possession of two or three antique bits which, by inspiring interest, and appreciation, lead him to wish to bring the other house-furnishings into harmony with the loveliness of the old pieces. Few collectors of antique furniture, of course, are without homes of their own, or the modern substitute—the long-lease apartment. The skill of the modern restorer of old furniture accomplishes wonders with the battered derelicts of the houses of yesterday by making the old pieces to shine forth in their glory anew; all of which lends encouragement to the collector and new zest to his traditional delight in the "hunt."

Upon first thought, a collection of desks might seem like a mastodonian assemblage; so it would be, if the collector placed them all in a row or all in a single room. But the house of today can accommodate—indeed, finds necessary—more than a single desk in its furnishings. And so the collector of old furniture has another impetus in his search, a utilitarian one. Under the term of desk we may include the various escritoires, bureau-bookcases (bookcase-bureaux) and the secrétaires. All of these, in common with our cabinets, tall-boys and so on had their origin in the chest or coffe of the Middle Ages. To the bottom of the chest came to be added a drawer. Next, side doors instead of a top lid came into fashion, and in this manner followed the many steps that led to the development of the piece of furniture we designate, for convenience, the desk.

It is not possible to tell just when the earliest desks were made. The desk is (Continued on page 68)
The house, Southern Georgian in architecture, stands on a high bluff commanding a great sweep of the James River and fields that during the Civil War were fought over by the armies of the North and South. The wide portico that graces the front of the mansion—a property recently placed on the market—is characteristic of the region.

Simplicity is found in both the architectural background and the furnishings of the dining-room. A high paneled wainscot circles the room. To one side is a Colonial mantel with a simple over-mantel panel above. The furniture is such as is required for the quieter entertainment and life of a country house far remote from the city.

The spirit of the rural South is found in the hospitable doorways and the comfortable furnishings that make for simple, dignified country living. The living-room shown to the right is an example of the type of furnishing that a country estate of this magnitude—its some 5,000 acres—requires.
FILLING THE SALAD BOWL

As It Should Be Filled Is Simple Enough When You Know What Plants to Grow and How to Grow Them

Ours being a family of salad lovers, I found myself more or less in "deep water" the year around. The more exacting one's requirements become, the more one realizes the limitations of markets. So I finally decided to take the bull by the horns, to study the subject from the ground up, with the result that the salad problem has become a salad blessing in which, tasty, flavory lettuce plays a most important part.

Since lettuce forms the most popular basis of all salads, I began to study it first. Few things I have attempted proved more intricate than the correct selection of sorts which would best serve my purpose. It developed that there are four distinct types, and of these I finally selected the kinds which, to judge from the descriptions, seemed to measure up to the requirements in nearly ideal fashion.

Of course, there were some disappointments. When I tried to grow in summer sorts recommended for spring use only, they quickly turned bitter and grew seed stalks instead of heads. Again, when I proceeded to prepare salads from heads grown during August, using the same dressing as I did for the more delicately flavored spring crops, the results were disappointing. The sum and substance of my experience inspired this discourse on salads, offered here for the benefit of those home gardeners who like them as well as we do.

LETTUCES WORTH GROWING

There are four distinct classes of lettuce, the individual members of which differ very little in general characteristics but very much in habit. Some grow very quickly, making big bunches of leaves, and then go to seed. Others make firm heads in the spring, but "shoot" seed stalks as soon as hot weather approaches. Still others are very slow growers, but they also form the most solid heads and go to seed only after trying hard to rot inside before bursting.

The earliest of all lettuces to yield crisp, tender salads in the spring I found to be the loose-leaf sorts. After trying quite a number, I decided that Black-seeded Simpson served my purpose in as nearly ideal fashion as any. It was ready for use, with fine, big plants about 10" in diameter, in forty-five days after seeds were sown. It remained in perfect condition for two weeks—at least four days longer than any of the other extra early spring sorts. As a result it stayed in fine condition for flavor salads just about a week longer, when my prize-winner among the butterhead lettuces—Naumburger—yielded its first fine heads.

FOR LATER USE

Naumburger, or Tenderheart, as it is called by some, perfected its attractive light green 10" heads in exactly fifty-five days from the time the seeds were sown. I have tested and tasted many lettuces during the last fifteen years, but I have never found one to surpass in flavor this splendid butterhead sort, especially when prepared for salad with the French dressing to which I shall refer later.

When later sowings of Naumburger produced seed stalks or "bolted," as the experienced gardener calls it, the crisphead lettuces saved the day. The best attractive and dependable of these proved invariably to be Iceberg. The first heads are generally ready in sixty-five

(Continued on page 94)
A Cottage in a New York Flat—The Apartment of Louis Fancher, Esq., the Illustrator

Photographs by the Johnston-Hewitt Studios

Ahaz, the Inky Ethiopian, takes you up in the iron cage to the tenth floor, deposits you in a bleak hall before a fireproof door. You ring the bell. The door opens. And you step into the jolliest little cottage this side o' Devon. Above is one end of the big studio that serves as the dining-, painting- and living-room. The walls are golden grass cloth and the ceiling is golden too. The furniture, simple fumed oak and wicker, fits well into the scheme.

On the top of the page opposite is the other end of the studio. A big over-stuffed settee with blue flaps one end. Bizarre pillows are stacked on it. Above is a semi-circular mirror in a blue frame. The sconces at either side are blue touched with orange. The little table to the left has an orange tray on a blue frame. Golden orange and true blue is the prevailing combination. The rug has a deep pile in a rich golden tone. The color effects are interesting and restful. The room has the advantage of large spaces.

Because it had to serve a twenty-four hour purpose, the utilitarian objects were so arranged as to be both compact and convenient. Between meals the sideboard dresses racks with orange and blue candlesticks and an orange tray, and looks perfectly in place. In the hall is a built-in cabinet to hold the family jewels, Mr. Fancher's scraps of paper and tubes of paint, together with sundry overshoes, umbrellas, hats and dinner jackets, all neatly arranged and decoratively concealed.

The photograph directly opposite shows the artist as carpenter and his wife as painter. (Mr. Fancher wielded the hammer and Mrs. Fancher the paint brush—she being also the designer of these decorations.) The white shelves with their Breton pottery connect up with the white woodwork of the room. The curtains are blue calico with orange fringe. Two little love birds (see the blue) perch on a rod above the shelves. If you despair of making that ghastly flat livable, here is one way of doing it—love birds and all
THE TRUTH ABOUT DWARF FRUIT TREES
Real Quality in Diminutive Apples, Pears, Peaches, Cherries and Apricots—The Necessary Culture

WILLIAM C. MCCOLLOM

If your first impulse is to ask "What does it cost?" you had better skip this article. It is directed to the person who wants quality first of all. Yes, to be sure, we all want quality, but here I am using the word in its fullest significance. Quality first is usually one who does not study every penny to figure how many dollars' return it will yield.

Frankly, I do not consider the dwarf fruit tree a really sound commercial proposition. There may be some cases where it could be advantageously tried in a commercial way, but generally speaking it is for those who want orchids for their buttonholes, and straight Havana cigars—In fact, for people who are really looking for the highest standard of quality and are willing to pay for it.

I am not trying to frighten anyone about the cost of dwarf fruit trees, for their prices are by no means prohibitive; but where you get ten apples from the ordinary standard tree you will get but one from the dwarf. The quality will be of the best, but disregarding the many other factors that make the dwarf fruit trees so desirable, and judging only by the pound for pound return, the standard type outweighs the dwarf. On the other hand, in the proportionate quantity of fruit produced, the dwarf trees are far preferable. When you see these sturdy little fellows carrying a load of fruit that even the larger type wouldn't be ashamed of, you can't help admiring them sincerely.

Disregarding economics, there are a number of sound, logical reasons for planting the dwarfs. Of these I would place quality first, for surely there is nothing more worthy of our efforts. There is no class of trees of any description that bears fruit of as high a standard, because of the better care they get. The situation is analogous to that of a person with a good suit of clothes, and another with a cheap one—there is more involved, and so better care is taken. And be it known that among the real aristocrats of the fruit family, the dwarfs are the acknowledged blue bloods.

What They Will Do

The dwarf fruit trees are particularly valuable to those who want quick results. Of course, you can't pick any fruit the day after planting, but you can get a fair crop the second season from planting, and if you get good stock which has been properly handled you will get some fruit the first season. This may sound like a fairy tale, but it is not. I planted a number when they were in full flower after having been delayed somewhere in transit, and they carried considerable fruit the same season.

To people with very limited grounds, the dwarf brings within their grasp the possibility of having their own fruit, from their own grounds. The little fellows can be confined to a degree beyond our imagination and still continue to give results. Where possible it is advisable to give them a reasonable amount of growing space, but if necessary to reduce the growth to the smallest possible allowance, they can be trained on a trellis of some sort and the space they occupy need not be much more than that given a climbing rose bush.

One of the greatest assets of the dwarf tree is the ease of caring for it. It can be properly cared for. This is another reason why the trees get better care, for they are under the closest scrutiny at all times and any disease or attack of insects is at once perceptible. There are no ladders to climb, and spraying is easily done with a hand pump of the smallest type. When the fruit becomes a pleasure instead of an effort. Summer pruning is also within our reach. This practice is out of reason with the high headed type of tree, and if done as it should be and the other cultural requirements properly attended to, fruit trees will bear annually instead of following the biennial habits of a great many of our standards.

Another important argument in favor of dwarfs is that because of their sturdy habit they are little affected by wind storms which often ruin quantities of regular fruit by causing it to fall before it is ripe. Then again, the dwarfs have so much less growth to sustain that they can be used in garden effects without killing adjoining plants by robbing the soil of every bit of fertilizer; and casting a very short shadow, they are possible in either the vegetable or the flower garden.

What They Are

The dwarf fruit tree can be had in a number of forms, the trained types coming in fan shape, cordons of various trainings, horizontals, U-shape, grafted without a trellis, of course, require a trellis of some description, or they can be trained against a wall, the side of a building, or some similar surface. These trees are extremely ornamental, and can be used in garden effects of various kinds; they are attractive when in flower, and are both interesting and pleasing after the blooming period.

Dwarfs must be grafted, else you cannot confine them. Some unscrupulous dealers send out very low headed standard trees as dwarfs, so get your trees from a reliable source. Pears should be grafted on quince stock, thus giving them the short jointed, dwarf habit of the quince without the danger of changing the characteristics of the tree. The Paradise or Doucin stock has the same effect upon the apple when the latter is grafted to it. Peaches should be worked on the plum, which is the best basis we can make in this case. (Continued on page 82)
THE PLUNDER OF THE PAST

Now Being Purchased by Americans
for the Glorification of Their Homes

CLIFFORD POPPLETON

It is an interesting experience to attend one of the big dealer's sales. He has the collection, perhaps, of some Italian, French or English aristocrat, fine antiques shipped to New York under heavy insurance, and unpacked with a delicacy beyond the conception of any but an egg merchant. Or it may be the collection of a departed Wall Street money king, whose heirs have a notion that the money would be more useful to them than the art.

You are probably surprised at the magnificent air of the rooms themselves. The thought of luxury was not associated in your mind with the thought of sales by auction, yet here are deep-carpeted, high-galleried chambers, murmurously alive with visitors in silks and furs.

The collection has been on display for several days, and many of those present were here before and have now come resolved on a plan of action; these are pre-occupied and finger their watches a little impatiently. Others are making a hurried tour of investigation, jotting a note now and again. Everyone carries an expensively prepared catalogue that has been lovingly compiled by the cognoscenti and printed in the best typographical taste.

The auctioneer is a mortal shrewd fellow. He has to be or he wouldn't be where he is. He looks around him with a keen glance and you have half a notion that he knows how much money there is in your pocket. You are as suddenly conscious that your limit is thirty dollars, or fifty, or whatever it is, and you bear yourself accordingly.

The law of the great auction rooms is, quite simply, that the highest bidder gets the article bid for. Reserve prices are the rare exceptions. The stuff is there to be sold for what it will fetch and your dollar is as good as the next man's. If competition is scarce you may buy a fine antique cheap, and if it is rife prices go sky-high. Do you think it would be interesting to have a book that was printed two hundred and thirty years ago? One went for fifty cents in a famous auction room recently. The man who bought it might have been willing to pay twenty times the amount, or fifty, but he waited until he saw that no one else was going to bid, and then he said mildly, "Half a dollar."

At the same sale a copy of Burns' poems with an autograph note from the poet fetched the sum of nine hundred and twenty-five dollars.

But to pick up the thread again, observe that dealer over there, leaning, regardless of rules, against one of the exhibits, a heavy Jacobean cabinet. So far he has shown little interest in the sale, but now the auctioneer calls "53 A." This lot is the figure of a child in bronze by an Italian sculptor of the 16th Century.

"What am I bid for 53 A?"
Silence.
"Come, give me a start please."
Silence.
"I can't sell it unless someone will give me a start. May I say ten dollars, will you let me say ten, it's a fraction of what it cost."
"Ten."
The languid dealer has spoken.
"Ten I am bid, ten, ten, twenty, twenty, fifty, fifty, fifty, a hundred, a hundred dollars I am bid."
Ah, Mr. Dealer, this is no "snip." Two more bidders have jumped in. An attendant puts the laughing bronze girl down on a table where she may be examined by latecomers. The clear, modulated voice of the auctioneer runs on firmly and fluently. Subtly he is conveying to you something more than that he is bid one hundred dollars for 53 A.

"One hundred, one hundred, one hundred."
A bald fact, true, but listen again. Is there nothing else?

"One hundred, one hundred, one hundred."

There is a quality of restrained surprise in his tone. You feel that someone is wounding him in his finest sensibilities; you are not sure that so sensitive a man should be an auctioneer; he is as thin-skinned as the princess in the fairy tale who could feel a pea through several feather beds.

"One hundred, one hundred, where's my hundred and twenty-five?"

The bidding is against the languid dealer, who now raises his eyebrows an eighth of an inch.

"One twenty-five I have, one twenty-five I have, where's my fifty; one fifty I'm bid, one fifty, one fifty, one seventy-five, one seventy-five, two hundred dollars, two hundred dollars I have."

Sharp eyes, these auctioneers have, for the slight, significant movement. A peculiar glint in the eye, a nod hardly perceptible to the casual observer, or a slight twitch of the catalogue—they are all bids among the experienced.

"Two hundred, two hundred, two hundred."

Still a bald announcement, but his tone is (Continued on page 74)
CONTINENTAL COLOR FOR AMERICAN HOMES

COMING down the Lago di Garda you can see them—clusters of them clinging to the hillsides like great brilliant clouds. You can see them in the sleepy villages of Bavaria and in the hamlets of Switzerland. For the native of the Continent has always painted the exterior of his house in brilliant colors and vivid designs. Crude though the technique may be, it lends an air of genuine interest to the house and indicates with what care and pride the owner has built it.

Here in America we have not gone much beyond tinting and painting our stucco houses, and the exteriors on which rich decorations have been lavished are few indeed. Perhaps the absence of these decorations is due to the fact that Americans are only now arriving at an appreciation of the value of strong colors in decoration. Doubtless, another generation will see exterior color more in use, and perhaps more decorative mural paintings.

The walls of the residence of Mrs. Helen Hartley Jenkins at Norfolk, Conn., have been frescoed with Slavic figures and borders. W. de Leftwich Dodge was the artist. The position here, under the eaves, is the proper one for such murals.

On this page are glimpses of two American homes that are decorated with paintings laid directly on the stucco wall. One is the residence of Mrs. Helen Hartley Jenkins at Norfolk, Connecticut. Architecturally, the house is a bungalow save at one end where the living-room has been carried up a second story to provide for a gallery at one end and an upper row of windows. The timbers, which are exposed, are solid chestnut painted and left to weather. The entirety of the exterior wall, except where these timbers cut through the plaster surface, has been frescoed. The general background is a tawny tone and the figures, inscriptions and border designs are adaptations of old Slavic forms and peasant sayings painted in brilliant reds, greens and yellows. The artist was W. de Leftwich Dodge, the well-known mural painter.

The difficulty that confronted Mr. Dodge in the execution of his work was that the painting had to be done while the cement was still wet.

While the entirety of the exterior of the Jenkins bungalow has been given a tawny ground coat, frescoes have been painted in the larger spaces.

Moreover, the positions of some of the frescoes were not conducive to their permanence, for the pictures require the overhanging of eaves to protect them against inclement weather.

The other residence illustrated is the home of Mr. Dorl, on the Palisades. The walls were especially designed to provide for murals up under the eaves. In long panels between the stucco pilasters were painted sections of a large fresco showing maidens walking through a flowery field. The work is modern in character and the colors are brilliant. In time, of course, they will tone down and blend with the color of the walls. Try to visualize the facade of this house without the murals, and their value at once becomes evident.

Murals such as these, or designs of a simpler character, are perfectly feasible for many styles of stucco houses. The decoration may be nothing more than a stenciled band of color.

(Continued on page 98)
CUSHIONING THE COUCH AND THE DAY BED

Much of the distinction of a couch or day bed is due to the cushions that are upon it and the way they are placed. They are like the trimming on a hat. You can utterly ruin the looks of that model by stringing the gowns in the wrong place and you can miss half the charm of that Adam day bed by failing to have the right cushions in the right place. This page is one of a series devoted to these small points of decoration. In January, curtains were shown; in February, French doors. If your individual decoration problem still remains unanswered, write To Information Service, House & Garden, 445 Fourth Ave., New York City.

The day bed or couch of Colonial design can be upholstered in a glazed chintz when in the bedroom. It should have the simplest form of lingerie pillows, showing neither lace nor embroidery, but a crisp ruffle trimming. As a day bed of this character is intended for use with simple furnishings, the pillows should be in keeping.

Below is shown the solution of a day bed problem. Between the rooms was a wide door which was closed up. Against this was hung a soft yellow silk curtain. The over-curtains and valance are of pale, cool, green taffeta with a tiny frilling of yellow which finishes the turn back hem. The day bed is covered in the same green taffeta piped in yellow, and at either end, by day, is an unusual oval pillow. Agnes Foster Wright, Decorator

On an Adam day bed of this type of enamel wood and cane there should be used, first of all, the foundation cushion. At either end should rest a long tubular bolster cushion and over them two flat square pillows. Such materials as taffeta, striped or plain, or certain of the more formal linens may be used.

Visualize an ivory white Continental type of day bed, decorated in small designs of black and with a touch of brilliant color. It is covered in black satin with one tubular bolster pillow of black satin decorated with jade green and with a jade green button at each end. Against this is placed an ivory white satin cushion with a center motif combining jade green, black and pale lemon yellow. Tassels and binding of pillow are lemon yellow with a touch of jade green and black.

The popular form of curved wicker settee requires this style of cushioning. The cushions which should repeat in design the features of the settee, may be of gay linen or chintz, or of heavy duck or linen, with futuristic decorations that might be worked in worsted.
THE LEGENDS OF THE MODERN NURSERY
AGNES FOSTER

The most disenchanted moment of one's life comes when one goes back and visits his old nursery.

How Time has shrunk it! The ceiling is not limitless after all, nor are the closets great, dark, mysterious holes. It is really a skimpy, homely little room.

But pity be to the grown-up who cannot smile at the googe on the window sill that he made with his first knife thirty years ago, or at the putty holes in the headboard he picked out with his finger-nail one early Sunday morning, or the bare front leg of the rattan chair he carefully unwound on an interminably rainy afternoon!

Nurseries are planned with more care today than they used to be, and the man of thirty years hence will have a richer heritage in the legends of his nursery.

What Nurseries Are For

Happily it is now seldom that the nursery must also serve as the children's bedroom. When it must be used for a bedroom, the children should have their supper in another room, because it is unpleasant for them to be fed and put directly to bed in the same room. Children never sleep as well due to the excitement of supper and the odors. It is an established psychological fact that playing and eating in one room and then being put to bed in another is conducive to the refreshing, restful sleep of children. If this arrangement is impracticable, the nursery should be thoroughly aired and put in order while the children are supping elsewhere.

The nursery should be considered the child's inviolate domain. His playthings should be kept sacred and he should be permitted to have some say about their disposition. Children have queer fancies: they like to keep certain toys in certain corners and on certain shelves. Why shouldn't they? We grown-ups have a favorite corner for our glove box and another for our handkerchiefs, and we wish them kept there. Thwarting a child's fancies in these small matters may make him whiny and broken-spirited.

In the first planning of the room, provide sufficient shelving, closet, and play-box space to accommodate the toys and trappings of the shield.

How They Are Being Told in New Curtains, Paper and Tiny Furniture

The walls should not be covered with brilliantly colored, grotesque figured paper. It is exciting and soon becomes tiresome to the child. A child is easily impressed by surroundings and reacts to them. If the decoration is crude and grotesque, his mental conception cannot help but reflect some of that crudeness. If the walls have a pleasant, refining line with a border of delicate fairy tale pictures, he is equally sure to be affected by them.

When a frieze is used it should be placed high enough to be a mysterious decoration to the child. It should be well designed, preferably some fairy tale subject. A black silhouette border of fairies is to my mind the most charming nursery decoration. It has a mysterious quality and possibilities around the child's own imagination can weave a story. Moreover, it is really decorative. If, on the other hand, one wishes a pictorial paper, nothing could be better than the Kate Greenaway paper of "The Months." The colors are soft and the figures are quaint and charming, with a direct child appeal.

Wall Colors and Mirrors

It is well to have the nursery walls washable, because in the case of a diptheritic throat or a semi-contagious sickness, the walls may be washed down with disinfectant. Then, too, young artists' fancies may be more easily washed, than rubbed away from wallpapers, as they are usually pencilled with a strong, heavy line which was intended to "stay put."

Soft rose and blue are nice, suitable colors to use, though children sometimes have a funny prejudice against these colors, whereas they invariably like yellow. Grey, dark red or dark blue or the eternally neutral buff are bad nursery colors as they have no response for childhood.

It is well to have a low mirror on the wall for two reasons, and perhaps for as many reasons it is well not to; but we must not anticipate our children being vain or priggish. If a nursery has a mirror, a solitary child is not so apt to be lone-some. There is always another dancing, jumping little child just on the other side of that looking-glass frame. Also, if a child

For the nursery or garden playhouse an iron-worker has made a "Cow-jumping-over-the-moon" weather-vane. The outdoor size, 6' high and 3' wide, $65. The smaller, 3' high and 1' wide, $45. The squirrel mud scrapper, 12" wide, $7.50

And make it an unbroken rule that things are to be picked up and put in their places each night before bed-time.

The best finish for a nursery wall is semigloss paint, which is easily washed. It should be of a cheerful cream or light yellow tint. Avoid strong tones.

W. & J. Sloane, Decorators
In the residence of Captain J. H. Poole of Detroit is a playroom especially designed to hold plenty of toys. Low benches circle the room and all the furniture is diminutive. The small table is just the thing for teas and fine crayon work!
thin window hanging introducing some color as described and a small figured cretonne as upholstery.

An English block print with its beautiful clear fresh coloring and excellent design is extremely good for a nursery. The prints come in a quality of soft, finely woven cotton that makes them easily laundered. In a narrow width they are adaptable for side curtains where one wishes to introduce some pattern at the windows. The same designs may be had in soft cream Shikisilk with scattered flowers and charming designs and colorings, naive as childhood itself.

Soft blue albatross with a little ribbon with picot edges in light yellow would be a delicious winter nursery drapery. The furniture could be painted blue and striped in yellow. With a soft blue rug for the blue-eyed, golden-haired Little Lady—what could be more “suitable to her personality!” The furniture could be upholstered in a narrow blue striped line with flowers and tiny birds, an inexpensive but distinctly childish pattern always to be found in the shops.

Cornerless Furniture

Wicker is excellent for nurseries because it has no sharp corners and it can be readily re-dipped when it becomes shabby. A vacuum cleaner or a good, stiff beating with a wooden stick will keep it clean. Wicker tables, if used in the nursery, should have wooden tops, as wicker tops give an uneven surface for tiny tea services and for fine crayon work!

Wicker combines excellently with painted furniture and mahogany. It gives lightness and variety, but it should always be stained or enameled. Unfinished wicker furniture should never be used than unpainted wooden furniture. It is impractical.

(Continued on page 96)
Informality should characterize the planting scheme of rhododendrons. Here it is attained by the solid banks of bloom and their natural background of trees.

**AS TO FLOWERING EVERGREENS**

GRACE TABOR

Photographs by Nathan R. Graves

ALL evergreens produce flowers, of a kind; but not all produce flowers that are noteworthy to any but the simon-pure botanist.

I am moved to the making of this pseudo-apology by reason of the botanist's well known jealousy of exact terms. I stand in great awe of the botanist; and I know that I have not, strictly speaking, a right to distinguish as "flowering" evergreens the plants which I am here about to consider. But it is a phrase that means a great deal more to the layman, I am sure, than the more technical "broad leaved evergreens" of scientific precision. Besides, they are not so very broad leaved, literally—save by comparison, perhaps, with the needle leaved species which commonly pose as the entire family under the general name of "evergreens."

It is, it seems to me, notable that the showiest flower in American woods deal more to the layman, I am sure, than the more technical "broad leaved evergreens" of scientific precision. Besides, they are not so very broad leaved, literally—save by comparison, perhaps, with the needle leaved species which commonly pose as the entire family under the general name of "evergreens."

An excellent example of rhododendron planting in a suitable hillside location.
is that of a purely American shrub which is evergreen in its habit, the
native laurel or calico bush. In the
masses of it which Nature plants, it furnishes a display of floral
splendor hardly surpassed by anything in the world, and certainly
rivalled by only a few things. Its
near relative, the rhododendron, grows all over the world, practical-
ly; but laurel is distinctly a North
American species.

These two belong to quite a
wonderful plant family, a family
which it is necessary to know if one is really to know anything about evergreen shrubs; and as the
entire family shares to a marked
degree the same likes and dislikes,
and requires the same general care and attention, I am going to enu-
merate such of its numbers as we,
in our gardens, have occasion to
become acquainted with.

The Heath Family

The name of this family is
Ericaceae to the botanist; to the
man of common speech, heath.
The heather of English moors has
probably the greatest general pop-
ularity of any of the breed, and
has been praised in song and story

In all cases, naturalism is the primary con-
sideration when using the broad leaved ever-
greens. About the house particular care
should be taken in accomplishing this

When mass planting is followed with rhodo-
dendrons, scraggly specimens must never be
allowed in the foreground. The foliage
should reach the ground in front, as here

The flowering evergreen shrubs do not com-
bine well with deciduous sorts. A distinct
line of demarcation should separate them
from such other plantings

with greater sentiment than all of the
rest. All heathers are mem-
bers of the family, and being so
abundant have given the common
name which they gained from the
waste spaces whereon they grow
—"heath"—to all their relations.

So then we come to the rhodo-
dendrons and the laurel and the
azaleas, as well as to an interesting little shrub which is called
Labrador tea or wild rosemary in
the folk tongue—Ledum latifo-
lum in formal speech. The leaves
of this are somewhat aromatic and it is said that they were dried
and used as a substitute for tea
during the Revolutionary War.
Many things served as such sub-
stitutes in those days.

Peculiarity of Growth

Running the gamut in plant in-
dividuality though they do, there
is yet one thing which is especially
mentioned in connection with
every one of these widely differing
allied species, wherever they are
described and their habits noted:
"grows best in a moist, peaty or
sandy soil." Without exception,
this is their preference—"a moist,

(Continued on page 60)
THE NOBLE DANE
A Country Place Dog of Fine Lineage and Exacting Points

WILLIAM HAYNES

The Great Dane's head is very expressive of his noble character. The head points of any breed of dogs are their most distinguishing characteristic, and Great Dane breeders have with great care developed the heads of their dogs to a point of fine perfection. The skull is long with a slight crease up the center. The cheeks must be as flat and smooth as possible. The forehead is long and broad and deep with a square, blunt muzzle and a large nose. If the bridge of the nose is not wide enough, the dog, when viewed in full face, looks snuffy, and the proper depth of the muzzle be lacking and the lips too tight and wanting in squareness, the dog, in profile, looks what fanciers call "snouty." Of course, a combination of these two faults will quite ruin a Dane's head, giving it a common, underbred appearance. The Dane's correct expression, alert and masterful but without the slightest suggestion of meanness, depends very largely upon small, dark eyes set under prominent, well developed eyebrows. Neatly cropped and well carried ears add a great deal to the dog's dashing aristocratic appearance, and in England the anti-cropping edict in force has been a severe handicap to the breed. The Dane is only just beginning to overcome.

TRUTONIC MEASUREMENTS
The perfect symmetry of the Dane has been reduced to strict mathematical terms by his methodical German friends who have discovered that in a dog that is 30" tall at the withers, the line from the shoulder to the ground should be divided in half just at the point of the elbow and brisket. Moreover, the line from the crupper, which is the top point of the hindquarters, to the ground should be just equal in length to the same line from the shoulders, and it should be cut into a third at the angle of the hip and flank.

Extremely large dogs are very often taller at the crupper than at the shoulder, a fault that is usually combined with straight, stilty hindlegs, and straight hindlegs, in turn, result in a jerky, ungraceful movement. So closely are proper conformation and the elegant grace of the breed bound up together that there is the best reason for demanding perfect symmetry in the Dane. For this same reason, dogs that are markedly lower behind than in front—a malformation stigmatized on the Continent as "hyena dog"—are in particular disfavor.

The German measurements also require that the line down the back from the point of the shoulders to the crupper be one-sixth longer than half of the dog's height. This is also the ideal length for his tail. It is an interesting, and alas, sometimes a disappointing fact for a Great Dane owner to apply the yardstick—not the tape measure—to his dog to discover how he measures up to the perfect scale thus laid down.

Other points that count in judging a Dane are the legs and feet, the tail, coat and color. The front legs should be straight and heavily boned; the hinds legs, sometimes a disappointing feature for a Great Dane owner, should have a straight, low hocks. The feet are of good size, but they must be very compact and well knuckled up. The tail, which is thick at the base and tapers to a fine point, ought to reach just to the hocks. Of two evils, however, a tail that is too short is better than one that is too long. "Short, dense and sleek looking" is the official description of the coat. It must be neither coarse and wiry nor of a silky softness in texture.

THE RECOGNIZED COLORS AND POINTS
Five distinct colors are recognized: fawn; brindle; blue, which is a slatey gray; black; and harlequin, or small, jet-black spots evenly distributed over a white ground. The German breeders are very scrupulous in mating to keep the different colors pure and distinct, and while the fawns and brindles are interbred, and the blues, blacks, and harlequins, still to cross a harlequin with a brindle, for example, would be a mesalliance but one degree worse than mating a fawn to a mastiff or greyhound.

The different points that make up the typical dog are well summed up by the Standard of the Great Dane Club of England, which

(Continued on page 92)
A LITTLE PORTFOLIO OF GOOD INTERIORS

The design of this Little Portfolio is to assemble each month a group of rooms in which the distinction has been gained through applying the principles of decorating. They also show the trend of the mode as it is set by the latest work of interior decorators and architects. Incidentally do they contain helpful suggestions. But if your individual decoration problem is not suggested here, write The Information Service, House & Garden, 445 Fourth Avenue, New York City.

James Brité, Architect

At the top of the page is an end of the living-loggia in the residence of Herbert Lee Pratt, Esq., at Glen Cove, Long Island. The floor is of reddish brown tile set in white mortar with a border of limestone. The limestone has been carried up to the spring of the window arches; above that the walls are plaster. The furniture is wicker in brownish golden stain. A divan is shown, upholstered in a verdure pattern of reds and greens and black background. The pillows are black and white, and the shades are of black and white stripe.
Off the living-room is a little card room in striking colors. Panels of paper in green, black, yellow and red alternate with painted panels in dark green with mouldings picked out in a lighter shade. The davenport is covered with a scarlet brocade. Curtains are red and the rug is a neutral tone. The furniture is Cuban rosewood upholstered in red. A green lampshade tones in with the walls.

In the dining-room the walls are hung with a linen rep of brown and putty color stripes. The rug has the same tones. At the windows hang a blue and yellow linen with double sash curtains of cream scrim. The lighting fixtures are bronze, and the two mirrors, gilt. A three panel screen by the pantry door is of leather.
In the residence of Mrs. Oakleigh Thorne at Millbrook, N. Y., is a Tudor room paneled in dark oak, that forms the architectural background for sturdy furniture of the same period. Above the paneling have been hung mounted heads. Wrought iron candelabra flank the fireplace. The chairs are deep and easy. It is a room of strong personality and definite historic affinities. The focal point of interest is the fireplace. It is of Caen stone with carved over-mantel above, the designs being consistent with the period of the room. An Oriental rug is on the floor.

A quiet bedroom corner is a desideratum for any home. It should be simple, restful and convenient. In this instance the furniture is mahogany and wicker, the curtains rose and white. On the walls is a two toned stripe paper in rose. A tapestry firescreen in a gilt frame stands before the fireplace and over the mantel is a mirror of Colonial design in gilt. The woodwork is painted cream. A rose colored shade completes the color scheme.

Dignity and comfort have been successfully created in the bedroom to the left, which is in the residence of Armond O. Smith, Esq., at Center Island, L. I. The walls are tinted a pale green and the upholstering of the bed and its cover are of the same tone suits. The rug is taupe. Some of the furniture is covered in rose and green, the remaining pieces being marquetry. The architectural background of the room is formal in its pilasters and panels. Over-door panels or grisailles are in low relief.
MAKING THE NEW GARDEN
How to Get Good Results the First Season in Your New Flower or Vegetable Garden, Hardy Border or Rose Planting

F. F. ROCKWELL

THERE is a commonly accepted belief that good results cannot be counted on from your new garden the first season. This idea has sprung from the fact that first-year gardens are generally not as good as older ones. But this is, in most cases, because the gardener has not carefully analyzed the problem he had to meet. From force of habit, in most cases out of ten, the new garden is prepared in practically the same way as one that has been in use several years. To get the best results, however, the preparation should be quite radically different.

The characteristics of any soil which most directly affect its fertility are its physical condition; the amount of available plant food; the degree of inoculation by certain “friendly” or helpful bacteria; and the amount of moisture contained. These are the factors—some what prosaic, perhaps, but nevertheless all important—which determine whether you will have big roses and plenty of them, asters that you can cut by the armful, sweet peas as high as your head, tender and juicy beets and plump tomatoes, or struggling, half-starved, scrappy flowers and vegetables that will demand the apology from you to every visiting friend that this is only a “first-year garden, don’t say on it.”

So that in the matter, let us make a comparison between the new soil and the old and see what can be done to improve the former and make it more productive.

NEW SOIL VERSUS OLD

First there is the question of physical condition. If you dig down about a foot or so into the soil of an old garden, and then do likewise in the soil of a new garden, three things will at once strike your attention. First, on the old ground the top layer or surface soil is very much deeper; secondly, you will notice that it falls apart and crumbles into much smaller pieces, being comparatively free from large lumps, or, if there are any, they break up easily into small, crumb-like particles under a blow from the spade or fork; and thirdly, the color and character of the soil are quite distinct from the new soil, being darker, more uniform in texture, and more fibrous and loamy. Every time a plot of ground is dug and pulverized, every time it is hoed and cultivated, the result is to break the soil up into smaller and smaller particles. The addition of manures, the spading under of millions of plant roots, gradually fill it with vegetable matter which rapidly decays and gives it its darker color. The lower layer or subsoil gets mixed with the top soil, and makes a blend which is quite uniform in character to a considerable depth. This is usually a gradual process, but it can be hastened by the methods suggested in the following paragraphs.

Far as the available plant foods are concerned, the best way is so easy to distinguish between the old soil and the new. Available plant foods are combinations or forms of nitrogen, phosphoric acid, potash, and a few other plant food elements that will dissolve in the moisture present in the soil, and can, therefore, be absorbed or taken up by the plant’s roots. There may be, for instance, the same amount of nitrogen in the soil of an old shoe, a piece of charred bone, a forkful of well rotted manure, and a spoonful of nitrate of soda. So far as the plant is concerned, there is a great difference. The nitrogen in the nitrate of soda is available for use within a very short time, while the same amount in the old manure will take many months to be available. That in the bone will become available only as it decomposes gradually during several years; while that in the shoe will remain latent or unavailable for many years, as only a very small part of its surface will decompose each season to become soluble in the soil.

Right here there comes in another point which directly affects our problem of making new soil productive as quickly as possible. If the nitrate of soda, the manure, the bone and the leather should each be thoroughly ground up or pulverized before being added to the soil, they will all be available for the plant’s use much more rapidly than if they were left in their original states. So the more you pulverize your new soil, the more quickly the plant foods in it will be available and the better the crop.

Now, in the old soil there is a gradual accumulation from year to year of all kinds of plant foods in various stages of decomposition or availability, so that you will be getting this season the benefit of fertilizers and manures added to the soil during several years back. The results obtained are natural and instinctive. In the new soil is put on the fly. And when the same materials, put on new soil, do not give similar results, their failure to do so is wrongly attributed to the fact that the soil is new.

The decayed vegetable matter, or humus, already mentioned, also gradually accumulates in the soil, but not directly on plant food, but its presence is essential for several reasons. In the first place it tends to keep the soil open and spongy, so that it can catch and retain much more moisture than soil that is without humus. It readily permits the free circulation of air through the soil and furnishes congenial conditions for the rapid increase of the bacteria in the soil. The vegetable matter in the soil becomes valuable for this purpose only as it decays and decomposes—in other words, as it changes from vegetable matter into humus. As with manure and fertilizer, its benefits are felt not as soon as it is added to the soil, but several months, or even two or three years in many cases, later.

BACTERIA IN THE SOIL

Bacteria in the soil—or, to be more exact at the expense of using a few polysyllabics, the bacteria in the soil—are one of the important factors of fertility because through their development and growth these invisible but extremely active and voracious little bugs aid very materially in changing insoluble and unavailable forms of plant food into forms that are soluble and available. So that if you do more than that; they assist directly in feeding the plants by gathering nitrogen from the air and “fixing” it in little storehouses or nodules on the plants’ roots, which sooner or later growing plants will make use of it.

These minute allies of the gardener are found in much greater numbers in older soils than in new. While they multiply with incomprehensible rapidity, there being innumerable generations of them in a single day, the amount of assistance they can render depends upon two things: the first is their even distribution throughout the soil, so that they can lie in wait, as it were, to go to work at the very first opportunity; the second is to have conditions such that they will multiply rapidly. Under ordinary methods of cultivation, it is several years before this even distribution is accomplished and these favorable conditions prevail in any soil; that is another reason why the old garden is likely to make a better showing than the new.

Last, but nearer greatest than least, comes the matter of soil moisture. Surely, you say, as much rain falls on the new garden as on the old! Very true; but the thing of importance is not how much falls, but how much is saved. The water saving or retaining capacity of a soil is determined by the degree of fineness into which it is pulverized, the amount of humus it contains, and the thoroughness of the dust mulch with which it can be kept covered. All of these factors, as we have already seen, are likely to be in favor of the old garden as compared with the newly made one.

IMPROVING SOIL CONDITIONS

There you have the reasons why your new garden is so often disappointing. The practical question that remains is what can be done about it. A definite answer can be put, rather compactly, into the following five suggestions: Some condition must be arranged to turn the new flower bed and the vegetable garden, hardy border, shrub plantings, strawberry patch, or whatever you may be expecting to put out this year:

(Continued on page 90)
## House & Garden's Gardening Guide for 1917

A Condensed Ready Reference for the Year on Culture and Selection of Vegetables, Flowers and Shrubs, and for Planting, Spraying, and Pruning

**Address individual garden problems to The Information Service, House & Garden, 445 Fourth Avenue, New York City.**

### Shrub for Every Purpose

<table>
<thead>
<tr>
<th>Shrub</th>
<th>Common Name</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buddleia</td>
<td>Butterfly shrub</td>
<td>6'-8'</td>
<td>Pink, lilac, violet</td>
<td>July to frost</td>
<td>A new flowering shrub, but one of the best; sunny position and fairly rich soil. Flowers are delightfully fragrant.</td>
</tr>
<tr>
<td>Callistemon</td>
<td>Strawberry shrub</td>
<td>4'-6'</td>
<td>Brown</td>
<td>May</td>
<td>One of the best of the smaller shrubs; very fragrant.</td>
</tr>
<tr>
<td>Cilindra</td>
<td>Sweet pepper</td>
<td>5'-7'</td>
<td>White</td>
<td>July-Aug.</td>
<td>Very free flowering; a great favorite for grouping.</td>
</tr>
<tr>
<td>Deutzia</td>
<td>Deutzia</td>
<td>4'-6'</td>
<td>White, pink</td>
<td>June</td>
<td>Good for cutting; best effect obtained through pruning with other shrubs; charming flowers.</td>
</tr>
<tr>
<td>Escobarda grandiflora</td>
<td>Pearl bush</td>
<td>5'-6'</td>
<td>White</td>
<td>May-June</td>
<td>Large yellow flowers bloom before the leaves appear.</td>
</tr>
<tr>
<td>Forsythia</td>
<td>Golden Bell</td>
<td>4'-5'</td>
<td>Yellow</td>
<td>April</td>
<td>Most striking when clumped; strong grower; free blooming.</td>
</tr>
<tr>
<td>Lonicera tatarica</td>
<td>Tatarian Honey-suckle</td>
<td>4'-6'</td>
<td>White, pink, yellow, red</td>
<td>May-June</td>
<td>Most striking when clumped; strong grower; free blooming.</td>
</tr>
<tr>
<td>Philadelphus</td>
<td>Mock-orange</td>
<td>6'-10'</td>
<td>White</td>
<td>June</td>
<td>Profuse bloomers; a valued and favorite shrub.</td>
</tr>
<tr>
<td>Prunus</td>
<td>Flowering plum</td>
<td>8'-10'</td>
<td>Deep pink</td>
<td>May</td>
<td>Flowers of a beautiful shade.</td>
</tr>
<tr>
<td>Rhus</td>
<td>Szechum</td>
<td>15'</td>
<td>White</td>
<td>July-Aug.</td>
<td>Suited for summer houses; brilliant in the fall.</td>
</tr>
<tr>
<td>Ribes</td>
<td>Flowering currant</td>
<td>4'-6'</td>
<td>Yellow</td>
<td>April-May</td>
<td>Fragrant; nice foliage; grows well in moist spots.</td>
</tr>
<tr>
<td>Spiraea</td>
<td>Bridal Wreath</td>
<td>4'-6'</td>
<td>White</td>
<td>May-June</td>
<td>A shrub of exceptional gracefulness.</td>
</tr>
<tr>
<td>Viburnum</td>
<td>Snowball</td>
<td>12'</td>
<td>Lilac</td>
<td>August-September</td>
<td>There are many varieties; each has some good point.</td>
</tr>
<tr>
<td>Vibex</td>
<td>Chaste Tree</td>
<td>5'-6'</td>
<td>White, red, pink</td>
<td>June-July</td>
<td>Graceful; long spikes; flowers late in summer.</td>
</tr>
<tr>
<td>Drivilla</td>
<td>Westega</td>
<td>6'-8'</td>
<td></td>
<td></td>
<td>Of robust habit, blooms profusely, and easy growth. (Eva Rathke especially fine; flowers continuously; very deep color.)</td>
</tr>
</tbody>
</table>

### For Individual Specimens

<table>
<thead>
<tr>
<th>Shrub</th>
<th>Common Name</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Althea</td>
<td>Rose of Sharon</td>
<td>8'-12'</td>
<td>Rose, white</td>
<td>Aug.-Oct.</td>
<td>Among the best of tall shrubs; very hardy; W. R. Smith (New) especially fine.</td>
</tr>
<tr>
<td>Acer japonica</td>
<td>Japanese maple</td>
<td>6'-10'</td>
<td>Foliage, various</td>
<td></td>
<td>Leaves of many distinct shapes and attractive coloring, especially in early spring.</td>
</tr>
<tr>
<td>Aralia spinosa</td>
<td>Angelica tree</td>
<td>10'-15'</td>
<td>White</td>
<td>Aug.</td>
<td>Unique tropical looking.</td>
</tr>
<tr>
<td>Baeberis</td>
<td>Groundsel tree</td>
<td>10'-12'</td>
<td>Rosy pink</td>
<td>April-May</td>
<td>White fluffy seed pods in fall.</td>
</tr>
<tr>
<td>Ceris</td>
<td>Judas tree</td>
<td>10'-15'</td>
<td>White</td>
<td>June</td>
<td>Flowers before leaves appear; very attractive.</td>
</tr>
<tr>
<td>Chinabiscus</td>
<td>White fringed dogwood</td>
<td>8'-12'</td>
<td>White, red</td>
<td>May</td>
<td>Very distinctive and attractive in appearance; flowers resemble fringed decoration.</td>
</tr>
<tr>
<td>Cornus</td>
<td>Smoke tree</td>
<td>15'-20'</td>
<td>Smoke colored</td>
<td>July</td>
<td>Not symmetrical in shape; but very striking; foliage highly colored in autumn.</td>
</tr>
<tr>
<td>Rhys Cotinus</td>
<td></td>
<td>12'</td>
<td></td>
<td></td>
<td>Very distinctive; flowers in feathery clusters.</td>
</tr>
</tbody>
</table>

### For Hedges and Screens

<table>
<thead>
<tr>
<th>Shrub</th>
<th>Common Name</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Althea</td>
<td>Rose of Sharon</td>
<td>8'-12'</td>
<td>Rose, white</td>
<td>Aug.-Oct.</td>
<td>See above; plant close, 11&quot; to 18&quot;; pruning.</td>
</tr>
<tr>
<td>Berberis</td>
<td>Japanese barberry</td>
<td>3'-4'</td>
<td>White, red</td>
<td>May-June</td>
<td>Very attractive; many different forms; long lived.</td>
</tr>
<tr>
<td>Crataegus</td>
<td>Hawthorne</td>
<td>12'-15'</td>
<td>White</td>
<td>August</td>
<td>Color changes; very hard; one of the best late flowering shrubs; enormous flower panicles.</td>
</tr>
<tr>
<td>Hydrangea paniculata</td>
<td>White fringed rose</td>
<td>6'-10'</td>
<td>White to rose</td>
<td>August</td>
<td>Most popular formal hedge plant; plant close, 8&quot; to 10&quot;; prune to shape frequently.</td>
</tr>
<tr>
<td>Privet</td>
<td>To 8'</td>
<td></td>
<td>White</td>
<td></td>
<td>New varieties harder than California.</td>
</tr>
<tr>
<td>Pyrus</td>
<td>Japanese quince</td>
<td>6'-8'</td>
<td>Bright scarlet</td>
<td>Early May</td>
<td>Set 15&quot; apart; makes a dense hedge; requires a little pruning.</td>
</tr>
<tr>
<td>Spirea</td>
<td>Spirea</td>
<td>6'-8'</td>
<td>White</td>
<td>May-June</td>
<td>Plant 1½' to 2' apart; very graceful in formal hedge; especially for boundary lines.</td>
</tr>
<tr>
<td>Syringa</td>
<td>Lilac</td>
<td>15'-20'</td>
<td>White, pink, lilac</td>
<td>May-June</td>
<td>Plant 2' to 3'; very fragrant; good for allee walks, etc. Japanese late blooming.</td>
</tr>
</tbody>
</table>

### Vines

<table>
<thead>
<tr>
<th>Vines</th>
<th>Common Name</th>
<th>Flowers</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actinidia</td>
<td>Silver vine</td>
<td>Whitish with purple centers; A. Chinensis, yellow</td>
<td>Very rapidly growing with dense foliage; good for arbors, trellises, etc. Edible fruits after flowering.</td>
</tr>
<tr>
<td>Akebia</td>
<td>Akebia</td>
<td>Pink, yellow, red</td>
<td>Good where dense shade is not required; very graceful in habit.</td>
</tr>
<tr>
<td>Amselopsis</td>
<td>Benton ivy</td>
<td>White, yellow, white</td>
<td>Most popular of all vines for covering smooth surfaces such as brick and stone walls, etc.</td>
</tr>
<tr>
<td>Bignonia</td>
<td>Trumpet vine</td>
<td>Very large trumpet shape; red or orange</td>
<td>Semi-climbing, especially good for covering rough stone work, tall stumps, porch trellises, etc.</td>
</tr>
<tr>
<td>Clematis paniculata</td>
<td>Virgin's Bower</td>
<td>Fragrant pure white flowers in August and September</td>
<td>Extremely hardy and robust; most satisfactory late flowering vine. Especially good for porches. Flowers followed by feathery silver seed pods.</td>
</tr>
<tr>
<td>Eryngium</td>
<td>Eryngium spicatum</td>
<td>Foliage, green or green and white</td>
<td>Extremely hardy; good in place of English ivy in cold sections. Evergreen.</td>
</tr>
<tr>
<td>Honeysuckle</td>
<td>Woodbine</td>
<td>Red, yellow and white</td>
<td>Old favorite; one of the most popular for porches and trellising covers. Summer position; good variegated foliage.</td>
</tr>
<tr>
<td>Wisteria</td>
<td>Wisteria</td>
<td>Purple or white; immense pendent panicles</td>
<td>Of twining, not clinging habit; especially good for pergolas, etc. Attains great height with suitable support. Sunny position; rich soil.</td>
</tr>
</tbody>
</table>

### Summer Flowering Bulbs

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anemone</td>
<td>12'-18'</td>
<td>White, cream, pink, blue</td>
<td>July-Sept.</td>
<td>Plant in May in sheltered position, in groups, about 6&quot; x 6&quot;. Hardy.</td>
</tr>
<tr>
<td>Begonia</td>
<td>12'-15'</td>
<td>Pink, yellow, red</td>
<td>June-Sept.</td>
<td>Start in heat, or plant in rich light soil in open. Water freely.</td>
</tr>
<tr>
<td>Calla</td>
<td>18'-24'</td>
<td>Yellow, white</td>
<td>June-Sept.</td>
<td>Plant suitable varieties in rich warm soil. Plenty of water; store for winter in warm temperature.</td>
</tr>
<tr>
<td>Cannas</td>
<td>2'-6'</td>
<td>Pink, yellow, red, white</td>
<td>June-Oct.</td>
<td>Start in heat, or plant dormant roots in rich soil. Store for winter.</td>
</tr>
<tr>
<td>Caladium</td>
<td>18'-3'</td>
<td>(Foliage) green or variegated</td>
<td></td>
<td>Sheltered, semi-shaded position, light rich soil. Store in warm place.</td>
</tr>
<tr>
<td>Dahlia</td>
<td>2'-6'</td>
<td>White, pink, yellow, red</td>
<td>June-Oct.</td>
<td>Start in heat or outdoors danger of frost. In deep, rich soil; this and disbud for good blooms.</td>
</tr>
<tr>
<td>Gladiolus</td>
<td>2'-5'</td>
<td>Pink, red, white, yellow</td>
<td>July to frost</td>
<td>Succession of blossoms from April to June for continuous bloom; store cool for winter. Single and double forms equally good; good for cuttings.</td>
</tr>
<tr>
<td>Racemoseulus</td>
<td>5'-4'</td>
<td>Red, yellow, scarlet</td>
<td>May-June</td>
<td>Culture similar to that of gladiolus. Plant 3&quot; to 6&quot; each way; take up or protect.</td>
</tr>
<tr>
<td>Muscari</td>
<td>18'-2'</td>
<td>Blue, pink, yellow, scarlet</td>
<td>June-June</td>
<td>Culture same as above but should be stored for winter.</td>
</tr>
<tr>
<td>Tuberose</td>
<td>2'-3'</td>
<td>White</td>
<td>July-Sept.</td>
<td>Plant put in May, or start in heat</td>
</tr>
<tr>
<td>Zephyranthes</td>
<td>8'-10'</td>
<td>Yellow, white, pink</td>
<td>June-June</td>
<td>Good for masses or borders; plant two clumps, in early spring. Store like gladiol.</td>
</tr>
</tbody>
</table>
VEGETABLES FOR A CONTINUOUS SUPPLY

<table>
<thead>
<tr>
<th>Vegetable and Type</th>
<th>Representative Variety</th>
<th>First Planting</th>
<th>Successive Planting</th>
<th>Amount of Space for 50 Row</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bean, bush, Green Pod</td>
<td>Early Bountiful</td>
<td>April 15</td>
<td>2½ to Aug. 15</td>
<td>1 pt.</td>
<td>In dry soil available; cover first planting 1&quot; deep.</td>
</tr>
<tr>
<td>Bean, bush, Wax</td>
<td>Rust Proof Golden Wax</td>
<td>April 20</td>
<td>2½ to Aug. 1</td>
<td>1 pt.</td>
<td>15&quot; x 4&quot;</td>
</tr>
<tr>
<td>Bean, pole</td>
<td>Burpee Improved Pole Lima</td>
<td>April 15</td>
<td>3½ to Aug. 1</td>
<td>1 pt.</td>
<td>15&quot; x 4&quot;</td>
</tr>
<tr>
<td>Bean, pole, Lima</td>
<td>Golden Cluster</td>
<td>April 15</td>
<td>May 15</td>
<td>1 pt.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Beans, Early Lima</td>
<td>Early Leiblaton</td>
<td>May 1</td>
<td>June 15</td>
<td>12&quot; x 2&quot;</td>
<td></td>
</tr>
<tr>
<td>Beans, Early</td>
<td>Early Model</td>
<td>April 25</td>
<td>May 15</td>
<td>1½ pt.</td>
<td>1&quot; x 12&quot;</td>
</tr>
<tr>
<td>Beans &amp; lima</td>
<td>Detroit Dark Red</td>
<td>April 15</td>
<td>May 15</td>
<td>1½ pt.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>Dalkeith P</td>
<td>June 15</td>
<td>July 15</td>
<td>35</td>
<td>Transplant to four weeks; same treatment as late cabbage; pinch out tops of stalks when &quot;buttons&quot; are 4&quot; long.</td>
</tr>
<tr>
<td>Cabbage, Ex. Early</td>
<td>Copenhagen M'kt</td>
<td>April 1</td>
<td>June 1</td>
<td>3½ oz.</td>
<td>Set out well hardened off plants as soon as ground can be worked; fertilize in rows.</td>
</tr>
<tr>
<td>Cabbage, late</td>
<td>Danish Ball Head</td>
<td>July 1</td>
<td>July 15</td>
<td>3&quot;x 10&quot;</td>
<td>Cabbage has a large quantity of nitrates of soda beneficial.</td>
</tr>
<tr>
<td>Carrots, Ex. Early</td>
<td>Early Scarlet Horn</td>
<td>April 15</td>
<td>3½ to Aug. 15</td>
<td>1½ oz.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Carrots, the winter</td>
<td>Mayflower</td>
<td>May 15</td>
<td>July 15</td>
<td>3½ oz.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Cauliflower, spring and fall</td>
<td>Early Snowball</td>
<td>April 10</td>
<td>July 15</td>
<td>3½ oz.</td>
<td>24&quot; x 18&quot;</td>
</tr>
<tr>
<td>Celery, Early</td>
<td>Golden Self-Bunching</td>
<td>May 10</td>
<td>July 15</td>
<td>1½ oz.</td>
<td>30&quot; x 12&quot;</td>
</tr>
<tr>
<td>Celery, late</td>
<td>Winter Queen</td>
<td>June 1</td>
<td>July 15</td>
<td>3 oz.</td>
<td>10&quot; x 15&quot;</td>
</tr>
<tr>
<td>Corn, main crop</td>
<td>Country Gentleman</td>
<td>April 10</td>
<td>June 15</td>
<td>1½ oz.</td>
<td>3&quot; x 3&quot;</td>
</tr>
<tr>
<td>Corn, seedling, etc.</td>
<td>Davis Early</td>
<td>May 1</td>
<td>June 15</td>
<td>3 oz.</td>
<td>Fertilize with 1 lb. of nitrate of soda.</td>
</tr>
<tr>
<td>Cucumbers, for pickling</td>
<td>Ever-bearing</td>
<td>June 1</td>
<td>July 15</td>
<td>3½ oz.</td>
<td>4½ oz. x 4 foot.</td>
</tr>
<tr>
<td>Eggplant</td>
<td>Black Beauty</td>
<td>May 20</td>
<td>June 15</td>
<td>3 oz.</td>
<td>Fertilizer; mix plenty with sand.</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>Giant Fringed</td>
<td>June 1</td>
<td>July 15</td>
<td>3 oz.</td>
<td>12&quot; x 12&quot;</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>White Vienna</td>
<td>April 10</td>
<td>July 15</td>
<td>5 oz.</td>
<td>12&quot; x 12&quot;</td>
</tr>
<tr>
<td>Lettuce, batavia</td>
<td>American Ice</td>
<td>April 13</td>
<td>July 15</td>
<td>5 oz.</td>
<td>12&quot; x 12&quot;</td>
</tr>
<tr>
<td>Lettuce, &quot;Butter Head,&quot; for spring and fall</td>
<td>Big Boston</td>
<td>April 10</td>
<td>July 15</td>
<td>5 oz.</td>
<td>Treated at size of head above; grow in heavy soil.</td>
</tr>
<tr>
<td>Lettuce, &quot;Crisp Head,&quot; for summer and fall</td>
<td>Brittle Ice</td>
<td>May 16</td>
<td>June 15</td>
<td>5½ oz.</td>
<td>6 x 4&quot;</td>
</tr>
<tr>
<td>Melons, musk</td>
<td>Nettet Gern</td>
<td>May 1</td>
<td>June 15</td>
<td>4 oz.</td>
<td>6 x 4&quot;</td>
</tr>
<tr>
<td>Melons, musk, bush</td>
<td>Henderson's Bush</td>
<td>May 1</td>
<td>June 15</td>
<td>6 x 4&quot;</td>
<td>6 x 5&quot;</td>
</tr>
<tr>
<td>Melons, water</td>
<td>Halfbush Honey</td>
<td>May 15</td>
<td>June 15</td>
<td>6 x 4&quot;</td>
<td>6 x 5&quot;</td>
</tr>
<tr>
<td>Onions, &quot;seta&quot;</td>
<td>Yellow Danvers</td>
<td>April 11</td>
<td>June 15</td>
<td>1½ oz.</td>
<td>2&quot; x 10&quot;</td>
</tr>
<tr>
<td>Onion, globe</td>
<td>Yellow Spanish</td>
<td>April 10</td>
<td>July 15</td>
<td>1½ oz.</td>
<td>3&quot; x 2&quot;</td>
</tr>
<tr>
<td>Parsley, Italian</td>
<td>Emerald Curled</td>
<td>April 15</td>
<td>June 15</td>
<td>1½ oz.</td>
<td>3&quot; x 2&quot;</td>
</tr>
<tr>
<td>Peas, smooth</td>
<td>Alaska</td>
<td>April 15</td>
<td>July 15</td>
<td>3 oz.</td>
<td>30&quot; x 12&quot;</td>
</tr>
<tr>
<td>Peas, Early, wrinkled</td>
<td>Gradus (Little Marvel Dwarf)</td>
<td>March 10</td>
<td>May 15</td>
<td>3 oz.</td>
<td>Make first plantings in light soil, or on slightly raised hill ½&quot; to 1&quot; deep.</td>
</tr>
<tr>
<td>Peas, main crop</td>
<td>May 10</td>
<td>May 15</td>
<td>3 oz.</td>
<td>30&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Peppers, large fruited</td>
<td>Ruby King</td>
<td>May 15</td>
<td>July 15</td>
<td>3 oz.</td>
<td>2&quot; x 30&quot;</td>
</tr>
<tr>
<td>Peppers, small fruited</td>
<td>Green Comet</td>
<td>April 15</td>
<td>July 15</td>
<td>3 oz.</td>
<td>2&quot; x 30&quot;</td>
</tr>
<tr>
<td>Potatoes, bush</td>
<td>Improved Oregon Grow Crow</td>
<td>April 15</td>
<td>July 15</td>
<td>4 oz.</td>
<td>30&quot; x 12&quot;</td>
</tr>
<tr>
<td>Potatoes, Irish Cobbler</td>
<td>May 1</td>
<td>July 15</td>
<td>4 oz.</td>
<td>30&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Radish, Early</td>
<td>Crimson Globe Giant</td>
<td>April 1</td>
<td>July 15</td>
<td>3 oz.</td>
<td>30&quot; x 12&quot;</td>
</tr>
<tr>
<td>Radish, summer</td>
<td>Carters</td>
<td>May 1</td>
<td>Aug. 15</td>
<td>3 oz.</td>
<td>3 x 12&quot;</td>
</tr>
<tr>
<td>Radish, water</td>
<td>White Chinese</td>
<td>April 1</td>
<td>Jul 15</td>
<td>3 oz.</td>
<td>3 x 12&quot;</td>
</tr>
<tr>
<td>Rutabaga</td>
<td>April 15</td>
<td>July 15</td>
<td>4 oz.</td>
<td>15&quot; x 4&quot;</td>
<td></td>
</tr>
<tr>
<td>Salsify, common</td>
<td>Sandwich Island</td>
<td>April 10</td>
<td>Sept. 15</td>
<td>3 oz.</td>
<td>15&quot; x 4&quot;</td>
</tr>
<tr>
<td>Salsify, long</td>
<td>Victoria</td>
<td>April 10</td>
<td>Sept. 15</td>
<td>3 oz.</td>
<td>15&quot; x 4&quot;</td>
</tr>
<tr>
<td>Squash, summer</td>
<td>Golden Summer Crookneck</td>
<td>May 1</td>
<td>Aug. 15</td>
<td>4 oz.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Squash, winter</td>
<td>Hoover</td>
<td>May 1</td>
<td>Aug. 15</td>
<td>4 oz.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Swiss chard</td>
<td>Lucullus</td>
<td>April 10</td>
<td>July 15</td>
<td>3 oz.</td>
<td>15&quot; x 4&quot;</td>
</tr>
<tr>
<td>Tomato, Early</td>
<td>Best Sixteen (Chalk's Jewel)</td>
<td>May 10</td>
<td>July 10</td>
<td>3½ oz.</td>
<td>For tomatoes for cutters or clusters for fruit.</td>
</tr>
<tr>
<td>Tomato, main crop</td>
<td>Amber Globe</td>
<td>May 10</td>
<td>July 10</td>
<td>3½ oz.</td>
<td>2½ x 2½ foot.</td>
</tr>
<tr>
<td>Turnip, summer</td>
<td>White Globe</td>
<td>April 10</td>
<td>July 15</td>
<td>3½ oz.</td>
<td>12&quot; x 2&quot;</td>
</tr>
<tr>
<td>Turnip, winter</td>
<td>June 1</td>
<td>July 15</td>
<td>3½ oz.</td>
<td>12&quot; x 2&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**P** = plants from frames or seed-beds. First figures under Directions indicate distance between rows; second between plants in row after thinning, or between hills. Plants in continuous rows, in which the seeds are sown near together, and the plants even after thinning stand at irregular distances, usually touching. All vegetables have the regular distance, but so near together that machine cultivation is attempted only between the rows, which are usually especially enriched before planting, are isolated groups or clusters of plants, generally about equidistant—3 or more—each way. Hilling consists in putting out the surplus seedlings as soon as most of the seeds are up. Hilling is drawing the soil up toward the roots or stems; often instead—usually a wide hill, slight hill is the best. Blanching is necessary to prepare some plants such as celery and endive, for eating; excluding the light, bank with earth, tying up the leaves, covering with prepared paper, and storing accomplish this result.

NOTES ON VEGETABLES

NOTES ON CONTROL OF INSECTS AND DISEASES (See page 46 for tables). INSECTS belong to four general classes: "chewing" insects, which cut portions of the plant, usually leaves; "sucking" insects, which live on the plant's juices; "scurvy" which work inside the stems or roots; and "underground" grubs or worms. For larvae of lepidopterous insects, a stomach poison, is the standard control; others are Paris green and hellore. For sucking insects, nicotine sulfate, a concentrated liquid extract of tobacco, is the standard control; others are petroleum jelly, for fruits, tar and pitch, for vegetables. For harrowing, destruction of the individual, and destruction of adults, mulls or flies, or prevention of egg-laying, must be resorted to. For underground insects, tobacco or lime, or special preparations, waters into the soil; and prevention of egg-laying. DISEASES of plants are caused by fungi or bacteria. By fungi, diseases are unaccompanied, but are not true viruses; the medicine is used when the mark of the foliage left by Bordeaux mixture is objectionable. The effectiveness of all controls depends on using them immediately when the enemy is first sighted.
# Flowers for Every Place

## For Beds and Borders

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asters (A)</td>
<td>18'-30&quot;</td>
<td>Various</td>
<td>July-Sept.</td>
<td>Protect from aster beetle by hand picking and Paris green.</td>
</tr>
<tr>
<td>Begonias (TP)</td>
<td>12'-18&quot;</td>
<td>White, pink, red</td>
<td>May-Sept.</td>
<td>Very free and continuous flowering; bushy, compact growth; good for edging. (P)</td>
</tr>
<tr>
<td>Cosmos (A)</td>
<td>2'-8'</td>
<td>White, pink, red</td>
<td>Red, yellow, June-Sept.</td>
<td>Usually graces artist; good for backgrounds or planting against buildings, fences, evergreens, etc. (P)</td>
</tr>
<tr>
<td>Celosia (A)</td>
<td>18'- 4&quot;</td>
<td>Red, yellow, white</td>
<td>July to frost</td>
<td>Colors rather crude but brilliant; good effect distance.</td>
</tr>
<tr>
<td>Heliotrope (P)</td>
<td>12'-18&quot;</td>
<td>Blue, white</td>
<td>July to frost</td>
<td>Flowers freely until frost; give soil; fragrant and white.</td>
</tr>
<tr>
<td>Marigold (A)</td>
<td>10'-36&quot;</td>
<td>Pale gold to orange</td>
<td>July to frost</td>
<td>Easily grown, free flowering; select color with care, avoiding mixtures.</td>
</tr>
<tr>
<td>Nasturtium (A)</td>
<td>12'-24&quot;</td>
<td>Various</td>
<td>May to frost</td>
<td>Especially good for new or poor soil; for best bloom soil must be not too rich.</td>
</tr>
<tr>
<td>Pennisetum (A)</td>
<td>6'-8&quot;</td>
<td>Various</td>
<td>May to frost</td>
<td>For immediate show get old plants, but for a long season new plants just beginning to bloom. (P)</td>
</tr>
<tr>
<td>Petunias (A)</td>
<td>12'-18&quot;</td>
<td>White to clear mixed</td>
<td>Various</td>
<td>Use first Petunias (A) kept in seed bed over before transplanting: (S B)</td>
</tr>
<tr>
<td>Phlox Drummondii (A)</td>
<td>12'-36&quot;</td>
<td>Various, brilliant</td>
<td>July to frost</td>
<td>Unsurpassed, brilliant and harmonizing; many fine named varieties. (S B)</td>
</tr>
<tr>
<td>Salvia (A)</td>
<td>12'-24&quot;</td>
<td>Brilliant, mottled names; select variety bright and strong; pinch back for stocky plants. (P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbena (A)</td>
<td>6'-9&quot;</td>
<td>Various</td>
<td>July to frost</td>
<td>Most brilliant for low, spreading, carpet growth; flowers to hard frost. (P or S B)</td>
</tr>
</tbody>
</table>

## For Edges and Borders

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alyssum (A)</td>
<td>6'-12&quot;</td>
<td>Blue, white</td>
<td>June to frost</td>
<td>Compact, upright growth; will not spread out over walk. (P or S)</td>
</tr>
<tr>
<td>Baby’s breath (BIP)</td>
<td>6'-12&quot;</td>
<td>White, pink, red</td>
<td>April to June</td>
<td>Tidying or spreading; very graceful in habit. (P or S)</td>
</tr>
<tr>
<td>Marigold (Duf. Srr. A.)</td>
<td>9'-12&quot;</td>
<td>Orange and yellow</td>
<td>June to frost</td>
<td>Dwarf sorts in named varieties very effective for narrow borders. (P)</td>
</tr>
<tr>
<td>Myosotis (B)</td>
<td>6'-12&quot;</td>
<td>Blue, white</td>
<td>Apr.-July</td>
<td>Best blue edging plants, especially dainty. (P)</td>
</tr>
<tr>
<td>Zinnia (Duf. Srr. A.)</td>
<td>12'-18&quot;</td>
<td>Crimson, yellow and white</td>
<td>June to frost</td>
<td>Next, upright, formal effect; dwarf varieties, selected colors.</td>
</tr>
</tbody>
</table>

## For Shady Places

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antirrhinum (P)</td>
<td>24&quot;</td>
<td>White, red, yellow</td>
<td>July-Sept.</td>
<td>Select dwarf, medium or tall varieties as wanted; make tall sorts loosely.</td>
</tr>
<tr>
<td>Aquilegia (P)</td>
<td>12'-36&quot;</td>
<td>White, orange, blue</td>
<td>June-July</td>
<td>Unexcelled open habit of growth; fine in combination with other things.</td>
</tr>
<tr>
<td>Canterbury bells (B)</td>
<td>18'-30&quot;</td>
<td>Pink, blue, white</td>
<td>June-Aug.</td>
<td>Winter over plants or started early in frost; avoid crowding. (P)</td>
</tr>
<tr>
<td>Delphinium (HP)</td>
<td>3'-4'</td>
<td>Blue</td>
<td>June</td>
<td>Germinate in garden for bloom; started in heat will bloom first season. (P)</td>
</tr>
<tr>
<td>Dianthus (B)</td>
<td>12'-36&quot;</td>
<td>White, pink, purple</td>
<td>June-Aug.</td>
<td>Easily grown old favorites; wintered over plants or started early in heat. (P)</td>
</tr>
<tr>
<td>Erysimum (B)</td>
<td>6'-12&quot;</td>
<td>Blue, white</td>
<td>April-July</td>
<td>Nee above; good for most situations; some fine new varieties. (P)</td>
</tr>
<tr>
<td>Foxglove (A)</td>
<td>18'-24&quot;</td>
<td>Various</td>
<td>May to frost</td>
<td>Succeeds in partial shade, but blooms more freely in sunshine.</td>
</tr>
<tr>
<td>Schizanthus (P)</td>
<td>24&quot;</td>
<td>Mixed-yellow to lilac</td>
<td>July-August</td>
<td>Long season of bloom; one of the most satisfactory of all start early. (S)</td>
</tr>
<tr>
<td>Tohemia (A)</td>
<td>24'-30&quot;</td>
<td>Blue, white</td>
<td>June to frost</td>
<td>Exceptionally gay, free flowering dwarf sorts for borders. (S)</td>
</tr>
</tbody>
</table>

## For Cutting

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreton (A)</td>
<td>15'-21&quot;</td>
<td>Rich, various</td>
<td>June to frost</td>
<td>Easily grown, give sunny situation; start in heat or outdoors. (P or S)</td>
</tr>
<tr>
<td>Asters (A)</td>
<td>12'-18&quot;</td>
<td>Various, yellow (orange brown)</td>
<td>June to frost</td>
<td>Protect from beetles; dishar for great flowers. (S or A)</td>
</tr>
<tr>
<td>Catopsis (A)</td>
<td>15'-18&quot;</td>
<td>Purple, white, pink, red</td>
<td>July-August</td>
<td>Give plenty of sun; keep dead flowers cut off. (S)</td>
</tr>
<tr>
<td>Chrysanthemium (A)</td>
<td>12'-36&quot;</td>
<td>White</td>
<td>August to frost</td>
<td>Very show; pinch back to get bushy plants. (P or S B)</td>
</tr>
<tr>
<td>Cosmos (A)</td>
<td>2'-8'</td>
<td>White</td>
<td>August to frost</td>
<td>See above; start in early cutting. (P or S)</td>
</tr>
<tr>
<td>Delphinium (P)</td>
<td>3'-4'</td>
<td>Blue</td>
<td>Aug. to frost</td>
<td>Exceptionally easy growth; brilliant, rich colors; avoid crowding. (S)</td>
</tr>
<tr>
<td>Dianthus (B)</td>
<td>6'-12&quot;</td>
<td>White, yellow, orange</td>
<td>July-August</td>
<td>Unexcelled for use with other cut flowers; small sowing every month. (S)</td>
</tr>
<tr>
<td>Erysimum (B)</td>
<td>12'-24&quot;</td>
<td>Various</td>
<td>July-August</td>
<td>Small plants, keep old flowers cleaned off, avoid crowded plants.</td>
</tr>
<tr>
<td>Salpiglossis (P)</td>
<td>12'-24&quot;</td>
<td>Crimson, rose, purple, white</td>
<td>July-August</td>
<td>For stronger flowering plants start early; use selected colors. (P or S)</td>
</tr>
<tr>
<td>Siberian (P)</td>
<td>15'-30&quot;</td>
<td>White, rose, pink, crimson, maroon, maroon</td>
<td>July-August</td>
<td>Old favorite but one of the most satisfactory; try improved named varieties; avoid crowding; cut flowers.</td>
</tr>
<tr>
<td>Sunflower (A)</td>
<td>3'-7'</td>
<td>Yellow</td>
<td>Aug.-Sept.</td>
<td>Great variety; continuous supply; sunny position; keep cut.</td>
</tr>
<tr>
<td>Shasta Daisy (A)</td>
<td>15'-18&quot;</td>
<td>White</td>
<td>Aug.-Sept.</td>
<td>One of the longest keeping, especially good; winter over plants, or start early; seeds.</td>
</tr>
</tbody>
</table>

## For Fragrance (Cutting)

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centaurea (Sweet Scent) (A)</td>
<td>24'-30&quot;</td>
<td>Rose, lavender</td>
<td>June</td>
<td>Make second sowing; favorite old “Sweet Scent.”</td>
</tr>
<tr>
<td>Heliotrope (P)</td>
<td>12'-24&quot;</td>
<td>Purple, white</td>
<td>July</td>
<td>See above; select most fragrant plants for stock. (P)</td>
</tr>
<tr>
<td>Marguerite Carnations (P)</td>
<td>15'-18&quot;</td>
<td>Blue, white</td>
<td>July-August</td>
<td>Bloom early from seed; give good stand; select colors. (S B)</td>
</tr>
<tr>
<td>Mignonette (A)</td>
<td>12'-18&quot;</td>
<td>White, yellow, pink, red</td>
<td>August to frost</td>
<td>See above or method or for success; cool, moist soil. (S or S B)</td>
</tr>
<tr>
<td>Seris (TP)</td>
<td>24&quot;</td>
<td>Pale gold to orange</td>
<td>July to frost</td>
<td>Easy blooming, one of the pleasant whites. (S or S B)</td>
</tr>
<tr>
<td>Stocks (A)</td>
<td>12'-24&quot;</td>
<td>Lavender, pink, yellow, scarlet</td>
<td>July to frost</td>
<td>Give rich soil; start indoors or in seed bed, and transplant twice to select double flowers only. (P or S B)</td>
</tr>
<tr>
<td>Sweet Pea (A)</td>
<td>2'-6'</td>
<td>White, rose, pink, crimson, maroon, maroon</td>
<td>June</td>
<td>Plant deep, avoid overcrowding; water abundantly. Keep old flowers picked. (P and S)</td>
</tr>
<tr>
<td>Wallflower (B)</td>
<td>12'-30&quot;</td>
<td>Brown (yellow)</td>
<td>July</td>
<td>Winter over or start early in heat to get flowers first season. (P)</td>
</tr>
</tbody>
</table>

## For Climbing

<table>
<thead>
<tr>
<th>Flower</th>
<th>Height</th>
<th>Color</th>
<th>Season of Bloom</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canarybird Vine (A)</td>
<td>10&quot;</td>
<td>Canary yellow</td>
<td>June to frost</td>
<td>Fridged, bright yellow flowers, very unique; rapid growth. (P or S)</td>
</tr>
<tr>
<td>Cardinal Climber (A)</td>
<td>30&quot;</td>
<td>Scarlet</td>
<td>July to frost</td>
<td>New rapid growers; unparalleled for brilliant display; soak or tile seeds. (P or S)</td>
</tr>
<tr>
<td>Belladonna (Hyacinth Bean) (TA)</td>
<td>10&quot;</td>
<td>Purple, white</td>
<td>Mid-July to frost</td>
<td>Easily grown; very free flowering; good for screening. (S)</td>
</tr>
<tr>
<td>Mockflower (TA)</td>
<td>15'-30&quot;</td>
<td>White, blue</td>
<td>August to frost</td>
<td>Unique and fragrant; some new good varieties; start early for best results. (P or S)</td>
</tr>
<tr>
<td>Morning-glory (TA)</td>
<td>15&quot;</td>
<td>Mixed</td>
<td>June</td>
<td>Old favorite but greatly improved; for operating fences, rubbish heaps, etc., as well as climbing.</td>
</tr>
<tr>
<td>Nasturtium (A)</td>
<td>6'-10&quot;</td>
<td>Crimson, maroon, orange, white, rose</td>
<td>June to frost</td>
<td>See above; Use self-colors for most striking effects.</td>
</tr>
</tbody>
</table>

Notes:
- "A" annual; "B" biennial; "P" perennial; "HP," "HIP," and "TP" mean respectively hardy perennial, half hardy perennial, and tender perennial.
- Annuals flower, mature, and die in a single season.
- Biennials become established the first season, and flower and seed the next spring or summer, by starting early or under glass, most of them flower the same year, like annualls.
- Perennials flower and seed year after year, by early sowing many of them will flower the first season.
- "Hardy" annuals, biennials, or perennials are those capable of resisting cold, and may be planted or sown with the harder vegetables.
- "Tender" annuals, biennials, or perennials require warm weather, and should not be planted until corn-growing time.
- Half-hardy, biennials and perennials are those capable of resisting frost, but not of surviving the winter without protection.
- In the Directions: "S" sow seed in early spring, where plants will flower. "S B" sow plants in seed bed or border, to transplant to permanent positions. "P" plants from frames, greenhouses, or florists.
## Control of Insects and Diseases

<table>
<thead>
<tr>
<th>Insect or Disease</th>
<th>Identification</th>
<th>When to Look For</th>
<th>Attacks</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In the Vegetable Garden</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphid or “plant louse”</td>
<td>Small, green or black, soft-bodied flies that congregate in large numbers.</td>
<td>Throughout season, especially on half-ripe fruits, especially on under side of leaves. June, July, especially on new growth. Late May until September, two broods.</td>
<td>Cabbage, cauliflower, lettuce, peas, etc.</td>
<td>Contact spray, two or three applications, at intervals of a week to ten days, especially against under side of foliage, and on foliage. <strong>Beetle</strong> seed. <strong>Beetle</strong> fruit. <strong>Garden</strong> beetles with tobacco dust. Poison bait before planting, and give plants protection with 4” paper bands 1” in soil; also hand picking. Bordeaux mixture and arsenate of lead; tobacco dust on seedlings. <strong>Thrips</strong> thorough, forceful spraying with kerosene emulsion or with nicotine. Carefully remove, burn or infested parts of plants; spray as for aphids. Nicotine spray forcibly applied; kerosene emulsion. Spray or dust with arsenate of lead or Paris <strong>bichloride</strong>; burn plants and plant debris. Protect cabbage group with tarred paper guards; <strong>Beetle</strong> seeds; <strong>Beetle</strong> lumps; <strong>Beetle</strong> eggs; <strong>Beetle</strong> leaves. <strong>Leaf beetles</strong></td>
</tr>
<tr>
<td><strong>Onion thrip</strong></td>
<td>Minute, active, whitish insect barely visible to the naked eye, ledge especially down between leaves.</td>
<td>Throughout season, especially in May and June.</td>
<td>Onions and leeks.</td>
<td></td>
</tr>
<tr>
<td><strong>Potato beetle</strong></td>
<td>Common striped beetle or bug 2” long.</td>
<td>Throughout season, first on early sprouts.</td>
<td>Potatoes, onion, cabbage, cauliflower, turnips, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Root maggot</strong></td>
<td>Small white worm or grub 1” to 2” long.</td>
<td>Throughout season, especially on late to autumn.</td>
<td>Squash, pumpkins, and other <strong>vein crops</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>White grub</strong></td>
<td>Large, soft, white, repulsive grubs or worms, feeding on roots under ground.</td>
<td>Usually appears first late in June, remaining until autumn. Young hatched from brown eggs on under side of leaves; resemble large <strong>louse</strong>.</td>
<td>Strawberries especially; also corn, potatoes, tomatoes, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>White fly</strong></td>
<td>Minute, tenacious, white winged fly; congregating in large numbers until disturbed.</td>
<td>Through season; especially on dried, overworn seed and moist plants.</td>
<td>Tomato, cucumber, tomato and tobacco mostly.</td>
<td></td>
</tr>
<tr>
<td><strong>Tomato worm</strong></td>
<td>Large, green worm, often seen several inches long.</td>
<td>Through season, especially in moist weather and low, closed places.</td>
<td>Potatoes, beans, celery, cucumber, tomatoes, paprika, <strong>butter</strong>, <strong>leeks</strong>, <strong>beans</strong>, <strong>limes</strong>, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Blight</strong></td>
<td>Usually, spotting or spotting of the leaves, progressing very rapidly.</td>
<td>Throughout season, same as for blight; also crowded foliage.</td>
<td>Tomatoes and beans; <strong>butter</strong>, <strong>peas</strong>, <strong>carrots</strong>, <strong>broccoli</strong>, <strong>beets</strong>, <strong>asparagus</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Mildew</strong></td>
<td>Whitish coating or spotting of the foliage, spreading rapidly.</td>
<td>Throughout season, especially in warm weather.</td>
<td><strong>Various vegetables</strong>, especially <strong>cabbage</strong>, <strong>beans</strong>, <strong>asparagus</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Leaf spot or rot</strong></td>
<td>Spots in leaves, stems, or fruit turning from green to dark brown, then turning rusty or yellowing of foliage or walks.</td>
<td>Throughout season, especially on the sides of new leaves.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>, <strong>pears</strong> and <strong>apricots</strong>.</td>
<td>Dormant spray before leaves come out; nicotine spray on young foliage.</td>
</tr>
<tr>
<td><strong>Rust</strong></td>
<td>Spotted, <strong>brown</strong> or <strong>black</strong> rust.</td>
<td>Throughout season. Early in spring before buds open.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td>Sulfur, <strong>bichloride</strong> or other <strong>fungicides</strong> spray; just before leaves come out and again in fall.</td>
</tr>
<tr>
<td><strong>Apple aphid</strong></td>
<td>Bright green aphids.</td>
<td>Throughout season. Early in spring before buds open.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td><strong>Bichloride</strong> or other <strong>fungicides</strong> spray; just before leaves come out and again in fall.</td>
</tr>
<tr>
<td><strong>Blister mite</strong></td>
<td>Small, yellowish, white, red-brown, and black.</td>
<td>Throughout season, especially on the sides of new leaves.</td>
<td><strong>Beetle</strong> seeds; <strong>Beetle</strong> eggs; <strong>Beetle</strong> leaves.</td>
<td></td>
</tr>
<tr>
<td><strong>Bud moth</strong></td>
<td>Minute, yellowish, white, red-brown, and black.</td>
<td>Throughout season, in early spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Caterpillar, tent</strong></td>
<td>Stripped caterpillar in large masses in webs or “teuts.”</td>
<td>Throughout season. Early in spring before buds open.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Canker worm</strong></td>
<td>A “tortoise worm,” 1” or more in length.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Codling moth</strong></td>
<td>The majority of young apple moths is small and chocolate colored; worm hatches on the outside, usually in blossom end, and eats it. About 1” long.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Curculio</strong></td>
<td>Small, grayish beetle, 3/16 to about 5/8” long; brown, black and white; has a conspicuous “nose.”</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Cucumber</strong></td>
<td>Green worm with black spots about 1” in length.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Leaf hopper</strong></td>
<td>Small, green, yellowish with black heads.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Scale, San Jose</strong></td>
<td>Minute, yellowish, white, red-brown, and black.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Scale, oyster shell</strong></td>
<td>Minute, yellowish, white, red-brown, and black.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Scales</strong></td>
<td>Minute, yellowish, white, red-brown, and black.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Bass, apple</strong></td>
<td>Causes dark colored spots on leaves or fruit.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Rot, black</strong></td>
<td>Fruit turns purplish brown and become shriveled.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Aphids (plant louse)</strong></td>
<td>Similar to those attacking vegetables described above.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Aster beetle</strong></td>
<td>Active, long-legged beetle, 1/2 to 1” in length, eating flowers and foliage.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Mealy bug</strong></td>
<td>Small, soft-bodied insect covered with small cotton-like specks.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Rose beetle</strong></td>
<td>Yellowish, active, crawling beetle 1/2 to 3/4” long or more long with long hooked legs.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Mildew</strong></td>
<td>Powdery, dirty white deposit on leaves.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
<tr>
<td><strong>Leaf spot; rust</strong></td>
<td>See above.</td>
<td>Throughout season. Early in spring before cold weather.</td>
<td><strong>Apples</strong>, <strong>peaches</strong>, <strong>plums</strong>.</td>
<td></td>
</tr>
</tbody>
</table>

### For Notes on this Table, see Page 44.
THE RESIDENCE OF J. J. HAMILTON, Esq., at FIELDSTON, NEW YORK

A Dutch Colonial House of Conventional Lines But Unusual Plan

DWIGHT JAMES BAUM, Architect

The plan has avoided the usual central hall, the living-room, dining-room and porch opening up together. The large pantry serves also as servants' dining-room. Interior trim is gumwood; floors of oak; two brick fireplaces with Colonial mantels. Walls are sand finished

While symmetrical, the exterior shows the entrance off center. It is accented by a hood and lattice sides. The south wing forms a large porch while the north gives a liberal size garage. Walls are cased in 12" wide red cedar siding painted white with color relief in the blinds, which are an unusual shade of green. The chimneys are of rough red brick—"black headers"—overburned brick that was discolorered and twisted in the kilns.

The second story reverts to the central hall type with four master's rooms and two baths. The owner's and child's rooms open into a large sleeping porch. The maid's room and bath connect with the kitchen by a private stairway. All of the woodwork is in white enamel.
RICH COLOR IN THE NEW CHINA AND GLASS

The discerning housekeeper will find here valuable suggestions from the March sales of china and glass. For the names of the shops and addresses, House & Garden, Fourth Avenue, New York City. Or purchases may be made through the Shopping Service at the same address.

Color plays a great part in the new china, as in this set of Wedgwood porcelain. Borders are gaily colored flowers and edges are corrugated. Dinner plates, $10 a dozen; entrée, $7.50; tea cups and saucers, $10 a dozen.

MARCH ushers in the china and glass sales which are now held semi-annually by most of the large shops. At the same time, when the attention of the buying public is centered on articles of this character, many of the new patterns and interesting novelties of the season are launched in the open market.

One of the new features in glass, and one that is very smart, is the group illustrated at the upper right of this page. It shows the amber glass in combination with the Venetian blue stem and base. The stem of the glass is twisted from the blue flaring base up to the bowl section on both the champagne and goblet glasses, while the highball glasses stand on a blue flaring base. The amber glass seems to be particularly popular this season, and in combination with the blue it is very decorative on the table. The goblets come for $35 per dozen, champagne glasses $35 per dozen and the highball glasses are priced at $20 per dozen.

A very attractive iced tea set which suggests refreshing drinks in the warm summer afternoons is that illustrated at the upper center of this page. It shows an unusual frosted design of little balls on stems which decorate the glass at regular intervals. This method of serving the tea from a glass teapot is attractive to many hostesses. The set consists of eight pieces and sells for $23. The mahogany tray, which is not included in the set, has a glass top and simply designed brass handles, and may be had for $5.50.

There have been many designs of marmalade jars brought forth, but one of the most attractive and unusual, and one especially suited for the summer home, is that illustrated at the top of page 49. The glass is very thin in both the bowl and saucer, and the cover is of wood, hand painted with decorations of fruit and flowers. These decorations come in strawberries, oranges and pears, and the handle is a small fruit in natural coloring. A small glass spoon comes with this, the bowl of which and the end of the handle are of bright orange, to match the gaily decorated cover. It sells for $3.

The country house china has ovals in black and dark green with red flanking designs; red, green and black border. Dinner set, $57.20. Plates, $6.75 doz.; covered dish, $2.90.
An inexpensive piece of glass which is especially desirable for the home in the country is the fruit salad glass with plate made of American glass with a thumb design and a border of narrow ridges around both plate and the top of the glass. They come at $4.75 per dozen.

Compotes are always useful, and the one shown at the lower left of page 48, made of glass, is most attractive in its simplicity, as it carries no cut work or decoration of any kind, but is gracefully molded with a short stem and cover. It particularly appeals to the hostess, as it is very inexpensive and exceptionally good value for the price of $1. It is 6" high over all.

At this time of the season the woman begins to think and plan for her country home and is desirous of having smart as well as new designs in China. Color plays a great part in the china which is brought out this season, and several illustrations of this are shown on these pages. At the upper left of page 48 is an exceptionally smart design of Wedgwood porcelain. The rim of the plate has a corrugated effect border with a small line of coloring near the edge. Inside the border is a wreath of gaily colored flowers. These flowers are also used to decorate the top of the tea cup shown with this plate. The lower part of the cup and the saucer are ridged similar to the plate. This porcelain can be had in dinner sets as well as tea or breakfast sets. The dinner plates are $10 a

Among the marmalade bowls is one of very thin glass and a wooden cover painted in fruit and flower decorations. The handle is a small fruit in natural colors. $3.

A domestic porcelain salad set consisting of bowl, plate and six individual plates, bears an old-fashioned design of roses. It would prove an enlivening addition to any table. $4.50 complete.

Copeland-Spode china comes in a Chinese pagoda design with Chippendale border. Colors are yellow, green, pink and blue. Dinner plates, $20 doz.; entrée, $13 doz. The name of the breakfast sets is Legion. But here is a new one of gay red, green and yellow birds and flowers on white ground. Set consists of eleven pieces; $8.50. Dinner plates to match, $5.50 doz.

An inexpensive piece of glass, desirable for the home in the country, is a fruit salad glass with plate. It is of American make. A thumb design and narrow ridges decorate the border. $4.75 a dozen.

The gay colors in a new design are illustrated in the set shown at the bottom of page 49. For a country home there is nothing more attractive than this brightly colored breakfast set, which can also be had in a dinner set. The bird and conventional flowers are colored with green, red, blue, and yellow on a white ground. The line at the outer edges of this porcelain is of a bright green. The breakfast set consists of eleven pieces and sells for $8.50. The dinner plates to match are $5.50 a dozen.

The Chinese influence, which has been so popular in furniture, also finds its way in the attractive decorations of the china. The plate shown in the center of this page is of Copeland-Spode china with Chinese pagoda design and an attractive Chippendale border. The predominating color is a soft greenish yellow, pink and blue in small decorative spots. This plate especially appeals to the hostess who wishes to have something distinctive on her table, and, as the Chinese influence does shown itself so prominently, many women are anxious to display the new tendencies on the table as well as in other portions of the house. These dinner plates are $20 a dozen, and the entrée plates are to be had for $15 a dozen.

The bright and cool colorings which are so popular for the summertime are (Continued on page 81)
INTENSIVE METHODS AND THE VEGETABLE CROP

E. W. ELLISON

THE well-equipped and seasoned home gardener recognizes four methods of under-glass gardening. There are the greenhouse, the hotbed, the cold-frame and those ingenious devices of later introduction which carry the frame idea right into the very garden—the "junior" frames, the vegetable forcers and the little miniature greenhouses which in their various forms furnish protection to plants growing outdoors.

In order to simplify matters, under-glass gardening in greenhouses is not considered here. That is largely work requiring considerable knowledge and experience to be carried on successfully. I would rather focus the reader's attention upon the simpler, easier and less expensive methods to prove that under-glass gardening is highly desirable.

REASONS AND METHODS

Before going into details as to the intensive methods that may profitably be employed, let us consider the reasons for all under-glass gardening and the parts played by the different equipments in the working out of a "program." We plant seeds in hotbeds, set out plants in cold-frames—in short, employ under-glass gardens for four distinct purposes: To get an early start; to grow crops out of season; to lengthen the growing season, and to hasten maturity.

The first two require hotbeds and cold-frames, while the last two may be accomplished with the help of simpler devices. And, lest the newcomer in gardening be mystified by the term "hotbed," let me state here that it is simply a wooden frame (or a number of them) which stands about

The little glass houses are inexpensive and especially useful in keeping untimely frosts from injuring the bearing plants

When it comes to hotbeds and cold-frames the possibilities are almost unlimited. Concrete is used here for greater endurance

A sheltered, sunny position is best. The faucet so conveniently located means less exertion at watering time

A typical hotbed, banked up on the outside to conserve the heat. Raising the sashes at midday provides necessary ventilation

Hotbeds, Cold-frames and Forcers

10' high in front and 18' high in back over a space 3' wide and 6' across, covered with layers of glass called "sashes." Underneath this frame is a so-called sub-frame which extends about 18" into the soil and is filled with fresh manure over which is spread soil about 6" deep. The fermentation of the manure causes the heat from which the whole thing gets its name "hotbed." A cold-frame is a hotbed without the heating manure, simply a bed boarded up with a frame and covered with sash. It is especially good for transplanted seedlings.

In the hotbed, many of our popular vegetables, such as beets, carrots, radishes, lettuce, etc., may be grown to maturity. The cold-frame is an almost necessary companion to the hotbed since it may be utilized to take care of plants between seasons, keep them in a semi-dormant condition, so to say, while the more valuable hotbed is kept busy calling more plant life into existence. In this matter, hotbed and cold-frame supplement each other.

EARLY LETTUCE AND OTHER CROPS

To illustrate, let us say we want to get an early start with lettuce. Seeds may be sown by the middle of March and the young plants will be large enough for transplanting two weeks later. It is out of the question in most sections to transplant hotbed grown lettuce plants into the garden by April first. What to do? The answer is the cold-frame. In it, the plants will harden gradually, thrive slowly and may be transplanted when properly hardened.

To grow crops out of season, a hotbed is

(Continued on page 78)
March, 1917

THE GARDENER'S KALENDAR

About every third year gooseberries should have a hard pruning to produce good wood.

All nature seems to cease and forget their laurels. The fields are wearing—birds are on the wing. And Winter, slumbering in the open air, wears in his smiling face a dream of Spring. And, the while his soul is busy, things Nor homely make, nor path nor craze—Coleridge.

A rag soaked in kerosene makes a good torch for caterpillar nests.

Some perennials, like achilleas and pyrethrum, can be divided by hand.

1. Sun rises, 6:39; sun sets, 5:49.
2. Sow in the hotbed or greenhouse: cabbage, cauliflower, celery, lettuce, tomatoes, eggplant, peppers, leeks, onions and parsnips. These seedlings must be transplanted about May 15, when large enough to handle.
3. For early flowers sow now in greenhouse or coldhouse: petunias, salpiglossis, scarlet, etc.

Vegetable seedlings should be dibbled off into a frame or coldframe.

Label seedlings carefully and keep the soil loose.

When transplanted, trees, get as much of the root system as possible.

Pick your greenhouse beans when they are young and succulent.

If you have not already done so, start sowing early things under glass.

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Label seedlings carefully and keep the soil loose.

When transplanted, trees, get as much of the root system as possible.

Pick your greenhouse beans when they are young and succulent.

If you have not already done so, start sowing early things under glass.

About every third year gooseberries should have a hard pruning to produce good wood.

All nature seems to cease and forget their laurels. The fields are wearing—birds are on the wing. And Winter, slumbering in the open air, wears in his smiling face a dream of Spring. And, the while his soul is busy, things Nor homely make, nor path nor craze—Coleridge.

A rag soaked in kerosene makes a good torch for caterpillar nests.

Some perennials, like achilleas and pyrethrum, can be divided by hand.

1. Sun rises, 6:39; sun sets, 5:49.
2. Sow in the hotbed or greenhouse: cabbage, cauliflower, celery, lettuce, tomatoes, eggplant, peppers, leeks, onions and parsnips. These seedlings must be transplanted about May 15, when large enough to handle.
3. For early flowers sow now in greenhouse or coldhouse: petunias, salpiglossis, scarlet, etc.

Vegetable seedlings should be dibbled off into a frame or coldframe.

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SEEN IN THE SHOPS

They're not just pictures—you can buy them. Our Shopping Service will be glad to do it for you, or the Information Service will furnish you with the names of the shops. Address either in care of House & Garden, 445 Fourth Avenue, New York.

Candlelight on flowers gives a gracious suggestion of old-time cheer. You can get the effect with an iron candle-holder of Elizabethan design, with a stand for flowers below the candles. 45" high; $15

A straight Puritanical candlestick of hand-made wrought iron, with a clean white shaft of candle, and a combined ash-tray and match-holder that gives the whole thing away. It stands 40" high, and costs $15.

Above, for porch, solarium or living-room, a wrought iron tripod with green Italian fruit or flower bowl; 40", $20

Left, a mahogany table, decorated in gold and dull colors, 20" high, $23.50; mahogany chair, reinforced back, $14.75; wooden mirror, soft burnished green, colored decorations, 24" $30; smaller, $20; hammered copper flower bowl, 8½" diam., $13; carved ebony stand, $2

Mahogany spinet chair, tapestry seat, $14. Mahogany desk, 20" by 30" by 36", $75. Dull gilt wooden floor lamp, 6' 6" $20; illuminated yellow parchment shade, 14', $25. Philippine waste-basket, $3.50; brass candlesticks, 10", $6 pair; letter-box, Eastern designs, 10" by 10" by 5" $45
A friendly little knocker for a lady's boudoir door, this good-luck horseshoe of painted iron with a lover's knot at the top, and a wreath of gauze-colored flowers. Its measurements are \( \frac{9}{16} \) " by 2", its cost, $2.60.

For "finish," both from outside and inside point of view, the plain net undercurtains cannot be excelled. The corner shown above represents a set in filet pattern, in ivory tone only; \( \frac{1}{2} \) yard long. $1.85 per pair.

Embodying the grace of reed; a settee, stained as you please, with a fitted cushion of figured English linen, 60" by 22" by \( 2 \frac{1}{4} \)", $60, cushion $15.50 extra; armchair to correspond, 22½" by 20", $33; cushion, $6; a table, too, 36" by 24", $22; and finally a lamp, 24" high, with silk shade 19" diam., $21.50.

Beside the hospitable front doorway a place might be found for this hand-wrought iron sconce with mirror reflector. It stands 11" high and may be had for $5.

The leftward wrought-iron sconce is a wall-bracket, too, and will be useful for a fern or your best bird-cage. 14" long, $2.50. The present incumbent is a brightly colored Coolie hat with a tin lining and a wrought-iron holder, 14" in diameter, $5.

To withstand any assault, an iron-bound log-basket, stained in weathered or brown oak, each slat firmly mortised through the stout end-pieces, 2' long, 15" wide, $16.

To close the eyes of the house ever so little—the thin undercurtains! These are of hand-drawn marquisette, and may be had in ecru or white. They are 32" wide and \( \frac{1}{2} \) yard long, and cost $1.50 per pair.

A particularly effective filet mesh distinguishes these undercurtains, which have a narrow lace edging for their further adornment. They come in ivory tone only, and are 37" wide and \( \frac{1}{2} \) yard long. $2.35 per pair.
PLANT FOODS AND FEEDING

D. R. EDSON

Successful gardening means far more than the mere planting of seed or bulb and letting Nature do the rest. It is not enough to sow and trust; the underlying principles of plant growth must be understood and followed if the best results are to be obtained. The experienced gardener knows this, but few beginners do. For the inexperienced, then, Mr. Edson has written the series of which this article is the third, with the aim of setting down simply and understandably the whole story of the gardening game.—Editor.

The mystery of seed germination we have already looked into. The seed itself, as was explained, supports the little plant for some time after it takes form.

Just when and how does the seedling become self-supporting?

Through the action of the roots, the mechanical construction of which we will look into presently, moisture is absorbed from the soil, and passes along the roots through the main stem, to be finally distributed to the leaves of the plant. Before it begins supporting itself there is an intermediate stage during which the plant food stored up in the seed, root-stalk, bulb, or corm, contributes to its sustenance jointly with the roots. It is impossible to tell just when the plant becomes "weaned" and is able to do for itself. When digging potatoes in the fall, I have frequently found seed pieces, as sound and as plump as they were on the day they were planted, still attached to a fully developed plant. Some seeds quickly disappear entirely; others, such as beans and squash, are shoved up above the ground by the growing plant and form the fleshy seed-leaves or cotyledons as shown in the photographs.

Before we undertake a study of the food of plants—which is, of course, one of the most important things about which the gardener must learn—we should get some insight into the way they use it. There are a number of very interesting facts, many of which have been discovered only after years of experimenting and scientific research, that should be remembered.

FACTS TO REMEMBER

The first thing to fix in mind is that all the plant's food must be taken in liquid form—"in solution." This is the most important fact of all to remember, because it affects the whole system of cultivation from beginning to end.

The next noticeable thing is that a plant "swallows" up instead of down. Of course, it does not "swallow" at all in the true sense of the word; but its liquid food, after being taken in, travels upward, passing from the tiny root-hairs into the little roots on which they grow, then along these to the main roots and the stem, and finally is distributed through the branches and the side branches or shoots to the leaves.

The third particularly striking thing about plant anatomy is that the plant wears its stomach on the outside—that is, the food is not digested, as one might naturally suppose, in the roots, the stem, or the branches, but merely passes through them to the leaves. There it is digested, or rather "elaborated"—that is, chemical changes corresponding (Continued on page 68)
NEW WALL PAPER
BACKGROUNDs FOR
THE VARIOUS LIFE
OF THE HOUSE

Walls constitute the background against which we
live, and the choice of them depends upon the type
of the life the room and occupant require. Bed-
rooms should have restful walls, the halls should be
dignified. Here are shown six of the latest de-
signs. For the names of the shops write House &
Lunney, 445 Fourth Avenue, New York City, Or
they may be purchased through the Shopping Service.

Summer dining-rooms require a paper that is not
too diverting, its tones should be soft and its
designs sufficiently light to lend an air of restfulness and interest. The paper shown be-
low has both of these virtues. The background is a mixture of grey and white and the dog-
wood blossom design is in grey-blue. $1.20 a roll

Since the purpose of a bedroom is to convey a
spirit of quiet and peace, the paper should not ob-
trude itself upon the occupant, it should help
create the atmosphere of restfulness. That de-
Sired atmosphere is found in the lattice paper above. Its gen-
eral scheme is grey and white, the grey forming
the diamonds. It has a lovely, clear, cool tone. 35 cents a roll

Another type of bed-
room paper that makes a
quiet background is a green and white stripe
with a linen finish. The
green is very soft. The
paper sells for 75 cents
a roll. Picture with it
striped green silk cur-
tains made with a box
pleated valance piped
with lemon yellow and
under-curtains of cream
net or scrim. The bed
cover could be made of
the same silk with a
lemon yellow edging

Also suitable for the dining-room is the
scenic Canton paper shown below. The back-
ground is grey. The leaves are a delightful
blue-green and black, and the flowers are
mulberry color. The pagodas are dark grey.
It is interesting without being too active. It
can be lived with comfortably. $1 a roll

The hall has an atmosphere all its own. It
should be formal enough to receive strange-
ers and hospitable enough to receive friends.
In the paper below is found both dignity and
interest. Warm grey stripes alternate with
stripes of white on which are vines and
daisies in a warm grey tone. 90 cents a roll

For the hall comes a Japanese design paper
of subdued tones but interesting spirit. The
background is pale grey and the flowers,
fountains and birds are in two tones of
darker grey. It sells for $1 a roll. With it
can be used a black or a deep blue rug, a
table and a chair of black lacquer, and on
the table a vase of rich crimson pottery.
CARNATIONS AND THE OPEN BORDER

Using the Perpetual Sorts
Outdoors in Summer
W. R. GILBERT

A great advantage of the perpetual carnation is that, properly handled, it will bloom throughout the year.

Precisely as there exist among the peoples of the earth racial characteristics that mark one from the other, so do differences exist between the tribal members of a given flower family. As there are hardy, rugged branches of the human tree, and others to which exposure to rigorous cold would prove fatal, so are there hardy and delicate flower varieties of the same original stock. Rather strikingly do we find this exemplified in the ease of the carnation.

PERPETUAL AND BORDER CARNATIONS

The terms perpetual carnations and border carnations denote two distinct forms or races and although the former may be used for all purposes, as it blooms under glass the whole of the year and is unexcelled in the open border during summer, border carnations flower only once a year. The long stemmed perpetuals may be seen in flower shows at all seasons; the border type, with blossoms supported by paper collars, is mostly seen at shows in July. A further difference is that perpetual carnations are propagated by cuttings made in the spring, whereas the others are secured from “layers” in the summer.

There can be no quarrel, I think, with the assertion that the carnation is a desirable addition to the year’s flower crop. That it is not more used is partly due, probably, to mistaken ideas as to its culture; so here are a few carnation requirements and suggestions for fulfilling them.

The perpetuals, which flower throughout the summer outdoors, need not be planted until May, thus giving time for the beds to be previously occupied by bulbs. To get the best out of the border varieties fall planting is necessary.

SUCCESS WITH PERPETUALS

The conditions for success with the perpetuals are those that have been set forth in the preceding May and potted into 3” pots a month later should be used. These young plants are shifted into 5” pots as soon as they become well established, at which time they are ready to be stopped by shortening the growth to about 3” from the top of the pot, so as to induce bushiness. This operation may be performed a little later than the potting, and when the roots have reached the sides of the pot. Throughout the summer and autumn they may be grown in frames or outdoors like chrysanthemums, and housed in a frame or covered with pit lights early in September. In the natural course of events they would be throwing up flower shoots during the late autumn, but as we are growing them to bloom the following summer we give them a further stopping in October, by breaking out the growths at the sixth joint from the previous stopping.

No artificial heat is needed for these plants; the

(Continued on page 96)

NAMING THE COUNTRY PLACE

Appropriateness, Distinction and Euphony Are the Three Great Requisites — How They May Be Achieved

JOHN C. THOMSON

We must have a name for our suburban home

to give it distinction and individuality. Furthermore, we believed a name would inspire greater care in arrangement, and more pride in keeping it well ordered. If an establishment was worthy of a distinguishing name, to sustain such dignity it needs must be differentiated with circumstance and a degree of originality.

Appropriateness we considered a good attribute in a title, although I personally liked Dragonfelfs. It filled my eye and mouth and ear; it looked good to me; it was a sweet morsel to my taste; it sounded musical. I liked the looks of a dragon—I must have their pictures pleased me. A neat likeness of one would make a good trade-mark on the labels of our produce. We could have it illustrate a notice in, say, a poultry paper; and it

would attract and hold attention if put amongst the picture of hens. We could say: "No, we do not offer the eggs of this reptile, but if you want eggs from a fine strain of Blue Andalusians"—and the advertisement would be half written then and there!

However, we did not think the sobriquet fair to any old, ill-tempered or unprepossessing person—or to one who might become such—who would be obliged to live with such appellation. Personal remarks or a nickname might be suggested to sarcastic or flippant observers; and among other things that I intended to lay by for old age, I did not wish to include a ready-made hint-giving, appropriate epithet. So avant Dragonelfs?

At this time we had no access to a list of names, so spent many hours in searching, shuffling and choosing from the resultant array. We give hints on how to find or coin a name rather than a long list. Many may be changed or combined differently; and some might be translated to another language to their advantage.

A tree name joined to a word indicative of situation gives some good names; for example, Birch Coulee, Cedarcrest, Cherry Hill, Elm Dale, Honey Locust Ridge, and Larchfield. Hill coupled with the name of tree, flower, etc., may be pleasing, like Amemon Hill, Beech Hill, Hillcrest, and Hillcroft.

The name of a flower or plant linked with another name makes these: Aster Ledge, Cloverdale, Crocus Place, Fern Hollow, Bluebell Wood, Laurel House, Pinewood, and Rose Hedge.

Dale or dell, with tree or flower, are: Daisydell, Lilydale, and Mapledale.

Side with qualifying words is good, as Brookside, Hillside Cotswold, Lakeside, and Sunnyside.

The words Bungalow, Camp, Cot, Cottage, Homestead, Hut, Lodge, Lookout, Outdoor, Ranch, Rookery, Roost, Shack, and Shanty, may be preceded by Our or The, or by some appropriately descriptive name like Honeysuckle Vi
ten, Ivey, Woodbine, Garthside, or Hilltop, as: The Rookery, Our Camp, and Forest Lodge.

Sycamore, Melilot, Groveland, and many of the preceding names and those to follow may be joined to Farm or Grange: Wood, Brook, and Lawn help to make these: Edgewood, Highwood, Woodacre, Brookford, Brookvale, Opal Brook, Trout Brook, Deerlawn, West lawn, and Woodlawn.

The names of colors may sometimes be used with pleasing combinations, as in Green Gables, Red Rock, and Redtop.

(Continued on page 88)
PRINCIPLES OF SAFE VENTILATION

Since the beginning of time draughts have been a winter bugbear. Assiduously we avoid them by not sitting where they can reach us. For the sake of convenience and comfort it was better to use some device whereby draughts can be directed in the right direction. This can be accomplished by applying the simple principles of safe ventilation as illustrated in the drawing to the right.

The principle is simply the turning of the air current upward toward the ceiling. The presence there of the warmer air will cause the cooler, cleaner air to circulate about the room. Direct draughts are thus avoided and ventilation is assured.

The device may be, as here, merely a sheet of plate glass. Hinges are fastened on the lower edge and ratchets are attached to the window trim to hold the glass in position. The angle of the glass can be adjusted at will, and the amount of air regulated by the position of the window itself.

The special value of this type of ventilator is that it admits the light and does not detract from the appearance of the window.

Other devices made on practically these same lines are on the market. They provide a glass ventilator with a frame of wood, which protects the glass from being broken. Adjustment is arranged by a collapsible fan-like metal strip. The pane falls into a flange on either side, and can easily be removed for washing.

SILHOUETTE FIXTURES

In the corner to the left and directly above are two designs for fixtures that combine the principles of indirect lighting and the rules of good taste as recognized today.

The scheme includes a shield to cover the bulb. It is of painted tin. The bulb lies—in the case of the illustrations—in the hull of the boat and in the bowl. When lighted, the illumination is thrown up against the walls and reflected back on the room—in the same manner as any indirect lighting, save for the fact that most indirect lighting provides for the light being thrown on the ceiling. In addition, the fixtures, which can be painted to harmonize with the color scheme of the room, constitute a decoration in themselves. The form they would take would depend upon the design suggested by the uses of the room. The scudding galleon above would find a place in a man's room or library and the flowers would be suitable for a living-room or a hall.

A CURTAIN CATCH

If you want to rouse the ire of the average housekeeper, knot her curtains. Yet you can go into almost any house on sweeping day and find the curtains knotted or looped back in a fashion that is far from beneficial to the curtains. The same is true of curtains in a bedroom at night. What can one do with curtains at night anyhow? They shouldn't be allowed to blow out to the snow and the rain, and if they are hung over a conveniently adjacent picture, both picture and curtains may suffer.

All of which is rather a lengthy introduction to a very simple device recently placed on the market. It consists of a small brass bracket that can be attached to the side of the window trim. In that position it is out of sight. An arm can be folded out from it. On this the curtains may be looped. The brackets sell for $1.25 a pair.
Twisted candlesticks, $10.50 a pair; tall Somersetshire sliding candlestick, $7; Jacobean candlesticks, 18" high, $35 a pair; smaller sizes, $5 to $14 a pair; old brass plates, $5 to $20 each, and the jug, $6

Three distinct types of book ends are shown here. The couple, $12 a pair; the knight (left), $15. Queen Anne flower basket, $8

Essentials for home comforts, which in the early days in America included cooking utensils and other household articles, that were necessarily brought from England, we have now adapted to more decorative uses, while those from Holland and Russia—the latter chiefly of religious significance—have likewise been perverted to ornamental purposes in the United States.

The open fireplace, about which the life of the home centered in those early times, was equipped with brass appointments that, even in this day of improved heating, have their place by the open fire. In these the andirons of characteristic Colonial design cannot be improved upon for the

(Continued on page 64)
The above is an illustration of a Persian Odalik, of Kirman weave, size 7 ft. 10 in. x 4 ft. 8 in., Price, $875.00.

EASTERN RUGS

This rug, the production of Ustad-Oshgore, a master weaver of Kirman, is a most unusual example of fine Eastern weaving.

The Cypress, symbol of youth and grace, is employed as the large central motif, upon which are again cleverly imposed the same forms in smaller scale; the birds with characteristic old Kirman treatment, are woven in silk. The color scheme of fawn, blue, ivory and green, completes the charm of this masterpiece.

It is but one of a great number and variety of unusual Rugs in our stock.

We shall be glad to give further information upon request.

W. & J. SLOANE
Direct Importers of Eastern Rugs

Interior Decorators  Floor Coverings and Fabrics  Furniture Makers
FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK
WASHINGTON, D. C.
SAN FRANCISCO, CAL.
The tire can not fail you unless you fail yourself by not letting Goodrich know one of its tires is in debt to you.

**Goodrich Super-Guarantee**

Goodrich Fair Treatment at all times stands ready to meet **more than half way** honest fault finding with Goodrich tires.

There are no strings—no conditions—no catch words to Goodrich’s world-wide offer: **Send in a Goodrich tire that owes you anything.**

Goodrich Fair Treatment will settle in full—settle gladly and generously.

The B. F. Goodrich Co.
Akron, Ohio

Also maker of the tires on which Dario Resta won the 1916 National Automobile Racing Championship—Silvertown Cord Tires

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**As to Flowering Evergreens**

(Continued from page 37)

peaty or sandy soil," absolutely free from all trace of lime.

It is, of course, perfectly obvious that a plant which needs a moist and peaty soil should dislike lime; for lime is soil near above all else. A rich and peaty soil, rich in decaying vegetation, is decidedly sour; a plant which prefers it, prefers sour soil; hence nothing could be more contrary to such a plant’s needs and wishes than anything which tends to change this condition. Plants not unlike people, who have a peat or acids only, would eat and they sicken and pine—and die, if their food preferences are continually thus overridden without consideration.

All of this heath family are shallow rooted plants. This is another decided and common characteristic, also perfectly obvious, when you stop to consider. For growing in a moist soil, they have no need to send roots down deep after nourishment. It is available right at the surface of the ground, practically; and so they spread their roots out in a fine network close up to the surface.

Because of this habit of shallow root growth, they are naturally very sensitive to heat on the ground around them—to sunlight shining upon it, if not to sunlight shining upon their heads. Not a root in all creation likes light, to say nothing of sunlight or heat. Roots must be cool and in the dark. Hence shallow rooted plants generally require the ground above them to be shaded, and to this family it is essential that it be so. This is the reason for the persistent mulching practiced by those who know how to handle them.

**Appropriate Uses**

The trees perform this office for the wild plants; for by nature they grow in open woods where the leaf fall drifts around them every autumn, and remains to decay and add to the food which they do on, year after year. Trees shade them, too, in winter as well as summer; for even bare branches offer a considerable obstacle to the warmth of the sun. The man who plants rhododendrons or laurel in the open, therefore, and then rakes the ground around them clean as fast as the leaves blow over it, is a criminal.

So I come at last to speak of the use of these plants, particularly the rhododendrons and laurel. They are all immensely expensive, as compared to ordinary deciduous garden material. Thousands of rhododendrons might be set every year to screen the foundations of dwellings, to take the place which belongs only to deciduous shrubs in broad plantations, to make “play” and to do pretty nearly everything else which a rhododendron ought to do. There was once an intention by its creator to do.

When we will learn that these are all “wild flowers,” just as wild as the most elusive wood orchid, or the gentian, or the precious pitcher plant of hidden bogs? You may say that all flowers are “wild” somewhere in the world; and I grant you that, but I could name a lot of hybrid this and that and the other which never were wild anywhere in the world, if they were disposed to split hairs. But certain wild flowers are easily domesticated, are fitted by nature to adorn any spot, just as certain animals are by nature designed apparently to be Man’s companions and friends, while others are untamable.

**Essentially Wild Plants**

It is to this latter, untamable class that all of this family belong; and though wonderful hybrids have been produced and beautiful specimens are in existence, it is only when planted in conditions similar to those which the plant chooses in a state of nature that they fully satisfy one’s sense of fitness and harmony. Under any other conditions there is an incompleteness in the landscape; it is not indeed a landscape at all, in the true sense of the word, but rather a collection of laurel, or rhododendrons, or whichever of the family is used.

But starting with the conception that they are all wild, and that an untamable nature, it is impossible to go astray in the use of them. They invariably require naturalizing—scattering, massing generally in such careless formation as they naturally assume in the woods. Always put them under the partial shade, at least, of overtopping trees, and always where the general conditions are right.

Of course, this makes them not everyman’s plant, but only plants for

(Continued on page 62)
ARE you neglecting your trees?
Do you know positively that they are strong and healthy—are you sure they are free from decay and disease?

It is dangerous to guess about your trees—dangerous to procrastinate.

The owner of the tree shown above assumed that its condition was perfect, but he intended to find out some day for a certainty.

His neglect was fatal. The tree, though not in appearance to the untrained eye, was seriously decayed. One day a severe storm blew the weakened tree down—and beyond saving! It was a case of "the last straw which broke the camel's back."

Take no chances with your trees—have them examined now.

But be sure to select Tree Surgeons of proved ability—experts who can save your trees without guessing or experiment.

You wouldn't think of entrusting your body to a hospital assistant nor your teeth to a dentist's helper. To entrust your trees to untrained and inexperienced men is equally dangerous—as dangerous as neglect itself.

Davie Tree Surgery is Safe

Your trees, many of them the product of several generations, are priceless. Once lost, they can not be restored in your lifetime, or that of your children.

To whom shall you entrust them? There can be only one answer, for there is only one safe place to go—Davey Tree Surgeons.

Safe—because Davey Tree Surgery is time-proved; its record of successful performance for thousands of estate owners spans a generation.

Safe—because the Davey Company is a successful institution of financial stability and amply able to make good in every detail.

Safe—because no Davey Tree Surgeon is allowed any responsibility until he has conclusively demonstrated his fitness. He must have served his full course of thorough practical training and scientific study in the Davey Institute of Tree Surgery—a school, the only one of its kind in the world, which we conduct for the specific purpose of training our men in Davey methods and Davey ideals.

Safe—because Davey Tree Surgery has been endorsed as best by the United States Government, after exhaustive official investigation.

Safe—because Davey Tree Surgery is recommended by thousands of prominent men and women whose endorsement you can accept with complete confidence. (Several such endorsements appear on the right.)

Tree "patching," cannot save your trees. Only scientific, mechanically perfect treatment by men trained through years to the point of skilled skill can be permanently successful. And for such treatment by such men there is only one safe place to go—to Davey Tree Surgeons.

Write today for Free Examination of your Trees
—and booklet, "When Your Trees Need the Tree Surgeon." What is the real condition of your trees? Are injurious diseases and hidden decay slowly undermining their strength? Will the next severe storm claim one or more of its victims? Only the experienced Tree Surgeon can tell you fully and definitely. With our cost or obligation to you, a Davey Tree Surgeon will visit your place, and render an honest verdict regarding their condition and needs. Write today.

The Davey Tree Expert Co., Inc.
503 Elm St., Kent, Ohio
(Branch Offices, with Telephone Connections:
225 Fifth Ave., New York; 2017 Land Title Bldg., Philadelphia; 450 McCormick Bldg., Chicago)
Permanent representatives located at Boston, Newport, Los Angeles, Hartford, Albany, Providence, White Plains, Stamford, Jamaica, L. I., Morris-town, N. J., Philadelphia, Harrisburg, Baltimore, Buffalo, Pittsburgh, Cleveland, Detroit, Cincinnati, Louisville, Chicago, Milwaukee, Minneapolis, St. Louis, Kansas City, Canadian Address: 81 St. Peter Street, Quebec.

Five typical letters from hundreds by satisfied Davey clients

Mr. William Almy, William Almy & Co., Boston:
"The skill of your workmen is remarkable. I am sorry I did not have this work done sooner as I apparently lost a tree by not having an expert examine my trees before."

Mr. Joseph Pulitzer, Jr., owner of the New York World and the St. Louis Post-Dispatch:
"Your work on the trees on my place was done at a most thorough and painstaking manner."

D. S. Chamberlain, President, Chamberlain Medicine Co., Des Moines, Iowa:
"I congratulate you on the excellent work you are doing. I have seen much of this character of work done in some foreign countries, as well as in the United States, but none as perfect, scientific and satisfactory as yours."

Dr. G. L. Doenges, Superintendent, The Johns Hopkins Hospital, Baltimore, Md.:
"We have been very much impressed by the work done here by the Davey Tree Company."

Mr. Robert E. Friend, Second Ward Savings Bank, Milwaukee, Wis.:
"I cannot commend too highly the work you have done both this year and last on our place at Pikes Lake. Your work on the University Club trees here in the city, under my supervision, was also very good indeed."

Davey Tree Surgeons

FOR SAFE TREE SURGERY

Every real Davey Tree Surgeon is in the employ of the Davey Tree Expert Company and the public is cautioned against those falsely representing themselves.
In Sutton’s Catalog Are
Choice Flowers and Vegetables
Found Nowhere Else

YOU who have favored us by coming to our beautiful, garden graced England; know fully well the surpassing beauty and charm of its flowers.

You Americans, so we understand, sometimes think of us as being a bit stolid, and lacking in enthusiasm. But surely no nation, so enthusiastically fosters, or more genuinely loves flowers.

Every little town has its liberally patronized flower shows.

In this exceptional environment, the Sutton family have been growing, developing and perfecting seeds for generations.

Very naturally, it has resulted in being more than a business with us. It is a life work of genuine pleasure.

This pleasure, we would share with you in the wonderful charm of our flowers and the surpassing varieties of our vegetables.

Let us send some Sutton Seeds to you this year.

Send 3c for Garden Guide. When your orders for seeds amount to $5, the 3c will be promptly refunded.

ROYAL SEED ESTABLISHMENT

Sutton’s Seeds

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The SHERMAN T. BLAKE CO.
629-E Sacramento Street
San Francisco, Cal.

Sole Agents East of the Rocky Mountains

Sole Agents West of the Rocky Mountains

As to Flowering Evergreens

(Continued from page 60)

such men as have suitable places to grow them. Here is the kernel of the situation: hybridizing is no getting around it. You may have rhododendron flowers in almost any doorway, just as you may have water-lilies in pools, but to know how beautiful water-lilies are, you must have them growing in a pond, in a state of nature. And so to use these members of the heath family, you should have woods and dells and wilderness conditions generally; and a pond, or water tumbling down rocks if possible; for it is above such cas- cades, and not of them, that they belong, in their mountain homes.

There is probably no material available for fine lines, in groves, or where great trees grow, as the rhododendron and the laurel. But great care must be exercised in grouping and selecting the clumps for every spot, lest unsightly, leggy specimens crowd to the front and obscure their angles. The same rule prevails in planting evergreen shrubs that guides in the grouping of deciduous masses: Can there be too much spreading: of the mass should come down to the ground, and leave no bare openings through which branches may be seen. This is a point so often overlooked that I speak of it here. For with evergreen material, the oversight is not as well remedied by the plant’s growth as it is in the case of the deciduous things.

The so-called “broad leaved evergreens” generally are used to a very great degree just because they are evergreen, and therefore assumed to be cheerful notes in the landscape in winter. To a certain extent this cheerfulness is true of laurel and of the others; but rhododendrons are about the most pinched and unhappy looking things on a biting cold day than can be found. Moreover, they are “pinching” in that they have a very interesting way of curling their leaves to avoid exposure to the cold, somewhat as people draw themselves in, in a shiver as much as possible when chilled. Shrinking thus from winter’s severity, a rhododendron is a pathetic looking shrub, around which I always feel I should like to put a shawl.

Evergreens of larger growth, evergreen shrubs do not combine well with other vegetation, nor does combine the most pinched and unhappy looking things on a biting cold day than can be found. Moreover, they are “pinching” in that they have a very interesting way of curling their leaves to avoid exposure to the cold, somewhat as people draw themselves in, in a shiver as much as possible when chilled. Shrinking thus from winter’s severity, a rhododendron is a pathetic looking shrub, around which I always feel I should like to put a shawl.

Rhododendron varieties

Rhododendron maximum is the common American species, the great American rose bay, which grows wild as far north as New England and away south through the high parts of the southern Alleghany mountains. Naturally it grows in proximity to mountains and cascades, where all Nature is wildest and most exuberant. Its flowers are either white or pink, and there is no hybrid evergreen that surpasses it. In company with it grows Rhodo-

dendron Canadense, the rose bay which went to Europe over a hun-
dred years ago, and became one of the parents of the great array of Garden Rhododendrons. It is the finest of all except in color, which is a bright reddish purple, and it grows in such great size as Rhododendron maxi-

mum, but its foliage is much better and not subject to the rust which often makes the latter unsightly.

Under no circumstances should hybrids be used for naturalizing on a large scale, for they are in the realm of the exotic, and though they too should be planted in surroundings which are natural to themselves as to seem natural, they cannot en-
dure the vicissitudes of climate and weathering to the latitude. Nothing grows harder than this; and it is safe to say nothing is lovelier. Its foliage is far more pleasing than the foliage of the native rhododen-
dron; and to my taste, its bloom is quite the equal of theirs.

Kalmia latifolia is its true native cousin.

Hardy azaleas

Azaleas are the third in the list of lovely things in the heath family— the hardy native azaleas. These are not evergreen, hence do not perhaps rightly belong in this article at all; but they belong in the family, so I shall not exclude them. They are in a planting which has heath for its motif; moreover the lower ones form a very desirable complement to the laurel and rhododen-
dron; and to my taste, its bloom is quite the equal of theirs.

Azalea arboreus is the tree azalea, sometimes 20' high, also with pink blossoms that are deliciously fragrant. The swamp pink, in some places mistakenly called wild holly, is a flower which has heath for its motif; moreover the lower ones form a very desirable complement to the laurel and rhododendron; and to my taste, its bloom is quite the equal of theirs.

This Famous Hotel is Stained with Cabot’s Creosote Stains

and the bungalows, camps and other buildings have also been stained—shingles, siding, boards and trimmings—with the soft, rich colors that harmonize so perfectly with nature’s tints. The colors are never shiny, and they grow softer and nicer on weathering, with no cracking or blistering. They cost less than paint, and any one can put them on at half the cost for labor. The Creosote penetrates the wood and preserves it against decay and insects.

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

24 W. Kinzie St., Chicago


This Famous Hotel is Stained with Cabot’s Creosote Stains

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24 W. Kinzie St., Chicago

The REED SHOP, Inc.
467 Fifth Avenue
NEW YORK

Reed Furniture Ideal for both the City and Country Home

Imported Cretonnes, Upholstery Fabrics, Scotch Art Rugs

On receipt of 14c in postage we will mail our new catalogue now ready for delivery.

Bobbink & Atkins

Sunshine and Showers—and the "World's Choicest Nursery and Greenhouse Products Grown in America" assure the Garden Beautiful.
We do our part.

HOME GROWN ROSES
HARDY OLD-FASHIONED FLOWERS
TREES and SHRUBS
EVERGREENS
HOME GROWN RHODODENDRONS
and 150 other specialties.

We shall be glad to send our illustrated catalog.

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New Jersey

The front door of a home expresses the taste and character of the owner. It is the first impression the visitor gets of the home—and first impressions are lasting.

Front Doors

are made in a wide variety of designs and styles. You will find a door in the Morgan line to express your individuality.

Carefully selected veneers make Morgan Doors beautiful and distinctive. The exclusive All White Pine Core and patented Wedge Dowel Construction assure durability and perfect service.
Morgan Doors are guaranteed to give complete satisfaction.

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You don't need to build a new home to enjoy the beauty and service of Morgan Doors. "Adding Distinction to the Home" gives suggestions for improving the present home.

"The Door Beautiful" is a book of suggestions on doors, interior trim and interior decorations for prospective builders.
Send for either, or both booklets.

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Morgan Co., Oshkosh, Wisconsin

Exhibits of finished Morgan Model Doors in all principal cities. Ask for list.
More House for Less Money

By the Bossert modern method of building, a great many savings in materials and labor are effected. Just as the locomotive is a more efficient machine than the hand car, the work is done for you at an efficient factory instead of by old fashioned hand labor, and you are sold the finished product.

The time and money saved go into better plans, better materials, and you get the benefit. Before you build investigate

Bossert Houses

In these days of high labor costs why not buy the finished product in houses as you do in every other line of merchandise? Every house has its own individuality, yet shares in the savings effected by large buying of material and efficiency in manufacture. The economical Bossert

Price: Eleven hundred dollars complete
F. O. B. Brooklyn

Two men can erect this house in three days; not even a nail to buy.

Send 12 cents today for complete catalog showing Bossert details of construction.
We also manufacture the smaller "portable" or "knock down" houses.

LOUIS BOSSERT & SONS, INC.
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A Terra Cotta TILE ROOF

on a modest priced house gives it stability and character and adds to its selling value. It's the only perfect shelter — leak-proof and fire-proof. Requires no paint, stucco or repairs to preserve its beauty and last forever. Border of sun, snow, clear more clearly of CLOISTER STYLE TILES used on this pretty residence of R. H. Bartlett, Pittsfield, Pa. Ask your architect about the use of tiles on that new home you are now considering.

Our illustrated booklet "The Real Beautiful," printed in color, contains views of many beautiful homes with roofs of Terra Cotta Tiles, and is sent free upon request.

LUDOWICI-CELADON CO.
Manufacturers of Terra Cotta Roofing Tiles
General Offices: 1107-1117 Monroe Building
CHICAGO, ILL.

As to Flowering Evergreens

(Continued from page 62)

Tulip Time in the Garden

(Continued from page 16)

foreground. Back of this group again, more green, more green, and tulip. A shade beyond the color of Bleu Aimable is the same as that of Bleu Celeste, but the former is a single tulip of the Darwin type. Clara Butt stands beyond this grouping, at a distance sufficient to keep out the pale pink from conflict with the strange and lovely color of Le Reve.

All through this garden, too, in certain springs at the time of tulip bloom, little colonies of Narcissus poeticus are in flower. These, the only flowers in the garden since the general scheme is lavender and pale to bright rose, give that delicate effect which is found when Stevia, gynophylis and other fine-flowering whites are added to bowls or bouquets of subjects which are decidedly strong in form and color.

On leaving the garden by its gateways toward the house, it is a marvel to see one's eyes from all this beauty within formal limits and above a bar of dark hedge to see long gardens in full bloom along the old stone wall of the spring-house, the quaint little building with which the Pennsylvania or Maryland farmwife in the old days was expected to perform the duties of a house manager as well as some account of the plantings.

This walk is some 8' in width and runs from east to west. Many years ago word came to me concerning the interesting manner in which some umbels of lovely, lessons along the walls of certain Lenox kitchen gardens; wherefor, lacking other place for grapes, and thinking that the little decoration of such vines might not be out of place here, I set to the south of this walk a small gateway and on the north of it a number of 2' iron posts 9' apart, painted dark.

(Continued on page 66)
Naturalistic Home Landscaping

Little Tree Farms — Birthplace of Little Trees that Live

OFFERS UNEQUALED VALUE in America's most wonderful and useful evergreen—White Pine—more valuable and more extensively planted and appreciated than all others combined. The dense rich evergreen foliage gives great beauty in winter when snow laden, also protection and screening. They break the dust and noise; give shade and seclusion and thicken up and supplement your older plantings. Use in your native woods and reclaim unsightly hillsides and odd corners.

Replace America's Chosen Evergreen Upon the Landscape and Have Truly Naturalistic Planting

We Specialize: Our stock of many millions is the largest in America; therefore our unequalled values in these splendidly developed White Pines, 3 to 4 feet high, twice-transplanted and root pruned.

The price is greatly reduced in carloads; tens of five to ten thousand; 32c. each.

If you want only one standard box of 100 trees, they cost 30c. each; 35c. each if you take ten boxes.

Many carloads of these Evergreens are annually shipped to America's finest country estates and parks and to nurserymen. They give immediate effects and permanent evergreen beauty.

Write for information; tell us under what conditions you wish to plant. One of our Forest Landscaping Engineers will take up the matter with you, and we can assure you success—complete success such as many others have had. Our Engineers have been entrusted with the biggest work and are recognized as the largest tree planters in America. We have a splendid organization of technical men and skilled workmen.

Illustrated Catalogue Free
also Instructive Bulletins on Evergreen Possibilities mailed on request. Your letter making specific inquiry incurs no obligation and will have careful and prompt attention.

American Forestry Company
Div. K, 15 Beacon St.
BOSTON, MASS.

The beauty of this evergreen is preserved by an

"EXCELSIOR" RUST PROOF BED GUARD

Let air and moisture reach the roots. Work the ground. This Excelsior Rust Proof Bed Guard prevents transplanting and packing by animals. Also protects the lower branches, preserving the symmetry of the tree. Prevents mowers and garden tools getting too close and clipping off the tips of the branches. These guards can be moved about or taken up and laid away for the winter.

Excelsior Bed Guards are made of extra strong, heavy wires, held securely at every intersection by the Excelsior patented steel clamp. Dip-galvanized after making. This not only prevents rust but securely solder the lateral to the vertical wires, which means added rigidity and strength. If you would know more about these garden necessities, write for catalog C.

We also make a full line of Excelsior Rust Proof tree guards, fences, trellises, tennis railings, gates, etc.

WRIGHT WIRE COMPANY

A Better Lawn At Less Expense

FILLER & JOHNSON MOTOR LAWN MOWER

is backed up by 25 years' reputation of the Fuller & Johnson Manufacturing Co. for the highest manufacturing integrity. It is scientifically designed and built as a complete unit. Indeed, its balance and delicacy of the mechanical features of the mower have received as close consideration as has the motor itself. If it were possible to disassemble this wonder of scientific manufacture, you would marvel at the extraordinary thought and study given to the planning of its smallest feature—the infinite care used in the finishing and aligning of its smallest part—yet its greatest characteristic is simplicity.

Write us now before Spring arrives for full information and a copy of "A Better Lawn.

Manufacturers Distributing Co.
445 Publicity Bldg.
ST. LOUIS, MO.
The "Old Glory" Gladiolus Garden

A selection from choice named varieties and color sections. The bulbs are grown in our fields, selected from our regular stock, and we are sure the "Old Glory" will give you a wonderfully beautiful display this summer.

One Hundred Select Bulbs; $2 Delivered to Your Door

All the new varieties of Gladiolus; Dahlias, Gloxinias, Bedding Plants, Roses, Shrubs, Fruit and Shade Trees, Garden and Flower Seeds are presented in our

1917 Seed and Plant Annual

a book of nearly 200 pages. It points the safe way to a garden that will give the greatest pleasure and profit to the planter. Send your name and address for a copy.

The Storrs & Harrison Co.
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Three Rarely Beautiful Roses

In this trio of superb Climbing Roses is a whole Juneful of joy for the rose-lover. They are widely different in color and form of flower, but are united in beauty and loveliness. The three were originated and introduced by the West Chester Nurseries—which vouch for the value of this new trio.

Climbing American Beauty. Hugo flowers, 4 inches across; handsome rose crimson; fragrant. Plants are strong growers, covered with flowers.

Christine Wright. A wonderful clear pink Rose usually 4 inches in diameter, Beautiful in bud and flower.

Purity. Pronounced by experts the most beautiful climbing Rose. The broad petals are ivory white, with stamens of bright golden yellow. The flowers are large and borne abundantly on strong plants. Purity is sold in this collection only.

3 Plants, One of Each, Delivered $5

"Hoopes' Specialties"
Shaws Climbing American Beauty, Christine Wright and Purity in their rarest natural colors. The shrubs are perfect from the strong root to the blossom. We are proud to have these beautiful flowers on the home grounds. Send your name and address for a complimentary copy.

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Hoopes, Bro. & Thomas Co.
46 Maple Ave., WEST CHESTER, PA.
What a Home is Like

is very much in evidence before ever you cross the threshold. Indifference to the appearance of the lawn and grounds is an indifference to public opinion.

Just as quickly as possible after completing your building, you want your property to have that finished effect which of necessity depends so vitally on the planting for its results. MOONS' know how. Perhaps the secret lies in our methods of frequent transplanting. Possibly in the soil in which the stock is grown. Whatever the reason, MOONS' plantings are so generally satisfactory that those we have served continue to send us customers.

Spring Time is Rose Time!

When the tender leaf buds begin to expand under the warming influence of the early spring sun, every true nature lover feels the impulse to plant. And, what is so well worth planting as the queenly rose. Not only are roses unrivalled for charm and beauty, but C. & J. Roses are guaranteed to grow and bloom this very summer. Get our 1917 Floral Guide—Free

Our famous annual brought right down to date. Contains 92 pages, 253 exquisite illustrations—many in colors. Lists nearly 400 "Best Roses for America"—varieties suitable to every climate and soil, also for every lawn and garden purpose. You need this Guide when making your spring time planting list. It's sent free and postpaid. Write today.

"How to Grow Roses"


Here are three ways to get this helpful little book: (1) Send postcard with $1.65. (2) Remittance must be sent for $1 with $1 order for plants. (3) Send postcard with $1 order for plants. Order today.

The CONRAD ★ ROSES
& Jones Co. Box 126, WEST GROVE, PA.

Robert Pyle, Pres. A. Winzinger, Vice Pres.
Rose Specialist—Backed by 50 Years' Experience

Give YOUR Lawn Better Care

You, too, can have a smooth, beautiful lawn this summer if you join the ranks of Ideal Power Lawn Mower users this spring.

Proper lawn care in the spring counts greatly toward a beautiful summer award. Start your lawn care right this season. Have the Ideal ready for the very first cutting. It eliminates the nuisance of a horsedrawn contrivance on your lawn, or the expense of a squad of hand propelled machines. It enables both you to give your lawn double the usual amount of attention, more efficiently and more economically.

The Ideal Junior Power Lawn Mower stands unexcelled in the field of lawn mowing machines. It embodies all the features on which Ideal has built its splendid reputation—simple, reliable clutch; automobile throttle control, gearless differential and many other refinements which make the Ideal easy to operate and simple to care for.

For full particulars write to us—now, while making your plans for a beautiful lawn.

The Ideal Power Lawn Mower Company
R. E. OLDIS, Chairman
403 Kalamazoo Street,
Lansing, Michigan

Ideal
Junior
Power
Lawn
Mower
$225
House & Garden

Antique Desks and Their Appreciation

(Continued from page 25)

The commoner design in American desks was the "Executive" of the late 18th Century, of mahogany, with reversed serpentine feet. A simpler form of American style of Hepplewhite tambour desk was made between 1760 and 1820. It is of mahogany inlaid with satinwood.

Orinoka
GUARANTEED SUNFAST DRAPES & UPHOLSTERIES

We welcome sunshine streaming into every room in the house is a joy when Orinoka curtains and draperies are used. Their most delicate colorings never become dim nor the beautiful lasture dull, however powerful the sunlight or frequent the tablings. Every color is absolutely guaranteed not to fade.

To get genuine sunfast insist upon the name "Orinoka."

There is a fine, wide choice of light and heavy textures, designs and colorings. Write for our booklet, "Draping the Home."

ORINOKA MILLS, 356 Clarendon Building, New York

Are You Looking Forward to a Home of Your Own?

Why not build this Spring? Begin now to collect ideas for the home of your dreams. When the question of woodwork comes up you may want a dark rich mahogany in the living room, or a warm brown tone. Or possibly, your taste runs to dainty white enamel for the dining room. Again you may favor the popular silver grey for music room or boudoir.

Whate'er your choice, the question of "which wood?" for these various effects can be convincingly answered with ARKANSAS SOFT PINE

It has proven its durability and artistic possibilities through twenty-five years of service in American homes. Our homebuilders book, containing eight colonial designs, will give you the "way of" the truly historic with all artistic and practical building directions, attractively illustrated, will supply the "how of it." We'll send them free. Write today, architects should have our Modern—send an order.

ARKANSAS SOFT PINE BUREAU
616 Bank of Commerce Bldg. LITTLE ROCK, ARKANSAS

On Display—National Complete Building Exposition, March 5-11

A simpler form of American style of Hepplewhite tambour desk was made between 1760 and 1820. It is of mahogany inlaid with satinwood.
TO the garden lover—and especially to the man or woman who appreciates the contrast of Nature's beauties with the best of man-made art—the

Mathews Garden-Craft

handbook,—72 pages in all,—is a veritable treasure-trove of attractions. Where one reader finds a dainty French trellis for a garden screen, another finds a sturdy, wholesome link of good Queen Anne's time that fits a cozy nook in the shabby. Best of all, both trellis and bench are accurate reproductions of old world originals. Arbors, tables, swings, gates even fences are examples of workmanship in this remarkable catalog. It is gladly sent anywhere on receipt of eighteen cents in stamps.

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the sharp edges are disposed of, and something approaching the softness of old age is attained. After treatment in this manner the contents come out very palpable 'antiques.' This is very clever and in no way wrong unless done with the intention to deceive. There are not nearly enough old handles to 'go round' and further deception these means to make imitations quite legitimately, only they tell you that, old as they look, they are, cleverly drawn, whose go-to furniture collector will now not be apt to come across anything in the way of a 'find' in a decade of the Renaissance, 17th or even early 18th Century Italian periods, or in the way of the finer pieces of other early Continental periods. In all of these, if not in public or great private collections already, would be fixed on high, and the pigeon-holes into whose stock such pieces might come. However, there are occasional sales—there have been some very important ones at auction in New York this winter—of old foreign household furnishings, and great bargains may be met with at those and in this period. In every case, the collector must cultivate alertness, decision, and an intuition for opportunities to buy—and once in a while to sell, too.

The modern name bureau, from its French derivation, is understood to be connected with writing. In fact, the bureau is a piece of furniture designed to hold articles of clothing in its various drawers. It was developed about the middle of the 17th century when the drawer was added to the lower part of the chest. Later in the century, the bureau cabinet was developed, and by the beginning of the next we find the complete chest of drawers in use. In view of this we will not expect to find Jacobean desks, though we may find cabinets for writing materials and documents and occasional desk-like pieces.

WILLIAM AND MARY TYPES

In the William and Mary period (1688-1702) cabinets, secretaries and bureaus came rapidly into use. The first half of this period is characterized by Macgoid as "attractive through simplicity of shape and the use of good woods, and the smaller desks displayed distinct characteristics which differentiate several groupings. These were either (straight) feet or bun feet; a whole front flap, which when let down disclosed flat drawers; a top either single-hooded or straight with ovolo frieze may be placed in the first division, the second division have the bureau-bookecase with its slant-top desk plane. Here we find the taller desk style, sometimes with double-hooded tops, or with or without vase-shaped finials. The third division allows the free standing shelves, with turned legs, flat stretchers and bun feet. The knee-hole desks (decks with center portion arranged to permit the knees of the writer to go below the desk plane) constitute the fourth division. The Fifth sort of desk had gate-leaf braced by serpentine flat stretchers. The center legs, there were six in all, all, and the supports for the desk flap when it was close. In the writing of the desks of the William and Mary period of the Queen Anne period succeeding, two English authorities, Blake and Revers-Hopkins, make the following interesting observations: 'We look back upon the Elizabethan times as the Renaissance period of English literature, but the period was beyond the minority. By the end of the 17th Century literature had spread from the Middle East, as the Press pouring out countless ponderous volumes on every imaginable subject. It is a very plausible supposition that a conspicuous amongst whom were Samuel Pepys and John Evelyn whose diaries bring us so intimately in touch with the political and social life of the times. It is the age of the pamphleteers and the satirical periodicals. The semi-satirical periodicals of the early 18th Century—chief amongst them the Spectator by Joseph Addison and Richard Steele in 1701. This vast outpouring of literature called for more commodious writing-desks and the writer or bureau is the natural result. Like the other furniture of the period, the desks were solid and dignified. In the main they were severe in outline, but generally reflected the prevailing simplicity, which was derived from the Italian Renaissance. We find the desks often surmounted by a carved cornice, and broken pediments. As the Dutch influence grew we find the lower knees gradually losing their commodious long drawers with rounded or bombé fronts. The principal wood was walnut, and sometimes vacated on oak and pine. We also find the same schemes in many of the works as in the chests of drawers, cabinets and clock-cases showing Continental influence."

The furniture makers of the time of George I. had to find a demand, and to supply it, for writing-tables with tiers of drawers at each side of the "kneehole." From about 1720 mahogany entered into furniture making extensively. Its use by the American furniture makers in the Colonies was coincident with, and possibly anticipated, lacquer which had been the rage and as a fashion was continued to hold the popular favor.

STYLES BY CHIPPENDALE

Of course, no writing furniture is more eagerly sought than that of the Chippendale period. The writing-tables with bombé fronts, the bureaus, standing on legs that support the top, were the bookcase styled desk, the slant-top secretaries, etc. In American desks of the period we find the block-front to have been very popular. The writing furniture of the Brothers Adam exhibited the originality and excellence common to their other articles. They introduced the mingled woods, of which the walnut, and others of the lighter colored woods, and a contour of line in design that struck a new note. Painted furniture was extensively used by them than ever before in English furniture.

The furniture of Hepplewhite we find the three section bookcase-desk in vogue, and the pull-over top with the final form of which was an ancestor to the modern roll-top. The Hepplewhite desks are in great variety and offer great variety of utility as well. Sheraton included in his desks all the forms brought into fashion by Hepplewhite modified by him. All these various periods were reflected in American desks, some of them with local modifications and variations.

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It is HEAT

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For $1.50 we will send you this beautiful collection.

Actual value $2.00.

Collection A. Tall Bearded Irises

Madame Chereau, white ruffled border of blue

Kochii, deep claret

Queen of May, rose

Jacquemontia, lawn and reddish violet

Foster's Yellow, creamy yellow

Write for our New Catalog

It describes our Irises, Gladiolus, Perennials, Cannas, Hardy Poles, Dahlias and many other plants and bulbs. It also lists all kinds of flower, field and garden seeds.

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The Flower in the Crannied Walk
(Continued from page 17)
shadows, no changing lights to break the monotony. Such a walk is picturesque where rock plants may be sown. More satisfactory, perhaps, because special provision for certain effects can be made, is the walk which is laid with a definite thought for future planting. Here spaces of 1 ft. to 8 ft. can be left, especially at the sides, which will subsequently be filled with plants. In the case of the flowers here listed, no particular type of soil is needed if it is well drained and reasonably fertile.
For reasons too obvious to need mention here, the best plants are drawn from that large list which considerations of taste and adaptability have designated as suitable for the regular rock garden. The charmingly fragrant white rock cress (Arabis alpina) is a good sort for the edges, as are also rock madwort (Alyssum saxatile compactum) with its mass of little yellow blossoms in April and May, and saxifrage pink (Tunica saxifraga), pinkish bloomed through the summer months. These three, with Baby's Breath (Gypsophila repens) and rose moss (Portulaca grandiflora) will give enough variety to the dense mass effects. For contrast with them, I know of nothing more charming than our own eternally dainty wild colubrine (Aquilegia canadensis), rising here and there in clusters of

(Continued on page 73)
THE

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and LILACS

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Plants extra strong, two years old, cut back to 18 inches, and will bloom freely THIS NEXT SUMMER.

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YOU who love trees for their own beauty or value them for the charm they lend to roadside and lawn, must have often wished deeply for a more friendly knowledge of how to choose and group them best, how to improve the outlook from your windows or make more attractive the approaching vistas of home.

This, then, is to say that at last a book has been written which tells just what you want to know about trees. It is the new catalog of the well-known ornamental trees and shrubs grown at Andorra Nurseries.

"Suggestions for Effective Planting" tells what trees are best adapted by nature for each garden and landscape, what shrubs and trees most effectively group together.

And all this is so beautifully illustrated and conveniently arranged that it is as interesting to read as your favorite magazine. It is not the usual mechanical, deadly dull nursery list. To read it is like going around the grounds with an old, experienced gardener and discussing in a friendly way what the place needs; what evergreens to screen the foundation, what will look best along the driveway or against the all of the house.

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All our varieties thrive on any fertile soil, and can be used singly, massed, or in groups to produce the effect desired.

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Detailed instructions for planting and care, with each order.

Write for 1917 Catalog and Planting Guide, which includes Trees, Shrubs, Evergreens, Roses and other Flowers, Fruit and Nut Trees, Berry Bushes, and all varieties of Fine Nursery Stock.
The Flower in the Crannied Walk
(Continued from page 72)
but a few stems each, and crowned with fragile looking blossoms of coral and yellow.
Suitable also for the more used parts of the walk, because of their lower habit, are rock speedwell (Veronica rupestris) and snow-in-summer (Cerastium tomentosum). Moss pink (Phlox subulata) makes a splendid third, perhaps the best of all.
All of these do best in abundant sunshine, though most will succeed except where really shady conditions prevail. In some woodland walks where full sunlight is at a premium, such shade-loving species as blood-root (Sanguinaria Canadensis), bluebell (Campanula rotundifolia) and wild cranes bill (Geranium maculatum) are valuable additions. If ferns are desired in addition, let them be of such comparatively low growing sorts as Cystopteris bulbifera, C. fragilis, Phlegmopterys Dyplostria, and Phyelodium disjunctum.
There are others, of course—there always are in any sort of gardening. You may vary your list at will so long as you remember the peculiar requirements of the case and hold always in mind the fact that the successful flower experimenter is wont to apply to untired things:
"It's pretty, but will it grow?"

The Plunder of the Past
(Continued from page 31)
different. One feels that the bidding has at last left the sphere of the absurd and the danger of any abrasion of his personal susceptibilities is past. But his tone is slightly petulant, evincing something of the spiteful turn of mind of the fashionable woman who has just been saved from falling off a high cliff by a vicar. Not a pleasant thing to have most ungracefully over her eyes. One realizes that although he has been saved from the worst he is no quite happy over it. He prefers a conquest to a rescue.
A gentleman of seeming Oriental extraction, who has been examining the figure on the table, ceases to twirl his hilt and lifts his index finger an inch in the direction of the auctioneer.
"Two hundred and twenty-five, two hundred and twenty-five dollars I am bid for 53 A in the catalogue."
"He will have no mistake about it. The Osceola of Lot 53 A, the little bronze girl who has been laughing for nearly three centuries in defiance of all rational records of risibility, and who was very nearly sold for ten dollars to the first bidder who came perfectly against the cabinet will make no further sign, his eyebrows are motionless; those two other idlers start motionless from their bench a last or twitching a catalogue.
Around the big chamber the auctioneer's gaze travels steadily, searching optimistically, nay, confidently.
"Two hundred twenty-five, two hundred twenty-five."
There is the merest trace of finality in his tone, contradicting the confidence of his gaze; after all, he is human, and two hundred twenty-five is really the end.
"Two twenty-five, two twenty-five, fair warning and last call, two twenty-five—SOLD."
Don't cross his pencil—not a hammer—and the bronze virgin is the property of the man from the East. Let us hope he will be good to.
**
A dagger was sold in New York the other day, an antique Damascus dagger of bloody history: made in amorous Venice before Shakespeare was born, to the order of some high, impetuous spirit.
The man who bought it was from Tennessee. He wanted something to show the folks at home, and this dagger he bid for and bought at one of the notable auction rooms; got it very reasonably, too.
Newspaper reports give one the impression that the only people who bid are those with an interest in art are the millionaires, and the dealers. The impression is misleading. Millionaires and dealers have neither the cash nor the inclination to purchase and house a quarter of the relics sold in New York every year; dozens of important collectors come under the hammer annually.
Who buys these old, beautiful things? George does, Dick does, Harry does, the plain folks from Tennessee, from Yonkers, from Wyoming, from Flatbush. For years they have been buying their real antique or two, and if you attend the big sales you can find a few of them crystallizing their intention into action.
Nor does the average man buy less wisely than the rich. The latter is no more a connoisseur by divine letters patent than the former is by Philistine reason of his lesser fortune. The millionaire simply buys what strikes him, like everyone else, and he is imposed upon much less often than he should be. His purchases may be more impressive than the man from Tennessee's, but they are not genuine.

**
Taking it by and large there is no need for those who are in the antique market, the supply being so considerable. The yield of five or six thousand dollars is steadily coming under the hammer. Inevitably the sardonic truth comes upon one that it is an ill war that leaves no one any good.
Not much noise is made about the average man's purchases of antiques, yet the total sum he spends in a year is immense. Figures are not available, but here is a fact that conveys some idea of the popular interest. Recently eight hundred people passed through one auction gallery in six hours; the large majority of these were not professionally interested in antiques, but at the sales of this collection they spent between them scores of thousands of dollars, individual purchases frequently coming well under the fifty dollar mark.

What is the inward root of this strange fascination of ancient things for human beings? It is not alone to the wide-eyed howling of those ugly to our eyes, or at least grotesque. It is rather that they are the peculiar dreams of the men, that they afford sweet relief from the perpetual hard logic of business, and the sweet thrills of those of the modern novel.
The glamour of medieval times is the business of plunder of the past upon the walls and counters of the metropolitan auction galleries. Here one may catch tales of days and lives as strange as dreams, tales more
Hardy Perennials

Why not start this spring and make a collection of the more desirable groups of these old-fashioned garden favorites—a selection that will assure you of flowers throughout the season:

For early summer flowering—June Pink, Foxgloves, Campanulas, the gorgeous Poppies, Daffodils, German Iris, and some of the choice Long-spurred Columbines.

For mid-summer—Delphiniums in choice hybrids and named kinds, the stately Anenomes, Shasta Daisies, Japanese Iris, Erythronium, the new Astilbe Atina type in fine varieties, Veronicas, and Phloxes.

For early fall—Phlox in handsome varieties, Helianthus, early-flowering Chrysanthemums, Hardy Acres, Japanese Anenomes, and Hardy Lilies.

For late fall—Hardy Chrysanthemums predominate in the garden. We have a splendid collection of varieties, tested for hardness here in New England. Then there are some late-flowering Antennas, Japanese Anenomes, and the Phloxes making their second display.

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Address the originator.

A. E. KUNDERD, (BOX 2), GOSHEN, IND., U. S. A.

Plating a Pink Garden

(Continued from page 21)

peonies and chrysanths. Queen of May, the iris nearest to a true pink, predominated, but attended by the violet pink and white of Madame Paquette and Sappho. A soft radiance of lavender and violet was contributed by Shellfish and Gypsy Queen, a pale straw color by *flavescens* and a golden yellow by *aurae*, contrasting with the clear blue of *B. delphinium* "Kunderdi,* the latter placed near the large pink petals of the oriental poppy, shaded by the dull grey and lavender of *Veronica incana.*

The hues of pink and cream chrysanths fluttered everywhere, their lazy foliage contrasting with the grassy blades of the iris. The peonies as well as the iris were chosen from observation at the horticultural show. All those listed are of the earlier varieties, the first one of them being the slightest tinge of blue. Of the single ones *Leucadia, Arozis,* and *Rosy Dawn* are of a wonderful satin-like hue. The Bride is an immense single one of glistening whiteness with conspicuous golden stamens. The others are all of the double or rose type, blending perfectly in tones of shell pink and lavender.

Contributory to the iris and peonies was an especially delicate border of maidenhair fern, lavender-blue *foam flower* and *Andrea rasyzi,* awitching pink. Above the fern, later, swayed coral bells.

A single touch of gold was offered by the little shrub *Potentilla fruticosa,* completely covered with flowers of a clear primrose, and resembling a wild single rose.

Against the hedge at this time—laden with berries—masses of taller flowers: foxgloves, pink lupines, Canterbury bells of a soft pink, hollyhocks, and yellow *Scabiosa* of a purple blue of *Delphinium belladonna.*

I was horrified to discover that Sweet William and foxglove, so generally quoted as an excellent combination in their mixed varieties, disclosed an appalling range of conflict in harmonies, from white to cerise, magenta, purple and dull red. However, prompt and vigorous enough the gardener's hand, for this combination only white or very pale pink was allowed.

THROUGH THE SUMMER

From the middle of June to the middle of September the garden is filled only an occasional note of color for chance visitors. Of course there were phlox, sweet peas, and asters. Had the summer months been under consideration I would have chosen the pink loose-stripe (*Lythrum roseum*), rose malows and more phlox, keeping to the soft, warm pinks and omitting cold blue pink or flame color. Of these some excellent types are Elizabeth Campbell, with a warm pink center; *Selma,* light rose with a small cherry-red eye; *Mrs. Wm. N. Craig,* with a red eye; *Mme. Paul Dutrie,* an indescribable faint flush of *lilac* pink; and *Daybreak,* soft pink.

An unusual flower for this season is *Rudbeckia purpurea,* a tall daisy with dull old rose petals, set in a rich brown center, appearing in August; and for a soft mass of pale pink add *Cystosophila autumnalis.*

SEPTEMBER BLOOM

In early September the garden was very satisfactory in its mass effect, though there was not the wealth of interesting detail to be seen in the spring. The borders were filled wherever space permitted with silvery pink snapdragons; a few pink hollyhocks survived from summer; the air was still heavy with the fragrance of the *Scabiosa* i leaves which began to bloom in August. The best early pink aster was *Ellie Perry,* a sturdy, hardy variety 3 high. In combination with these were large masses of dill pink *Sedum spectabile,* clouds of lavender *Statice laevis,* dwarf bleeding heart, and phlox—*Floss Blows,* pale pink, and *Pamilion,* silvery rose.

With the exception of the sedum and statice, whose period of bloom proved short, all lingered toward the end of the month when the Japanese asters began to show. In masses of rose, silvery pink, and white, both single and double, appearing in October to lend their colors to the later chrysanthemums. The later hardy pink asters are *Thomas Perry,* *Ellie Perry,* and *Thirza.* Of these the latter proved weak and ineffective, as did *Vesuvius* and *Floss Blows* pink and *Thirza.* The only one to do the others did not prove effective enough to warrant giving it space, I have put in a carefully balanced position in the four center beds, a dwarf aster—the variety *C. odoratissima* and *Rhubinia rosea.*
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It is the heat of heats, mainly because it is a health heat. A heat that is as fresh and wholesome as the gladsome sunshine outdoors. A heat that has the welcome restfulness of being noiseless. No hissing and sissing; or thumping and banging.

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JOHN A. BROOKS, 2358 Fulton St., Toledo, O.
Intensive Methods and the Vegetable Crop
(Continued from page 50)

Absolutely essential. Between October fifth and the last half of March it will yield beets in 40-50 days from date of sowing seeds, carrots in 45-60 days, lettuce in 35-55 days, radishes in 20-40 days. Of course, much depends on the choice of varieties. Points that should provide selection of sorts for under-glass gardens are their time of maturity, habit of growth, productivity, and pedigrees. The last is by no means the least important, for, no matter how well a sort measures up to all requirements, if you get a poor strain of it, your plans are apt to go astray.

This brings us to the point of methods in under-glass gardening. When you consider that it requires a lot of time, money and care to get results from this kind of gardening, it cannot be said that you should want those results to be worth while. Your efforts must produce crops above the average or the game won't be worth the candle. For methods by which this most elegant of gardening arts and crafts can be made profitable, we are indebted to the French. For over a hundred years they have practiced three intensive methods that an acre under glass would yield more net profit per year than many quarter section farms in our Western States.

Intensive Planting
As long ago as 1810, French gardeners coming to this country taught their American countrymen to sow short-topped radish seed, mixed with carrot seed, or spinach seed, maybe mixed with the radish seed. The spinach or carrot will be fit for use sometime after the radishes are drawn out. Here we have the sum and substance of intensive methods for under-glass gardening. They consist simply of selecting crops not related to each other and of different seasons of sowing, sowing them in one and the same row, and harvesting your crops in their order of getting ready.

We have learned much since. We now know that it is perfectly safe to sow three different kinds of seeds at the same time and harvest three crops in succession without any special effort. For instance, radish, lettuce and carrots make good companion crops. Select a radish that is ready in 25 days, a lettuce that is ready in 30 days, and a carrot that may grow for 50 days, and you have a perfect program. Just one hint—sow your seeds thinly and buy the best strains that are available.

Another good radish, spinach, carrots and beets. Select an extra early radish, any spinach (Victoria in a 25-day, carrot and a 60-day beet. After the radishes are pulled, see that the balance of the plants stand at least 4" apart. Never sow seeds or the basin becomes a perfectly safe operation as I have proven to my perfect satisfaction.

For instance, we are very fond of cucumbers and melons. Ordinarily, we plant our seeds outside the doors before June first. We now "beat" the date by two weeks and have cucumbers by the 15th of July instead of August and musk melons by August first instead of the middle of that month.

Here is how we do it:

About April 1st we sow Emerald Gem muskmelon seeds in paper pots indoors. Five seeds to a pot. These pots are sunk in the hotbed. Within four weeks we generally have a fairly good "seedling." Four plants per pot, which are then lifted (pot and all, so as not to disturb the root system) and set outdoors in well-manured beds, one plant per bed with a junior frame. They never receive a setback and, in about 115 days after planting, are generally enjoy our first melon. Cucumbers are handled in very much the same way except that we do not sow the seeds until mid-April.

The principal value of the little glass houses lies in the inexpensiveness and ability to grow early and late crops in the spring and fall off plants that are right at the height of their bearing season. They have often helped us to carry a fine row of lettuces right up to Thanksgiving and even several days outside of our bean rows that were thriving lustily in the garden by May 20th, after an early start.

For the Guidance of Correspondents
In order to facilitate the answering of the great number of letters that come in to the Information Service, we wish to ask readers to cooperate with us by observing the following rules:

1. All inquiries must be accompanied by a self-addressed, stamped envelope or return postage.

2. State your problem concisely. If asking for decoration suggestions for a room or number of rooms, state the exposure and the existing features of the room. The Information Service cannot suggest alterations or improvements to plans or give schemes of decoration unless a full description accompanies the inquiry. If possible, send a sketch of the plans both in decorative and architectural questions.

3. Do not supply plans for houses or for gardens. Plans are shown with many of the gardens and houses in the editorial pages of which the reader may avail himself with the consent of the architect.

4. We do not issue a catalog or circular. Letters that definitely ask for the catalog of a manufactured article are referred to that manufacturer who sends the catalog and payment.

5. We cannot discriminate between two equally reliable manufacturers of the same product.

6. Remember that all information for correspondents are compiled by a staff of experts whose experience especially fits them for this service. Replies are made as promptly as the necessary investigation permits.

By looking on page ?? of this issue, you will find a number of suggestions for your problems.

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You will find them to be authoritative text books upon the subjects named:
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AMERICAN SHEET AND TIN PLATE COMPANY, Frick Building, Pittsburgh, Pa.
Brass About the House

(Continued from page 58)

average country house today, or in any setting where simplicity is the keynote. They are especially desirable in their wide range of prices from $6.00 to $35.00 a pair. The graceful proportions of the Adam style, illustrated, lend themselves more consistently to a room of the same treatment or of French period decoration, being an adaptation of the Louis XVI detail and outline. With the andirons, the perforated brass fender makes the fireplace possibly more complete, but as the depth of the fireplace opening and the frequency of heart burners have made the fender less of necessity for the warmer time of year, it is when coal is burned in a grate, one rarely sees the fender in use, although many beautiful examples are originated by the great furniture designers such as Chippendale, Sheraton, Hepplewhite and the Adam artist and are reproduced in modern brass.

The novel, tongs, poker and stand can be found in prices ranging from $1.50 to $25.00, while the trivet or old-fashioned kettle- rest, suitable for use at the tea hour, can be bought from 50c to $1.00.

The brass toasting fork is also an attractive and useful accessory for the fireplace. Reproductions of old English design in these range from $2.50 to $5.00 each. The fork can be hung from brass hooks, such as are reproduced from the old English and Italian designs. These can be found in great variety and range from 50c to $1.50 each.

Lighiters and Warming Pans

The Cape Cod lighter should not be overlooked, as well as the equipment of the fireplace as an undeniable convenience, diminishing the use of paper. They are made in plain brass with a tray and igniter for $4.50 complete, and advance in price to $10.00 for the more elaborate types. The brass covered wood box is also desirable, where the space will admit of its use. Still another feature of the early American home, which we only associate with the present-day fireplace for sentimental reasons or decorative purposes, is the brass warming-pan, sometimes made of copper as well—elaborately pierced and mounted with a handle in mahogany handles.

In the house where the bedrooms were often without heat of any kind or adapted to the luxurious home, the room boasted a fireplace; this was so inadequate in the stress of extreme cold, that the warming-pan, used to heat the linen bed covering, was regarded as an indispensable accessory.

But in the practical use today, however, the covers of warming-pans, because of their more or less elaborately perforated decoration, can be removed and converted into sconces by adding arms for the candles. This is an attractive way to utilize a cherished heirloom, that would, perhaps, otherwise be relegated to the garret or storeroom.

Of the other heating receptacles of former times, such as braziers and foot-warmers, made in both copper and brass, few are seen now other than in ornamental use as flower holders or perhaps converted into incense burners.

The stove, or rather the grate, influenced the design of the Adam style in the early part of the 18th Century and known as the "Franklin Stove," much trimmed in brass, is still used in the old houses throughout Pennsylvania and New England, and is much sought after by the modern country house builder of taste.

The Finish of English Brass

In English brass, we find a quality of finish simulating age that is not appreciated in its interest but necessarily to its expense, as greater care is given to its production than to its brass. It likewise lacks the newness of the American factory-made brass and does not have the brilliant finish of the English. This is especially true in the candlesticks. Brass candlesticks constituting the popular substitute for silver, for the Jews, famous for their skill in brass-work, have carried with them their religious traditions wherever they may have settled, and in coming to America the Russian Jew has introduced his ecclesiastical brass, as well as that for commercial use, until, within the last fifteen years, we have become as familiar with it as we have with that of the better established English brass.

The Russian candelabra, comprising five, seven or nine stems, that is popular in Russia and lighted on certain religious festivals, can be found at very reasonable cost, depending on the height of the candlesticks ($3.50 to $15.00 each). It is perhaps most attractive for decorative purposes when placed on a table of polished dark wood, such as a dining table, where the light is to be concentrated and the greater part of the room left in shadow.

Of the smaller candlesticks of English make, such as are shown here, there are a great variety averaging from $5.00 to $14.00 a pair. In the

(Continued on page 82)
"A Spark in this Spells Ruin"

A fire within the walls of your house is almost unfightable, and if the inflammable material is there it's easy to start—worn insulation on an electric wire—a hungry mouse and an appetizing looking match-head—a leak in a flue.

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Expanded Metal Lath

gives you as clean a wall inside as out. The metal mesh completely embeds itself in the plaster and not only prevents the accumulation of inflammable refuse, but forms a wall in combination with the plaster that is an impenetrable barrier to fire. This is only one of the reasons why Kno-Burn is the choice of people who build for permanence and appreciate that "no upkeep" is more important than "first cost."

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American Evergreens FROM APPALACHIAN HIGHLANDS

HARDY EVERGREEN GARDENS, OIL FUT, N. C., Routes 1

Bows About the House

(Continued from page 80)

Russian brass from $2.50 to $7.00 a pair and for the smaller ones, suitable for desk use, to hold the various wax, candle, from 50c to $1.50 a pair.

The brass seal, engraved with the monograms or crest, and converted— from a pipe stopper, is also a quaint little accessory that can be used for a double purpose. It is inexpensive at 125 cents. These little devices that are surmounted with a grotesque figure or one of the ever popular Dickens' characters, were originally used for stuffing tobacco into the bowl of the pipe and measured a little over 2 long—just right to fit conveniently in the smoker's pocket.

In the matter of lanterns, notwithstanding the modern invention in the use of gas and electricity has perverted the matter of lighting, the old brass lantern obtains as an appropriate treatement for lighting the old-fashioned way. These can be readily adapted to electricity and, when suspended from a crane or by a brass chain, are distinctly more consistent as a lighting fixture than the conventional electric of today.

SMALLER ACCESSORIES

Next in importance to the fireplace and light accessories in brass is the door knocker. These are made in a variety to accord with any style of architecture and should always be selected with a view to their consistence of design. A good reproduction costs from $2.50 to $6.00. The value of an original knocker, needless to say, is enhanced quite as much by its association and sentimental interest as by its rarity and workmanship. The popularity of the small knocker, for inside door use, has led to the reproduction of a vast number of designs by the old English knocker of peculiar significance, such as the familiar cross-legged 'lions comb,' the 'Durham Decoy,' the Rugby arms, the monk's head, etc. These average from $1.00 to $5.00 each.

Among the smaller conveniences in brass may be included the table bells, copies of the historical bells that now are found in English museums, such as the figure of Queen Elizabeth in full court dress, which was made in the form of the human fore-legs and feet. These bells cost from $2.00 to $15.00 each according to their size and the subject they depict.

What we have grown to enjoy as an incident, is at least 8 deep and 3 across, and use about one third manure to the quantity of soil required to fill them. Have the manure thoroughly incorporated with the soil, and if the latter is poor, replace it with some top soil. When planting the trees avoid the covering any manure to come in actual contact with the roots. A good sprinkling of coarse crushed brick or charcoal through the soil will also add to the life of the compost.

Where cover crops can be used they are recommended. This may be the soil from running down and the trees suffering for lack of fertilizer. Where this is not practicable, use mulching with manure should be resorted to.

Spring pruning should be practiced very little with dwarf fruit trees. It promotes a strong, vigorous growth, whereas just the opposite result is our

The Truth About Dwarf Fruit Trees

(Continued from page 30)
The Luxembourg Museum And Its Treasures

By CHARLES LOUIS BORGMEYER

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is a volume without peer for the art lover and for the library table. It is a most appropriate holiday gift—desirable and in excellent taste.

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Established 1880

11 East 48th Street — NEW YORK — 242 FIFTH AVENUE

Rich Color in the New China and Glass

(Continued from page 49)

again, shown in a new design in the salad bowl and plates of domestic porcelain illustrated at the left of page 49. A salad set is always a desirable shape. The design is large and deep, and the shapes of the small pitchers, tea pot and other small articles are very attractive in design. The dinner set can be had for $57.20. The plates are $6.75 a dozen.

A beautiful color is always welcome in a salad bowl, especially when shown in the gracefully shaped and inexpensive flower bowl, such as shown at the lower right of page 48. The design is very attractive in design. The dinner set can be had for $57.20. The plates are $6.75 a dozen.

A beautiful color is always welcome in a salad bowl, especially when shown in the gracefully shaped and inexpensive flower bowl, such as shown at the lower right of page 48. The design is very attractive in design. The dinner set can be had for $57.20. The plates are $6.75 a dozen.
Meehan’s Mallow Marvels

Absolutely hardy perennials of surpassing beauty, originated by us. The sturdy bushes, 5 to 6 feet high, are covered with gorgeous blossoms from July until frost. A conspicuous and dazzling novelty for any lawn or yard. Order now.

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The root system is wonderfully involved and yet admirably efficient. This shows the below-ground part of a corn seedling.

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Special Get-Acquainted Offer! 10 Big Packages, 25c Beets, Cabbage, Carrot, Cucumber (Pro- bably pickle), Leaf Lettuce, Mustard, Onion, Radish, Tomato, All 10 and our big, new 194 page catalog and a package of Salzer’s 1917 Special Master Meters for only 25c. Send today and we’ll include FREE our coupon pool for use on future order. 49 years’ experience backs every sale. Don’t miss this grand opportunity. Write today.

America’s Headquarters For Field Seeds
49th Year
John A. Salzer Seed Co. Box 600 Lacrosse, Wis.

Plant Foods and Feeding
(Continued from page 54)

The root system is wonderfully involved and yet admirably efficient. This shows the below-ground part of a corn seedling.

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To digestion take place, the inorganic plant food which has been absorbed from the soil being changed into organic forms.
This elaborated plant food is in its turn redistributed through the plant to every part that is developing or making growth, and thus cells that are forming new tissue are fed. But an even more remarkable fact remains. The plant foods or nutritive elements, once taken up, are transited through the plant’s body from the roots to the leaves and from the leaves back through the plant, independently of the flow of sap! The movement of the sap—which is, of course, mostly water— is determined by the temperature, the amount of moisture in the soil, and many other controlling factors. At times it ceases altogether, but the distribution of the nutritive elements in the plant continues through a slow process of diffusion in all directions.
The plant foods which we have spoken of as being absorbed with the soil moisture by the roots are a dozen or so of different chemical elements. Most of these are present in every soil suitable for garden purposes in sufficient quantities to supply all the plant’s needs. There are, however, likely to run short: nitrogen, phosphoric acid, and potash—and the worst thing about it is that if any one of them is short, a superabundance of the others will not in the slightest degree make up for it. Every plant that grows so independently that it has to have what it wants and how it wants it, or it will balk then and there! For that reason we call any of these food materials which may be deficient the “limiting factor”; for until that deficiency is made up, the plant will not continue to make the greatest growth of which it is capable. So it behooves the gardener who would grow the biggest flowers and the best vegetables to see that the supply of none of these foods in the garden cupboard runs low.

That, you may say, should be a simple matter; but—

While the number of plant foods or nutritive elements is few, the forms or combinations in which they may be found are innumerable. It is because they do not realize this fact that many gardeners get off the track in trying to keep their plants well fed and thriving.

Supplying Available Foods
We have seen that the plant’s roots can take up only such food materials as are in solution—that is, as the soil moisture is capable of dissolving. Nitrogen, phosphoric acid, and potash also exist in many forms which are not affected by contact with the soil, and therefore cannot be used in that state by the plants. Such materials are called unavailable, because the plants cannot use them until they undergo a chemical change which makes them soluble. It is the gardener’s business, therefore, in adding plant-foods to his garden, to make sure that they are in forms that his plants can make use of. It is his further business to use wisely. He can change the unavailable plant foods already in the soil into available forms. This is not as good as it seems, for the deal cheaper, adding them from the outside.

We have probably heard or read in connection with the use of fertilizers that some of them are particularly useful because they are “quick acting.” This means simply that the nitrogen, phosphoric acid, potash or lime which they contain are in forms which will at once dissolve in the soil, or very quickly become so. There is no space here to discuss the various materials which are suitable for making the soil richer, but they have frequently been mentioned in this magazine. The practical benefit you can get from knowing these facts is that when buying any fertilizer the percentage put down as “available,” in the analysis given, are the ones which really count in determining its value so far as your garden is concerned. The plant foods already latent in your garden soil, Nature, herself, continues gradually to make available, but one of the most important tasks of the successful gardener is to speed up her leisurely methods of going about this.

There are three chief factors which help in this important work:
First, the more finely the soil particles are pulverized, the more quickly these desired physical and chemical changes will take place.
Second, the conditions of moisture and heat favorable to chemical action should be maintained as far as possible.
Third, the presence of bacteria in the soil which helps these changes should be increased in every way that is possible.

All these things are expressed in terms of actual work in your garden: when you break up and till the soil: when you cultivate it so as to conserve moisture, when you introduce bacteria through the liberal use of

(Continued on page 88)
Farr's Hardy Plant Specialties

This new edition for 1917-18 is much more complete and helpful than any of its predecessors. In its completeness it is a textbook that no reader of House & Garden will wish to be without.

Special Features of this Edition

IRIS. In the German section there will be some notable new introductions from Europe and my own Germania Faride Gold Medal Collection.

In the Japanese section there will be the first offering of a series of new seedlings of my own hybridizing.

PEONIES. I shall include a number of fine varieties, which, owing to limited space, I have not been able to offer heretofore.

TREE PEONIES. The purchase of the most prominent trees for use in the show garden is given me a collection of over 300 varieties. All of these are established on their own roots.

LILACS, ROSES, EVERGREENS. Many new and selected varieties are included in these sections.

To insure receiving a copy of this edition you should send me your name and address now. As soon as the work is completed the book will be mailed to you without cost.

Bertrand H. Farr
Wyoming Nurseries Co.
106 Garfield Ave.
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Some Good News
To Those Interested In Having A Moderate-Sized Greenhouse

A s near as we can make out, there are a lot of people who very much want a greenhouse, but hesitate to make a move to find out definitely about them. Hesitation is due, not because of having an impression that they are a rich man's luxury.

There seems to be no middle ground with them, between one made out of an old piano box and discarded photo plates, and the elaborate house of tip-toe price.

Which, of course, is a decided mistake.

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Send for your Free Book—The most splendid book ever published in the United States. Send this name and address to The Ball Seed Co., Dept. 20, 1762 Massachusetts Ave., Cambridge, Mass.

Keep Your Flower Order in the Ground!
Plant Foods and Feeding

(Continued from page 80)

manure and other bacteria-containing materials; when you keep the soil well opened up so that warm air can penetrate it; and when you maintain the supply of humus, which is essential to the growth and spreading of bacteria.

There is one more idiosyncrasy of plants which the gardener should know. They have, like Jack Spratt and his wife, their own ideas as to what is preferable in the way of food. The chemist can analyze a plant and tell what it has taken in from the soil, but he cannot tell in what forms the growing plant will prefer to have its food supplied. For this reason it is always advisable to supply the plant food in the garden from a number of different sources. This is especially true of the vegetable garden, where all kinds of crops are grown in close proximity. This habit of having a course dinner rather than a meal of two or three dishes has the further advantage of supplying the different plant foods continuously throughout the season, as is given in different materials becomes available at different times.

The Root System

In order to fix definitely in mind this rather complex business of how plants have learned to penetrate, by knowing the facts we have been discussing, just what happens when the roots of plant penetrate the prepared soil. One of the photographs shows part of the root system of a young corn seedling, which I started in sand and a little compost, and carefully took up, removing from it all soil which would be really shaken off.

As the roots push out through the soil, on most plants they branch freely in all directions. This is a commonly accepted idea that they seek out the rich spots in the soil. In the photograph you will notice that some of the roots are much longer and less branched than others, while some are more or less clusters of rootlets still grasping tenaciously the compost on which they fed. What really happens, however, is this: when a root strikes a "pocket" of rich food elements, there is an extra development of the lateral or branch roots. The moisture in the soil containing the various plant foods in solution, and clinging in the thin film about each microscopic particle of soil, is absorbed through the porous sides of the root hairs. The amount taken in by any one source is, of course, inconceivably minute, but as there are literally millions of them in a few cubic inches of soil, their united efforts attain very perceptible results.

The tips of the roots are not provided with the special root hair which is the main branch of a tree.

The Sap Flow

The soil moisture, carrying with it the dissolved plant foods, flows along the roots and up through the trunk and branches into the canopy and out at the older parts of the leaves. The sap is formed and carried to the leaves as the new young growth is being nourished.

Naming the Country Place

(Continued from page 56)

The following may be taken as they are, or split into suites; Berwick, Clovely, Dovedale, Eglantine, Fairview, Hilton, Fairview, Hammond, Ingleside, Inglewood, Island Lake, Lynden, Otter Creek, Overen, The Lindens, Vervain, and Woodcote.

We did not list into the possibilities of the more ambitious names like Castle, Manor, Mansion, or Hall; nor did we investigate those in town or cottage.

These from the old English are pleasing for names of suburb or cottage. Each of the above is a variation of two words, and if one is not familiar with the italicized portion of the name should be looked upon as all are descriptive of scenic elements; Barberry Brae, Benbarton, Clavercroft, Clove, Gable, Garthdale, Greenbush, Greenbeaks, Hazelwood, Homecroft, Lynden, Midhurst, Sedgewood, and Southdown. Again, one might use simple Welsh words, such as Dwy, which means "a clear, white stream," or devon, "a dark marvin."

A surname may be used, as Taylor's, or with another name as Blake's Corners and Scott's Valley. Christian names can be used in various ways as Gabriella Gables, or spelled backward; thus Lydia becomes Aildy. The first two or three initials of Elsie make Arel: the first three of each, lady's first, Elsart.

One may find many appropriate names in a gazetteer, as Arcadia, Campden, and Camperdown.

My wife and I do not wish to marry words of different nationalities in the naming of our homestead, although we believed in the intermarriage of races. Each of the above is a variant of two words, and if one is not familiar with the italicized portion of the name should be looked upon as all are descriptive of scenic elements; Barberry Brae, Benbarton, Clavercroft, Clove, Gable, Garthdale, Greenbush, Greenbeaks, Hazelwood, Homecroft, Lynden, Midhurst, Sedgewood, and Southdown. Again, one might use simple Welsh words, such as Dwy, which means "a clear, white stream," or devon, "a dark marvin."

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Making the New Garden

(Continued from page 42)

1. Pulverize the soil as finely as it can be and get it under a good dressing.
2. Add plant foods which are to a large extent available for immediate use.
3. Incorporate with the soil all the humus possible.
4. Distribute throughout the soil as evenly and plentifully as possible “friendly” bacteria.
5. Keep the soil well supplied with moisture by thorough preparation, by cultivation and irrigation.

That is the answer in a nutshell, but, like any other art, there is some cracking to be done before the meat can be of much practical use. And so the gardener must interpret these condenced general principles into actual garden activities, and prepare to do it at once for results this year.

The first thing of all in the actual work of preparing the new garden is to make sure of good drainage. I merely mention that as a precondition in passing, because no soil, old or new, in which the surplus water remains after a rain is fit for gardenening purposes. Unless the subsoil beneath your proposed new garden and its position assure good drainage, you will have to supply it artificially. This may be done in the individual bed, border, etc., by digging the subsoil out to the depth of 1½ or more, and putting in a layer of small stones, coal ashes, or some other roughage, making this layer about 18" or so deep. Cover it with another layer of inverted soil, dead leaves, or straw manure, etc., to prevent the new soil from washing down through the tiny crevices in the stone layer. In some cases subsoil or wind may be necessary. Details of doing this work may be found in the former numbers of Hortus & Garden.

PULVERIZING THE SOIL

The question of getting the new garden finely pulverized is one of hard work; there is no getting away from it. You can power wash it off, however, if you choose to work yourself or stand over some one else to be it done right. If drainage has to be put in, and the best of the soil removed should be thrown to one side separately, and then the whole area and pulverizing can be pulverized with a fork or spade before it is put back. In the vegetable garden or large flower garden or shrubbery border where the soil cannot be thrown out, the plowing or spading should be done with the greatest care, and then the soil, when turning over the soil, there will be very many large, hard lumps buried beneath the surface, escaping attention at the time, but doing their share toward making the garden unsatisfactory during summer. It is a good plan to prepare the various pieces of ground as early in the spring as you can be worked and where possible, to work them over again just as carefully right before planting. In this way the very best chance to work and express your new garden soil the equivalent of two or three seasons' pulverizing done in the ordinary way. When the soil is deep enough to allow it, it is best to “trench” the bed or garden in the ordinary way, washing it out by digging it two spades deep, roughly breaking up the lower layer in addition to plowing and breaking the top. The surface of the soil, by repeated workings over it with a wide prosq look and iron rake, should be made fine and free from rocks, stones and trash to a depth of at least 2" or 3".

When it comes to manure and fertilizer, only the old, or the most mature nature you can get (preferably from a last year's heap, scrapings from the manure pit, or compost from a hotbed) should be used. If you make use of a complete ready mixed fer-tilizer, get only that made up with an analysis high in nitrogen. You can be more certain of getting quick results, however, by using guano, dried blood, or some very high grade tankage, as the nitrogen in all these becomes available more rapidly than in the fertilizer, and is used to several kinds as well as several grades of ground bone. For your purpose, use manure or very fine ground bone, or at least half of the application to be made. The bone contains both the phosphoric acid and nitrogen. The analysis for fine ground bone is about 3% of phosphoric acid.

A GARDEN MIXTURE

Potash is less likely than either of the other ingredients to be the limiting factor, so far as food is concerned in your new garden. Never- theless, it will have to be used for it all the wood ashes you can get. The ordinary sources of potash will be exceedingly scarce, however. If you will make the following mixtures for use in your garden; 25 lbs. of nitrate of soda; 50 lbs. of dried blood; 100 lbs. of acid phosphate and 25 lbs. of muriate of potash, and use this at the rate of 5 lbs. for each 100 square feet of garden space, supplementing it by a good dressing of unbleached wood ashes, raked into the surface of the garden, or by the use of sphagnum moss, the conditions are favorable all the way through and the new garden will not lack available plant food the first year.

Next, there is the important question of humus to consider. Formerly, the only practical source of humus for immediate results was the manure pile or the compost heap. There is nothing better for the new garden than thoroughly rotted, well-finished compost, as long as you can get it, how- ever, that there are a few things in which too much nitrogen at planting time should be avoided. But in developing drainage, bone, and especially horse manure, which is the quickest acting, is be- coming increasingly hard to get; the good manure of the old days was usually manured with very little nitrogen, and the conditions are now worst as previously stated, or rather supplement, in the prepared commercial "humus," which usually has the water retarding and bacteria breeding properties of manure, and has the added advantage of being more concentrated and free from straw and more convenient to handle. For stiff, heavy soils the very bulkine humus, with a 5% or 10% of lime, or on such soils as these dead leaves or straw can be used in addition. In gardening, however, this is very much a question, and should be taken to select a good, well-prepared grade which has been so treated that you are not paying more than the value of the ingredients, and do not run the risk of excesses, for soil, and that it is a good medium for bacteria.

Soil conditions on the ground where the new garden is to be made will furnish humus after it decays, but in very cold locations in two or three months, particularly if the season is dry, before it is of much use. In small garden lots it is a good idea where flower seeds are to be planted, it will

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1459 BANCROFT AVENUE, C. I. Moore, Prop., Box 9, Walnut, I. O.
House & Garden

Making the New Garden
(Continued from page 90)

often pay to "skin off" the surface before breaking up the ground, as a thick sod will make it very difficult, if not impossible, to get the soil in as fine a shape as is desired. This sod can be used in the compost heap, for drainage material, and in many other ways. In the case of trees and shrubs, it should be turned upside down and placed about them after planting, thus making an efficient mulch to retain the moisture.

The Bacteria Crop

There are several ways of thoroughly inoculating the soil of your new garden so that there will be plenty of opportunity for a biological action, even the first season. A good dressing of well-rotted manure will do to try, so far as the bacteria are concerned. If you have only a little manure, it is best to spread this evenly over the whole surface rather than to put it all on one spot. It may be supplemented by fertilizers and humus. The best grade of humus contains bacteria in large numbers if it has been kept in the right condition, and not allowed to get dust dry where you store it, or even later on while it is being applied.

In addition to this, a dust mulch should be provided as soon as the ground is worked in the spring and maintained throughout the growing season. The conservation of moisture will be accomplished to a large extent through the thorough pulverization of the soil and the supplying of humus, of which we have already spoken. In addition to this, a dust mulch is very desirable, as soon as the ground is worked in the spring and maintained throughout the growing season. The conservation of moisture will be accomplished to a large extent through the thorough pulverization of the soil and the supplying of humus, of which we have already spoken. In addition to this, a dust mulch is very desirable.

The Noble Dane
(Continued from page 38)

describes the Great Dane as a dog "not so heavy or massive as the mastiff, nor yet approaching too nearly in size the greyhound. Remarkable for its size and very muscular, strongly though elegantly built; the head and neck should be carried high, and the tail in line with the back or curved slightly upwards, but not curled over the hindquarters. Elegance of outline and grace of every form are most essential to a Dane; size is absolutely necessary; but there must also be real nobility of expression and strength of movement without which the Dane character is lost. He should be neither too long in the legs nor being able to go anywhere and do anything."

SIZE AND WEIGHT

A typical Great Dane then must be a large, powerful dog—30" tall at the shoulder and a hundred and twenty pounds in weight are the minimum standard requirements for a male, and not an existing ideal. This difficult combination, however, has been the salvation of the Great Dane. It gives him a special physical and intellectual charm of their "Umer Doggen" spread rapidly all over Europe and early reached England. The "Dane" of today go back directly to the dogs of these Wurtzburg breeders.

About thirty-five years ago dog lovers in the south of Germany, especially in and about the ancient cities of Ulm and Danzig, were interested in remnant of the old race of boar hounds. Whether their first instinctive impulse was right or not is a matter for scientific investigation and to study the habits of the oldest typing dogs. They worked what Mr. Frederick Becker has happily called the "emblematic" of the natural history of the "Umer Doggen" spread rapidly all over Europe and early reached England. The "Dane" of today go back directly to the dogs of these Wurtzburg breeders.

It is to the German breeders that we are indebted for this splendid dog. They have taken the heavy, ferocious boar hunting dog of the Middle Ages and by painstaking selection and intelligent handling have made of him the dog we know.

WHERE THE DANE CAME FROM

The Dane’s origin is lost in antiquity. Great heavy dogs of a somewhat similar though coarser type are depicted hunting huns and wild asses, on Assyrian and Mesopotamian monuments, and the Greeks and Romans had dogs of this same stamp. Throughout the Middle Ages such dogs were used for boar and stag hunting and throughout Europe. Written descriptions, pedigrees, and sculptures all show that there were many different variations in size and shape in different countries, and it is quite impossible to trace with any degree of certainty the ancestry of the breed. In a general way we know the Dane is a descendant of the ancient hunting dogs, but beyond 1800 the pedigree cannot be written.

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THE NORTH-EASTERN FORESTRY CO.
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The Noble Dane
(Continued from page 92)

days after sowing the seed. In other words, if you sow on April 10th you are bound to get your first heads of Iceberg on June 15th. And it does not turn out to be as hot as the other varieties. In fact, it is only turned out to be as hot as the Iceberg. The reason is that the thin-skinned, long-leaved Iceberg is more dependent on its coolness than the thick-skinned, short-leaved Iceberg. The thin-skinned, long-leaved Iceberg is more dependent on its coolness than the thick-skinned, short-leaved Iceberg.

The Noble Dane has been the mainstay of the Iceberg, and Americans have enjoyed even greater opportunities than British fanciers for growing the breed. Not only has the English cropping law hurt the Dane's popularity, but the strict quarantine laws have made importing difficult. Moreover, Americans of German descent have always rallied around this splendid dog from the Fatherland, so that there are more than a few fans in the United States alone. The Noble Dane is the best and finest specimens in the United States today than anywhere outside of Germany, Holland, and Austria.

"Jim"—HERO—

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Filling the Salad Bowl
(Continued from page 27)

The crisphead lettuce is the least bitter of the lettuces and is the most resistant to the heat. It is also the most tender and the most popular of all the lettuces. It is the only lettuce that can be grown in the southern states and the only lettuce that can be grown in the northern states. It is the only lettuce that can be grown in the cities and the only lettuce that can be grown in the country.

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"The Wood Finishing Authorities"
The Legends of the Modern Nursery

(Continued from page 35)

possible to get any effect with it, it wear such as it is bound to get. shows every speck of dirt, and it does a low, wooden table for playing. not last half as long as that which and one for eating are advisable. A has a preserving coat of stain or enamel. Low benches, drawers and playing boxes save the mother and nurse from constant ly waiting on the child. The drawers should be made to pull out easily—not too heavy for little arms. A low, long bookcase for the smaller, breakable toys and a big box for the heavier ones are nursery assets. A light-weight box covered with matting is excellent for this purpose, as the cover is light and the box will stand much

Photographs by Johnson-Hewitt Studios

The nursery bedroom is nothing more than a grown-up's bedroom. The child should play and eat in one room and sleep in another

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Try a few Suntrazps, 50c each, (No Glass) delivered anywhere in the United States and Canada.

Get our complete catalogue.

The Legends of the Modern Nursery

(Continued from page 96)

A doll's house, perhaps 5' high, with a little door and two rooms could easily be built in the nursery corner, and would prove a delight for the children. A tiny door bell or a knocker, two suitable chairs and table in one room and a doll's bed and window boxes would be large and without glass, to insure plenty of ventilation.

Any bathroom or nursery should have rugs large enough not to slip around and small enough to be easily cleaned. The floor should be smoothly finished to avoid splinters, and a wide border constantly cleaned should be left on all sides. The speckled or green interior rug is best. It does not show spots. The paint should all be finished in glossy enamel, not to show finger marks. One should be avoided in furnishing a nursery, as it is too soft, heavy-grained wood for children.

Little low seats or hassocks are a good nursery accessory, as children like to sit on the floor, to be doughty and dusty. A low platform 18" wide and 3" high built around a window or flower box is well suited to get the children to sit on, supplant the chairs.

Old-fashioned wire plant-stands are an excellent idea for the nursery. Children love to tend plants. The fact that a potato will sprout and a carrot grow delicate leaves is of the utmost surprising interest.

Begonias and geraniums that will blossom in winter, if carefully tended, will be much better in the nursery than a few flowering plants, which must be avoided like a lice around the windows and doors and along the second story string course. Or it may be elaborated at certain spots, with the edges of the string course landing itself to a larger decoration.

The simpler forms will be very inexpensive and any painter can carry the one that is to cost of the more elaborate, of course, will depend upon the artist and the designs selected.

For those who are thinking of such murals, it might be well first to study photographs of the peasant cottages of Bavaria and Switzerland, and to note the character of the decorations. In those countries whole villages are decorated. Here in America this is scarcely possible. Naturally we cannot have such elaborate gilding, but it is a fact that yet not suitable for the town house, save it be in some corner of Bohemia. Interior colors run rampant in other, lesser, hands, and exterior murals are perfectly suitable for the small country home that has either English, French, architecture or Continental peasant. If the house is well surrounded by trees and shrubbery the pictures will have an environment that shows them to their best advantage.

Continental Color for American Homes

(Continued from page 32)

Carnations and the Open Border

(Continued from page 56)

only protection given is cold frame or hotbed, and has frequently found the plants frozen like bricks without ill effects.

We will be planting out need not be of any special nature although if it is loamy so much the better. If hot, heavy dressing of manure, preferably cow manure, will give better results. Road sweepings from country gravel roads, are good to lighten a heavy soil. To check the trouble- some wire-worm, and also the sand flies that are a heavy dressing of equal portions of lime and soot is advisable. This is best applied in the spring and worked in when the ground is dug a second time.

PERPETUAL CARNATION BEDS

In planting a bed of perpetual carnations a few simple details must be considered. The plants, which are at least ten months old, are best transplanted not less than 1' apart, so that in summer the indispensable Dutch sofa cushion for fear of blighting one of the fronds. The sturdy, easily tended plants are best. The flower pots may be painted and decorated for the children themselves.

The bath and bedroom connecting with the playroom should be nurseries. The beds, bureaus, wash-stands and tubs should be low and small. There are many bathroom secrets for children that the greatest effort should be made in planning a house to have one bathroom fitted exclusively for children. While the children will eventually outgrow it, it is not a matter of expense to change the children's fittings for larger sizes.

A NURSERY IN GREEN

A nursery that was a great joy to the child as well as to the decorator gives a definite idea of the utmost surprising interest.

The walls were painted white with a border of spring flowers in delicate greens. The room is a tiny nursery. The furniture was painted light green with stripes a shade darker. It consisted of a day bed, two small benches to match the day bed, shelves and a playing box. For supper, the children are served little low iron table painted green on which was used green and yellow floral china. The curtains an the cover were of dotted Swiss with a ruffle edge with rickrack braid in green. The room was lighted by a few Spring, a lovely domain for the tiny, black-haired lady who presided there.
INTERIOR DECORATION NUMBER
Three Stages of Motor Development

In the first stage, higher power was obtained by building larger cylinders. In the second stage, greater flexibility was secured by adding cylinders. Both involve serious handicaps in a reciprocating engine. In the third stage, upon which gas engine design is now entering, a higher range of inherent capability has been developed—more power from existing plant. Simple and rugged, the sixteen-valve four draws straight from the source of high power and flexible performance: valve efficiency.

The White Company, Cleveland
**SUMMER IS ICUMEN IN**

While you, gentle readers, were knocking the icicles off the old pump and praying that the coal in the cellar would see the winter through, we were dispersing ourselves in zephyr-swept gardens, lolling in easy chairs on sunny porches and lying about on shaded lawns listening to the trickle of water from wall fountains—editorially speaking. And in those pleasant hours we assembled such stuff as summer homes are made of. All of them will be shown in the next issue—May—which is yeclut The Spring Furnishing Number.

Here are articles—and pictures galore—on breakfast rooms and porches; the country house dining-room table between meals; new summer house fabrics and wall papers; hot weather rugs and furniture; and a portfolio of rooms that—must be a joy to live in—there are all kinds of porches in the May issue. This is only a glimpse of one. Wait and see!

---

*April, 1917*

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A JEWEL ENSHRINED

It is a worthy practice that when architects find a rare old doorway of great beauty in a foreign land they bring it home, incorporate it in the construction of the house, build rooms about it—enshrine it as a jewel is enshrined.

This was done in the residence of Prof. Marquand at Princeton, New Jersey. Cross & Cross, architects.
WHAT IS MODERN DECORATION?

The Why and Wherefore of Vivid Colors and Original Furniture and The Decorators Who Are Using Them

MODERN decoration represents the return of a sense of humor into art. It is the same spirit which inspired the Gothic carvers in their execution of fantastic shapes on their most revered cathedrals. And indeed, reverence and humor generally go hand in hand, so that the indications of the present age represent a Renaissance of art: a new birth of thought, care, taste, study and individuality.

We are in the period of the early seekers; we are the Giottos, the Cimabues, of this century, or rather the unknown strugglers of the pre-natal period; those who render the Giottos and Cimabues possible.

PARALLEL PARADOXES

The art of literature illustrates today the same tendency as the art of decoration. A man is no longer either a humorist or an author. Mark Twain could now secure a serious reading, a thing which he found himself forever denied because his large and loving public insisted on regarding him as a funny man. We have come to realize at last that laughter and tears may be only a hair’s breadth apart.

In the theatre it is possible to produce “Another Way Out” and “Bushido” side by side, and Bernard Shaw is recognized as the most serious of all existing dramatists, despite his unmatched wealth of epigram. It is the age of immoral moralists, of amusing thinkers, of gay churchmen, and of artists who dare to be inartistic according to their elders.

I said, in an earlier number of this magazine, that good taste has become the cheapest and most mediocre thing in the world; that chorus girls dress in it, married nonentities live surrounded by it, and brainless decorators still continue to preach it—often as a special discovery of their own.

We moderns are in rebellion against this negative philosophy, this eternal affirmation of what must not be done. In art, as in morals, the determination of this century seems to be that “Thou shalt not” must be demoted from its place of honor. We are tired of the eternal preaching of neutral backgrounds, of tawny walls, tawny rugs, cream ceiling, pears in the bedroom and walnut in the sitting-room and oak in the dining-room. We despise the “charming,” “interesting,” “delightful” combinations, in such constant use among the twenty dollar salesmen at department stores. We welcome the bizarre, the ridiculous, the vivid exhibitions that would have been reviled in by the very masters of the 15th Century, whom we are told to copy, if these men were living today.

For the greatest ages of decoration have invariably been vivid, in the colors of art and of life. The Greeks, we now know, were resplendent in strong color, the Gothic reeked with vivid painted and inlaid surfaces, the Renaissance employed hues of which we have today only the disintegrating remains. What we copy in our art schools, is not the color of old Italian fabrics, but the discolor of four hundred years of wear and tear. The worship of the antique is a worship of dullness and drabness that would have been reviled by the very men who designed and executed the originals. Let our over-cultivated instructors do their best to make us believe in the infallibility of their convention of the disgrace of newness, of the horror of fresh paint.

IN THE AFFIRMATIVE

So much for our denial of the negative anti-Victorianism of 1900. But something remains to be said on the affirmative side of our accomplishment. Mrs. Hazel H. Adler has written a three hundred page book in explanation of this, but in some ways her very worth while accomplishment seems to me...
Herts, Decorators

A den in black and orange. Furniture painted with orange lines and flower decorations. Upholstery is orange and varicolored linen. Taffeta pillows and black taffeta bolster.

too limited. For example, her statement of what has been accomplished by the forerunners of "Twentieth Century Decoration" refers to a long list of workers in decorated porcelains, handloom fabrics, embroidery, rug making, batik, block printing, ceramics, wrought metal, stained glass, and enamels, but not to any makers of furniture, wall decorations, architecture or interior design. In the remainder of the volume, many decorators' names are mentioned, but the illustrations of their work are only partially effective, and not always worthy. One imagines in the reading of this book that the moderns of America have modeled themselves too exclusively on the German school of Innendecoration to be the rightful forerunners of a new native art.

The Inevitable

But in some way, by some means, perhaps undreamt as yet, the new style must come. We cannot continue to copy the antique forever, and certainly not the decaying examples of antiquity which are what we reproduce today. Some time, some leader of the fashions will declare "I shall have nothing in my house that has ever existed on land or sea, or in the heavens above or the waters under the earth," and then the apes will climb up after her into a new demand for originality, and art, with a flourish of trumpets, will give birth to a new gesture.

The Recalcitrants

Meanwhile we are surrounded by a number of worthy performances by decorators who employ the periods with a new sense—of color, of design, and of humor. Baron de Meyer, with a devil-may-care audacity worthy of his title, has selected the most despised of all periods today and has exploited it with great success. The verve of his Victorian interiors is remarkable; he must have a lot of fun with them and his clients, at the same time that he adds to the gayety of at least one nation. Here we have all the old ugly things used in a new, effective way, and we perceive that no one of them is ugly in itself, but only in relation to everything else with which it was used in 1870, and '80, and '90, and that a place exists or could be made to exist in which everything, even the Venus with a clock in her belly, might be fine.

That itself is an important point in the new teaching which is bound to follow the practice of a new style. There is nothing wrong with bright (Continued on page 92)
Paul Frankl, Decorator

A reception-room with red and blue walls and cream ceiling. Curtains and lighting fixtures orange red. Sofa, chair and carpet, blue velvet.

Herts, Decorators

A young girl's library with mission furniture made over in dull green striped with tan. Chintz curtains and net sash drapes are used.

The interior below is frankly Teutonic. Walnut walls, brilliant fabric on floor. Table of original design in walnut. Curtains of violet silk. Upholstery of violet velvet.

Paul Frankl, Decorator
A fireplace is almost always the axis of a room, the point on which the eye naturally focuses. Appreciating this fact, decorators have used their best resources to make it express at a glance the general character of the surroundings. When it is understandably used, it strikes the keynote of the decorative scheme, and greatly aids in giving unity to the arrangement. On the contrary, if unskillfully planned, it becomes a discordant note which disrupts the harmony that might otherwise be obtained.

When a woman has a particularly attractive feature, a nose that is perfect in its contour, a cheek that might tempt a painter's brush, or a chin that might grace a Grecian statue, she takes a small piece of court plaster and puts it where it will direct attention to that particular attraction. The ornamentation over the fireplace of a room may be likened to such a beauty spot; with this difference, however, that it is something more than a pointer, being, if rightly used, a vital part of the decoration itself. It is capable, even, of usurping the importance of the fireplace itself, so that one is conscious of the over-mantel rather than the object which it decorates. When this is the case, the importance of the over-mantel becomes correspondingly greater, and deserves the very special attention of the person rationally planning a home.

Over-mantels in the United States have gone the whole gamut of the development of interior decoration. The first over-mantels were those of Virginia, and were brought bodily by the rich plantation owners from England. Their descendants and the descendants of the other colonists could not afford to import such elaborate objects of art and there grew up the Colonial style, which in over-mantel decoration, as well as furniture, was a potpourri of the English styles that followed the one after the other, a medley of Chippendale, Sheraton, Hepplewhite and Adam ornamentation, with a mirror or a picture as the central piece.

The Colonial style still persists, and it has its undeniable charm, even though it may be lacking in individuality. It is immeasurably better than the product of the period of over-ornamentation in interior decoration, from which the country is only now gaining artistic relief.

The tendency of the present day is toward simplicity of arrangement, and individuality. This healthful development is one of the marked things in American decoration of the present day. It succeeds the era of extravagance, when American millionaires lavished their money on interiors, which decorators were willing to make ornate to the point of vulgarity because of the profit it gave. It must be said to the credit of the decorators of the present day that they are doing what they can to make their

**THE BEAUTY SPOT OF THE ROOM**

**Over-Mantel Paintings and Their Place in the Modern Home**

**PEYTON BOSWELL**

The architectural axes of this dining-room are clearly marked. At the end of one is the fireplace with its over-mantel mirror. The other terminates in a console surmounted by a Watteauesque panel that gives the room a just measure of color and life.
clients understand the essentials of beauty, as based on line and volume.

America now possesses many of the best paintings and objects of art that once belonged to the old world, and this is likewise true of fireplaces and over-mantels. Fireplaces have been taken bodily out of old English houses and placed in American homes, along with the paneling from walls and furniture of the period. Therefore, the development of the over-mantel as seen in this country must be traced in England itself, from the earliest times, when it took the form simply of a special arrangement of the oak paneling, with the arms of the family carved thereon, to the succeeding period of massive stone carvings, again with coats of arms chiseled and polychromed, down to the later delicacies of Chippendale, Hepplewhite, Sheraton and the Brothers Adam. Fewer in numbers have been the importations of hooded over-mantels from Italy, that reach almost to the ceiling, and of those from France.

The revolt from over-ornamentation, however, has brought to the front in this country the simple scheme of hanging a fireplace, whose lines are those of simplicity and beauty, a specially framed picture, a tapestry and other textile, such as a church banner, or perhaps a plaque or shield. This falls in well with the scheme to have simple rooms with fine proportions—a much harder thing for the architect and decorator to attain than the old lavish effects. Walls, neutral in themselves, are treated as backgrounds for objects of art.

This sort of over-mantel treatment is, in a way, a reversion to the simplicity of Elizabethan times, when, if a coat of arms were not used, the ornament most preferred was a painting, as likely as not a Dutch portrait.

**Flower and Fruit Pictures**

Light and cheerful effects, in the very best taste, have come with the use of flower and fruit pictures, which give a fine air of distinction to a room and have the merit of fitting in with almost any scheme of furnishing. So great has been the demand of pictures of this class that thousands of them have been brought from Europe in the last few years. A long list of capable artists of the past headed perhaps by Van Huysem, left these ornamental flower and fruit pictures for American home builders, as well as hundreds of their nameless followers whose pictures are also full of beauty.

Some of the most ambitious over-mantel schemes, transplanted from England, were placed in Castle Gould, at Fort Washington, by W. A. Herzeigen & Co. The dining-room is a stone hood on which is placed an old English coat of arms, polychromed, and in the library is a coat of arms and crest carved in oak. Other notable effects by these galleries are the elaborate Henry II over-mantel in the home of Mrs. T. A. Sperry, at Cranford; a stone Renaissance effect with the bust of a Roman emperor in Mr. Daniel G. Reid's residence at Irvington and the tapestry panel effect in Mrs. Guthrie's house at Locust Valley.

Warwick House inclines to the use of paintings, some tasteful examples being the over-mantels in the apartment of Mrs. P. H. Stewart, in New York, with an Italian effect, with a portrait, in the dining-room and the use of a Morland print in the living-room. Warwick House is doing a Georgian over-panel with a portrait in the Whiteclaw Reid country house at White Plains.

Especially dainty is an over-mantel in the bedroom of Mrs. George P. Baker, Jr., also of New York, comprising a little English pastel portrait in a Venetian setting, planned by Karl Freund. To the same decorator is due a beautiful over-mantel effect in the reception-room of Mrs. I. J. Herszeg's New York house, consisting of two Old English embroidery pictures set with mirrors. Typical of the Georgian style is an over-mantel done by Angelica Kauffmann for Rathfarnham Castle, Ireland, now on exhibition at Mr. Freund's galleries.
The design of the house is a combination of various typical New England Colonial elements modified. Houses much of this character are to be seen today in old Salem and Portsmouth. They date from about 1800. In the white panel blinds is also found a suggestion of Philadelphian Colonial influence. The scheme is simple and dignified.

The first floor plan shows a house-depth hall with library and drawing-room on one side and dining-room and service quarters on the other. The porches and verandas are paved with red quarry tile and the floors are white oak.

On the second floor the chambers are arranged in suites around a large hall. There is a plenitude of light and ventilation from numerous windows. Large closet space is also available. The rear hall arrangement is original.

The architecture has "come through" to the interiors, which have been finished in Colonial style. The dignity of the woodwork in the dining-room is typical of the general architectural backgrounds of all the rooms of the house. Incidentally, this overmantel treatment is an excellent example of the proper arrangement for that part of a dining-room.

THE RESIDENCE OF
HENRY W. BLAKE, Esq.
AT ENGLEWOOD, N. J.

HAYS & HOADLEY, Architects
FRESH BERRIES—WITH CREAM

Wherein the Wares of the Howling Huckster and the Avaricious Fruit Store Man Achieve that Elusive Perfection Through the Medium of the Home Garden

ROBERT STELL

THERE is nothing particularly musical about it—that elongated howl of the huckster beneath your window. Indeed, his voice is distinctly harsh when unmellowed by the distance, and his enunciation is atrocious. About all you can understand is that he has berries of some sort for sale, and that they are fresh; whether they be black-, straw- or rasp- is lost in the middle motive of his song in B-Flat. And yet, you are somewhat less than human if those two relatively understandable words do not make you hungry.

Naturally! Good berries, regardless of variety, are an epicurean treat in themselves. Notice, please, that I specify "good"—the ordinary fruiterer's "Yes, madam, very fine today—and only thirty cents a box. How many will you take?" is sometimes susceptible of doubt. Sadly enough, the same is often true of the leather-lunged huckster's vociferations; so when you really hunger for the best obtainable, I can offer just one bit of conscientious advice:

"Grow them yourself."

Strawberries come in for their share of attention elsewhere in this issue, so the paragraphs which follow have to do merely with the so-called cane fruits. Blackberries, raspberries, currants and gooseberries—these four are the most popular sorts in this country, and perhaps the most easily grown. Granted proper selection, a suitable location and the right sort of care, there is no reason why you should not raise fruit which, because it ripens on the stem instead of in the basket, and because it comes to the table indubitably fresh, boasts a perfection that the market product cannot hope to attain.

There is no mystery or magic about the successful cane fruit garden. It should have a fair share of sunshine, good soil (a trench dug 3' deep and filled with a mixture of 2/3 soil and 1/3 well rotted manure is best), plenty of moisture, and a supporting trellis for the blacks and raspberries. Early spring is the time for setting out, and while the crop for the first year will be negligible, the second season should see an abundant yield.

Provided the strip selected for the small (Continued on page 74)
THE WRITING ON THE WALL

HERE is an odd rumor. Some good woman, intent on having her home in the best of taste, writes, "I hear that pictures are going out. Is this true?"

The vision this conjures up! You see the Louvre and the Metropolitan deserted—windows boarded up, huge padlocks on the doors, weeds growing in the driveway, a policeman asleep on the top step by the entrance. You see the Sargents and the Henri disdaining the avenues rattling little tin cups, or going into the more lucrative business of laying bricks. You see the lovely Fragonards and Watteaux dumped on the garbage heaps of the city, along with the wornout discard of a day.

A mad vision? Granted. Yet if pictures were going out, the results might not be so different after all.

But pictures are not going out. The things genuinely essential to life never go out of fashion. They are integral elements, and the more the world becomes civilized the higher are they valued. To live without pictures would be as unthinkable as living without music, without rainbows, without good deeds and laughter. They are essential to life. They are essential to a home, which is the heart of life. They are as necessary to the complete decoration of the rooms of a home as chairs and tables.

EVEN before men thought of kindly deeds they took to drawing pictures on the walls and to fashioning the utensils of everyday life into things of beauty. An inherent craving was thereby satisfied. . . . In this year of grace, other cavemen fashioned things of beauty and cover canvases with visions of terrible and lovely things. Paris and London and Berlin are holding their exhibits of "trench" art. The latter-day caveman must seek some satisfaction for his soul in the midst of murderous warfare.

The artist stands in much the same position. His work marks the transition from the days of the past and the present, cave habits and civilization. His expressions of beauty, grown more marvellous with the years, have become more treasured. The same folk who lament the loss of life in warfare also lament the loss of great works of art, because art has become essential to life and to destroy the creation of a master hand is almost akin to destroying ruthlessly the tender life of man.

Consider the world without pictures and you conceive chaos. Pictures are stabilizers. They can be weighed against crime and passion and gross materialism and ugliness, and never be found wanting.

So then, when for some commercial purpose the rumor is spread abroad that pictures are going out, we might just as well throw all the good things of life into the discard. For when the appreciation of good pictures passes from us there will also pass the appreciation of honest workmanship, the sense of rhythm, the understanding of line and contour—expressions into which the vision of the artist crystallizes itself whether his medium be a chair, a vase or a painting.

ALL decoration is based first on the requirements of comfort and convenience. The chair must be comfortable to sit on—much more comfortable than the floor, else why chairs? It must be convenient—light enough to move about so that the furniture of the room can be grouped into centers of work and play—the window where we read and write, the hearth where we play and rest. The bare essentials of a room—a chair, a table, a bed—contribute to the bare essentials of physical existence.

But to stop decoration there would be as absurd as wearing no more clothes than are necessary to protect us against the elements. The caveman had his bench and his rockledge table. He also had his walls, and on them he scrawled his visions of mighty deeds and loveliness. It is the wall, then, that decides the final character of the room.

Read down through the history of architecture and you will find that invariably the architecture "came through" to the interior walls. The transition from one historic period to another was first a transition from one wall treatment to another. From the architecture that "came through" to the walls were taken the motifs that decided the character of the furniture. Between the outside environment (which created the type of architecture) and the chairs fashioned by cunning workmen, stood the walls. There has always been a writing on the wall that told men of the things which were to come to pass.

Against these walls we live and at these walls we look. They are backgrounds to life; they should be inspirations to living. What goes on them will stamp the individuality of the room and oftentimes the type of life lived in the room and the type of life of the age. The room in which life is active, busy, constantly stirring, requires a restful background to act as foil. When day-to-day life is of this character men must have walls that inspire them to peace and contentment. They must have walls on which they can read the hand-writing.

It is not enough that we have chairs to sit in and tables to sit at. If these were all we needed life would be of a very low order, indeed. We must be able to look upon walls that satisfy the demands of something more than the mere physical requirements of aching bone and tired muscle. We must have pictures on the walls.

THE good woman who wanted to know if pictures were going out had wisdom in her question. Bad pictures, cheap pictures, futile pictures are going out. The survival of the fittest functions even in art. There was also wisdom in her question because we no longer cover our walls with pictures. Our busy American life demands the soothing foil of restful backgrounds whereon men may look for peace and beauty enshrined as it should be—the new writing on the wall.

And in enshrining beauty as it should be lies the secret of modern decoration. Have only the necessary furniture in a room, but have it of honest workmanship, of good line and good proportion. Place it so it will be convenient and comfortable and shown to the best advantage. Let your walls meet the requirements of your life. Hang on them only such pictures as you will always be content and happy and proud to live with. And place them so that they will give the best that is in them to those who look upon their visions of light and shade for the things which life craves.

ARE pictures going out? Rather they are coming in. Americans need pictures. No nation under the sun needs them so desperately. No national soul stands in greater need of pictures on the walls.

We read that the currents of art are turning toward America. The demands of war have made Continental owners sacrifice priceless works for what they will fetch here. The ill wind has blown us this good opportunity. Slowly the art center is shifting from the old world to the new. Americans will be able to look upon it here at home—and even own—great works that hitherto they traveled thousands of miles to see.

Let us make the most of this opportunity. Let us cherish the works of master hands. Let us read the writing on the wall—the writing Americans can inscribe there themselves—the appreciation of pictures in the home.

THE FRANTIC ASTRONOMER

At night, before I go to bed, I look up at the sky:
I see the Dipper overhead
Hanging out to dry.

That Dipper, so isosceles,
Is hard at work all day:
To keep the Moon supplied with cheese
It churns the Milky Whey.

—Christopher Morley.
AN INTIMATE DOORYARD

An architect alone cannot make a house nor can Nature alone make one. Together they can create a work of great charm and beauty. Here the architect made the house—James T. Kelley's, at Philips Beach, Massachusetts—and Nature made the setting. That is how the intimate dooryard came to be. Kelley & Graves, architects.
THE DELICATE BEAUTY OF CHINESE PORCELAINS

GARDNER TEALL

Not to know something of Chinese porcelains, their history and their periods, is to be denied a pleasurable interest. The old porcelains of China are the ancestors of all the chinawares of the world, and never have the finest antique fabriques of the Celestial Kingdom been surpassed or even equaled in beauty and texture.

The potter's craft, as we all know, had its origin in the dim ages of the past. Even the discovery of true porcelain must be dated so far back that we have no authentic record of the era of its origin.

The literature of China ascribes the invention of true porcelain to some twenty-five hundred years before Christ, but we cannot be certain that the art of porcelain-making was known and practiced until, perhaps, after the 7th Century. While Chinese literature of the early periods abounds in references to porcelain, we have not a single authentic dated piece of the very early dynasties. It seems plausible to advance the theory that true porcelain was an invention or discovery of the Han Dynasty (206 B.C.). Okakura, an eminent Japanese connoisseur and authority, has suggested that to the alchemists of the Han Dynasty came accidentally the discovery of the wonderful porcelain-glaze.

The literature by Chinese authors of the T'ang Dynasty is rich in references to porcelain. The poet Tu (803-852), for instance, says: "The porcelain of the Ta-yi kilns is light yet strong. It rings with a low jade note and is famed throughout the city."

The fine white bowls surpass hear frost and snow."

The white bowls of Hsing-chou in Chihli and the blue bowls of Yuen-chou in Chekiang were highly esteemed and celebrated in song and story.

The Arabs and Chinese were conducting a flourishing trade during the 8th and 9th Centuries. To Soleiman, one of the early Arabian traders who wrote an account of his journeys, we owe the first mention...
of China in the literature of the world outside the Empire. "They have," said he, "in China a very fine clay with which they make vases which are as transparent as glass; water is seen through them. These vases are made from clay."

In the time of the Emperor Shi Tsung (954-959) of the brief Posterous Chou Dynasty established at K’ai-feng-fu prior to the Sung Dynasty, an imperial rescript ordered porcelain "as blue as the sky, as clear as a mirror, as thin as paper and as resonant as a musical stone of jade."

All the porcelain of the times we have referred to seem long since to have disappeared and the only knowledge of them which we have today is through the literature of their contemporary writers.

The Sung Dynasty (960-1280), the Yuan Dynasty (1280-1367) and the Ming Dynasty (1368-1643) open up to us a unique knowledge, as specimens of the time are available to students. The porcelains of the Sung and Yuan Dynasties should be classed together. The ceramic production of these periods could not be made of porcelain. It has been said of true porcelains of the Ming period that they look their age and that they never fail to disclose their period to the initiated eye. The cobalt blues came into favor in this period, and it is also the time of the famed "Mohammedan blue." European and American collectors have given a great deal of attention to the Blue-and-White porcelains that came in with the close of the Ming Dynasty. It was between 1662 and 1722, however, that the very flower of the Blue-and-White porcelain was produced. This marks the reign of K’ang Hsi.

The K’ang Hsi Period was the culminating one of Chinese ceramic art. Says Bushell (in "Chinese Art"): "The brilliant renaissance of the art which distinguishes the reign of K’ang Hsi is shown in every class; in the single-colored glazes, la qualté maîtrise de la céramique; in the painted decorations of the grand feu, of the jewel-like enamels of the muffle-kiln, and of their manifold combinations; in the pulsating vigor of every shade of blue in the inimitable 'blue and white.' Porcelains of the famille verte class pervade the period, while those of the famille rose class may be said to have ushered in its close. The greens that give the porcelains of the famille verte and the famille rose classes their names are indeed gem-like in their beauty. Precious, too, to the collector are the Blue-and-White or the Black Hawthorn jars of the period. Hawthorn is a misnomer, for the hawthorn blossom and not the hawthorn blossom furnishes the motif of the decoration.

"These charming jars, originally intended to hold New Year’s gifts of fragrant tea, are painted with a floral symbolical design appropriate to the season. The prunus flowers are bursting forth in the warmth of returning spring, while the winter’s ice seen through their meshes is just melting. Other jars are strewed with single prunus blossoms and buds reserved in white on a pulsating blue ground, cross-hatched with lines of darker blue to represent cracking ice."

**GlaZe AND Marks**

The master-quality of fine porcelain is its glaze and the glazes of old Chinese porcelains have never been surpassed. The (Continued on page 68)
The ever essential rose

Is More Worth While Today than Ever Before
—New Types and Varieties and How to Care for Them

F. F. Rockwell

It is unnecessary to enter any special plea for the rose. Since the dawn of romance and poetry hers has been the first place, not only in literature, in lore, lyric and lay, but in popular fancy and the affection of many as well.

In ancient Greece the rose was sacred to Aphrodite—who, by the way, was a feminist of parts, being the Goddess of Gardens along with her many other social, religious and irreligious activities. And the rose has been the most international of all flowers. It has graced the songs of the immortals in all climes. At the hand of the tent-maker in a Persian garden at Naishapur, or where Sappho touched her lyric lyre, or some Gaelic bard entwined it in his melodies, the rose has lent itself to the spirit of a people.

Ranging from the heavily scented, densely folded petals of deep yellow or dark crimson—gold and blood—to the frail but inexpressibly charming beauty of the most delicately flushed or purest white single form, it is small wonder that the appeal of the rose is universal; that in its infinite variety there is a flower not only for every person, but for every mood; and that while, in popular enthusiasm, other flowers may come and go, the rose loses not in favor, but goes on forever.

Ancient as the rose is, however, I think it is no exaggeration to say that within the last two decades more has been done to develop and perfect it, and make it universally available, than in all the preceding centuries. We have not yet reached the end. In fact, it is the well considered opinion of many of the best informed rosarians that at present we are only at the beginning of a new era in the development of this wonderful flower; and that the next few years will see even more remarkable results achieved than ever before.

Among garden roses, while we have forms and colors which leave little to be desired, there is much room for improvement in hardiness, in disease resistance, in good growth of foliage, and in continuity of flowering. Color; fragrance; flower (size, color, fragrance, form and strength of stem); ever-blooming tendency; character of foliage; and hardiness—all these characteristics have to be considered in any variety, so even the layman will readily see that it is a tremendous task for the hybridizer to breed a flower that will score anywhere near a hundred on all of these points. While rose breeding has been,
and must continue to be, mostly a labor of love, nevertheless more science and system are being brought to it every year, and these things are beginning to tell.

The Opportunity

But he who would have roses—and who would not?—need not wait for that rose millennium which some enthusiasts dream of. With the roses now available, they may be had under almost all conditions, and from one end of the season to the other—every day around the year, in fact, if you have some greenhouse space which may be devoted to them. The range of kind or "type," as distinguished from varieties, is not even yet recognized as widely as it should be; but information in that direction is fast becoming common property. One can now have roses, if the types are carefully selected, in almost any place where there is room for a plant to grow about the grounds—or, if put to it, in a window box. June is still the "month of roses;" but now, for every thousand flowers that morning brings and evening takes away, on the morrow we can have, if not a thousand more, at least a goodly number.

Factors of Success

No matter how many good roses there may be available, however, the price of success with roses must be a careful study of their requirements and eternal vigilance in seeing that they are supplied. To avoid plunging at once into a sea of detail in which the beginner might feel hopelessly lost, I have attempted to classify here, under four general headings which will be easily understood, all of the various things to which attention must be given.

First, the selection of suitable types, varieties and plants for such conditions as exist in any particular case.

Second, the providing of conditions which will be congenial and stimulating to roses in general and to the kind selected in particular.

Third, culture: such practice in the way of planting, cultivating, manuring, supplying moisture, fertilizing and pruning as experience has shown to be best.

(Continued on page 84)
Assembled above is a group of excellent furniture for a man’s study or library. The refectory table is of walnut, 30” by 78”, $77.50. Long bench, also of walnut, 15” by 72” by 17” high, $35. At back is a commodious oak Welsh dresser of Jacobean design, 20” by 66” by 74” high, $140. To right of table is a deep seated chair covered in denim, $90. It can be upholstered in any other fabric with relatively more cost. The small bench by it is walnut, 14” by 22” by 17” high, perfect for a smoking stand, $24.50. The chair to left of table, 34” over all, $27.50. The lamp is of Jacobean design executed in carved oak, 29” high, containing two lights, $31. Simple shade of shirred silk 26” wide, $24.

We believe in giving Father a chance, and this furniture has been especially selected for him. It can be purchased through The Shopping Service or we will supply the names of the shops when you write to the Service at 445 Fourth Avenue, New York City.
WHAT A FIFTY-FOOT GARDEN WILL GROW

Ample Returns in Fruit and Vegetables Achieved by System and Careful Distribution of Space

MARY RANKIN THOMAS

A FIFTY-FOOT garden can be made to supply the table of the average family of five permanently with fresh vegetables almost the year round. If supplemented with a three-sash hotbed it will furnish green things several weeks in advance of the season. If surplus vegetables are canned at home, the garden's products may be enjoyed during the entire year.

There are two things to be considered in planning a garden to give the best results, depending upon what the owner wants it to do for him. He may make a permanent garden which will include some of the berries, bush fruits, smaller truck garden, as well as annuals. Such a garden is better, not only for its greater bearing but because it is less expensive in the long run. But where a place is temporarily rented, it would be better to utilize the entire space for the short time vegetables. If there should happen to be too many for family consumption, during the summer, they need not be wasted, for canning may be done at home so easily and cheaply, and the canned vegetables are so good, that a supply of them would go far towards reducing the winter living expenses of the family.

The suggestions in this article are for a permanent garden, but the changes to be made for temporary planting would be the substitution of Irish and sweet potatoes for the fruit, rhubarb and asparagus, with the space given to more of the vegetables usually planted, the varieties and quantities being governed by family tastes. Potatoes are omitted from the permanent garden because they require more space and labor than can be given with the wheel hoe.

EXPENSE AND CARE

The expense of the garden may be small or great, the cost depending upon whether the work is done by a hired man or by members of the family. One plan is for the man of the house and his wife to assume responsibility for the garden, with the help of the children. If he happens to be the lover of nature which makes of him a born gardener, he will not pass on to a paid worker the pleasure that is to be found in digging the ground, in planting, in watching the little green things come up, grow, blossom, and mature. He will keep this happiness for himself and his family, especially for the children. It is well to have a man spread a two-horse load of manure over the ground and then plow it in deeply, so his work may be done by the householders in the early morning, and afternoons; for a little, regularly done every day, gives much better results than a day's work once or twice a week.

Vegetables should be planted in long rows running north and south, if possible, since they will then receive the maximum amount of sunshine and be easily cultivated with the indispensable wheel hoe. The old-fashioned beds the the idea of the past.

We will assume the garden to be a square 50' x 50', with a 2' walk down the middle. The permanent features, which will be taken up first, are the hoophouse, rhubarb and asparagus beds, and fruit. Place the hoophouse and plant the rhubarb across one side of the garden nearest the house, according to directions farther down. Then set out along the side fence, from the house to the back fence, and 2' from it, a row of twelve raspberries, 3' apart, either the old reliable Cuthbert or the new, ever-bearing St. Regis. Cuthberts are larger, but the St. Regis bears the first season after planting and continues to fruit until frost.

THE FRUIT TREES

Three feet from the back fence, on one side, place three Bartlett pear trees, or two Bartletts and one Duchess, 10' apart. Six grapevines are trained over the back fence, one Black (6' apart), three Niagara (white) on the other, 8' apart. On the opposite half of the garden, 3' from the back fence and on a line with the pear trees across the walk, place three peach trees, 10' apart, one Mountain Rose (early), one Elberta (mid-season), and one Late Crawford. Along the lower end of the fence on that side of the garden, place three plum trees, 10' apart, one Green Gage, one Abundance, one Burbank. Between the plums and the upper boundary line of the garden, set out five Victoria currant bushes, 3' apart. For a year or so, while the fruit trees are small, a row of early vegetables may be planted in between, such as lettuce, radishes, peas, or beans. The fruit may be planted in either the fall or spring, in October, March or April.

In the spring the first thing to do is to make the hotbed, which we will locate, in a space 6' x 9', next to the central walk and on a line nearest the dwelling house. This hotbed of three sash will give all the seedlings for transplanting, besides early corn, beans, and late lettuce and radishes for the table. The space should be dug out 15' deep and a little larger than the frame of boards which is built around it, 2' high at the upper side, 1' lower at the opposite side. Good stable manure is now put in to a depth of 18", then a 6" layer of good soil mixed with sand, half and half. The sash is put on and the bed allowed to heat. The temperature will rise rapidly for a few days, then subside. When it reaches 90° the hotbed may be planted. The best way to do this is to take a piece of board, 2' or 3' long, and make shallow rows by pressing an edge of the board into the soft earth, spacing the rows 6" apart. Now sow the tiny seeds and with the hand or trowel cover them lightly; then firm the soil with... (Continued on page 66)
THE GROUP IN FURNITURE ARRANGEMENT

Showing How Centers of Interest, Work and Play are Created and Space is Conserved

H. D. EBERLEIN and ABBOTT McCLURE

The group around this fireplace, as shown here and in the view opposite, is a work, rest and play center, the furniture being grouped according to its uses.

It is just as natural for furniture to fall into groups as it is for human beings. The primary essentials are, in each case, that the groups be composed of the right units and that they be in the right place in the room.

Since groups there will necessarily be either well or ill composed, either well or ill placed, it behooves us to consider the principles of their successful formation and management, for success in the composing and placing of groups is not the result of chance but of the application of fundamental rules.

A furniture group is a number of pieces of furniture brought together either because of some affinity of function that creates a bond of relationship between them or because of some obvious fitness in creating an agreeable decorative composition.

As an example of the former might be mentioned a tea table with several chairs and a "curate" or plate stand; or, before a fireplace, a sofa with small tables at the ends or a long table in back to hold reading lamps, books and magazines.

As a familiar example of the second sort might be named a console cabinet or table with a mirror hung on the wall above it.

The arrangement on axis is regular and balanced, giving the room the dignity bespeaking the tapestries, the fireplace hangings and the furniture, and conserving space.

Sconces flanking the mirror and chairs flanking the console cabinet.

The group need not be numerically large. Indeed, it may consist of only one piece. This sounds like an Hibernianism! The fact is that one often finds a piece of furniture, as, for instance, a coral red lacquer cabinet on a carved stand, that is so pronounced and concentrated in the emphasis of its characteristics that its force would be impaired by the proximity of other pieces. Of itself such a piece is fully capable of supplying all the decorative interest that one section of a room can stand without muddling the effect and bewildering the eye. It may properly be considered, therefore, a group of one, which it is potentially. Nor need such a piece be large of bulk to entitle it to classification by itself.

The units or individual members from which groups are formed may be classified, in the first place, as "wall furniture," such as cabinets, cupboards, tall secretaries, bookcases, mirrors and similar objects which, from the nature of their shape, structure or size, must necessarily be placed against a wall. In the second place there is the classification of "floor furniture," that is,
sofas, all the many different sorts of tables, chairs and the like which may either be set against the wall or brought out in the room.

In the same manner groups are to be classed as "wall groups" and "floor groups." A good example of the former would be a long table with high-backed chairs at each end; or a long chest above which is hung a large picture of decorative character or a Chinese screen. A "floor group" might consist of a long sofa facing the fireplace, backed by a table of the same length with a bench or form. This sort of grouping naturally admits of more latitude of arrangement.

**GROUP FORMATION**

Ordinarily the larger and more important pieces of furniture will become the natural centers about which subsidiary pieces will be grouped. If the larger things are well arranged, the smaller things, the mobiliary satellites one might almost call them, will of themselves fall into fitting positions. The composition of each group must in itself be restrained, coherent and logical. In forming these groups it is exceedingly important to divest one's self of preconceived notions that a certain object or a certain kind of object of necessity must enter into the composition of a room, or occupy a certain place in a room. One must take up the task with a clear, unbiased mind, being guided only by the immediate circumstances, unless one is prepared to put aside everything original or distinctive and to consent to plod along in a groove of sand-papered conventionality. An obsession in favor of a convention has spoiled more than one dining-room by insistently putting the dining table in the middle, regardless of the shape and general condition of the room, without realizing that the physical center is not necessarily the center so far as convenience and interest are concerned.

One of the illustrations shows an English dining-room whose owners candidly recognized conditions imposed by the architecture and made a thoroughly satisfactory grouping of the dining table and its attendant chairs in a bow window opening on a delightful garden. They had an admirable chance to spoil the whole effect by doing the conventional thing and putting the table in the middle of the room.

It is easy to deduce the plainly implied principle that a furniture group should be not merely a focal point of visual interest, but a focal point of practical utility and convenience as well. No matter how fine the furniture, there is no use in displaying its charms unless its system of grouping contemplates comfort and utility first of all. Comfort and utility must be the ultimate tests of the value of the grouping. Furniture that cannot be conveniently used on account of its placing or furniture that obstructs progress through a room is ill grouped. No decorative canon is valid if it is not based on these fundamental purposes of all furniture.

In starting out to arrange the furniture of a room and determine the location of the groups which the composition is to consist, the first step is to make a careful survey of the architectural facts which are to supply the background. At this point it will be a great aid to clear planning as well as a saving of experimental effort, to make an accurate floor plan of the room, or better still a set of duplicate blue prints of the plan, indicating the position of measurements to fireplace, door, window and fireplace openings, the projection of the chimney jambs and the position of all lighting fixtures and attachments. On this may be made several trial diagrams, working out the various grouping possibilities and deciding which best meets the requirements. This furniture diagram will be of value in indicating the architectural axes of the room, whether it is ultimately decided to arrange the groups on axis, in a more or less symmetrical composition, or off axis from the room.

**PLACING THE LARGE PIECES**

The next step after completing the survey of architectural features is to decide upon the logical placing of the larger and more important pieces of furniture, the nuclei of the group that will be completed later. And in this process we naturally dispose of the "wall furniture" first. In so doing, the character of the pieces themselves will, to a certain extent, determine their placement. For example, a long 18th Century Italian table will naturally have the longest unbroken wall space assigned to it. In most conditions, it would be a bad mistake to set such a piece in the space between doors or windows where it would barely fit it, leaving no room for chairs or other flanking objects. Such a piece demands sufficient space in which to dominate its own group. Moreover, the treatment of the wall space above it must be accommodated to the existing conditions.

In this matter of the relation between wall adornment and furniture grouping it may be observed that oftentimes a certain place has to be assigned to a certain

(Continued on page 90)
There's a breath of the sea and windswept dunes in this gull cretonne for the seashore house. It comes with black background, old blue and brown designs with birds in yellow, white and mulberry, or a putty background with tawny and blue motifs and yellow, red and tan gulls. 36" wide, 59 cents a yard.

Quite European in character is the quaint bird design going so well with early English furniture. On a black stripe are figures in greys, brown and putty. The cream stripe carries cool green foliage, musky and mulberry flowers, and brown and green crimson-breasted birds. 36" wide, 59 cents a yard.

To left and below, a linen that comes in a variety of backgrounds — mustard, black, white and natural linens with rose flowers, brilliant green foliage and bright colored birds. 36" wide, 50 cents a yard.

To right and below, a cotton taffeta wisteria, charming for the country house. Background is white, leaves cool green and flowers in natural violet or soft shades of rose. It comes 36" wide and is priced at 48 cents.

For the living-room, sun parlor or porch comes a gay cotton taffeta shown above. It is procurable in many color combinations, the best having a white background with black foliage and mustard, rose and blue flowers; another with mustard, musky and blue flowers. 48 cents.
COLOR TENDENCIES IN SPRING FABRICS

Despite unsettled conditions, the new linens and cretonnes are unparalleled for their variety of pattern and beauty of color. Nine of the latest fabrics selected especially for House & Garden readers are shown here with suggestions for their use. Names of shops will be gladly furnished or purchased can be made by writing to The Shopping Service, House & Garden, 445 Fourth Avenue, New York City.

We are recovering from Poiret—Heaven be praised!

A few years back the color cacophonies of Poiret and Hoffman gave the world a shock. But we took them into our homes, nevertheless, even though they weren't livable. The latest line of fabrics seems to be 'convalescing.' Colors are less startling though no less brilliant; they are blended. The designs are more natural and, on the whole, the fabrics are more comfortable to live with than of yore.

The most popular colors? Judging from the demands of those who shop early for their Spring fabrics, one would say that reddish lavender, navy blue and Alice blue combined with lemon yellow, and emerald and sage green are the predominant tones. Black and white as a combination, of course, has quite gone out.

And from these unsettled times we have reaped at least one benefit—the imported fabrics that used to fetch sky-high prices are now being copied in a more reasonable line by American manufacturers. Moreover, the increased use of linens, cretonnes and similar fabrics is evidently so encouraging to the manufacturers that, in spite of the conditions that exist in Europe, the Spring showing is resplendent with pattern after pattern showing originality and genuine worth in both design and color.

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A beautiful example of hand-blocked French cretonne, suitable for upholstery or curtains, comes with a putty color or black background and sprays of flowers in greens and browns, red, violet, tan and grey. 31" wide, $1.75 a yard

“A Jewel Cloth” is a new departure in domestic cretonnes. On varicolored back grounds, but particularly effective on black, are sprinkled gold dots. White trees and gay flowers are silhouetted against it. 36" wide, $1.35 dotted ground; 85 cents plain ground

The Jack-o’-lantern pattern on the chair and above comes in several shades of blue, crimson and violet against white. It is even more effective with a black background and orange, green and old blue motifs. 50 cents a yard

A very modern apple design fabric suggests the dining-room. On a white ground are brown twigs, green leaves, natural color blossoms and red and yellow apples. One color line is shown in the photograph above and the other—with a black background and violet apples—in the drawing. 36" wide, 85 cents a yard
SHINGLE AND THATCH FOR THE COTTAGE ROOF

Described by GUSTAVE CARETTO

Photographed by Glittle
dingle thatch is the roof culmination of the
cottage type of architecture. With any other
style this roof is out of place, for it calls pri-
marily for simplicity and intimacy.

INSTINCTIVELY all men love a
cottage in a dell. It would seem
to typify simplicity, intimacy and con-
tentment—virtues that we crave in an
age of complicated living and glacial
indifference to the things that count.
And so we visualize the cottage—a lit-
tle dwelling beneath a thatched roof,
a tiny giant with tousled hair.
While it is true that the cottage
type of architecture has suffered many
alleged improvements and modifica-
tions, the roof of the cottage permits
no such changes. Thatch, either in its
old form or in the form of shingles
laid to simulate thatch, is a sine qua
non in satisfying cottage architecture.

SHINGLE THATCHING

In the best style of
shingle thatching, the
shingles are laid 1½"
to the weather, there-
by making the thatch
ten or twelve courses
thick. This makes a
heavy roof and, of
course, a more ex-
pensive roof than one
on which the shingles
are laid regularly. It
has the advantage of
preventing leaks,
evertheless, a danger
current with shingle
roofs where the wood
warps under the heat
of the sun, especially
on the exposed courses
of ridges and eaves.
The choice of wood
to use for this pur-
pose is not restricted,
although white and
red cedar are prefer-
able. For this sort of
roofing cypress is too
stiff. These shingles
come in bundles of 250 each, and in
length vary from 12" to 16", 18" and
24". There is a varying width in the
individual shingles, and those that are
too wide the carpenter splits as he nails
them on the furring. In the course of
weathering the split becomes complete.
The foundation for shingle thatching
is composed of (1) the roof rafter
themselves, which in this case should
be especially heavy because of the
weight of the many courses of shin-
gles, augmented in rainy weather by
the quantities of water the wood
absorbs; (2) preferably a roof-boarding
or sheathing should cover the rafters
or forms, following the curves set by
them; (3) a heavy ply
roofing felt, on which
the thatch is nailed.

EAVE TREATMENT

The shingles are, as
has been noted, laid
in courses about 1½"
to the weather, re-
sulting in a very
heavy roof. At the
eaves there is a spe-
cial problem, caused
by the necessity of
accommodating the
straight pieces of
wood to the curve.
Here the shingles,
though of varying
widths on the roof
itself, are uniformly
cut very narrow, run-
ing from a scant
inch, or even less, to
about 2". By over-
lapping them the
problem of the curve
is overcome, and since
so many shingles are
used—they are some-
times six deep—there

The thatch simulation is successfully carried out with shingle in the curves and
valleys of this roof. It covers the residence of Mr. Burrows at Hartsdale, N. Y.,
of which A. J. Bodker was architect.
is little danger of penetration by water even in such an exposed place. It is always wiser, however, to break the joints, on account of the danger of warping in the cracks between shingles.

**VALLEYS AND FLASHINGS**

In open valleys, a curved piece of boarding is fitted in before the shingles are nailed on. On ridges the shingles are cut very short and laid close together, while on the actual angle of the ridge itself, covering the rear ends of the shingles, is nailed a piece of rabbeted wood covered preferably with copper or sheet lead. This insures that the ridge will be water-tight.

The flashings (small gutters or pans to be used in open valleys or at the angle of roof and wall) should be of copper. They are sometimes made of tin, but this is likely to rust and leak.

Various expedients are resorted to in order to give the desired impression of age and unevenness. The shingles, as has been said, are split in unequal widths, thus detracting from any effect of stiffness. The butt ends of the shingles are saved unevenly to form a wavy line. In some cases an occasional slight weak rafter is inserted in the roof, providing for a sag in the construction at intervals, and securing the rolling effect of an old roof.

It may be mentioned that it is possible to use a thatch of this sort at greatly reduced expense by laying the shingles at the ordinary width of 4½" to the weather, instead of 1½". This makes a very attractive roofing, although of course the effect of thatching is greatly reduced.

The life of a shingle roof of the first quality averages 20 years; of the second quality about 15. This is of course controlled in a measure by atmospheric conditions; sea air is very bad for thatch in our variable climate. When the roof wears out, it is necessary to re-shingle, a point to be borne in mind when considering the expense of shingling compared to other materials.

The life of any shingle is doubled by having it preserved by a stain. The stain of course depends on the design and color of the house; a preservative stain is advisable, for obvious reasons.

**RYE THATCHING**

Then there is the old-fashioned thatching which appears on English cottages—of which, as before noted, the shingle thatching is only an imitation.

For this type of roof, the first requisite is rye straw. Wheat straw is also good, but this cannot be procured here in the East. The straw—and this is a very important point—must be procured in bundles, not bales, for the straw in the bales is broken. The best thing to do is to take a trip up into the country, find some farmer who has a hay-loft full of rye bundles, and persuade him to part with what you need of it for a reasonable sum.

In this climate, before the thatch is applied, the roof must be wood-shedted—made into what is called a tight-boarded roof by the use of 3½" tongue-and-groove North Carolina pine over-rafters. Over this is laid a layer of 30-lb. asphalt-saturated felt. Then, on the felt, 1½ by 2' furring strips—18 centers—running the length of the roof. Another layer of furring strips, cross-ribs this time, goes above this; in dimensions the strips are the same, 1½ by 2', but they are laid with 9" centers. You will see that the general effect is that of a checker board with uneven squares, or rectangles.

**TYING ON THE RYE**

The roof is now ready for the thatch. The bundles should be untied and combed; then the thatch is re-made into little bundles, about as thick as one's fist, care being taken to keep the heads all at one end. With scissors or snips the rough ends of the bundles must then be evened off. Completed, the bundle is about 4" long, tied loosely about 6" from the butt-end.

Some bundles will be short and should be used for the eaves. The eaves are done first. The thatch is attached to the roof by means of a tarred, loose-spun twine, known as binding twine. This is tied to the end of the thatch, then wrapped around a bundle, and knotted with a running hitch—a sort of slip knot. In every case the butt-ends are placed upward, and the heads downwards.

When the first bundle is secured, a second is placed beside it on the roof—working alternately. One by one the thatch is tied to the roof. When this is done, the next bundle is placed, and a similar hitch is tied to the second bundle, and the process continued.

When the eave course is completed, a new piece of twine is fastened to the cross rib, just above the first course, and the second is begun. In this manner, building up roof over roof, the thatch is secured.

At the ridge a slightly different treatment is necessary. Take a bundle of the straw, tie it firmly at one end, wrapping the twine around it for 4" or 5". Part the other end of the bundle and split it, fitting it over the ridge, so that the tied end sits up on the ridge. Catch the affixing bundles in this way, until the ridge is covered.

The bundles should be secured underneath by catching them into the cross-ribs on both sides enough to hold them firmly.

When the roof is finally covered, it should be neatly smoothed over and combed. A strip as well as here the thatch is tanged on the ridge, it must be trimmed with scissors until it is even.

**THE LIFE OF THATCH**

The life of a thatched roof is about as long as that of ordinary shingles. It would not keep a roof in good condition for more than 15 or 20 years, were it not for the waterproofing beneath. This will keep the roof water-tight for a hundred years.

There is, of course, danger of fire. Another destructive, if less dangerous, menace is mould; something in the quality of the rye is supposed to be accountable for this, but it is not possible to choose so as to avoid its occasional attacks.

In this country, as in the case of shingles, the unevenness of atmospheric conditions encourages rot. In the course of time the rye weather a beautiful dull shade of greyish-brown, the very tone a cottage in a dell should have.

But—and this is a "but" to consider—its cost is expensive—an expert charges about $0.60 per square foot for the job.

So much for the details of application—somewhat boresome, perhaps, but vital and essential to a full knowledge of what the thatch roof should be. I have said but little of the broader reason—atmosphere—which underlies the use of this type of covering; for, after all, this must be seen to be understood.
In the bright lexicon of Pullman cars there are no names that compare with the life stories blazoned on the sides of the Birmingham Tally-Ho! coaches. Modern social opportunities, too, are tame.

BUCKS, FRILLS, and HORSEFLESH in OLD ENGLISH PRINTS

Ancient Gossip and Scandal that Lend an Air of the Ancestral to a Room

CLIFFORD POPPLETON

YOU are waiting one day in the roomy hall of some friend's country home, before a cheerful open wood fire, perhaps, what time George puts on his heavy shoes preparatory to joining you in an exhilarating tramp through the cold-whistling woods of early winter, when your glance leaves the dancing firelight for a moment and notes an old print hanging in a thin, black frame above the heavy oaken mantelpiece.

Your deep chair before the crackling logs is too pleasant to get out of, though, and you think, as you toast your toes, of the big snows that are due, and what times they must have had of it traveling in the old days before the limousine and the luxurious transcontinentals simplified locomotion.

Having a hazy liking for prints, scenes of ye olde English stagecoach days and that sort of thing, don't you know, you resolve that when George comes down, and it is really necessary to cease basking, you will take a good look at that fellow up there.

Your knees begin to get so confined hot, however (bless the fellow, he's had time to put on forty pairs of shoes), that you get up, and George arrives just as you are tip-toeing on the hearth with your muddy feet in an endeavor to look at the print and avoid scorching your shins at one and the same time—and not succeeding.

BEING a man of some practical sense, George takes it down, and leads you firmly over to the window-seat where you may admire it in comfort without danger of complete incineration.

"Fine old thing," says he casually. Mighty little cares he for your opinion; you are no collector.

"A Barouche." You read the title. 'Twixt that is a barouche. It is like nothing so much as half an eggshell, oval end down, suitably paneled, and sprung high and dry above four spindly wheels; a Cinderella's coach for fragility. How any woman ever got into one of these contrivances passes your comprehension. There's no step in sight, and it's four feet if it is an inch from the ground to the floor of the eggshell. Ah! maybe she was lifted in; that's the idea, decidedly. Some women were lifted in, anyway. 'Twould come natural to a gallant age, upon my honor.

But there's more in the print than a barouche, there is fine action. My lord Boldblade is on the box, hands full of reins and whip, and he is toiling four spanking grays down the road at fifteen an hour or you're a Dutchman. Two silk-hatted flunkies are perched up on a ledge at the back of the flying equipage.

"By gad, they're stepping it out!"
"How's that for horseflesh?"
"What an elastic motion!"
"Those fellows led a rare life."
"I should say."
"How much did it cost you?"
"Two hundred and eighty, at an auction in New York."
"For the love of Mike, what a price!"

The bidding started at ten dollars, and there were half a dozen in the game up to a hundred and fifty. It's a rare impression; engraved by R. Hixon, 1813."

"Any more around?"
"Yes, I'll show you sometime. Let's get out now, or we shall be back late for supper."

AND so it goes; George sells you one or two prints cheap, and you buy others whenever the chance offers. Sometimes you spend ten and sometimes fifty. It is a new excitement in life.

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IN THE GARDEN OF JAMES PARMELEE, Esq.
Washington, D. C.
CHARLES A. PLATT, Architect

Photographs by Gillies

The feathery foliage of arbor vitae and the richer green of boxwood hedging stand out in marked contrast to the lines and color of the brick and cement wall.

Approaching the garden from the side, five steps lead down from the higher ground. From them, the axial walk leads to a pool and fountain in the center.

Save for the rough flagged smaller pathways, it is a brick walked and brick walled garden. pleasantly relieving shadows are cast by the projecting bricks in the wall, which are regularly arranged.
Hollow tile, coated with rough-texture white cement plaster, forms the exterior walls. Pleasing contrast is introduced by ivory-painted woodwork, stone foundations and solid, dark green shutters. A really novel note of effective exterior development is found in the roof treatment.

A COUNTRY COTTAGE OF COMPACT LINES

WALLACE & WARNER, Architects

On the first floor an hexagonal hall is created by the provision for a small corner closet and a diminutive passage leading to the kitchen. From this passage stairs lead to the basement, a door being located at the landing to permit convenient and ready access to the cellar from outdoors.

Although the roof is of shingles, it is as rich in color variations as though mottled slates had been used. Prior to their application to the roof-tap frame, the shingles were dipped in several different shades of green stain and then applied at random.

The upper floor is marked by rigid economy in the allotment of hall area and by a proportionate prodigality in closet space. In addition to the storage facilities on this floor is a large attic store room above. The plan is compact and livable.
The fireplace is the focal point of the room. It is also the point about which furniture is naturally grouped. For this reason it should be given a decorative treatment that justifies its prominence. In the residence of George E. Turnure, Esq., in New York City, is the fireplace pictured above. Its dignity lies in the faithfulness of its architectural detail. In the broken pediment is set a basket of flowers. The simplicity of the mantel garniture is in keeping with the lines of the overmantel. Miles & Greenleaf, architects.
The livable living-room affords open restful spaces and the furniture is so grouped as to form centers of convenience and comfort. But there are winter centers and summer. In this view of the living-room of the residence of J. R. Schieffelin, Esq., at Monroe, N. Y., the centers of interest are for summer. The decoration is consistent in every detail from the hand-hewed beams and brocade fringed frieze to the broad floor boards. R. B. Smith, architect.

Nothing is more successful for the background of a room than wood properly paneled and finished. It has dignity, diversity of interest and warmth of tone. In the residence of William J. Tully, Esq., at Locust Valley, N. Y., wood has been used. It gives formality to the entrance and makes a perfect setting for the Gainsboro and the few pieces of well-selected furniture. Kenneth Murchison, architect.

The popularity of the Italian mode in decoration is unquestioned. It is sparse but comfortable, dignified but not too cold. Our American lives require backgrounds of this character. The dining-room to the right shows that mode consistently carried out in both furniture and architectural background. It is in the residence of W. W. Lawrence, Esq., at Watch Hill, R. I., of which Mott B. Schmidt was the architect.
The beauty about wicker, willow and reed is that they combine so well with painted furniture and with mahogany and walnut in informal rooms. The living-porch above, which is in the residence of George E. Ide, Esq., at Locust Valley, N. Y., is informal in its green lattice frieze and woodwork laid directly against the white brick wall. Mahogany and reed in natural tone have been successfully mired. The floor is of small red tiles with fur and Indian rugs thrown over it. The davenport by the fire are comfortable and well placed.

J. Gamble Rogers, architect

Dining-rooms and bedrooms require only the essential pieces of furniture. An example of this is seen above, in the residence of C. L. Brokaw, Esq., at Glen Cove, L. I. The walls are plain, interest being given by one or two French prints. The curtains are simple and dignified. The furniture is conducive to restfulness and the lighting is so arranged as to give the maximum of service and effectiveness.

Charles A. Platt, architect

An unusual entrance hall has been created in the residence of Dwight Holbrook, Esq., at Hartford, Ct. The floor is of large flagstones laid irregularly in wide white bonds of cement. The woodwork is hand-adzed with white plaster panels between. Above are lights of leaded glass in small panes. An outside fireplace is built in one corner. R. F. Barker, architect
The English iris, above and to the left, is the oldest cultivated species in the western world. An excellent example of the best use of these splendid plants.

The true Iris Germanica is purple and yellow, and though closely related to the so-called "German" hybrids, is not identical. Hybrids above and at the right.

FLOWERS OF THE RAINBOW GODDESS

GRACE TABOR

Iris flowers last from three to six days. Cut them before the petals unfold, to get the fulness thereof. Never bunch them in vases, but arrange singly, with a leaf or two, in a Japanese flower holder set in a flat, shallow bowl of water. This alone preserves the character of the flower and leaves.

No flower is so happily named as the iris, namesake of the rainbow goddess; for what but the rainbow's self is of such color as the iris? Look carefully and for a long time into the depths of almost any common iris flower, and you will see these colors come out more and more, as it were—see them glistening on it much as they play on the filmy surface of a great bubble. Like the rainbow in very truth, here is a flower that shatters the shafts of light which fall upon it into countless tiny darts of pristine color, so that the entire range of the spectrum's scale plays under the vision of the close observer.

That this is not true of every part of the flower I am perfectly willing to admit, but that it is true of the heart of the aver-

In their native land Japanese iris flowers attain a diameter of 12" or more.

Iris Sibirica, tall and free growing, has been in our gardens a century.

Iris flowers of the rainbow goddess are divided into races associated with certain races of human beings. We are all familiar, for example, with German iris; most of us have heard of Japanese iris; some recognize Spanish iris when they see it growing; to others the English iris is familiar; and most of us, I think, have heard of Florentine iris.

Now considering that here is a family that practically girdles the globe in the northern temperate zone—the greatest num-

Look long and carefully into the depths of an iris flower and you will see a wondrous play of rainbow colors.
bers are found between about 33° and 40° north latitude—it is evident that there must be a great many more races represented than those named; and also it is evident that German iris and English iris cannot come from either of those countries. So this system of classification is somewhat out of joint, as it were.

**The Iris Varieties**

As a matter of fact, there is just one iris entitled to be called German iris: *Iris Germanica*, so named by its official sponsors long ago. It is native to central and southern Europe, blooms usually in May, is purple with yellow beard, and is not the parent of the great mass of hybrids which pass generally as “German” iris. These are closely related to it, it is true, through a percentage of allied species; but *Iris Germanica* itself has but few varieties, being a reluctant seeder and therefore not a promising species for the hybridizer.

The lovely Florentine iris is usually one of the parents of the so-called Germanica hybrids. It is *Iris Florentina*, the earliest flowering of the tall and showy kinds, with large flowers of a gleaming greyish white over which the color I have already mentioned plays remarkably. The oxis root of the chemist is the root of this species; and flowers and root both have the delightful, refreshing odor. This is also native to central and southern Europe, and a near relative of *Iris Germanica*. A natural pure white variety of the species is found in Spain and the Levant, which is distinguished by the varietal name *albicans*. Both the species and the variety are lovely.

Perhaps the most striking difference between the few true Germanica hybrids and the Florentina hybrids is the fragrance of the latter, and the lack of scent of the former. Still another fragrant species is the Juno iris (*Iris pallida*), usually violet in color and closely related to Germanica, save for the scent and the later flowering period. It blooms about a month later, or along in June. The variety *speciosa* of this is lovely, with light blue flowers borne on long stems.

The commonest iris of our gardens generally, that is, the so-called German strain, but properly Florentine or Italian. The yellows and browns have been introduced through crossing with *Iris flavescens* or *Iris variegata*, or perhaps both. The first comes from the Caucasus and has bright light yellow flowers raised on long stems, showing darker yellow bearding; and the second is from Turkey and southern Russia, with deeper coloring generally, the outer segments of the flower, or “falls,” being richest, warmest brown like old port wine, while the inner segments, called the “standards,” are bright yellow veined with the darker shades. Once fixed in the mind, these species will nearly always reveal themselves in their hybrid offspring.

With the Japanese iris we take up a totally different race—as different as these people of the Orient from whose land they come are different from the people of the western world. The plants form strong clumps, but the leaves are thinner and enormous, and a month later in bloom than all other irises which we have.

This species is *Iris kaempferi*, or *Iris laevigata*—the names are synonyms—native to Japan and the eastern portion of Siberia. The first plants were brought from the Orient to Ghent away back in 1857; but for some reason, popular interest in them has only recently seemed to awaken. In the beginning, of course, only the hybrids produced by the wizards of Japan were available; but western growers have taken a hand and developed some lovely varieties. All from Japan are supervised by the importations of the one species, bred by careful selection rather than by crossing, but the European growers have hybridized *laevigata* with *setosa* (which is also a Japanese species).

**English Iris and Others**

The species which we call English iris (*Iris siphoides*) is said to be the longest of any in cultivation, in the western world. It came originally from the Pyrenees Mountains, and differs from the species already discussed in being a bulbous-rooted plant. The Spanish iris is also bulbous rooted, and there are numerous others belonging to this division which are not generally cultivated. These are offered in the fall usually along with other bulbs, for fall planting. They are perfectly hardy and will multiply rapidly when once established. Certainly no one ought to be without them, for there is no more graceful flower in the entire family than these two. I couple them, for they are closely akin, and very much alike, although the Spanish iris shows greater color variety and contrast. This blooms earlier than the English, and is more delicate in flower and leaf. Its proper name is *Iris atropurpurea*, but dealers list it as *Iris Hispanica*, while the other so-called English iris is sometimes dubbed *Iris Anglica*. In ordering it is well to remember this, for otherwise a catalog may not do justice to either one, although both may be available.

A rather recent development in the hybrid world is *Iris intermedia*, a cross between a dwarf form—really between a hybrid of this dwarf form—and *Iris Germanica*. The results of this crossing bloom earlier than the iris species, and *Iris pumila*, the other parent, is a sturdily little early blossoming species of great merit and hardiness. Sometimes its flowers are purple and sometimes they take a notion to be yellow; and there are varieties which are white and deep purple and a true sky blue. This last, indeed, is one of the really

(Continued on page 74)
The room above was created in the residence of J. J. Toohey, Esq., at Sutton Manor, New Rochelle, New York. Rough-hewn chestnut stained a deep brown was used for the timber work. Where necessary, the walls were filled in with wall board, painted with a rough plaster preparation and sprayed with a mixture of Van dyke brown, Sienna and mucilage to give the necessary antique effect. Curtains are printed linen of a grapevine pattern. The radiator is covered with draw curtains and made to simulate a bookcase. Furniture and ship lanterns are in keeping with the spirit of the room.

COMPROMISING WITH THE EAVES

Five Schemes for Attic Rooms

Executed by H. BERESFORD STANTON

Compare the construction sketch above and the floor plan. They tell the whole story of the man's den to the left. Hand-adzed timbers or boxwork to simulate timber divide the room into a workshop, an inglenook and the larger floor space. Curtains can be drawn across the door of the workshop and the room made snug for entertaining. The furniture can readily be procured in any shop at reasonable prices.
The solution above compromises with an ugly wedge in the roof. Timber work and wall board form the frame for a lounge and bookshelves. The curtained space above hides smaller discards. The space below the cushioned lounge is a locker. The glass door on the right conceals pigeon holes or a cellarette. An old chair in a cretonne cover gives a spot of color. The rug can be of fibre and the furniture is such as any house or shop provides.

Below is an ordinary attic room created without timber work. The walls are stenciled into panels and the same design is repeated in the curtains and edge of rug. A lively color combination—green and purple, yellow and blue—will add interest. The walls can be painted and the floor stained. The furniture should be simple and comfortable. Mission pieces could go well in such a room.

Above is another solution for the type of room shown opposite. The room is enclosed with a bookshelf. In one corner an imaginary fireplace has been created around a gas or electric stove by curtains and a valance. The same fabric is used in curtaining. A striking color effect could be obtained by painting the floor a dull red and using rush colored mats. The walls can be rush color, the ceiling and the space above shelves a lighter tone, and the seats and shelves upholstered and painted in red. Such furniture as the room requires represents but a small outlay.
Problem 1 may be taken as one type of foundation planting where formality is called for by the architecture of the house. The plan is at the right, and the key to it is shown directly below.

**Problem 1**

**PLANTING LIST FOR PROBLEM 1**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Best stock, large pieces</th>
<th>Best stock, but smaller pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thuya occidentalis, common American arborvitae</td>
<td>2 plants 7'-6&quot; $10.00 5'-6&quot; $5.50</td>
<td></td>
</tr>
<tr>
<td>2. Thuya occidentalis</td>
<td>3 plants 5'-6&quot; 8.25 4'-4½&quot; 5.25</td>
<td></td>
</tr>
<tr>
<td>3. Thuya occidentalis</td>
<td>1 plant 3½'-4' 1.25 2½'-3' .80</td>
<td></td>
</tr>
<tr>
<td>4. Thuya occidentalis var. Wareana, Siberian arborvitae</td>
<td>2 plants 3'-3½&quot; 5.50 1½'-2' 1.50</td>
<td></td>
</tr>
<tr>
<td>5. Thuya occidentalis var. globosa, Globe arborvitae</td>
<td>1 plant 3'-3½&quot; 5.00 2'-2½&quot; 2.00</td>
<td></td>
</tr>
<tr>
<td>6. Thuya occidentalis var. globosa</td>
<td>12 plants 15'-18&quot; 10.00 9½'-12' 3.50</td>
<td></td>
</tr>
<tr>
<td>7. Taxus cuspidata var. capitata, Japanese yew</td>
<td>7 plants 1½'-2' 9.00 9.00</td>
<td></td>
</tr>
<tr>
<td>8. Taxus cuspidata var. capitata compacta, Savin juniper</td>
<td>17 plants 1½'-2' 16.00 1½'-3' 8.00</td>
<td></td>
</tr>
<tr>
<td>9. Juniperus chinensis, Chinese holly</td>
<td>14 plants 2'-3½' 17.50 15½'-18&quot; 10.05</td>
<td></td>
</tr>
<tr>
<td>10. Helictotrichon stevenii, English ivy</td>
<td>50 plants 1 yr. 5.00 5.00</td>
<td></td>
</tr>
</tbody>
</table>

**Planting List for Problem 2**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Size</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thuya occidentalis, common American arborvitae</td>
<td>5 plants 4'-4½'</td>
<td>$8.00</td>
</tr>
<tr>
<td>2. Thuya occidentalis var. Wareana, Siberian arborvitae</td>
<td>4 plants 2½'-3'</td>
<td>8.00</td>
</tr>
<tr>
<td>3. Retinospora filifera, thread-branched Japanese cypress</td>
<td>2 plants 2½'-3'</td>
<td>5.00</td>
</tr>
<tr>
<td>4. Retinospora plumosa (Chamaecyparis plamosa var. plumosa), Japanese cypress</td>
<td>6 plants 1½'-2'</td>
<td>4.00</td>
</tr>
<tr>
<td>5. Picea montana var. muhlingii, Mugo pine</td>
<td>9 plants 1½'-2'</td>
<td>9.67</td>
</tr>
<tr>
<td>6. Rhododendron hybrid, alpine azalea, tall white hybrid rhododendron</td>
<td>6 plants 2½'-3'</td>
<td>12.50</td>
</tr>
<tr>
<td>7. Rhododendron hybrid, Beadle de Neiger, dwarf white hybrid rhododendron</td>
<td>9 plants 1½'-2'</td>
<td>9.00</td>
</tr>
</tbody>
</table>

Bulbs which might be used among the evergreens

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Tulipa Kaufmanniana</td>
<td>25 bulbs</td>
</tr>
<tr>
<td>9. Tulipa carata red</td>
<td>25 bulbs</td>
</tr>
<tr>
<td>10. T. hildelgerdtii</td>
<td>25 bulbs</td>
</tr>
<tr>
<td>11. Narcissus poeticus var. recurvus</td>
<td>20 bulbs</td>
</tr>
<tr>
<td>12. Lilium regale</td>
<td>12 bulbs</td>
</tr>
<tr>
<td>13. Lilium speciosum</td>
<td>12 bulbs</td>
</tr>
</tbody>
</table>

**PLANTING LIST FOR PROBLEM 2**

**SIX SCHEMES FOR THE FOUNDATION BORDER**

ELIZABETH LEONARD STRANG

A certain amount of planting is necessary around the base of the house in order to soften the harsh lines and temper the architecture with the surrounding landscape, and to convey to the owner and the beholder alike that feeling of comfort and repose which is essential to a full appreciation of life. No other type of planting must bear such close inspection; yet, despite that fact, the majority are ill-conceived and unprepossessing.
The solution of Problem 3 depends on the right use of flowering shrubs. Climbing roses are also used, and a few well chosen twigs for early bloom. Key and plan below and to the right.

**PLANTING LIST FOR PROBLEM 3**

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Quantity</th>
<th>Size</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Berberis Thunbergii, Japanese barberry</td>
<td>18 plants</td>
<td>15/2'</td>
<td>$3.25</td>
</tr>
<tr>
<td>2. Deutzia Leucata, Leucotea</td>
<td>10 plants</td>
<td>3'4'</td>
<td>2.50</td>
</tr>
<tr>
<td>3. Hydrangea arborescens 'Bleu de cilindro', Hills of Snow</td>
<td>4 plants</td>
<td>2'3'</td>
<td>1.40</td>
</tr>
<tr>
<td>4. Forsythia fortunei 'Golden Bell'</td>
<td>3 plants</td>
<td>4'5'</td>
<td>1.50</td>
</tr>
<tr>
<td>5. Eumomona alata, Winged evernous</td>
<td>5 plants</td>
<td>3'4'</td>
<td>3.90</td>
</tr>
<tr>
<td>6. Viburnum cassinoides, white rod</td>
<td>5 plants</td>
<td>3'4'</td>
<td>3.75</td>
</tr>
<tr>
<td>7. Viburnum farreri, white flowers in June</td>
<td>14 plants</td>
<td>2'3'</td>
<td>4.20</td>
</tr>
<tr>
<td>8. Viburnum opulus, large cluster, white flowers in summer</td>
<td>4 plants</td>
<td>2'3'</td>
<td>1.60</td>
</tr>
<tr>
<td>9. Buddleia alternifolia var. magnum, summer blue</td>
<td>14 plants</td>
<td>2'3'</td>
<td>4.20</td>
</tr>
<tr>
<td>10. Darwin tulips</td>
<td>25 bulbs</td>
<td>1.00</td>
<td>.30</td>
</tr>
<tr>
<td>11. Deutzia Leucata, Leucotea</td>
<td>10 plants</td>
<td>3'4'</td>
<td>2.50</td>
</tr>
<tr>
<td>12. Hydrangea arborescens 'Bleu de cilindro', Hills of Snow</td>
<td>4 plants</td>
<td>2'3'</td>
<td>1.40</td>
</tr>
</tbody>
</table>

Some common mistakes are: overcrowding; lack of consideration for the individual form of the plants, and their inharmonious choice in regard to environment or to the type of building which they are intended to set off.

Next to no planting at all the worst effect is gained by too much. Some places which have been planted for immediate effect suffer from overcrowding after a few years and need the removal or at least thinning of some of the plants. In this instance the maintenance and not the original plan is at fault. However, many people have no idea of what foundation planting should look like. It is a mistake to engulf a house in billows of planting, from which it rises like a boat amid billows of spume; nor desirable to surround it with formal hedge-like lines of shrubs. In some places the foundations should be visible, and the height of the planting should bear a definite relation to the building.

**PLANTING LIST FOR PROBLEM 4**

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Quantity</th>
<th>Size</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pseudotsuga Douglasii, Douglas spruce</td>
<td>7 plants</td>
<td>3'</td>
<td>$14.00</td>
</tr>
<tr>
<td>2. Buxus sempervirens, tree box, spirea</td>
<td>3 plants</td>
<td>15'/ high</td>
<td>3.75</td>
</tr>
<tr>
<td>3. Ilex opaca, American holly</td>
<td>2</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td>4. Forsythia fortunei 'Golden Bell'</td>
<td>1 plant</td>
<td>3'4'</td>
<td>1.00</td>
</tr>
<tr>
<td>5. Berberis Thunbergii, Japanese barberry</td>
<td>10 plants</td>
<td>23/4'-3' bushy</td>
<td>3.00</td>
</tr>
<tr>
<td>6. Philadelphus grandiflorus, large flowers, orange</td>
<td>6 plants</td>
<td>4'5'</td>
<td>2.50</td>
</tr>
<tr>
<td>7. Viburnum opulus, hedges for screening service at sides</td>
<td>3 plants</td>
<td>3'</td>
<td>.50</td>
</tr>
<tr>
<td>8. Viburnum opulus, large bush</td>
<td>2 plants</td>
<td>3'</td>
<td>.50</td>
</tr>
<tr>
<td>9. Viburnum opulus, large bushy evergreen</td>
<td>6 plants</td>
<td>15'/2'</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Flowers in front of shrubs:

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Quantity</th>
<th>Size</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Thermopsis Carolineana</td>
<td>3 plants</td>
<td>5.45</td>
<td></td>
</tr>
<tr>
<td>11. Dorothea de Nemours</td>
<td>2 plants</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>12. Clematis paniculata, Japanese Virgin's Bower</td>
<td>2 plants</td>
<td>.30</td>
<td></td>
</tr>
</tbody>
</table>

Flowers in front of shrubs:

**Key** is often wrongly used, with consequent incongruous effects. Here in Problem 4, however, the Boston variety is entirely in keeping with the architecture and surroundings. Key and plan below.

(Continued on page 70)
The soil should be well prepared in advance of transplanting time. A good sized trowel is convenient for digging the holes. The soil should lie well prepared in advance of transplanting time. A good sized trowel is convenient for digging the holes. Then set in the plant, taking care not to put it so deep that its crown is even partly covered with earth. The strawberry bed, or rather, the plants, must be snugly "tucked in." This is very essential to best results later on. Strong as is the plant's tendency to spread it must be controlled by removing the runners. Good cultivation is also required. Without a proper mulch, the berries are apt to gather particles of earth, spattered over them during rain storms. Without a proper mulch, the berries are apt to gather particles of earth, spattered over them during rain storms. The summer mulch of straw goes under the fruit clusters, which are lifted to admit its being placed in position. The summer mulch of straw goes under the fruit clusters, which are lifted to admit its being placed in position. A Year-round Photographic Study of Plant Manners and Customs. A Year-round Photographic Study of Plant Manners and Customs. By WILLIAM C. McCOLLOM. A Year-round Photographic Study of Plant Manners and Customs. By WILLIAM C. McCOLLOM. HOW THE STRAWBERRY SEES IT THROUGH. HOW THE STRAWBERRY SEES IT THROUGH. You can go through the bed from time to time, looking for the plant runners and removing them. You can go through the bed from time to time, looking for the plant runners and removing them. Here is what you get if you follow the year's work consistently. Here is what you get if you follow the year's work consistently. Even in winter home-grown strawberries are entirely possible if you have a greenhouse in which to grow and ripen them. Even in winter home-grown strawberries are entirely possible if you have a greenhouse in which to grow and ripen them. And in the fall comes the regular winter mulch, to prevent the destructive heaving of the ground during temperature changes. And in the fall comes the regular winter mulch, to prevent the destructive heaving of the ground during temperature changes.
ESSENTIALS IN BEDROOM FURNISHING

The Sleeping, Beautifying and Boudoir Groups

The furniture of a bedroom may be divided into three groups: the sleeping group, the beautifying group and the boudoir group.

The sleeping group consists of the bed or beds and night stand, and possibly some sort of a screen. Beds, to be sure, seem no longer beds, so diverse are their classes. There are twin beds, day beds, davenport and convertible couches. Headboards have gone out. Now one buys two footboards and makes a day bed by stacking the frame with pillows. An old-fashioned bed with heavy white pique spread and starched pillow shams is such a curiosity that one asks to be taken upstairs and shown it. But, however attractive, they have become the modern painted beds with cretonne or taffeta covers, one must regret the passing of the comfortable — although ponderous — American walnut, heavy with ornament and stiff with starch. They were beds that were beds. Fortunately, the real four posters with valances of glazed chintz or fringed white seersucker and feather mattresses have never been entirely ousted from country houses. They still remain to keep us warm on wintry nights.

DIVERSE DAY BEDS

Day beds are excellent where one wishes to use a bedroom as a sitting-room, for while the day bed serves the same purpose as a bed, it looks more like a couch. Made of wood, painted and striped, they may be covered with a pretty cretonne and silk cushions of the color one wishes to bring out in a room. An iron bed—using two footboards—may be painted and decorated and made to look most charming. Besides, no one will suspect its humble origin.

In one room I know of—a room that had also to serve as sitting-room—was a very interesting 4' day bed. The bed had low wooden ends, and from the middle of each ran a flat slat. Against this slat on either side were placed cushions. Drawn before the fire one could either face the fire or the room. At night the slat was removed, leaving the full bed, 4' wide. A most charming pair of twin beds was made of beech, well stained and rubbed down to resemble Italian walnut. The lines were simple and straight, the head and foot boards being of equal height and open. In the middle of each was a flat simple urn motif, gilded and turquois or blue taffeta piped with deep rich yellow. An oblong strip of the taffeta covered the flat pillows, and at each corner was a blue and gold tassel that kept the cover taut and straight. Over the windows was a deep ruffled valance and from them hung deep cream net curtains. The valances were the interesting note of the room.

In another room an unusual day bed was done in old ivory with tiny lines of robin's egg blue. The head and foot boards rounded back in an interesting fashion. An English block print was used for covering. This was repeated at the windows. The thin ivory under-curtains had a ruffle of picot edged with blue ribbon the same tone as the day bed striping. The carpet and upholstery were rose.

It is always unfortunate when a bed has to be placed at an angle, particularly when it sticks out into the room. In a room with many doors and windows this arrangement almost seems a necessity. If, however, one of the doors or windows is unnecessary, we can place the bed crosswise in front of the opening and proceed to create a draped bed.

THE DRAPED BED

First hang some soft material, sateen or silk, in straight folds from the top of the trim to the baseboard, gathering it on a rod top and bottom to hold it taut and in very straight folds. This background should cover the entire trim. If the opening is not as wide as the bed, extend the background to the required width. Fasten a 6" valance board out from the top of the trim and from this hang a straight ruffled or shaped fitted valance. If one does not wish to use a valance board, one can use a rod with a 4" or 5" projection and hang the valance from this. A second rod will have to be (Continued on page 78)
C O N V E N I E N T D E V I C E S F O R T H E H O U S E

Every day some genius is devising new methods and new articles that make life more secure, the home more comfortable and labor easier. This page is devoted to such ideas. If you have the genius for such devices, remember that an idea is worth a dollar and that the Editor can be addressed at 445 Fourth Avenue, New York City.

THE PANELED WALL

Wall board, an interior finish at once simple, useful, effective and economical, has gained great popularity. Yet, despite its many advantages, results from its use have frequently been unsatisfactory because of its tendency to expand and contract, as well as the structural difficulties sometimes encountered. To remedy these defects and to simplify installation, a new type of flange moulding has been devised.

This moulding consists of a flat foundation piece grooved into which the wall board fits, and two locking strips that complete the decorative moulding around the panel. Headers and furring strips are not required for the installation, although they assist—and nailing is reduced to a minimum. Expansion and contraction are automatically provided for by the groove so that there is no occasion for the board buckling.

A number of designs in the moulding assure the proper styles for period rooms. Stock lengths come 10', 12', 14' and 16' in yellow pine. Other designs are in oak, gum, birch and mahogany.

A WALL SAFE

Only opera stars and chorus girls can afford to have their jewelry stolen. The rest of us folks forego the publicity and see that our jewels are safe at night. The bookcase method is a bit antiquated, and if you hide your jewelry beneath the mattress you are sure to forget it. The only safe method is to put the jewels in a safe.

For the convenience of those who do not possess a large portable safe, there is devised the little wall safe illustrated in the center of this page. The heavy metal box, built into the wall, becomes a part of the structure. A strong steel door with a dependable combination lock will make even the most persistent burglar change his mind.

The heat can be kept at a luscious level by a little machine attached to the radiator and concealed by the radiator box.

STATIC TEMPERATURE

Heating apparatus has almost become human when it can adjust the temperature of a room of its own accord. The boxed-in radiator above looks totally incapable of sensitive reaction, yet the machinery concealed in one end does exactly that. A volatile liquid, held in an hermetically sealed drum, expands or contracts upon the least variation of temperature, imparting movement to levers which open or close the shutters of the grill. Any degree of temperature between 60° and 80° is easily regulated and the room is kept at that exact static point desired. All the heat which is given out is used for the actual heating of the room.

This attachment may be applied to a radiator already in place. It consists of the machinery described above and the radiator case. When bought new as a unit, the device costs complete from $36 for a 12" to 17" radiator up to $68 for the 44" to 96" size. In its lines, the cover for the radiator has decorative value that enhances the beauty of the room.

FLAMELESS COOKING

American housewives have long since become accustomed to the advantages of fireless cooking. To the left is an electrical device that further reduces labor.

You put the meat or food in the cooking compartment and turn on the current. Then set the automatic clock to the time required. At the expiration of the predetermined time the heat will be shut off automatically by the clock, but the cooking goes right on because the imprisoned heat contained in the cooker cooks the food. Aluminum semi-circular containers enable you to cook two or more foods with the same heat at one time, and the beauty of this arrangement is that you do not have to stand around watching. Complete, $25; without clock, $19.75.
Keep your fruit trees headed low, so that you can work them comfortably without having to climb about.

Easter Sunday.

1. Lawns must be attended to, any new pieces acceded down and the necessary nodding done. There is neglect of the lawn.

2. Scolds can now be sown of all the favorite kinds of vegetables, such as onions, beans, melons, leek, cucumber, turnip, radish, parsley, saltwort, fennel, etc., and are set out a good distance apart. All those that last all season to one side.

3. New plants of rhubarb, horseradish, asparagus, Jerusalem artichokes, etc., can be set out. Old beds of rhubarb should be divided and lifted, the ground thoroughly enriched with manure and the plants reset.

4. Start hardening off the greenhouse in the cold frame all the vegetable seedlings which were planted indoors, such as lettuce, cabbage, cauliflower, tomatoes, etc., and all the flower seedlings, such as begonias, scarlet and sweet peas.

5. All hardy, annual flowers (except those that have been forced in the greenhouse) can be planted out in a good soil which has been well prepared before. These plants can be forced again after two seasons cut-out doors.


7. Set out a strawberry bed now. Use plenty of manure, the ground deep, plant good varieties, cultivate frequently, and keep the runners picked. You will have good fruit. See page 33 of this issue.

8. By planting potato early, you can usually avoid damage from the summer drought. Use good fertilizer, such as manure, and make the seedling formable and keep the soil well enriched with manure for the seedlings to grow.

9. All borders should be dug by this time. Rose beds, perennial borders, shrubbery plantings, etc., should have the mud turned under. Put a liberal amount of horse manure on the roses for the best results.

10. It is safe to sow in the garden now all the more hardy types of flowers, such as asters, balsam, petunias, sweet peas, etc. This is for those who have not a greenhouse where the plants can be started early.

11. All perennial plantings that are to be changed must be attended to at once, that's to say, dig up and divide those plants that are growing too fast; this will also help them recover from transplanting.

12. It is advisable to shade flowers in the greenhouse at this season, as the sun, if it is strong, will scorch the tender plants. Carnations will answer. Colorful flowers, particularly carnations, require this shading.

13. This is positively the last call for spraying. Very few Others will be injured, and it will then be too late. Carefully look over your fruit trees, roses, Japanese quince, evergreens and other plants.

14. Place in frames for the summer all the plants in pots that you are preparing for and keep the runners picked. You will have good fruit.

15. Cuttings of all types of shrubbery should be made some time during this period. Put them in a cold frame and they will make good growth.

16. Start setting the ground ready for fall crops. It should be dug and manured with a barrow until the snows show.

17. Start using weed killer on walks and gutters and other places where it is not practical to scuffle. All ground that cannot be dug up should be scuffled.

18. Start transplanting hardy bulbs, plants in the greenhouse at this season. This will prevent their being injured by the frost. The soil must be Rockwell soil for the best results.

19. Make arrange- ments now for spraying fruit trees in the greenhouse with promenade of lights, as the night is coming on. This will also help them recover.

20. If you haven't any melon frames, sow those that you will have in the greenhouse, as they are the best. This will also help them recover.

21. Start cutting grass early; there is nothing going by cutting it off. Don't let it grow until it is long that you have to rake it or pull it off the lawn; make a practice of cutting once a week, for the sake of appearance and succor.

22. Successive sowings must be made of peas, beets, carrots, cucumbers, tomatoes, melons, leeks, and spinach. It is important that these vegetables in small numbers be sown at frequent intervals.

23. If properly done, "killing off," the more hardly types of flowers, such as seedlings started inside can be set out now, including cabbage, cauliflower, beets, carrots, and more. It is not easy to have any greenhouse now, you can buy plants.

24. Carnations can now be planted out in the garden. If the season is late, cover them with a blanket or hula wire, and also help them recover from transplanting.

25. Make arrange- ments now for spraying fruit trees in the greenhouse with promenade of lights, as the night is coming on. This will also help them recover.

26. If you haven't any melon frames, sow those that you will have in the greenhouse, as they are the best. This will also help them recover.

27. It is now safe to divide the seed of any kind of flowers. We rarely do this during the winter months, but in most cases the more you divide and set the frames over the hill in order to warm the soil thoroughly before spring they will the sooner bear more.

28. Don't put off thinning out those vegetables you have been composting. Hill the peat when in full flowers and you may kill some bees. This is a great aid to fruit.

29. If your asparagus is short, the crowns are too near the surface. Hill up the rows, covering with six or eight inches of earth. If the grubs are boring the shoots, turn your chickens on the bed; they will clean the grubs and they will also eat the shoots.

30. Warm vegetables such as pumpkin, squash, string beans, etc., and many small fruits, such as currants, can, currant, or gooseberries, etc., may be sown now. If you have a continuous wet spell, postpone or set a class of plants for a day or two.

For winter's rains and rains are over, And all the season of storms and snows; The days dividing over and over, The light that loses, the light that wins, And time remembered is grief foretold, And frosts are slain and flowers begotten, And in green under and cover; History is chasing history from the spring begins.

The full stream feed after siesta, The fire hows the shadow of the clouds, The faint fresh flame of the young year flares From leaf to flower of fruit; And fruit and leaf are round and free, And the oat is heard among the grasses, And the hoofed head of the beast is on the chestnut-husk. —Swinburne.

This Kalendar of the gardener's lebors is intended for understanding for undertaking all their tasks in the month of April and it is fitted to the latitude of the United States, but its service should be accessible to the whole country if it be remembered that for every one hundred north or south there is a difference of ten or twelve days later or earlier. The morning garden operations are given and, of course, for an average season.
Spring comes when we begin to think of it, when we plan for the furnish- ing of that summer house. The shoppers have gathered these unusual articles with that end in view. If they can serve you by purchasing them, or if you would know the names of the shops where they are sold, write the Shopping Service, 445 Fourth Avenue, New York City.

Unusual china makes a great deal of difference to the appearance of the country house table. This hand-painted place plate is in delicate colorings with variegated flowers in soft tones. The border is formed by two lines of dark green. $2.50

Because of the bold, gay coloring, this tea or coffee set recommends itself for the country house. It consists of a large plate tray, tea pot, sugar bowl and creamer. Tray has upturned edges and is 10" wide; teapot, 7" high and 3" wide. It comes complete for $22.

Among these hand-painted pieces of Slavonic work is one that trill serve perfectly for a cake plate. On the center background of dark blue are gay colored flowers and a bird. The border is conventional with a narrow blue rim. $7

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Imagine this on a sunny hall table—8" high, of green Italian pottery with a center border in a Greek key design. It may be had for 50 cents.

The bowl can be had in mulberry, blue, yellow, green or rose. Stand of black glass to resemble teakwood. $1.50 complete.

The living-room table will take this vase of Deruta pottery in an antique Italian shape. 12" high. $10.

The arm chair, which is of wicker, may also be had in the rocker form, 50 cents extra. Seat 21" wide, 19" deep, back 30" high. $14 in natural willow, $1 extra for staining any desired color. The willow stand may be used as a garden basket, or in the house for magazines, 20" high, $3 in natural willow, $1.50 extra for staining. The wicker bird cage comes at $8.55 and stained at $9.25. Behind is the Royal Hollyhock cretonne. Background of broad black and grey stripes with large floral groups in soft lavender, purple, rose and green. May also be had in combinations of light tan and grey stripe with blue and yellow flowers. 50" wide. Price is $3.75 a yard.

In the parlance of the trade this Brighton day bed is known as a "super easy." It is upholstered in down and covered with a yellow, import- ed hand-blocked linen, $143. The linen is 56" wide. The day bed is 5'6" long. It may also be had in walnut, mahogany or oak legs as well as the ivory. If material is supplied the price is $125. The screen, 5'8" high, has mahogany frame with a satin filling in all colors desired. $12.50. The floor lamp of black decorated lacquer has a table in center; 4'9" high. $23.50. A pagoda shade of silk with alternating shirred and brocaded panels—21" wide. $30.

April, 1917
PLANTING THINGS TO GROW AND LIVE
D. R. EDSON

With this article, the fourth of a series getting down for inexperienced gardeners the things they should know about plants and plantings, Mr. Edson takes up the actual work of putting the seeds and plants in the soil. The series commenced in the January number and will continue through several more issues.—FORSTER.

WHENEVER Dame Nature gives us a real, true, gratuitous impulse, it is usually a good plan to follow it. The person who does not long to get out and plant something when the brown grass begins to green again, and the birds come back, and the earth smells sweet and clean, is so exceptional as not to be worth considering. Man flatters himself that he is helping and improving upon Nature, but that subtle dame is only using him for her own ends!

Whatever may be the secret source of that which urges man or woman to put seeds in the ground and set out plants, the work itself should be done in such a way that the seeds will grow and the plants will live. Gardening has its technical, work-a-day side as well as its inspiration. Hence the beginning gardener must devote some time to studying the tools of his occupation.

Now is the time to plant. It is in the air. Everything wants to grow—will grow with half a chance. There is only one trouble with spring; as the universal planting time—it is too short. The cold nights or the wet weather or the late frosts seem to hang on interminably. And then, before one knows it, the hot, dry weather has arrived and it is too late to do many of the things which we had planned.

SHORTEN THE WORK

How can the spring planting season be lengthened? There is only one way, and that is to shorten the work. To do that, you must plant long before "settled" weather has arrived. The most important preliminary work is to know exactly and definitely what you aim to accomplish in the garden this season.

A great deal of the work which is usually left until after the planting actually begins may just as well be done a week or so beforehand. The tools should be in hand, the beds prepared and fertilized, all seeds bought and nursery stock and plants ordered before a single seed is put into the soil. If you see to all this, there will be a good chance that you will get all your planting done on time, and done with time enough to have it done carefully and properly. Otherwise there is bound to be a rush, resulting in hasty and carelessly done work.

The plant foods for your various gardens should not only be ordered but be actually on hand by the first of this month at the latest—manure enough to give a 2" or 3" coating to the garden and to work into the top soil of beds of hardy perennials, etc. If this cannot be obtained, procure "commercial" cattle or stable manure sufficient to take the place of it. These latter materials have been put through a standardizing and drying process to make them uniform. In addition to this, obtain high grade fertilizers enough to give a dressing at the rate of 400 to 600 pounds to a quarter of an acre. A small supply each—25 pounds or more according to the size of your garden—of nitrate of soda, bone meal, dry blood, word, and, if you can find any this season, muriate of potash, should be obtained in addition to the above and used as suggested in the following paragraphs.

Such plants as you may be expecting to get from a local source, both vegetables and flowers, should be selected some time in advance of your actual need of them. In picking them out, do not be guided by the size alone; the stockiness, growing condition and the hardiness of the plant are all more important than the size. A plant of any kind that has grown so rapidly or under such cramped and coddled conditions that it is weak and "lumpy" will receive a serious setback in transplanting, even if it is not lost. A much smaller plant with firm wood, with a good dark color, planted at the right time, will soon outstrip it in size and general thriftiness.

EARLY PREPARATIONS

The earlier you can plant such things as you will be getting from the florist or nurseryman the better. (Continued on page 96)

A good garden line is a sure guide in getting the rows straight. A stick is convenient for marking them out

Few seeds are expensive, so do not economize in their sowing. Some of them will fail to germinate

Small seeds like lettuce and carrot are best sowed direct from the hand, letting them slide through the fingers

Lima beans may go in a double row in a wide trench. Space them about 4" apart each way as shown here

With the back of a garden rake the seeds can be covered easily and quickly from each side of the row

Watering in dry weather makes for easier work when it comes to thinning out the growing plants
IRON FENCES FOR THE PERMANENT PLACE
Choosing the Design and Material
H. P. THURSTON
Photographs by courtesy of Anchor Post Iron Works

IT is part of the wisdom exercised by Americans that when they build a house for a permanent home, they make the surroundings of that home also permanent. As quickly as possible they acquire the atmosphere of that place having always been there and always intending to be there. They transplant large trees, they make good drives and paths, and lay down lawns that will be a joy forever. Then they fence it in.

Time was when a man walked in his property. Nowadays a garden and a lawn are considered things one shares with his neighbor and the passers-by. And to make that boundary permanent and to share that property with the public there is no better type of fencing than iron.

It costs more than wood. Naturally, but it lasts longer, and there is no limit to the choice of designs to select from. It may be rigidly simple. It may have all the decorative rhythm that graced the old iron work of ancient Italy and Spain. The cost is the crux of the decision. But to those who build for permanency and plant for permanence the matter of cost is a negligible factor when they come to fence for permanence.

DESIGN AND MATERIALS

The fence oft proclaims the property, just as the house proclaims the man. It should be chosen with a view to giving the property a fitting boundary mark. In some instances the strictest simplicity is most desirable with only a simple elaboration at the gates, such as a woven wire fence with iron posts and rails. In other cases the design can be elaborate, a thing of beauty in itself. This distinction between the purely utilitarian fence and the fence that is also decorative is well to make and consider carefully.

The purpose of the purely utilitarian fence, besides marking the boundary of the property, is to keep out intruders and keep on the place the stock preserved there. It should be non-climbing and as nearly indestructible as possible. The non-climbing fence requires a barbed wire flange extending from the top rail toward the road side. It will be sufficient to dissuade the most persistent intruder. The requirements for the decorative fence include these same general principles, although its protective capacities need not be so pronounced.

Also, before deciding what fence to use, it is advisable to look into the materials employed.

A simple design with acorn posts is found on the property of Mrs. Florence Alker at Great Neck, Long Island. It gives a pleasing uniformity of fencing.

The gate is the logical accent point in the design of the fence. It can be elaborate as on the Bossert estate or simple as in the property of W. J. McDermott, Esq., at New Brunswick, New Jersey.

The decorative possibility of the iron gate has reached a high plane on the estate of Louis Bossert, Esq., at Bay Shore, Long Island. It is flanked by low evergreens and has a background of noble trees that make it a charming transition between the street and the garden, having some of the characteristics of each.

The permanent fence must be constructed of material that will resist the decay influencing the elements. In all cases it should be galvanized iron covered with a coat of rust-resisting paint to make the safety doubly secure. The posts should permit of such secure anchorage that they will resist sagging and wind pressure. Upon the posts will depend much of the permanence of the fence, in appearance as well as usefulness.

These are the main facts to be considered whether one is contemplating the fencing of an entire estate or only such small plots as a tennis court or a garden.

AS TO COST

The cost of such permanent fences ranges from $2.68 a linear foot for the woven wire type up to several dollars a foot for the elaborate designs. To this item must be added the cost of labor which in different localities will fluctuate. The lay of the land and the nature of the soil are also factors in computing the cost, since the posts must find firm anchorage, whether the soil be clay or rock, and there are the occasional obstructions that cannot be overcome.

Picture the fence as it will be in place on your land, and you find that there are several accessories that will add to its effectiveness. These may be a privet or barberry hedge set a foot or so back from the line of the fence, stone posts over which vines are trained, or in the case of the woven wire fences, rambling roses. In other words, the fence is but a factor in marking the boundary. Its hard, cold iron must be tempered with the warmth of flowers and foliage. It is a transition between the street and the garden and should have the characteristics of both.
KNOWING THE WILD MUSHROOMS

ORIN CROOKER

The best way to make a beginning in the study of mushrooms is to secure a thoroughly reliable manual on them. Browse through certain parts of this before making any effort to gather specimens, though on first sight it will appear no more intelligible than a classic in the original Greek or Hebrew. But it is essential to secure a preliminary knowledge of the different parts of these fungus growths, and this the book will help you to gain without leaving your sitting-room.

By studying the plates and illustrations in the book you will become familiar with the anatomy of the mushroom, and learn to know its parts.

FIRST STEPS IN IDENTIFICATION

This elementary knowledge may seem confusing enough, but it will give an idea of what to look for when gathering the first specimens. You will expect, of course, to make no use of these for food no matter how well the description may appear to tally. Indeed, some students never attempt to use the edible mushrooms until they have spent at least one season in study and observation. This, however, is not strictly neces-

The common edible mushroom, both in a wild state and under cultivation, is Agaricus. There is some resemblance between it and the poisonous Amanitas.

There are a few varieties in almost any vicinity about which there is little or no question. The student soon becomes familiar with these. Using them for food—once he has become acquainted with them—will serve to keep up his mushroom enthusiasm.

It is impossible to record in a popular article the characteristics by which the edible mushrooms as a class may be told from the poisonous fungi. There is no set and fast rule to follow. Further than this, however, is the fact that specimens of the same species differ so much that any directions set forth here might be very readily misconstrued by the ambitious amateur.

There are many so-called "tests" published from time to time in the press and in circula-

Some Common Edible Species and What They Are Like

(Continued on page 80)
**SHIPS THAT NEVER WENT TO SEA**

Old Models Now in Demand for Decorations—Their Makers and Their Use

COSTEN FITZ-GIBBON

There is something about the sight of a ship that lays hold of and captivates the imagination. It matters not whether the ship be a full-sized craft that "goes down to the sea" bearing those "that occupy their business in great waters," and stretching the network of commerce from port to port, or whether it be only a little model; it carries with it a potent spell whose fascination neither the habitual globe-trotter nor the veriest sea-dreading stay-at-home can escape. The inherent grace of line in the hull and, if it be one of the old sailing craft, the forest of rigging and the spread of canvas silhouetted in sharp relief against the sky, hold the eye by an almost irresistible attraction. Besides all this, there is a compelling appeal of mystery about a thing fashioned to meet and battle with the primal forces of nature, forces too vast for us to tame to our bidding and harness with any puny device of modern rectilinear and meticulous exactitude and to which we must, perforce, accommodate ourselves.

All these wholesome sensations of wonder and awe and admiration, and the memories of not a few threads of romance too, are called forth in just as vivid reality by the ships' models, which now enjoy such an absorbing share of popularity, as by the real, that actually plough the seven seas.

The Sailors' Votive Offering

"What are these ships' models and why were they made?"

The answer is many-sided, just as many-sided as the conditions that called them into being, and in order to give an intelligent explanation of their existence one must be permitted the indulgence of presenting an historical retrospect. The beginning of our story is wrapped in the mists of antiquity. In Egypt,

"Those were the days of clippers"—like the Red Jacket, which sailed from Sandy Hook to Liverpool in thirteen days. She was built in 1863

There's a fine romance behind this frigate which was made early in the last century by Peter Connor from bones saved from their meals in ancient Greece and in the early days of Rome's maritime greatness, seafaring men were wont to dedicate offerings to the gods either to propitiate them and ensure safety to themselves from the perils of the deep or else in thanksgiving for an escape from death by shipwreck. These first votive offerings seem to have been in the form of sea-stained garments hung in the temples or at shrines, but they eventually gave place, in part at least, to the models of ships which were suspended in a conspicuous position.

This same time-honored and picturesque custom was transferred from the old pagan days to the Christian era and, persisting through the ages, became widely prevalent in the 15th and 16th Centuries and remained thereafter in habitual practice. In the seaport towns and fishing villages of Brittany, Normandy and Holland, especially, but also to some considerable extent in England and in various parts of the Continent, ships' models as votive offerings were suspended high in air before the altars and shrines in cathedrals and churches. Those who have seen them thus displayed can never forget how strikingly graceful and impressive they always are.

Blessing the Boats

In Catholic countries their votive use has continued to the present day, even as it was in the "ages of faith." To cite but one specific instance, throughout the length of the nave and aisles of the Church of Saint Pierre, just off the south coast of Newfoundland, ships' models are hung in mid-air by long chains depending from the roof, and these votive offering ships have a very vital meaning to the inhabitants of the island whose livelihood is based upon the harvest from the sea. Every year at

As mantel decoration for the library or man's room, few objects have such value as a good model. It lends a sense of strength, with not a little tang of the sea.

This is shown by courtesy of Mrs. Charles Platt

In the living-room a ship model affords a fine spot of action and interest. It can stand on a table or shelf or be hung by wires from the ceiling beams. Complete in every detail of gear and stick, it will bear even careful inspection at close range, while its effect as a whole is always striking. Model by courtesy of Charles Platt, III, Esq.
Rogation tide there is a solemn procession, in which all the islanders join bearing banners or candles, from the church to the quay where the ship, once a century, is raised out of the sea, not to go to its harvest of fish and prays for the safe return of those who are about to set forth with the fleets for the banks. It is a solemn and touching ceremony; the people's all is bound up with the season's catch of fish and there are perls a-plenty ahead for the hardy fishermen, perls of which they are almost cer-
tain never to come back. This ceremony blessing the sea for the fishing is exactly compar-
able to old English Rogation tide proces-
sion to bless the fields and “beat the parish bounds.” The significant thing to our immediate purpose is that an im-
portant feature of the procession is a ship's model—a new one is made every year—which is, with great state to the quay and then, after the ceremony, is returned to the church as a votive offering and hung up in the silent navy along with its predecessors of foregoing years. The same practice, with slight local variations, prevails in plenty of other places. In Protestant coun-
tries, although this votive significance has ceased, the popularity of the ship's models has more or less continued in certain localities.

OLD SALTS' HOBBY

Quite apart from any religious connection, there were various other occasions that gave rise to the making of ships' models. Many a sea-
man, too old to follow the sea any longer, has, in fancy, monotonous hours by making a model of the ship whose rigging he climbed in his lusty prime, reproducing with pains-
taking care and exactitude every well remembered detail. Some of these models, pathetic little labors of old men's love and pride, are ad-
mirable examples of skillful work-
manship. So also are many of the models made as a diversion during enforced idleness or confinement by prisoners of war, especially some of the French sailors held prisoners in England in the latter part of the 18th Century. Some of these accu-
rate and beautifully made models are constructed entirely of bits of bone gradually accumulated from the meat supplied with the daily food and it often required months of patient waiting to secure a bone large enough for a mast or spar. The fragments of bone were whittled into proper shape, nicely fitted, polished and riveted together until, at last, the finished product was to the monu-
ment of patience and skill although it was some-
times less than a foot in length.

A careful study and analysis of the models states that “it has been estimated that some of the ships took from two to three years to build and another half-year to finish.” The best models were the most accurate models conceivable. Of scarcely less interest and almost incredibly deft workmanship are the models of the ships' models to be found hanging from the ceilings of some of the houses of artists particularly recently at any rate, in several old London water-
front taverns, bartered by sailors on shore leave in pay-day for cigarettes at the price of a night's carousing with a party of cronies.

SHIIPWRIGHT'S MODELS

Equally interesting as examples of craftsmanship-
ship and mastery of nautical design, though not perhaps as extensively admired by connois-
ers as some of the specimens just noted, are the models made by shipwrights in the 18th and early 19th Centuries. These models were
not merely images but really models made faithfully to scale in the minutest particulars, and this fact can only increase our respect for the skill of those who fashioned them.

Nearby every kind of craft that ever floated is represented in the models of one period or another and of various nationalities—Chinese junks, Spanish galleons and caravels, high-pooped English and Dutch merchantmen of the 17th Century, 18th Century "ships of the line," square-
rigged East Indiamen, schooners, everything in

While the usual material of their construction is wood, they were also made of sand or other substances. Bone models, made by French prisoners of war, have already been mentioned. Occasionally a tiny model is found executed in ivory. Then, again, others were fashioned all of metal. The writer heard the other day of a French model made entirely of gold and silver which the price was estimated at $600 and doubtless there were plenty of others, made under similar conditions, that cost as much or more.

In the early part of the 19th Century it was frequently the practice of marine insurance com-
panies, both here and in England, to require of the ship's owner a model of his vessel before insuring it and this model was deposited in the insurance company's office, or occasionally in the ship's owner's counting house if it was being built or stand so that it could be placed on top of a bookcase or desk. While this custom lasted, many of the finest old square-rigged ships and, in fact, the admixture of a few admiring souls who, one after another, have cherished them for nearly a century.

Sometimes the models were cut in half and mounted, as here, in a shallow box realistically painted. Courtesy of Joseph Patterson Sims, Esq.

It is only recently that the collecting of ships' models has become a hobby, but in a quiet and less extensive way they have been cherished and collected by a few individuals or institutions as mementos of a past era. The largest collection is that in the Rijks Museum in Amsterdam, where a large room is entirely de-
oted to displaying important commercial vessels in the various stages of construction, the majority of ships' models for many years had such financial value as the owners chose to attach to them. An admiring admirer was willing to pay for the pleasure of acquisition.

Now the conditions have wholly changed; the old models are being prized for the value of having once been set upon the tops of such pieces of wall furni-
ture as bookcases, secretaries, high-
boys, or cabinets or even upon a side table conveniently placed.

Again, there is many a model would make, all by itself, an admir-
able memento of a lifetime. Especially if there is a plain panelled white chim-
ney-piece to act as a foil. Then, as a very different, and a fascinating way it is, of displaying ships' models is to hang them by a chain from the apex of a ceiling to churches with the votive ships. Shown in this way they seem to have more life and animation, as well as new individuality that they might display when fixed in a rigid cradle. In a large room this method is to be fol-
lowed. For it is possible to do so, but no more advantageous or fairer way of using a ship's model could be devised than to hang it in an open stairwell, as was done in the churches of old. It can be hung with a view-

GOOD PLACES FOR THEM

The accompanying illustrations will suggest various other applications of the models to decorative purposes and will probably induce some to think that model enthusiasts are to be commended for their wisdom in reviving interest in a rich resource that was all too blindly disregarded until the present vogue began.

To be sure, one would scarcely care to place a ship model, however small a boudoir or among the formal lines of a period dinner service. Those are not fit settings for anything as full of the spirit of the open as these miniature frigates and clip-
pers, with their delicate lines, so true to the real ships; so well displayed to the last stick and bit of gear. By no means do they call for a niche surrounded by all the trappings of an indoor forest. On the contrary, they do best when fixed in a place of intrinsic strength, to which they bring an enlarged touch of atmosphere as refreshingly of the sea.

In addition to the uses already suggested for these ship models, in dining-rooms, stair well and parlor a particularly promising one is in the out-
door use. At present, mention may be made of their peculiar approp-
riateness for the real man’s room. Such a room in the West Indies or in the tropics, for instance, or to them in the impression they make, the old-time craft some of whose originals made seafaring his a record in the old sailing days of two or three generations ago.
W. & J. SLOANE
Interior Decorators    Floor Coverings and Fabrics    Furniture Makers
FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK
WASHINGTON, D. C.    SAN FRANCISCO, CAL.
For Your Garden

Left to right—York, $5.50; trowel, $5.50; bulb planter, $1.00; dibbler, $.25; daisy grabber, $.65.

Wicker Garden Basket, complete with tools as illustrated, $10.50.

Garden Tool Sets—Three sizes, $4.50, $5.75, $7.00.

This Garden Trellis is painted green with the figure of the bird in colors. It comes in two sizes, 24 inches high, $2.00; and 30 inches high, $2.75.

THIS year let your garden be a real success. Don't let it deteriorate into a tanglewood of good intentions. Nothing can make your home more attractive than flowers; nothing can make your table more appetizing than fresh vegetables. And nothing can bring results like the proper tools. You will find them all here.

Lewis & Conger
45th Street and 6th Avenue
New York

Bucks, Frills and Horseflesh in Old English Prints

(Continued from page 40)

Dear old prints, they are as human as cronies; all the gossip and scandal of their period is in them. And the gossip is as fresh and diverting to-day as when it was first whispered, or our dollars would never have sacked a couple of English centuries for the sake of the prints thereon.

I know dull dogs who probe about the main interest of old prints lying in the method of reproduction, and not in the subject reproduced. That is all my eye, dear reader, take it from me. Those old boys have doddered after the technical details of processes until they are no longer conscious that a print is a picture. At the liveliest it is a diagram to them, a mere plan.

Tut, tut, the play's the thing, as ever.

I promise you I have seen the model of those spectacled technical sharps swooping over a batch of joyous sporting prints, and sourly sorting them according to the kind of reproductive used (line, aquatint, lithograph, and the devil knows what), with never a grin on his lean, old visage. There is some truth in the plebeian observation that it takes all sorts to make a world.

The old prints are simply the results of an early instinct for kodakery. The bucks and blades of a dozen decades ago had no cameras so they sensibly set Mister Engraver to work to preserve pictorial memos of frolicking stot, arse and acooch, if I may say so. And the engravers took the tip and made a mint of money at it, I hope. Maybe some of the old prints caused trouble when they were new, just as a scandalous snapshot will. It is a moot point whether the Duke of York would have taken out the lovely Miss Clark in his curricle that bright afternoon in 1810 had he known the event was to be perpetuated in a print. For all I know he might have obtained the consent of the Duchess first, but then again, he mightn't. Anyway, the print fetched a good price in New York last week.

To take off the raw newness of a room, to ripen it, and even to pervade it with a vague air of the ancestral, commend me to a few old coaching prints of generations gone.

"The Brighton Mail," "Ready to Start," "Changing Horses," "Coach Passengers at Breakfast," "Bull and Mouth Inn Yard," what a stream of pleasant, imaginative reminiscence the very titles start. Stuff your ears to tales the world is telling you that the old days were very uncomfortable, and indulge, with Thackeray, in a fine manly lament at their absence.

"It must have been no small pleasure to sit even in the great kitchen in those days, and see the tide of human-kind pass by." What fun to see the Captain ogling the chambermaid in the wooden gallery, or bribing her to know who is the pretty young mistress that has come in the coach. The pachyderms are in the great stable, and the drivers and ostlers carousing in the tap. And in Mrs. Landlady's bar, over a glass of strong waters, sits a gentleman of military appearance, who travels with pistols as all the rest of the world does, and has a rattling gray mare in the stables which will be saddled and away with its own half an hour before the Fly sets out on its last day's flight. And some five miles on the road, as the Exeter Fly comes jingling and creaking onwards, it will suddenly be brought to a halt by a gentleman on a gray mare, with a black wizard on his face, who thrusts a long pistol

(Continued on page 66)
Yes—

have an artistic roof—but
add a Safety Clause — fire-proof

After all, it is a roof you are building and a roof has many responsibilities that all fall on the material you choose. Bad weather and changes of temperature bring repair bills and painting costs. Sparks from your chimney, or someone's burning house, may bring disaster.

So you must go further with the decision than to say just "fire-repellent shingles" because the fire-repellent shingles can burn. The FIRE-PROOF Shingle — J-M Transite ASBESTOS Shingle — will not. Add up all the requirements and put all the emphasis your mind can summon on the thought of fire safety. And you'll insist on J-M Transite Asbestos Shingles. You can have all the choice of shape and color, any style of laying—all the roof beauty you please, without the expense of the tile roofing or the weightiness of slate. Like all other Johns-Manville Asbestos Roofings, these shingles are backed by

Johns-Manville Roofing Responsibility

Under this policy your roof can be registered on the roofing records of this company. It is, then, our obligation to see that your roofing in service is all that was promised when it was purchased.
Bucks, Frills and Horseflesh in Old English Prints

(Continued from page 64)

into the coach window, and bids the company to hand out their purses.

I saw two more fine prints up for sale recently. One was "A Scene in Kensington Gardens, or, Fashions and Frights of 1829." The other was "Elephant and Castle on the Brighton Road."

The first was a pippin; as a satire on the modes of the day, perfect. One naturally expected the broad humor of balloony crinoline and grotesque male dandyism, but the absurd, empty pretentiousness of full-lick expressions upon the faces of the people was more subtly and satisfyingly funny, richly suggested on It was, of the laughable contents of their minds. These were the Mayfly musings of a contemptuous Hussar general, showing the ex- quisites of the Four Hundred, as far removed from the solid stuff of the nation as any chignon well could be. One dolly-dum-beau is depicted in the act of pushing the ball of his fancy cane into his mouth, an improbable posture at first blush, but looking closer you see its naturalness. He has just winked at an attractive damsel passing by with her father, and the old boy noticed it, frowned ferociously, and Dick the Dasher is covered with embarrassment; seated there on the park bench he pretends to be contemptuously sucking the ball of the cane, but it won't do, he doesn't do it too determinately, and he reminds one of the nervous little girl who gathers up sold after fold of her frock as she lips before company, for the first time, the history of Mary and her little lamb.

The other was a coaching scene of 1826, and showed a famous roadhouse where the stages pulled up. At that date the "Elephant and Castle" was probably the last stop from Brighton before running into the metropolis, being several miles in the country, but if my memory serves me well, it's a mighty short way "on the Brighton Road" now, as the title says. London has swollen out like a turkey-cock and gobbled it up. You are a trolley-car terminus now, "Elephant and Castle." "O' death, what a drop!"

Among the prints of olden-time merrie England coaching scenes stand first in favor, by long odds, and fortunately there are many hundreds of them to be had. Coaches in all sorts of predicaments are seen, "Under Way Without a Pilot" (the team of the Liverpool Royal Mail has taken fright and is running away without a driver), "Mail-Coach in a Flood," "A Mail in Deep Snow," "A Coach in a Thunderstorm," "Horseflesh in Newmarket Heath," "Mail Behind Time" (some speed and excitement here). I give an idea of what the Manchester Coach is passing an inn with the horses stretching out like good "Yankee" mules, with the caption present, "Stage Coach with the News of Peace."

This last is dated 1819. The York Coach with six horses is crossing a bridge at full speed, displaying banners with the word "Peace," announcing the news of the end of the war in Vienna. Much more exciting than wiring the news, isn't it?

And what a treat to find there is in that print recently sold for one hundred dollars, entitled: "A False Alarm" (a picture of Gretna Green — its only the Mail).

My, that's a print to take off the wall one wants to read. The snow drifts are heaping up too heavily outside for the youngsters' play. It's only the mail coach. And the fleeing clippers thought it was her pater coming after them hell-for-leather to regain his daughter sweet.

Look at Grace there with shining eyes, a romantic American schoolgirl. She didn't think of old prints that long time.

"Isn't there a Gretna Green in New Jersey, Daddy?"

What a Fifty-Foot Garden Will Grow

(Continued from page 33)

the flat side of the board. Drench the hotbed with a watering pot having a fine rose spout that will not wash out the seeds.

Seeds for transplanting should be sown in one-third of the hotbed the latter part of February or the first part of March. The young cabbages and Brussels sprouts may be set out in the open ground when they show three leaves or more, two or three true leaves; but tomatoes, egg-plants and peppers must wait until all danger of frost is over, while celery is not transplanted until after a good rain the last of June or the first part of July.

"Very early" lettuce and radishes may be sown in the other two-thirds of the hotbed. By using the lettuce for the table as soon as the leaves are big enough, the plants are thinned out, which gives the later lettuce a chance to form heads.

From June until September the hotbed takes a rest, the only time it is empty. It comes into use again in autumn, planted in the open ground in August, are set out in the hotbed in late September, for vegetable use in early fall, winter and spring.

The space between the hotbed and side fence will be large enough for two rows of rhubarb, four plants to a row, the rows 3' apart, the plants 18" apart in the row.

Between the raspberries and the central garden walk, starting 3' from the berries, lay out a strawberry bed of twelve rows, the plants 2' apart each way. This will take one row of strawberries and the plants should be given hill culture to produce the finest berries. There are many excellent varieties, but after a heavy rainfall add lime to the bed. Four feet will be used for twelve asparagus plants in two rows, 3' apart, the plants 2' apart in the row. This leaves a space 12 wide that will dry in favor, by long odds, and fortunately there are many hundreds of them to be had. Coaches in all sorts of predicaments are seen, "Under Way Without a Pilot" (the team of the Liverpool Royal Mail has taken fright and is running away without a driver), "Mail-Coach in a Flood," "A Mail in Deep Snow," "A Coach in a Thunderstorm," "Horseflesh in Newmarket Heath," "Mail Behind Time" (some speed and excitement here). I give an idea of what the Manchester Coach is passing an inn with the horses stretching out like good "Yankee" mules, with the caption present, "Stage Coach with the News of Peace."

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Look at Grace there with shining eyes, a romantic American schoolgirl. She didn't think of old prints that long time.

"Isn't there a Gretna Green in New Jersey, Daddy?"
Are you fooling yourself about your trees?

Are you making the dangerous mistake about tree surgery that was made by the owner of the tree shown here-with? (Small photograph No. 1 below.) Read the following facts—they may prove a revelation.

The owner of the tree shown here thought that Tree Surgery was merely a matter of patching cavities with cement—something which about any one could do. The result to his trees was costly and disappointing. Davey Tree Surgeons found that this tract (Photo 1), where owner thought had been saved, was in a really critical condition, disease and decay continuing unchecked behind the repairs. Entire work had to be torn out and done again—done right. Photographs Nos. 2, 3, 4 and 5—a typical tree—tell the story. (See descriptive matter under photograph.)

Tree Surgery a Specialized Science

Tree owners sometimes confuse Tree Surgery with Forestry. These two professions are as widely separated as dentistry and medicine. The Forest is trained to deal with trees in the mass, culturing them primarily for lumber supply. As Bernard E. Fernow, Dean of Faculty of Forestry, University of Toronto, puts it: "The feller grows trees not to be preserved, but to be harvested."

The Tree Surgeon, on the contrary, is interested in the individual tree; to prolong its life is his sole aim. He knows little or nothing about forestry and is entirely unequipped in training and experience to cope with its problems.

Forestry is a worthy profession doing a great economic work. But to entrust the saving of your priceless specimen trees to a Forester is certain to result in disaster.

For real Tree Surgery, there is only one safe place to go—to Davey Tree Surgeons.

Davey Tree Surgery Is Safe

Safe—because it is time-proved; its record of successful performance for thousands of estate owners spanning a generation.

Safe—because no Davey Tree Surgeon is allowed any responsibility until he has conclusively demonstrated his talent. He must have served his full course of thorough, practical training and scientific study, in the Davey Institute of Tree Surgery—a school, the only one of its kind in the world, which we conduct for the specific purpose of training our men according to Davey methods and Davey ideals.

Safe—because Davey Tree Surgeons are picked men, thoroughly trained, conscientious, intelligent, courtesous, in love with their work.

Safe—because the Davey Company is a successful and responsible house, simply able to make good in every instance, and not needing, for the sake of temporary existence, to sacrifice in the slightest degree its high standards.

Write today for Free Examination of Your Trees

—and booklet, "When Your Trees Need the Tree Surgeon."

What is the true meaning of Tree Surgery? Are insidious diseases and hidden decay slowly undermining their strength? Will the next severe storm claim one or more of your trees? Only the experienced Tree Surgeon can tell you fully and definitely. Without cost or obligation to you, a Davey Tree Surgeon will visit your place, and render an honest verdict regarding their condition and needs. Write today.

The Davey Tree Expert Co., Inc.,
604 Elm Street, Kent, Ohio
(Offering the Davey Institute of Tree Surgery, Kent, Ohio)
Branch offices, with telephone connection: 71st Floor Ave.
New York: 2017 Lloyd Title Bldg., Philadelphia:
436 Merchandise Bldg., Chicago.
Permanent representatives located at Boston, Newport, Lansing, Wheeling, Stamford, South Bend, Albion, Portland, Cincinnati, Columbus, Chicago, Detroit, Indianapolis, Louisville, Richmond, Milwaukee, Minneapolis, St. Louis, Kansas City, Cincinnati, Quebec.

Four typical letters from hundreds by satisfied Davey users.

A. P. Lovelace, Janesville, Wis.; "Your work has been excellent and scientific, your men capable and business-like."

Mrs. Susan Wheeler, Bryn Mawr, Pa.; "The work you have done for me has been entirely satisfactory. I only believe that it has added to the life of my trees, for which I am very thankful."

F. E. Atteaux, F. E. Atteaux & Co., Inc., Boston, Mass.; "I am pleased to say that your work is perfectly satisfactory in every way."

No. 1. This tree had started to decay. The owner saw the first indications and did not realize that it required scientific treatment. So he allowed an untrained man to "patch the holes" with cement. This "patching" was worse than useless—it was positively harmful.

No. 2. These cement patches were removed by Davey Tree Surgeons, and there was revealed an appalling condition of decay and disease. The tree had become a mere shell, liable to crack to pieces in any severe storm.

No. 3. Davey Tree Surgeons removed every particle of decay, disinfected the entire cavity to destroy the existing disease, thoroughly waterproofed the inside, cut watersheds to exclude moisture and carefully braced the shell mechanically.

No. 4. Here is the finished result of scientific plus skill. The strength of the tree, destroyed by decay, has been restored by mechanically perfect Davey methods. The filling was put in by sections to permit the normal growth of the tree without cramping the filling. The new bark is growing over the edges of the filling and in time will cover it entirely. This tree is now in perfect health—permanently saved—remaining gloriously to the marvelous skill of Davey Tree Surgeons who know how and why.
The Call of Spring Has Come and the Garden Lures Us Once More

We recommend rustic cedar furniture to add harmony and comfort and a quaint charm to your gardens and lawns.

The articles illustrated can be shipped direct to you by us. Catalogue B-3 shows various styles of rustic cedar furniture, from which you may be able to get many suggestions. It is free, write for it.

JERSEY KEYSTONE WOOD COMPANY
TRENTON, NEW JERSEY

What a Fifty-Foot Garden Will Grow

(Continued from page 66)

Frank Chouteau Brown, the noted architect, says: "Stucco houses, with walls of Natco Hollow Tile, are the most permanent and satisfactory."

Natco construction is cheaper than brick or concrete, and, while more expensive than flimsy and dangerous frame, the resulting economies in maintenance and insurance will in the course of a few years pay for this initial increased outlay.

Natco should be used not only for walls, but for floors and partitions—throughout the house.

Natco is cooler in summer and warmer in winter, saving coal bills, thanks to its blankets of dead air contained in the cells of the tile. It is vermin-proof, damp-proof, and, most important of all, absolutely fireproof. Think of Natco as a service, free to all architects, engineers, contractors; and to you.

Send ten cents for the interesting 32-page book, "Fireproof Houses." It will show you how other discriminating people have erected beautiful houses with Natco—for comfort, economy and safety. For your protection, look for the imprinted trade mark "Natco" on every tile.

NATIONAL FIRE-PROOFING COMPANY
492 Federal Street, Pittsburgh, Pa.

The Delicate Beauty of Chinese Porcelains

(Continued from page 29)

the reigns of Yung Ching and his celebrated son, Chien Lung, who lend name to the period from 1723 to 1795, sustained the perfection of Chinese porcelain. The decadence of the art begins with the Modern Period, from 1790 to the present.

The marks on Chinese porcelains are various and come under one or more of the following divisions: marks of date, hall-marks, marks of dedication and good wishes, marks in praise of the piece of porcelain inscribed, symbols and other pictorial marks and potter's marks. It is not necessary here to go into the intricacies of these, but they furnish a fascinating study.

This, too, is true of the designs that are to be found on the decorated pieces of Chinese porcelain. The casual observer will pick up a piece and admire or dismiss it on the judgment of the general impression it makes upon his artistic sensitivities. Not so with the connoisseur who takes into consideration color, texture, glaze and, quite as much as these (so far as intellectual interest is concerned), the story the design tells.

The porcelains of China, like the sword-guards of Japan, offer the native artists a vast wealth of mythological character and come in various symbolism and occasion are closely cemented in Oriental thought and if the collector of old Chinese porcelains finds their decoration puzzling at times in its significance, how absorbing are its unravelings!

Since the time of Queen Elizabeth the western world has recognized the beauty and the decorative value of the porcelains of China, and at no time have the sunk in regard. Rarities are no longer apt to be found hidden away, or acquired for a posy. At the same time the possession of a single object and a knowledge of the evolution of ceramics that led to it are interesting.
Put your House in Order

DUNHAM Radiator Trap

This device is one of the fundamentals of the DUNHAM VAPOR HEATING SYSTEM. It is the trap known the world over to heating engineers as the device that revolutionized vacuum steam heating. Leading architects everywhere use it.

Had your home been Dunham heated this would have been a winter of comfort, of health and of economy. Radiators would neither have knocked nor pounded. Each room would have been comfortably, cozily warm, every hour of every day. The consumption of costly coal would have been amazingly low.

You could have mechanically kept the whole house at any desired degree of heat all through the day and at another and lower temperature during the night. And without going near the cellar.

Whether you have decided to build anew, to move or to abide where you are, now is the time to plan to put your house in order against the rigors of next winter by installing Dunham Heating.

A steam fitter can Dunhamize a home. While the first cost of the Dunham Vapor Heating System is not the lowest figure at which heating equipment can be bought, in the end it is the cheapest. Write for full facts now. Ask for our free book, the 3 H's; it is of absorbing interest.

The C. A. DUNHAM COMPANY, Marshalltown, Iowa

DIVISION SALES OFFICES:

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Cleveland Detroit Indianapolis

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Branch Offices:

Halifax Montreal Ottawa Winnipeg

Denver Cheyenne Salt Lake City

Spokane Portland, Ore. Seattle Los Angeles
**Garden Necessities That Repay You**

Bushes, plants, vines, must have some kind of support and protection in order that they may grow most luxuriously. The best for the purpose, the one that combines beauty in itself as well as proper construction for endurance, is always the cheapest in the end.

Trellises and bed guards repay many times over in plants, blossoms and foliage. The Excelsior Rust Proof Trellis on the end of the porch shown here not only supports the vines, but is ornamental as well. The bed guards are of the same make—same construction and materials. These

**"Excelsior Rust Proof"**

**Trellises and Bed Guards**

are made of heavy, tough, springy steel wires, which are held at every intersection in the viselike grip of the Excelsior Steel Clamp, a patented feature. After making, the whole fabric is galvanized by the Excelsior Process, that not only makes it rust proof, but thoroughly and completely solders it into one rigid mass.

These trellises won't buckle, droop or sag. Winds and shock have no effect on them. They can be taken down and used over, and will last for years.

To insure getting full value for your money, ask your hardware dealer for these products. We also make Excelsior fences, tennis fences, tree guards, gates, and similar garden necessities. We will cheerfully send catalog C on request.

**Wright Wire Co.**

**Worcester, Mass.**

---

**Be cautious in your foundation plantings of evergreens—their form and color are both strong. Problem 5 shows one situation in which they are logical, contrasting pleasantly with the tapestry brick of the house walls**

**Six Schemes for the Foundation Border**

*(Continued from page 51)*

In regard to form we have three types of shrubbery known as accents, fillers, and facers. The first named are used in groups to give height and strength at harsh, bare corners, and to balance at entrances in pointed or globular shapes.

**Fillers and Facers**

The intermediate shrubs or "fillers" are for mass effect and should be of varying heights, nicely adjusted to the location of the windows, doors and bare spaces. Furthermore, they should present throughout the year individual interest in the texture and color of the foliage, and a variety of fruit and flowers. Not all shrubs can be used for this purpose, for some which are attractive when viewed from a distance and in large quantities are entirely too harsh for such an intimate use, or too large.

The third class, the "facers," are used in front of the intermediate shrubs to hide bare twigs or soil at their base, and to provide firm, compact edges and corners to the general mass.

Before drawing the planting plan it is best to sketch on the elevation drawings of the house an outline of the planting as it will ultimately appear, high at the corners or to screen the service portion, low under the windows, and balanced clumps or specimens at the entrance.

Many mistakes are made in choosing the plants for their climate or particular environment—that is, in regard to sun or shade, dust and smoke, soil and exposure. We see rhododendron shrubs in the winter sun and evergreens dried by icy blasts, when they crave shelter or at least a temporary protection of pine boughs. We see snow from the roof and walks heaped upon tender, slow-growing evergreens, and when why Japanese barberries would survive without a protest. Flowering shrubs which would flourish in the sun are forced to languish and dwindle in the shade.

Even more fatal than the wrong choice in regard to environment is a mistake regarding the architecture. For some houses a formal and highly refined type of evergreen planting is the only one appropriate, as in Problem 1. Again, as in Problem 5, the texture of the tapestry brick is admirably supplemented by the evergreens. For the latter it is best to choose few kinds of a uniform dark green color and to avoid a heterogeneous mixture of golden and silver-leaved sorts, which are in bad taste and often not hardy.

The most satisfactory evergreens for planting immediately around the base of the house are, for tall and medium size effects, the red cedars, the arborvitaes, and one or two species of Retinospora; and for facing down these, Japanese yews, Mugho pines, and various species of dwarf juniper. Of larger trees, hemlocks or firs unite successfully with tall deciduous shrubs when used to frame the ends of the house or cut off a view of the garage or drying yard.

*(Continued on page 72)*
ANCHOR POST Entrance Gates and Fences

STRENGTH, correct proportion and perfection of every mechanical detail are typical of Anchor Post Fences and Gates.

Expert workmanship is as evident in one of our simple wire fences as it is in heavy, ornamental wrought iron entrance gates.

In buying an Anchor Post Fence or Gate you are assured of superior workmanship, because each new installation is designed to maintain the reputation for quality that we have earned during the past twenty-five years.

CATALOGS Write for any of the following Catalogs: Wrought Iron Entrance Gates and Railings, Lawn, Garden and Tennis Fences, Country Estate and Farm Fences, Special Enclosures for Poultry, Dogs, etc., Garden Arches, Arbors and Trellises.

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Philadelphia—Cleveland—Boston—Hartford—Newark

Your Mother Knew The Luxury Of Soft Water. Do You?

In the old home, where the family water supply came from the rain-filled cistern, she knew what soft water meant—a more comfortable bath, softer skin, whiter linens, a saving of soap, better cooking. You can bring this luxury into your modern home by installing The Water Softening Filter To Zero Hardness.

Connect it in your water piping—and you will have an ample and unfailing supply of water as soft as rain and as clear and sparkling as that from a spring. You will know a comfort that you have never known before. You will understand why "velvet water"—Permutized water—is finding its place in hundreds and hundreds of homes, large and small, from coast to coast.

Let Us Send the Booklet, "Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY
30 East 42d Street New York

Drainage in the home

should have a free and continuous escape from the premises. The joints where the pipe and fittings come together should be so tight that there will not be any openings or crevices for foreign matter to lodge in.

CRANE DRAINAGE FITTINGS

are made with a shoulder against which the pipe abuts so perfectly that all "pockets" are eliminated so that the drainage may have an unobstructed flow to escape to the sewer. That is important.

We invite inquiry.

CRANE CO.
836 S. MICHIGAN AVE.
CHICAGO

Branches in 51 leading cities.
Is Your Laundry Equipment Satisfactory?

The washing mechanism of our DAYLIGHT WASHER consists of a series of Disc Cones, which are operated in an up and down motion and by PRESSURE and SUCTION forces water through the fabric of the clothes. The Disc Cones cover the larger portion of the area of the washer tub and they force water through ALL the clothes at EVERY stroke of the Cones.

We do not claim that our DAYLIGHT WASHER will clean dirty clothes in sixty seconds but we do know that it is capable of cleaning any clothes that are cleanable with soap and water. It will not only do this but it will do it in Less Time, with Less Labor and with Less Noise than any other machine. It is readily operated and has such simple machinery that it will not get out of order.

The DAYLIGHT WASHER is the one machine DIFFERENT IN WASHING PRINCIPLE, DIFFERENT IN DESIGN, DIFFERENT IN APPEARANCE AND DIFFERENT IN RESULTS. SIMPLE, STRONG and DURABLE.

Made in sizes and styles to meet the requirements of any home. Hand, Belt Power or 1/2 H. P. Electric Motor.

Complete information upon request to Dept. H.

PUFFER-HUBBARD MFG. CO.
MINNEAPOLIS, MINN.

Six Schemes for the Foundation Border

Broad-leaved evergreens demand a house of considerable dignity (Problem 6) where they are used alone, or in Problem 2, where they are combined with evergreens. Of these, the most conspicuous are the rhododendron hybrids, both tall and lowly. There are also many interesting plants of lower growth; box, if the climate permits, in standard, pyramidal or Bush form; Japanese holly (Ilex crenata) which closely resembles box and has the advantage of being entirely hardy; Andromeda floribunda, lily-of-the-valley shrub, with its racemes of white flowers clustered among small flowers of flaming rose pink; low-growing Daphne cneorum with its terminal clusters of fragrant pink blossoms; and the well-beloved mountain laurel (Kalmia latifolia) are among the best of the smaller shrubs. Two good evergreen edging plants are Pachysandra terminalis and English ivy, the latter to be clipped and pegged down.

For Deciduous Planting

Deciduous plants have a certain type of house for which evergreens are inadequate or too formal. They are much less expensive and can be made adaptable and useful depending upon a discriminating choice and careful placing, using more kinds of groups than in the boundary planting.

Occasional small trees like flowering dogwoods, flowering crab apples, cherries, thorns or laburnums are necessary and interesting as accents against the bare corners of the house. Picturesque shapes like smuckach or Hercules' Club (Afalia spinosa) will give an immediate effect of size and vary the round shapes and contours. For the intermediate shrubs in deciduous planting the usual garden-edging shrubs are all suitable, such as lilacs, forsythias, mock orange, spiras, and duteus. In some locations more woody effect is desired, when azaleas, sweet pepper bush, viburnum, etc., may be used.

For a low hedge in front of both evergreen and deciduous planting, several tufted tips for special use with evergreens are described in the planting list for Problem 2, and are excellent late ones for planting in front of white flowering shrubs in List 3.

Fresh Berries—With Cream

(Continued from page 25)

fruit border is well away from trees and hedges whose roots rob the soil of much of its nourishing power, the surrounding soil not being the particular dirt that it should be. There should be, however, plenty of room provided for cultivating currant or blackberry bushes, 6' or 7' being allowed between rows in case more than a single line is planted. Blackberries should stand 5' apart in the row, and raspberries, currents and gooseberries 4'.

For cultural purposes, these four species of small fruits may be divided into two groups, the first comprising the blackberries and raspberries (true "cane") and the second the bush-like currents and gooseberries. The larger group calls for a supporting vine and a trellis, as already mentioned. A good one may be made with stout posts, 4' above the ground and 15' apart, between which are strung three lines of heavy wire. To these wires the canes should be tied. Spring pruning of blackberries and raspberries makes for better crops. It should be done early, before growth starts, and the weaker the canes, the more the canes should be cut. Unless the growth is poor, cut back only 1/3. When the plants are first set out, the shoots almost to the ground, leaving not more than two eyes. As soon as the growing tip is over, cut off the old shoots at the ground level, as their usefulness is past. When the young canes reach the top of the trellis they should be pinch back a little to encourage side growth.

When corner plantings the pruning is of a different character. Early each spring a few of the old.est shoots should be cut off at the ground to prevent the plants becoming superannuated, as, unlike the preceding sorts, it is not the youngest wood which bears the fruit. Gooseberries, too, call for similar treatment, with the additional purpose of keeping the

(Continued on page 74)
A COMBINATION—not a simple key—is used by Spring to
unlock the great Vegetable Kingdom.

**Lutton Greenhouses**

employ the same combination.

Spring's Combination

- Warmth from the sun.
- Evaporation from the earth.
- Abundance of fresh warm air.
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- Perfectly controlled temperatures.
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You will readily see from the above that the Lutton way is Nature's way, with this difference—the Lutton Greenhouse is always the same day after day throughout the year, whereas Nature is fickle, cold one day and warm the next.

That is why the products grown in Lutton Greenhouses excel those of unassisted Nature.

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Grand Central Terminal, N. Y. City

Western Office

Horticultural Architects and Builders of All Kinds of Modern Glass Structures.

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**Burpee's Seeds**

**Grow**

Five of the Finest Fordhook Vegetables

For 25c we will mail one packet each of the following Vegetables, which are unequaled in their class. No other small collection would quite so completely fill the requirements of the average garden. These are tested and proved Burpee Specialties that have given the greatest satisfaction wherever used.

- **Beans**—Fordhook Bush Lima, the most famous Bush Lima
- **Beets**—Black Red Ball, rich color, tender, fine flavor, early
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- **Lettuce**—brittle Ice, large head, crisp and mild
- **Radishes**—Rapid Red, quickest growing round red radish, crisp and mild

25c buys all the above. Five collections for $1.00, and mailed to five different addresses if so ordered.

As a Compliment to the Ladies, we will include with each collection, a regular 10-cent packet of Fordhook Asters, replacing all the choicest American double varieties.

**Burpee's Annual for 1917**

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is bigger, brighter and better than ever before. We have added twenty-two pages, making in all 204 pages, and best of all, you will find thirty Burpee Specialties, illustrated in color. Burpee's Annual is mailed free upon request. A post card will bring it. Write for your copy today and mention "House & Garden."

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are like little greenhouses. They also embody the combination which enables you to gratify your desires for your favorite flowers and vegetables. At the same time they help you to solve the problem of the High Cost of Living.

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covers 21 sq. ft.

Over 8 ft. head and wide enough to fit in a 3 ft. span. Metal box & frame. Nothing better. Carefully packed; easily set up. Price complete, freight prepaid anywhere in U. S. East of Mississippi. This is an ideal frame for the beginner as well as advanced horticulturists.

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Catalog (D) covers all types of glass gardens and has valuable information on gardening under glass. Write for a copy today.

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Cuts a Swath 86 Inches Wide

Floats over the uneven ground as a ship rides the waves. One mower may be climbing a knoll, the second skimming a level and the third paring a hollow.

Drawn by one horse, and operated by one man, the Triplex Mower will mow more lawn in a day than any three ordinary horse-drawn mowers with three horses and three men. (We guarantee this.)

Does not smash the grass to earth and plaster it in the mud in springtime, nor crush out its life between hot rollers and hard, hot ground in summer, as does the motor mower.

The Public is warned not to purchase mowers infringing the Townsend Patent No. 1,209,519, Dec. 19th, 1916.

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EXPRESS YOUR INDIVIDUALITY—
in the architectural design of your white stucco residence—and your good business judgment by insuring that it will not become stained or discolored after a short time. Specify

MEDUSA WHITE-CEMENT WATERPROOFED

in which both whiteness, and the water and damp-proof quality, are integral permanent features that will never need renewing. Medusa Waterproofed white houses stay white indefinitely, because the stucco cannot absorb moisture. There is no efflorescence or staining.

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DEPT. D., CLEVELAND, OHIO, U. S. A.


Do not judge gooseberry size by the American varieties. These English berries are much larger and better

Fresh Berries—With Cream

(Continued from page 72)

bushes with "open" tops which will allow a circulation of air and the needful sunshine.

Perhaps the cultivated plant of any variety never described was the occasional subject to some sort of disease or insect pest. Certainly the same small form in the East, but probably it is there nothing in this connection which need cause you to hesitate about growing wild. Red rust appears on the leaves of your blackberries or raspberries, cut out and destroy the badly infected plants, and in the same way the grazing of the red Bordeaux mixture as a preventative. Anthracnose is checked in a similar manner, and the remedy for borers is to cut and destroy the canes which they have attacked.

In the case of currants and gooseberries, the commonest trouble is the currant worm, which eats the foliage of the bushes. To save the bushes all of their leaves if unchecked. Two good sprayings with arsenate of lead will prevent his ravages—the first is applied as soon as the leaves appear, and the second when the plants are in flower. San Jose scale, should it

Flowers of the Rainbow Goddess

(Continued from page 47)

ture blue flowers. As this Iris inter- regna shows the dwarf foliage of one parent with the tall stems of the other—the flowers are lifted from 12" to 18" above the leaves—it seems to be a most desirable addition. Its flowers are perfect in form and have clear and decided colors.

NATIVE AMERICAN SORIS

For some reason or other the irises which are native to the United States are not very commonly seen in cultivation. Perhaps this is because the loveliest of them are native to the Western portions and, difficult to establish in the East; but probably it is because, like everything else, they are undervalued because they are familiar. Iris versicolor, is a native to the North-western United States; and in the North-west dwells Iris setosa, which is also found in Japan. This, it will be

true blue flowers. As this Iris inter- regna shows the dwarf foliage of one parent with the tall stems of the other—the flowers are lifted from 12" to 18" above the leaves—it seems to be a most desirable addition. Its flowers are perfect in form and have clear and decided colors.

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One other distinct species I must mention, and that is I. Sibirica. This has been in our gardens for over a very many years, and it is a large growing kind. The flowers are purplish or lilac blue, on stems 3' high. With pleasure, the variety orientalis of this species should not be confounded with the species Iris orientalis just mentioned; they are distinct plants, one being yellow flowered and the other purplish or white.

With all of these races and strains to choose from, it is of course of first importance to know something about the season of bloom. By making use of some of all of them it is possible to have irises in bloom from early in May to the end of July, and even into August.

Some need a great deal of moisture, while others are equally satisfied without it. As a general guide we may say that all those having thick and surface creeping rootstocks

(Continued on page 70)
America now leads the world in the production of high-grade Asters, and our own famous strains, grown under our personal supervision, are acknowledged by experts to be unsurpassed.

We offer in our 1917 Garden Book over sixty distinct varieties and colors, but particularly recommend the following collection of six sorts, embracing several distinct types and colors, and which we feel sure will, on account of their free growth, produce flowering, large size, and general excellence please the most critical growers of this popular flower:

DREER'S SIX FAMOUS AMERICAN ASTERS
Dreer's Peerless Pink. Conceded to be the finest pink Aster ever offered. The form is nicely shown in the illustration.

Dreer's Crimson Giant. Densely double flowers of rich blood-crimson.

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For complete list of Asters and cultural directions see our Garden Book for 1917. Copies free with each order.

Asters are but one of our specialties in Flower Seeds. Among our many other specialties we would mention particularly:

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The very best of the novelties as well as the well-tried standard sorts.

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Special brands noted for their adaptability to various situations and soil conditions. Dreer's Booklet on Lawn Making free on request.

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We offer this season over 250 of the very choicest varieties, more than half of the number being of the Hardy Everblooming Hybrid-Tea Class, all in strong two-year old plants that will give a full crop of flowers this season.

All of the above and many more with valuable cultural hints are fully described and illustrated in

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DREER'S Famous American ASTERS

THE LAWN STORE
Step into the store where you see this sign in the window and ask for their free book on lawns. You will find they have lawn mowers, hose, grass seed, tools and everything you need for lawn or garden. Ask them to show you the

DUNHAM WATER WEIGHT ROLLER

Trade Mark
By simply pouring water in the steel drum, the weight can be regulated to suit any condition—soft lawn, firm turf or tennis court. It can be quickly emptied for storing away.

Rolling is not hard work with this tool. The handle is held upright when not in use by a NoTip Handle Lock and the scraper cleans all leaves and dirt from the drum.

Your lawn needs rolling NOW.

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(Suburb of Cleveland)
Warehouse: 270 West St., N.Y.C.
If your dealer hasn't the book, write us direct.
of rhizomes—which is characteristic of the members of the German strain—will do without a great amount of moisture and thrive in dry places as well as anywhere else; while the species having thicker and deeper-growing rhizomes need considerable water, some of them even demanding distinctly moist places.

PLANTING AND BLOOM SUCCESSION

The first to flower usually is iris sibirica, the dwarf iris from Crimea, with deepest purple flowers, along with several varieties algae, which is white, and sulphurica, which is yellow. Following this comes Iris germanica, in company with the Florentine iris and I. Sibirica. Close on the heels of these are the army of German irises, some earlier than others, yet none more than a few days apart. The Spanish strain comes into bloom in early June before the German has done flowering, and following it the English sort starts in late June. Meanwhile, the Japanese varieties have gotten under way, and these continue in flower after everything else has passed and gone—providing, of course, that their situation is congenial and that they have had proper feeding and watering.

All irises may be naturalized, for they are plants that lend themselves particularly to the careless abandon of Nature's planting; indeed, they are never so well placed as when thus treated. That they should never go where their foliage will be cut is very certain, for their leaves are essential to the flower. But naturalistic planting does not invariably imply scattering in grass! It means as often the grouping in the garden or against a shrubbery background, in opposition to bedding. And when I use the term in connection with iris, I mean this.

Someone has said that irises are as easy to grow as potatoes, and having grown the latter in large quantities, I am prepared to say that they are—and more! Most irises are indeed much easier to grow than good potatoes, for they do not need cultivating, or spraying, or tending a bit in the world, once you get them in the right place and give them the food they like. It seems to be true, however, that there is no telling exactly the right place except by trying. I have had iris clumps grow and thrive where I knew better and they could not possibly live! And I have had other clumps pine away and vanish right from under my nose in places that, according to all theory, were ideal.

The bulbous irises, to which class the English and Spanish species belong, like a somewhat sandy soil, free from manure, to which they are very particular. It is to their advantage that they should be rather dry during the summer; and of course, like all plants of such a nature, they should have free sunlight. The bulbs are usually supplied by dealers in the autumn, and should be planted as early as possible. It is the following spring is to follow, for the roots should be formed before winter sets in. All bulbous such as is used over any other fall planted bulb ought to cover them.

Wherever you plant them, if they do not show a distinct gain in their second season, make up your mind something is wrong, and move them elsewhere. These species increase rapidly by offsets when all is well with them, and need to be divided frequently. From best, by far the way, when dividing any iris clump, to do so by simply cutting it in two where it looks in the ground, and removing one portion of it. Then throw earth into the hole thus left beside the roots, which will go growing without a setback. Irises do not like being disturbed, although they do need to be divided fairly often, owing to their habit of growing from underneath the rootstock, as well as the roots themselves growing all along the rhizome. Without dividing will thus become a circle of leaves instead of a clump; and the middle will be mass of dead leaves and weeds that will have taken root between the old and worn-out portions of the rhizome.

DEPTH AND CARE

Plant the roots of the bulbous irises 3" to 4" deep, and if your soil is at all heavy, give each one a little bed of sand to lie in. Plant the rhizomes of the Germanicas and allied sections flat—parallel with the surface of the ground, not putting them deep. Indeed, some leave half of the rhizomes exposed; and as this is done particularly it is the logical thing to do. The best time for handling all these thick roots, which will often after they have stopped blooming and before they start in with their new growth. For this reason, fall is not a good time; for fall-planted rhizomes do not get a sufficient start before winter to be able to produce flowers in the spring. Dormant rhizomes should not be given much moisture until they have begun to grow, for until they have made roots and are thus able to use water, it simply lies around and is liable to rot them. This is the one point about handling them that should be particularly noted.

To secure the best results with the bulbous irises, plant them well under water them frequently and thoroughly—until the water penetrates to a real depth—manure water; or, if this is not available, with plain water, dressing the ground with well-rotted manure. Probably no other species so strongly capable to care for the lack of it, and no other species will repay care so abundantly. But, as the result of these plants not infrequently reach a depth of 2" in their eager hunt for moisture, it is evident that all top sprinkling will not do much good.

Flowers of the Rainbow Goddess

(Continued from page 74)
FREE—Write today for our new catalogue entitled
The World's Best Dahlias

Accurately describing 750 selected from over 2500 of the "best" secured from all sources, all the best and standard varieties in Cactus, Decorative, Giant Flowering Show, Fancy, Pompon, Paeony, Ispahan, Collarette, Anemone, Century and Single. Natural color reproductions of new Decoratives, "Dr. Tyrrell" and "Minnie Burgle" and 38 beautiful half-tone illustrations of the distinct types. The leading Dahlia catalogue with the 1917 novelties.

Book "The Dahlias", new, fifth and revised edition, 80 pages 10% x 7 1/2, clear, concise and practical. Beautifully illustrated. 50c post-paid.

PEACOCK DAHLIA FARMS
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This Book Tells How to Keep the Family Food Clean and Wholesome

WRITE TODAY for the Monroe Book on Home Refrigeration. It's Free. Thirty-six pages devoted to money-saving, health-protecting facts on this important subject. Learn how easy it is to get a "Monroe"—the best refrigerator made. One that will outwear several ordinary refrigerators, and earn its cost several times over. A "Monroe" will save one-third or more on ice bills. The "Monroe" has beautiful snow-white food compartments, molded in one piece of Genuine Solid Porcelain Ware over an inch thick, with every corner rounded. Not a single joint, crack or crevice to harbor dirt or germs. Can be sterilized and made germlessly clean in an instant by wiping out with a damp cloth. Food kept in the cold, dry, odorless atmosphere of "Monroe" food compartments is always clean and safe.

30 Days' Home Trial
The Comfort of Sparkling, Safe Water

In every home, for all household uses, stainless, attractive, safe water is extremely desirable. Besides its evident value in your bath, in laundry, kitchen or pantry, filtered water practically does away with the trouble from leaky faucets and valves and affords great protection to your handsome bathroom fixtures, piping, boilers and mechanical equipment because it is free from grit, muddiness and suspended matter of all kinds as well as odor or taste.

Loomis-Manning Filters

afford the maximum of such protection because they are extremely simple to take care of, they are scientifically designed to keep in excellent working order and are made in a substantial, durable manner.

These filters can be readily installed without confusion in new or old houses or buildings. The parts can be taken through an ordinary doorway. They cause no appreciable reduction in the flow of water or in pressure, and are suited for use with any kind of water supply system—either city or country. They are made in several sizes and types to meet any water conditions.

We have perfected a splendid method for cleansing discolored hot water and for the removal of iron rust and stain from either cold or hot water. Send for full information.

The best solution for Water Troubles—Hot or Cold

Loomis-Manning Filter Distributing Co. Established 1880
1445 South 37th Street Philadelphia, Pa.

Essentials in Bedroom Furnishing

(Continued from page 53)

adjusted from which to hang the curtain. The curtain should hang about 15" wide on either side and be the full width of 50" material. It may be lined with striped, ruffled or turned back hem and ruffled piping of another color. The bed-spread should be made to match and at one end place an oval pillow with ruffle or piping as the case may be.

For such a bed and roomment, use a simple curved line bed, painted and antiqued in a soft mauve. The bed-drapery could be of rose-silk and the piping of cretonne. The same curtain could be used as one drapes a window—with a soft mauve gauze underneath. The dressing table and night stand should be painted to match the bed and the all-over upholstered chair, the bench that is upholstered in an ivory mauve and rose striped material. On the night stand stand an ivory Georgette crepe to warm the room—with tiny mirrors of rose and mauve glass and the lamp itself of Chinese porcelain with that exquisite rose mauve shiny glaze. A pretty decorated writing desk in pistachio green would be a stellar note.

BEDS FOR BUSINESS WOMEN

The tired business woman will find a mahogany low four poster bed suitable and comfortable. A good covering is made by embroidery on heavy unbleached cotton cloth, a Jacobean design in crewel in dull blues, greens and tans. This spread, by the way, could be embroidered at night as the stitches are large, and even a business woman likes a homey touch that she has created herself. If this is impractical for her, she may use a spread of cretonne, with a turn-down under which to slip the pillow, edged with silk in green or whatever color is found in the room. This is much more interesting and effective to choose for the plain color the less obvious tone in a cretonne to bring out in the room. If a cretonne has a great deal of rose, a little lavender and the same amount of green and blue, to use the green for the color in bindings or accessories, or the mauve as one's taste likes.

Almost the night stand should be the light, preferably electric, although some folks like a candle to read by. The lamp shade is of silk, see that it is lined with white, as this will shed a better reflection of the flashlight, paper or vellum shade seems a little too hard for a bedside light. Electric lights that are placed on the bed are excellent for reading but they are not particularly decorative.

THE BEAUTIFYING GROUP

The beautifying group consists of a dressing table, a chiffonier, or buffet, or chiffonier for a man's use. Once on a day these came in shining golden oak and were monstrosities, but now they may be bought "in the plain" from the manufacturers and stained and painted any color desired. Here we can invent a succession color for paint and stripping, thus breaking the large plain surfaces, the chiffonier does not appear so cumbersome and certainly becomes a convenient piece of furniture.

Almost any bureau or chiffonier is improved by taking off the mirror and hanging it by itself at the required height. A chiffonier and dressing table make a useful combination—much better than the old-fashioned bureau, as one could not sit close enough to dress at a bureau.

A dressing table with a tripping mirror is the most serviceable and decorative type. The most attractive style I know, has auditor mirror frames with curved tops. But the most important thing about the dressing table is that it has shelves. When there are no available side wall lights, an electric attachment may be clipped on the middle shelf, glass and covered with a pretty silk shade of suitable design.

Charming little dressing tables can be made from a set of drawers or just a box with a shelf placed midway for slippers, etc., and covered with plaits or cretonne on long ruffles. A plain mirror frame may be covered with a flat rouch of silk or tightly covered with cretonne and hung above the table.

A tiny manucuring table is such a luxury that I am glad most bedrooms do not boast them. One usually balances a dish of soapy water on her knee or takes advantage of a mahogany table top when she sets it down. A tiny, oval black lacquered table with a drawer to serve the purpose admirably. Drawn up to the slipper chair or by the chaise longue, it would be a real joy and convenience to be appreciated.

The slipper chair, by the way, has become almost a necessity in these days of fat living and fitter gaiters. Low, snugly upholstered, they are most conveniently placed at the foot of the bed. A regular chair may be converted into a very presentable slipper chair by taking a few inches off its legs.

THE BOUDOIR END

The remaining group is the boudoir end of the room. Some lucky ladies have a real boudoir or sitting-room but many of us are thoroughly gratified by having a bed-room large enough to have assembled in one end the essentials of a boudoir.

The main thing is to have a chaise longue. Whether it is of silk, linen or brocade, or velvet does not matter, but a chaise longue spells comfort and harmony in its every line. Of course, a tea table is very desirable, and that should match, for if we are going in for effects, we must have colorful groups—including the lady, etc.

If the chaise longue is of wicker—which would be the very last choice anyway—have it upholstered as to silk back seat and new valance.

A very good couch for a boudoir is 5' long with a ratchet end which will let down when one wishes to lie down. This, by the way, will put up an extra guest, or is excellent in case of sickness, for by merely 5' of room is taken up, and it makes a very comfortable bed.

A little sewing table should be there, preferably with a colored bag beneath to add a spot of brilliant color to the room, and a little mahogany rocker. There is hardly a woman who would not openly or covertly wish for a low rocker to sew in. And after all women do sit in human plain and it's going to take at least one more generation before we become educated out of the habit.

In one corner we should find a desk. Adorable little desks are now being made for women. Scarce a half yard wide with one drawer underneath and a fold-back top with writing sides for paper, etc. They are a comfort and really for use. Not the least of their advantages is their small size.
These Shrubs Will Fill Your Place With Bloom

Rhododendrons and Azaleas have long been favorites for lawn planting. Their lustrous green foliage is mostly evergreen and it presents a delightful contrast with the handsome flowers.

Rhododendron Catawbiense. The hardy and most strikingly beautiful of all pink flowers in June. Well-budded plants that will bloom this year, $1.50 to $2.50 each. Special price in quantity.

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Cromwell Gardens Handbook contains information about shrubs, trees, evergreens and roses. It will help you plan your grounds or garden. Be sure to get a copy.

CROMWELL GARDENS
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A Better Lawn At Less Expense

The Fuller & Johnson Motor Lawn Mower is designed for the large lawn with numerous flower beds, shrubs and trees, where great flexibility as well as large cutting capacity is required.

A better, more wonderful mower is made enough to cut the green a day, yet tight enough to make lovely mows of your lawn. It will cut close up to and around trees, under the shrubbery, and along walks and driveways, blue entirely eliminating the necessity for cleaning up afterwards with a hand mower. The Fuller & Johnson is built up by 79 years' experience of the Fuller & Johnson Manufacturing Co., for the highest manufacturing integrity.

It is scientifically designed and built as a complete unit. Indeed, its balance and ease of the mechanical features of the mower have rendered it close comparisons as the mower itself. It is a motor that the mower itself. If you were possible to determine the time and effort that went into its development, you would marvel at the $225 Specially designed for use in Private Estates, Parks and Cemeteries

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Nothing Can Take Its Place

In late summer and autumn the Dahlia is indispensable for cutting. It yields great armfuls of gorgeous velvety flowers until frost.

Queen Emma

Paeyn-flowered Dahlia, Coloring a mingling of pale violet-rose and pale gold, the latter more pronounced on the inner petals; on the outer ones it appears as just a glistening sheen. Reverse of petals deeper violet-rose. Center yellow. A strong grower and free bloomer even in hot, dry seasons. 25c each.

We have 149 more selected from the best American and European sources. Among these are many that we think can be secured from no other American grower.

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It describes them all. It also describes our Irises, Gladioli, Peonies, Cannas, Hardy Pheas and many other plants and bulbs. It also lists all kinds of field, flower and garden seeds.

THE WING SEED COMPANY
Box 1327, Mechanicsburg, Ohio
Knowing the Wild Mushrooms  

(Continued from page 60)  

characteristic of the fresh specimens. If when sliced through the center there is revealed a yellowish, dusky, or smoky tinge, the specimen is bad and should not be used for food. Puff-balls are widely distributed and fairly common in moist, rich woods from mid-June until late fall. The one most frequently met with is the small, top-shaped variety which measures from 1" to 2½" in diameter. It grows on the ground in open, grassy places, sometimes forming small masses. The placenta, or hole, is white but become dark grey or greyish-brown as they mature. Often when sliced and viewed from the side, inspection, of the interior will reveal the tinge of color which betrays its identity, a fact which makes it of passed beyond the edible stage. When sliced and browned in butter puff-balls are a sweet dish.

In late summer and autumn the giant puff-ball makes its appearance in pastures and open places. It is frequently found in corn fields between the rows of standing corn. A specimen the size of a man's straw but a many different growths evidence more than enough for a meal for a large family. Another form of puff-ball is the larger-shaped puff-ball, is pear-shaped, rounded above and tapering beneath. Its largest diameters often reach 6" to 8".

A group of delicious edible mushrooms with which the student will become familiar without difficulty is that comprising the genus *Pleurotus*. This group is especially characterized by growing on wood—either the half-decayed stumps and fallen timber found in the woods or on dead branches of living trees or from old stumps caused by the weather or limbs. The genus comprises some of the most toothsome of the edible fungi, and to gather them one need often only walk along shaded city streets and pluck them from the trees which line the walks. The *Pleurotus*, which in autumn is common on many kinds of city shade trees, has a taste when butter browned not unlike a broiled pork chop. It is of large size, often occurring in groups or clusters, and becomes of its late season is unusually free from insects. Its aroma when cooking fills the house and brings everyone to the table keen of appetite. The *Pleurotus* genus includes the well-known oyster mushroom whose form suggests the shell of an oyster shell. By many this latter variety is placed as one of the edible fungi, but for food it is always rather tough, especially with age. After the amateur has had a little field experience he will have slightly difficulty in singling out the members of this genus and will run no risk in using them for food. Their characteristics are such as to preclude the possibility of making any mistake.

The *Debary Amanitas*

Most of the accidental poisonings from mushrooms of which one reads in the newspapers come from using fungi which are of the ordinary mushroom type. There is usually a great deal of satisfaction each time he discovers it. It is a dainty little creature varying in color from white with deep tan and is of a somewhat leathery appearance. In size it measures under rather than over ¾ across. It can be found in lawns, suburbs and pastures throughout the summer—being especially plentiful following a rain. Collectors have their names of the "fairy ring," since the plants sometimes occur in the form of a ring or circle in the lawn. It is not always that the full outline of the circle can be determined, but now and then this will be perfect. Sometimes the fairy ring makes its appearance in a well-kept lawn.

The *Field Mushroom, or Fairy Ring*

Closely allied in species, though not in appearance, is the field mush-

room. The amateur will early become acquainted with this form and recognize a peculiar satisfaction each time he discovers it. It is a dainty little creature varying in color from white with deep tan and is of a somewhat leathery appearance. In size it measures under rather than over ¾ across. It can be found in lawns, suburbs and pastures throughout the summer—being especially plentiful following a rain. Collectors have their names of the "fairy ring," since the plants sometimes occur in the form of a ring or circle in the lawn. It is not always that the full outline of the circle can be determined, but now and then this will be perfect. Sometimes the fairy ring makes its appearance in a well-kept lawn.

(Continued on page 82)
Why You Should Have a KOHLER Sink in Your Kitchen

KOHLER Sinks have the same quality distinctions that make KOHLER Bath Tubs and Lavatories first choice for the well planned home.

The patterns are varied, to suit every requirement, and the designs have the hygienic features that are characteristic of all

KOHLER WARE
always of one quality—the highest

KOHLER Sinks are made for right and left-hand corners, for recesses and for open wall spaces. They have right, left or double sloping drain-boards, and are made with and without sprays.

The whiteness of the enamel is notable in all KOHLER products, each of which has our permanent trade-mark—a guarantee of its high quality.

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KOHLER CO., Founded 1873, Kohler, Wis.


* The KOHLER permanent trade-mark in faint blue appears on end of sink shown by star.

YOU cannot have the charm of a home that always looks fresh in its colors until you have seen roof and side walls in two soft-toned browns or greens, or a "Dixie White" and a moss green, made possible by using

"CREO-DIPT" STAINED SHINGLES
Ask for color pad and book of homes.

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Factory in Chicago for West

This house is one of more than 200 in Cincinnati with different CREO-DIPT color combinations.

T HREE of the essentials for success in building a home are—a practical plan, artistic design, and good workmanship. But without the fourth essential—proper selection of materials—the other three are of little avail.

Take the matter of lumber. All woods are not equally good for all uses. One is good for one purpose—another for another. Select woods for their proper uses, and you will have no disappointments.

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Any architect, carpenter or lumber dealer will tell you that for the outer covering of a house—subjected to the rigorous onslaught of rain and snow, heat and cold, sun and wind—no other wood is so durable and holds its place so well, without warping, splitting, rotting or opening at the joints, as White Pine.

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Our new booklet, "Turf Engineering," should interest every owner. Mailed on request.

25 WEST 45TH STREET
NEW YORK
TURF ENGINEERS
House & Garden

Knowing the Wild Mushrooms
(Continued from page 80)

Color Tendencies in Spring Fabrics
(Continued from page 37)

A very beautiful example of a hand-blocked French linen is illustrated here. Among the many flower patterns of the season it stands quite alone. No one of its precedents, the design and secondly because of the sheer beauty of the color blending. A pattern of a rich warm glow or a black background—for the linen comes in those tones—are sprays of flowers in a riot of varicolored greens, earth tones, red, violet, tan, and gray. It comes 31" wide and costs $1.75 a yard.

Quite unique in character is the very quaint bird pattern, which would be most effective with early English furniture. Not only is the design more than ordinarily good, but the colorings are such as one seldom finds in today's dominoes. The narrow stripe is black with the design in greens, red brown and putty color. The wide stripe is a cream color with a very cool green foliage—mauve and mulberry flowers and a soft green and brown bird crimson beaked. The effect is quite like the very costly hand blocked English linens. It is 36" wide and sells for 50 cents a yard.

If you have a summer home with a room that looks out to sea, do choose for it the sea gull pattern. The manufacturer of this and the one above has succeeded each season in bringing out series of cretonnes that for sheer originality in design and color are unlike anything else that is on the market. The basic sea gull pattern is highly conventionalized and comes in many unusual combinations of color—a black background with tan and brown and white birds with cool yellow and mulberry wings. A putty background has tan and brown and black birds with wings of lacquer red and light tan. It is priced at 35 cents a yard, 36" wide.

JEWEL CLOTH AND OTHERS

A depart of equal interest is one of the features of another domestic line. It is called a "jewel cloth." By background it is various colors, but particularly effective on black are sprinkled gold dots which are oddly enough impervious to washing. With a black background and the same color in the foliage and the birds out stand in vivid relief. It is priced $1.35 a yard; 36" wide. The same cretonne may also be had without the dots, at 85 cents.

This manufacturer is also responsible for another pattern, which has already proved unusually successful. The idea was taken from a costly linen and has been beautifully rendered in a number of colors—such backgrounds as mustard, black, white and natural linen color being the most popular. In the French background the pattern shows rich rose colored flowers, brilliant green foliage, mustard or gray cloud effects, and brilliantly colored birds, but on the natural colored linen background the leaves are gun metal and gray, the birds white and blush, the cloud effect soft brown and the birds brilliant only as to breast and beak. The width is 36" and the price is 50 cents a yard.

FOR THE LIVING ROOM

A gay cotton taffeta with a conventionalized pattern is shown attractively in rooms, sun parlors or porches of summer homes, effective inexpensive patterns of this type are in demand. This one may be had in a great many color combinations. Two that are particularly good have a white background—black foliage and flowers of mustard, rose and blue in one case and mustard, mauve and blue in the other. It is 48 cents a yard.

Ideal for the same purpose is the Jack-o-lantern pattern, which is pretty for indoors but the series shown in the photograph: several shades of blue, crimson and violet against a white background. But it is even more effective with a black background and the design in crimson orange, dark as well as light blue, and a bit of old blue. With red, black or orange wicker furniture a cretonne so colorful as this is a wise choice for seat cushions particularly when used with other cushions of one of the predominant shades. In this case—green or orange cushions would be most effective. It comes at 50 cents.

Fruit designs are still so infrequent as to be must welcome, particularly when they can be found in the less expensive domestic fabrics. A very modern apple pattern is shown photographed in white with brown twigs and green leaves, apple blossoms in natural green, apples oddly enough in deep red rose, yellow and violet accompanied by blue grapes and illustrated in the drawing with a black background and the same color in the design; 36" wide, 85 cents a yard.

In the midst of all the novelties of the season, one greets with pleasure a simple lovely flower pattern such as the wisteria design. The material is a cotton taffeta, the background white, the leaves of cool, green tones and the flowers prettiest in unvaried violet of the flower itself, or soft tones of rose shading from almost a heliotrope tone to a touch of scarlet. It is 36" wide and costs 48 cents a yard.
You Need One In Your Home

A refrigerator can either be your health's greatest protection or its greatest danger. Cheap, poorly constructed refrigerators without proper circulation of air are the breeding places of germs and instead of keeping food fresh actually contaminates it.

In order to receive the maximum of refrigerator excellence, you should own a

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They are lined with Snow White Opal Glass—stain proof and acid proof—that is easy to keep clean and absolutely sanitary. The McCray system insures a constant circulation of cold, dry, pure air throughout every food compartment, which refrigerates perfectly. McCray Sanitary Refrigerators are used in the U. S. Government Pure Food Laboratories and Hospitals because they meet every requirement for sanitation, perfect refrigeration and economy of ice consumption.

Let us send you our large, illustrated catalog which shows a great variety of stock sizes from $30.00 and up for every requirement. Any McCray can be arranged with an outside icing door. Special size and built-to-order for particular requirements or to match interior finish.

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Ages in all principal cities.

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Block the attacks of water, grease, scuffing shoes and heavy furniture on your cement floors with Bay State Agatex.

Cement is porous. The first drop of grease spells ruin to the even, good-looks of your floor. No amount of scrubbing will rejuvenate it. Water is absorbed and the resulting dampness is unhealthful. Constant friction creates dust, cracks and pits. And, think—a little precaution—a coat of Agatex, will keep your floor new.

Two coats of Bay State Agatex cover your floor. It sinks in and binds every little particle of cement.

It makes the floor waterproof, waterproof, oil proof, dustproof and every-other-kind-of-proof.

Send for our booklet No. A.2. It tells how and why you should use Agatex, also what it costs.

Bay State Brick and Cement Coating makes brick, cement and stucco walls waterproof. It gives them a good complexion and keeps it there. Made in white and a variety of tints. Send for samples and Book No. 2.

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The most practical garage hanger on the market today. Adjustments are such that the doors can be moved up or down and to or from the building as conditions require. The door is hinged in sections and slides easily around the inside corner of the building. The entire unit is thus always protected from the weather. No more accidents or trouble from the use of the old style hinged swinging doors. The single foot door obviates the necessity of opening the entire set when not required. When open the door lies close against the wall allowing full clearance for entering and leaving.

For the small city garage the Myers cannot be equalled. It is, however, just as adaptable and convenient, either inside or out, for any large building where sliding doors are desired.

A card to our Service Department will bring you descriptive circulars illustrating the new Myers Hanger.

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Fourth, protection: the use of such measures as will guard the plants in summer from insects and disease, is likely to interfere with their perfect development; and in winter, from injury by freezing, the weight of snow, etc.

Anyone who is starting out with roses must make up his or her mind in advance that much care and patience and some experimenting along each of these lines will be necessary before full measure of success is to be expected. You may say to yourself "Uneasy must lie the head that would wear a crown of roses," but most of these things, after the first year or so of experience, will become routine work, not nearly so formidable as it looks to the beginner. It is much easier to succeed with roses today than it was a few years since.

There are more good varieties that are also robust and hardy; there are newer types suitable for conditions under which the older sorts would not succeed; and the means of fighting insects and disease have been improved in efficiency and also in convenience. There is no reason for the rose lover to be discouraged. But not to call attention of the beginner to the difficulties which exist and which must be overcome would simply be to lead him to encounter for himself trouble and discouragements which might have been avoided.

As to which of these various factors of successful rose growing is the most important, it would be difficult to say. But I can say without hesitation that the first step toward success is the selection of types that will be suitable under the conditions that have to be met in any particular case. Climate is a much more important factor in the growing of roses than with almost any other of our hardy ornamentals. There is, the situation, the amount of time that can be given, the purpose for which the flowers will be wanted, are other things which must be kept constantly in mind in making out your rose list.

Types and Their Special Uses

Your first impulse will probably be just to "grow roses." But as soon as you have made that excellent resolve you should decide how you want to grow them, whether for their beauty in the garden, or to decorate the house, or to add a unique touch to the landscape, or to decorate a trellis, pergola or porch. Also, you should consider seriously your limitations. If, for instance, in your part of the country the temperature seldom goes below zero, you will have no difficulty in growing many of the roses generally listed; but if you are in a section where the temperature does get well below zero, or stays near it for a long period, you should be careful to choose only such types and varieties as are recommended for severe climates. Even if your space is very limited, by judicious use of the climbing and semi-climbing roses available you may grow them in abundance, as well as a very decorative effect with the plants. If your roses must largely

be left to take care of themselves you may still find those which will suit your needs and blossom generously. The following are the principal classes or types. You should have the distinctions between them clearly in mind before making your selection of varieties.

Hybrid Perpetuals: The hybrid perpetuals, or "H. P.'s" as they are usually called, are the hardest and the most vigorous growing of the regular bush or garden roses. The "perpetual" in the name, however, applies to their persistency in living, not in blooming. They are "June" or "summer" roses, which flower freely in June and again to a less extent in the autumn. Where the climate is too severe for hybrid teas, or you have not time to give them adequate winter protection, a careful selection of H. P.'s will give most of the colors wanted, except yellow. For that purpose the Austrian briar may be used. A yellow H. P., Ludwig Moeller, was produced last year. It is an European introduction and has not yet been sufficiently tested in this country to prove its worth. If good, it will fill a long felt want.

Hybrid Teas: These are today without doubt the most important class of garden roses. Their advantages over the hybrid perpetuals are that they bloom more freely and constantly, being known as the monthly or ever-blooming roses, and they are more fragrant and have more gracefully formed flowers and a wider range of coloring. Their chief disadvantage as compared with H. P.'s has been that they are less hardy, with plants more likely to be of weak and unattractive habit of growth in the garden. As they are being given attention by all of the world's most prominent hybridizers, however, these shortcomings are being gradually corrected. In selecting hybrid teas for garden use pay particular attention to the habit of growth of the plant as well as to the beauty of flower--and to hardiness, particularly (Continued on page 80)
Quick Growth for Lawn and Garden

Your grass, flowers and vegetables will show the same remarkable results that these Cleveland people secured.

Nitro-Fertile is an odorless liquid to be mixed with water—two table spoonsful to the gallon. It seeps in around the roots where it is immediately absorbed by the plant, thus stimulating a quick, healthy growth.

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"After selling Nitro-Fertile for three years, we find this number of its use to be very evident. We have not come across a product on the market as yet in fruiting and flowering plants, as Nitro-Fertile."

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"One had only to see my sending and flowering to note the marked difference between those treated with Nitro-Fertile and those not treated."

Also manufacturers of Lime-Fertile—a complete fertilizer in powdered form.

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are constructed to combine both beauty and strength. Their graceful lines have added to the charm of many of the finest country places in America and the strength and practicability of their construction have made them the choice of the largest commercial growers all over the country.

We will be glad to send you our new booklet which describes the Moninger method of greenhouse construction. It is full of interesting information which you are sure to find helpful.

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Cedar Acres

WENHAM, MASS.
The Ever Essential Rose

(Continued from page 84)

for use north of the latitude of Philadelphia.

Roses: The tea roses for outdoor cultivation have been rather left behind by the development of the hybrid teas, which carry their good characteristics of fragrance and delicate coloration with increased hardiness. The comparatively few good garden varieties, however, contain some of the most sweet scented of all roses, and they bloom continuously. They are lacking in crimson shades just as the H. P.'s are in yellow.

The Perennials, or hybrid Austrian briars, are a much newer type. They have not as yet received the general recognition to which they are entitled, and perhaps for that reason a number of splendid new varieties which have Austrian briar blood are usually listed as hybrid teas or hybrid perpetuals. I have mentioned several such in the list of varieties given at the end of this article. This race is particularly strong and vigorous in growth. It is safe to predict a great popularity for it in the near future.

The Damask roses are extremely hardy and very sweet scented, although they flower but once during the season. The Moss roses, having a unique moss-like covering on the outside of their buds, are very pretty. The Bourbon, Bengal and China groups also contain several varieties of special merit, some very free flowering and others very hardy.

CLIMBING, HEDGE AND DWARF ROSES

Ramblers: The first of the climbing roses to attract universal attention was the flamboyant crimson rambler, which took the wild rose and quickly became more popular than any other climber ever introduced, although now there are several of superior merit. This group has been added to rapidly within the last few years, and now contains a great variety, both in color and form. A few of these are of the true rambler or cluster type, but more are Wichurana hybrids, and many of this group are extremely hardy. There has been an effort lately, to some extent successful, to extend the flowering period. All of this type are good for training against the house, covering pergolas, trellises, arbors, etc.

Climbing Garden Roses: The difference between this new class and the above is that the flowers are of the garden type and suitable for cutting. They are climbing hybrid perpetuals, hybrid teas and teas, many of which are hardy enough for use where the older southern, or tender, climbing roses could not be utilized. Some of them are more or less ever-blooming. With them, it is possible to have roses for cutting pretty much throughout the year, even if one has not room and time for a regular rose garden. Fine new varieties are now being produced rapidly in this class, and every lover of roses should keep an eye on them and try out those which seem most suitable to his or her wants and conditions. Some varieties are not real climbers, but are of what is classed as "pillar" roses, which throw up strong canes reaching a height of from 6 to 10 feet when supported by a post or upright trellis. They are exceedingly decorative as well as good, in most cases, for use as cut flowers.

Hedge Roses: Usually the first roses one thinks of when the word "hedge" is mentioned are the Rugosas, attaining a height of 6 to 10 feet, with abundant, thick, dark green foliage, and remaining beautiful throughout the season. They may be used to advantage in hedges, in landscape planting, or wherever roses must be grown under adverse conditions. The Austrian or yellow briar roses are equally desirable for their hardiness and general vigor of growth. The hybrid sweet briars (or Lord Penzance's hybrids) grow taller, and should be given some support. While they are not as good as the above for a dense hedge, for planting a few feet apart in a long row, or for single specimens, they are particularly effective.

The Baby Ramblers and Polyanthuses

The dwarf or "baby" roses are quite ideal for low hedges, borders, edging, and for planting in shallow beds where a mass of color is wanted. They are also very well suited for cut flowers. The baby ramblers and polyanthuses reach a height of from 18 to 24 inches. While they will not stand as much exposure as the rugosas, they are harder than most of the garden varieties. They are, moreover, very easily protected.

Roses, and particularly the garden varieties, should be given a position where they will have sun most of the day. Shelter from the north or the northwest is desirable, and in unfavorable climates it is often essential, meaning the difference between success and failure. The more thorough this protection can be, the better. Roses can be grown with fair success in almost any soil provided that it is well drained. While naturally preferring a rather heavy soil, a light sandy one can be built up and maintained by the use of manures and fertilizers, and every variety, the addition of heavy or muck soil gives good results. To make certain of success so much care cannot be taken in the preparation of the beds. They should be gotten ready as far in advance as possible. The time for this is by

(Continued on page 88)
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The Ever Essential Rose

(Continued from page 86)

nature thoroughly drained, artificial drainage may be omitted. The soil which is removed from the bed in the course of preparation should be thoroughly broken up, turned over, and dug in. Use a trowel and with bone meal, preferably fine ground and coarse knuckled, mixed half and half.

PERTINENT POINTERS ON CULTURE

Air drainage is as important as soil drainage—that is, garden roses should be situated in a hollow or cup. The more exposed to the summer breezes and currents of air the better, and this will make a great difference in their general health, especially in keeping them free from mildew and other fungous diseases. The addition of well-rotted manure and bone meal to the soil is usually beneficial. While roses grow rather prolifically on an acid soil as many other plants, unless you know that your ground is fairly well drained it is well to plant them in a little natural soil, and apply ground limestone if required.

The best time to set out your rose plants will depend upon the kind you buy. Dormant roots of perennials are much more useful than they were years ago. They should be set just as soon in the spring as the soil can be worked in late March or early April. If received before planting if possible they should be buried in soil, or in over winter to start growth naturally in the spring—will give the surest and quickest results. They should not be put out until after danger from late frost is over. Growing potted plants that have been greenhouse raised are not satisfactory.

Be sure that you know what you are getting before you buy. While many growers prefer roses that grow on their own roots, the trend of experience seems to be that grafted or budded roses are more satisfactory, and most of the garden varieties are now grown in this way.

In planting budded roses be sure that the collar or graft which can easily be distinguished by the swelling formed where the union of the two roots is put 2" below the surface, and keep a careful watch at all times to see that any runners or shoots should come from below this joint are broken off at once. These can be readily distinguished as they have a different color from each leaf instead of five. If allowed to grow they will quickly crowd out the roots on the top or bloom part of the plant.

The most important part about planting is getting the plants in position. Crowd the roots firmly as firmly as is possible with the hands, and when the job is done make it still more compact by allowing your whole weight to rest on the balls of the feet placed on either side of the stem. The dormant roots should be pruned back severely after planting, cutting away two-thirds or more of the canes from only from three to five side branches and cut these back to within four to six buds or eyes of the main stem. This may seem like wasting a tremendous amount of the plant that you have paid out good money for, but it is nevertheless necessary if you want the best results. The roots should be spread out and slightly down in a natural position, and any struggling or broken cane cut off before planting. Pot grown roses will usually require little or no pruning back on setting out. If they are compact, sturdy looking plants, showing no sign of wilting, put them in as they are. It will save a little labor in the nursery, but it may be well to sacrifice some of the growth and putting them into the ground so that there will be a little deeper than they were growing in the pots.

In the points caring for garden roses which is most often neglected is that of giving frequent water from early in the spring throughout the growing season. The surface should never be allowed to crust over or become hard. For this purpose there is nothing more convenient than the adjustable prong or tooth hoe. With this little implement the soil can be gone over rapidly and easily.

MOISTURE AND PRUNING

Roses to do well require an abundance of moisture. In dry weather it will be best to irrigate them, or water them thoroughly before Frequent and heavy watering of the roots with the potted plant method may cause the development of adventitious roots which must be removed, and carefully and carefully to be encouraged to come into bloom they will also appreciate extra fertilization, especially the use of nitrate of soda or fertilizer. To provide the latter, sink a half barrel in some out-of-the-way corner, and stand in it a hundred or so of manure, preferably cow manure. The resulting liquid, which will be free from salts and easy to handle, should be diluted two or three times to the color of weak tea, and poured about the plants just before a rain or a thorough watering.

One of the most essential of all jobs in the rose garden is of course, pruning. In the case of garden roses, spring prune to four or five canes if you want large mass of bloom; for larger individual blooms, in smaller numbers, save all vigorous canes, but cut back to 5" or 6" from the root. The ramblers and hardy climbers should be pruned little, just cut back the lower canes, and in short legs, 1 or 2" from the flower head. The rambler and Austrian breeders should be thinning out rather than pruned back, keeping all old wood, flower sports, etc. cut out.

PREPAREDNESS IN THE ROSE GARDEN

While the insects and diseases likely to attack roses are numerous, they are not nearly as serious as those of the former and over a dozen of the latter—happily most of them by the use of modern insect and disease control can be checked by the following methods and means.

To begin with, however, one should be careful to select only the most vigorous and disease resisting varieties. This, as I have already surmised that it is impossible to improve the varieties that have been selected for th... (Continued from page 90)
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The Group in Furniture Arrangement

(Continued from page 35)

picture, mirror or other wall decoration of any character, not by any means necessarily formal. Diagram III shows the same room as the last, but indicates an unsymmetrical placement of groups, that is to say, an arrangement about an off axis. An unsymmetrical or "off axis" arrangement of groups often entails greater difficulty of successful achievement than does the symmetrical and is possible the result is frequently delightful and apt to display more originality and individual personality: generally the unsymmetrical arrangement of groups is well suited to small or irregular-shaped rooms. Diagram V shows an irregular-shaped room where the furniture groups are arranged according to the architectural axes and diagram III shows the same room with the groups arranged off axis. An examination of these diagrams will show how the system of experimentation is worked. The same method may be applied to any room. To follow out a strong arrangement of the main groups, it is advisable to place the large pieces where they will show the architectural line of the room. At the same time the expression of an agreeable degree of intimacy and flexibility is conveyed by a few independent or "off axis" group compositions.

Each Room a Separate Problem

It is impossible to give suggestions which will apply to every room. Each room has a different space and conditions. The only thing to do is to assimilate the methods and principles of group arrangement and apply them.

Care must be taken to avoid crowding, which may result from bad group arrangement, as well as from using too many pieces of furniture. Keep the middle part of a room free of furniture. If a room appears too long for its breadth, break up the length by interposing a floor group somewhere near the middle. Cultivate a keen appreciation of contour, for it is indispensable in the one thing to the other. Perception of the fine qualities of contour and of the properties of form formation involves more subtle mental processes than a mere taste for color and pattern.
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Manager Manager
NEW YORK
What Is Modern Decoration?
(Continued from page 20)

red or bright green in itself, if the thought behind its use is big enough to carry it. The trouble with our very good Victorians was that they didn't believe in thinking. When they wanted to be clever, they turned a Corinthian column upside down and stuck it in front of a brown stone house, or slapped a few red pillows on a green sofa and let it go at that.

Mr. Chamberlin Dodds is another whom I should include among the moderns, although he will probably subpoena me for doing so, because although he employs the historic styles extensively, he does so with a humorous personal twist, and with such resplendent color as to signalize him as one of the most brilliant of the younger men.

Mr. Paul Frankl, an architect from Germany, is strongly imbued with the continental art of the secession, but his designs are, in a measure, personal, and must therefore become more and more impressed with the growing American spirit.

In a certain sense the interior work of Mr. Anton Hellman, and especially the idea behind his work, is typical of a rather large group of more or less modern
(Continued on page 24)
**Japanese Irises in Their Native Home**

In the lower picture Japanese Irises are shown equally at home in my fields at Wyomissing. The Rev. Dr. Rice, who came here to see them after having spent many years in Japan, expressed his surprise at the luxuriant growth and abundant bloom.

In your garden they will thrive as well with ordinary care. Spring is an ideal time to plant, as they will bloom the first season.

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What Is Modern Decoration

Continued from page 92)

American decorators. This number includes an array of young men here and there about the country, and especially a still larger number of young women, some of them pupils of Mr. Hellman himself. As a whole, they take care very little for period interiors, and whose study of the antique has given place to a keener interest in the furnishing of the homelike room, in harmonious, and sometimes novel color combinations. They are, to say the least, from my standpoint, attempt any wholly creative production; they do not design any historic furnishing, they employ reproductions of historic furniture, with distributions of color for which there is often no historic foundation or precedent.

Members of this school contend that it has thus far been impossible for us to discard any furniture as attractive as that produced by previous generations. They are somewhat fearless, and, while not unaware of what they have abandoned the schools of the conservatories. They believe themselves, and therefore others, than to be incapable of creating new forms.

Undoubtedly there were thousands of examples at the time of Chippendale and at every earlier great period. They are right to this extent: that they have not as yet produced the finished beauty of the finest Adam interiors, nor the marvelous excellence of design attained by master craftsmen who worked for Louis XVI. But our critics must not forget that we are laboring and living in a bourgeois environment, that we are working in the main for middle class people with limited funds and limited leisure, and that only a very few percentage of our clientele has been awakened to even the slightest interest in art, that artistic criticism cannot have as yet been able to stimulate any widespread desire to have us go further than we have charted accounts of the new art. If we do insist upon experimenting, it is at our peril, and many of us have lost first hand experience by suggesting to the wrong people color schemes on which we had set heart and soul.

A NEW AMERICANISM

The new art is like the new life, but it is so superbly all in superfine, extravagant, materialistic, quick and confident. Our nation, which has hitherto been a continent, will certainly be able to control a few academicians. And when once we have achieved an art, it will be time enough to civilize it.

For we have still to complete the Americanization of the Modern Art Movement. Thus far its motive power has been European, but there are indications that henceforth the centre of Modern Art, and perhaps of the New Art, will be on this side of the Atlantic. First of all, our benevolent millionaires are beginning to show signs of adopting some other excise for their leisure hours than the sole one attributed to them, with some justice, by Mr. Arnold Daly: that of going down to Battery Park to see whether the incoming steamers contain any passengers from Europe who can help them to spend their money. That is to say, there is a general belief that Americans are coming to patronize American music, to buy American pictures, to encourage American painters and even to make use of American decorations. They have generally permitted us to paint their walls, to stain their floors and make their sofa cushions, but when they had elaborate and expensive work to give they generally prided themselves on turning it over to aliens.

These firms writh the most valued walls of old wood paneling from their own countries around the art and objects d'art, and install them for fabulous considerations in the new residences of American magnates. I have personally examined a set of ten pieces on which a dealer makes a profit of over $100,000. But we may hope that the chance of such things is no more.

And besides this, there is the war. The ultimate effect of this is not to call for art to to art or to life. Both may receive a new stimulus, a renewed vigor, or both may be in abeyance in a state of quiescence, for a generation. But of one thing we may feel fairly certain, and that is that the peoples of Europe will have to settle down to a sterler existence, and we may hope that they will not be handicapped by the unsavory acquisitions of the past.

Thus far our accomplishments in decoration have been in part initiatory, in part crude, tentative and experimental. We have had insufficient opportunity for original expression; there has been little encouragement, except in the last couple of years, and then more particularly the designing of interiors for the stage.

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It is unbelievable, that these influences, this quickened energy, this new stimulus, should lead all to nothing, to an exhibition of the historic periods, and the willingness to draw from them an endless series of satisfactory and will to pleasing schemes of line and color. Something new will come, must come! Art is too live; and this will be Modern Decoration.
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Remember the name — Commercial Humus.
Plants Things to Grow and Live
(Continued from page 58)
be shipped at a suitable time, be ready to plant them as soon or tub, and putting in as
you get them. Order early—the
time the people who wait until the last gun
is fired ordering their plants and placing it close about the
are the ones who make the biggest
row about not receiving satisfactory
stock. When plants are being selected
from either the nursery stock or the greenhouse benches, naturally
the first orders are filled with the
finest, and the smaller and "heeled in" as soon
are left to the last. It is always best
have plants sent with the soil on, even though the express charges may
be a little more. If there are some
of the new things which you would
like to try, but feel too expensive
to set out in large quantities, get a few plants this year from
which to work up your own supply for next
season's bloom.

Do not make the very common mistak
of spacing up your gardens just
as you need them for planting, a little at a time. Not only to get
the work out of the way, but also be
cause of the additional benefit there
from, have all your gardens plowed and
spaded up as soon as possible after
harvest is finished and in good condition
for working.

Your success with the things which
your plant will depend largely on
oughness with which you prepare the
soil. If manure or soil to be
plowed in for the very
arden, see to that the furrows are not turned under "flat," leaving a
loosening of the subsoil and the surface soil to
intercept the upward action of the moisture in the soil when needed later
for the surface plants. They should be laid up against each
other at an angle, so that the narrow
side will thoroughly pulverize both
soil and manure and mix them as
much as possible, while at the same
time forming the surface fine and
be permanently clean, with all foreign matter far
enough below so as not to interfere
with raking and planting. The
flower gardens and small vegetable gardens are,
of course, prepared by hand;
but, for those which require strong
back plus intelligence. If
there is much manure to be worked
under, it may be spread evenly over the
surface first, then remove a spade's width,
and turn over the next row into this,
thus thoroughly mixing the manure with the
soil. While it is always
advisable to have
the soil deep and heavy, it will pay to
work it two spades deep, although
this is not considered any more labor.
It should be dug or forked to a depth
of 6" at least, and preferably 8".

When the Plants arrive
In spite of doing all that is possible
in advance, it frequently happens that
one's plants cannot be set out im-
mediately upon receipt from the
nursery. It is very important
to keep them in such a way that they
will not be injured during the interval before garden arrival or
planting time. Keep all plants in flats or pots in a place where they will be
shaded from direct sun, or at least
quently; in sunny or windy weather.
If the weather is to be dry, they will
usually be required
to be watered even
from getting drier than
they should. If plants in clay pots are
to be kept more than a day or
left to the rain in loose
soil, to prevent drying.

Plants that have been shipped from the
nursery should be opened up
immediately, loosen up if they
have been pressed tightly together, and the
roots carefully examined. If they are
beginning to get dry, give them as
much water as they will readily ab-
sorb. This may be done by placing

There is absolutely no danger in this
combination, as the gas section is an entirely separate from the
section as if placed in another part of the kitchen.

Gold Medal
Glenwood
Two Gold Medals—Highest Award
at San Francisco Exposition, 1915.

Note the two gas ovens above—one
for baking, glass paneled and one
for broiling, with white enamal door.
The large oven below has the Glenwood Patent Oven Indicator, and is heated by coal or wood.

See the cooking surface when you
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gas and four covers for coal.
The entire range is always avail-
able as both coal and gas ovens can be operated at the same time, using
one for snow, the other for
pastry. It's the range that

"Makes Cooking Easy"
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THE GORHAM COMPANY
Fifth Avenue at Thirty-Sixth Street
New York City

Why not a useful

1917

Garden this year?

UR catalogue is really a "text book" on gar-
dens, brim full of good suggestions, culti-
vations and directions and with a
wealth of pictures and des-
scriptions of just what you want in
vegetables and

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Although it is less than four feet
long it can do every kind of cooking
for any ordinary family by gas in
winter weather, or by coal or wood
when the kitchen needs heating.

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idle land by planting

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Spring and Summer Fashion Numbers of Vogue

Would you be smart—attractive—individual—in your gowning this season? It's quite simple. Take the first two dollars of your Spring and Summer dress allowance and invest in the ten great Spring and Summer Fashion numbers of Vogue. Insure yourself against a wrong start. Begin with the number that finally determines the accepted mode of Spring, the

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The complete story of the Paris Openings establishing the mode.

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The final blooming of the summer modes that will be...

$2 Invested in Vogue
A tiny fraction of your loss on a single ill-chosen hat or gown

Will Save You $200

Consider, then, that by the simple act of mailing the coupon below and forwarding $2 (a tiny fraction of your loss on a single ill-chosen hat or gown) you assure the correctness and economy of your wardrobe not only for the remainder of the Spring but throughout the entire Summer season.

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H&G 4 1917

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Suggestions may be gained from a dox box prints of well-appointed interiors, sent gratis upon request.

New York Galleries
Grand Rapids Furniture Company
INcorporated
34-36 West 32d St., New York

Placing Things to Grow and Live

(Continued from page 90)

It is difficult to give a rule for the amount of seeds to sow in small quantity. Small seeds sown in rows, such as carrots, turnips, onions, radishes, etc., should be sown in a continuous row, six to twelve seeds to the inch; this is, of course, much thicker than they will be wanted, but some will not sprout, and in order to make sure of a full stand, the gardener must expect to do some thinning. Larger seeds, such as beets, salisfy and Swiss chard, may be sown about half that thick, and peas and beans 1’ to 2” apart. Corn, pole beans, melons and similar things planted in hills are sown five to a dozen or more seeds to the hill, and thinned to two or four of the best plants. Seeds are cheap, so there is no excuse for planting too thinly; but there is still less excuse for doing what is so often done — use up in given space all the seeds there may be in the package or envelope.

Another essential thing is to have the seeds in firm contact with the soil. Seeds planted by means of a drill, as they always should be if there is only one seedling to be got from the bed, need not be covered. But, unless the soil is very moist, be gently firmed down into it with the back of the rakes or the heel of the shoe. If the soil is firming down on top sufficiently to mark it after covering it.

A final small but important matter is to tag each thing, to make a mark giving at least the date and variety for each thing as soon as it is planted. You will want to know these things before the season is over, whether the seed comes up well or poorly.

Transplanting

What has been said about preparing the soil applies to planting and transplanting as well as to seed sowing. If a root is to be planted, the plant is set down below the surface; but if the surface is dry enough when the hole to receive the plant is being made, the plant should be crumbled down into it and be that which will come into direct contact with the soil. This is, of course, just the condition which is not wanted.

The universal practice to use manure or fertilizer in the “hill” or directly under each plant set. Where this is done, care should be taken to mix it thoroughly with the soil, preparing the holes or holes in advance; otherwise, there is great danger of injuring the roots, particularly with chemical fertilizers. A mixture of fine ground bone and tankage or dried blood is both stock and the graft is so much the better and safer to use than ordinary mixed fertilizers. A small amount, about the equivalent of a handfulful, is ample for each plant. This will give it a quick, strong start, but should the plant be thinned before carriers to carry it through to maturity, the manure and fertilizer applied before being relied upon for that.

The plants, as well as the soil, should be carefully prepared. The soil should be moist enough so that it will not crumble away from the roots when they are removed from the flats or pans. In most cases, particularly as warm weather comes on, it is well to cut back about half of the largest of the leaves. Be careful not to leave the plants exposed, even for a short time, to the winds or bright sunshine, as the roots will be injured very quickly. Except in very dry weather or in exceptionally light soil, water in the hole will not be required, but if it is put in it before planting, or part in the bottom of the hole and part when it has been half filled — never on the surface after planting as is often done.

Firming In

A point in setting plants which causes failures is that they are not sufficiently "firmed" in the soil. Very small plants may be pressed into the fine soft earth hard enough with the fingers but, in setting bed-

Roses

Out-of-the-Ordinary

WITH the sturdy American grown roses that I am offering this year, you can make your rose garden a constant source of joy all year around.

Every plant throws out good vigorous new growth that brings its blossoms. Every plant is grown slowly under natural conditions and acclimated to snow and frost. All of them are free blooming and delightfully fragrant. None of them requires any special attention or care.

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THE GARDEN AS A LIVING-ROOM

I t is possible to live like a cave man in the garden. Few do it. The most of us who take to the garden in summer want to make that outdoor living-room livable. We don't have to bother about the ceiling—the blue sky attends to that. Nor do the walls have to be painted, for Nature looks to them in tree and bush and the purpling horizon. All we have to do is to set out the furniture and see that the floor is all right.

So we have assembled an issue for June which is devoted to furnishing this garden living-room. Here are pages of tables and chairs especially designed for that lovesome spot; here are shown new garden statuary, garden walls and fountains, pools and ponds. The floor of our living-room is considered in articles on lawns and tennis courts—practical articles that tell how each is made. Two experts have chosen the best white flowers and the best yellow roses to adorn this room. Gardeners will be interested too, in hearing how Washington is helping the farmer win the battle; it is a thrilling story, and an inspiring one, especially in view of the present national conditions.

Of course, the outdoor living-room is not the only thing that comes in for attention. Sleeping porches and country house water systems, for example, find their places here. Mili
tants and collectors will also find Gardner Trail's article on Japanese sword-guards vitally interesting.

Continuing the transition from the outdoors to the in, you come to the first of a series of articles on the Colonial house; to Mr. Eberlein's study of Italian furniture; to some more good little devices for the house: to the best and latest books on interior decorating; and by no means least, to the three pages of rooms which make up the Little Portfolio of Good Interiors.

In these forecasts we don't often say much about the poem on the editorial page, but "Out of Town," the one we have chosen for the June issue, is a so wholly delightful little lyric that we really can't help telling you its title, at least.

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May, 1917

House & Garden

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The Scartley residence at Great Neck, L. I. is among the country houses in the June issue

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FLOWERS THAT HUMANIZE FURNITURE

Here's a study in effects for you! A Jacobean hall, noble in its austerity. The weight of the ages rests upon its antique furnishings. You conjure up visions of sturdy men of an age that was not too proud to fight. . . . Then comes Spring, with a fresh loveliness, and her first fragile blossoms find a place there on the oaken sideboard. Her beauty of today graces the stern solidity of yesterday, softens it, humanizes it.
When Syringas Turn to Lilacs

And the Mock Orange Takes Its Rightful Place as a Namesake of Ptolemy II

Grace Tabor

Of a delicate and very lovely lilac or mauve are the flowers of S. pubescens, opening in late May.

When is a syringa not a syringa? When it is a Philadelphus.

When is a syringa, a syringa? When it is a lilac!

There isn't any sense in this, of course—or at least there wouldn't be, if it were not true. Being true, it seems as if there must be; else how could it be?

I am glad to get the two clauses into apposition. I have always wanted to, but never had occasion until now; and what a relief it is! For now, it seems to me, I may be able to straighten it all out.

Half of the time, when one of the elect in garden craft talks about syringas, those who are as yet only candidates, so to speak, think he means the mock oranges—those stimulatingly sweet old shrubs that someone named "after an ancient Egyptian king ... for no obvious reason," as the encyclopedia intelligently observes. Ptolemy II, he was; son of the founder of the Graeco-Egyptian dynasty, I believe, who lived some two thousand and two hundred years ago, more or less—and had about as much to do with mock orange shrubs as the man in the moon!

Among his intimates this chap's name was Philadelphus; only professionally was he known as Ptolemy II. So the plant species was christened Philadelphus—in a sort of dignified chumminess, one presumes—although there never is a bit of legend or romance or anything else associating him with it. Nevertheless, the sweet mock orange is entitled to no other name; and the lilac alone is a syringa.

But this matter of names is as often as not confused to the verge of very chaos! For example, Philadelphus—the mock orange plant—was the thing originally called, and with good reason apparently, "Syringa;" this name being derived supposedly from syrinx, meaning pipe or shepherd's pipe. The stems of these shrubs have a pith that is so easily removed that pipes were made from them. But after it was thus reasonably applied to the genus which, to avoid confusion, it may be as well for me to refer to as mock orange, no one could think of a generic name for the lilac. So they decided to transfer to it this name, and invent another for the plant which bore it in the first place!

Hence it is that we still refer to Philadelphus, in the common tongue, as "syringa;" and keep on calling lilacs, "lilacs." And I suppose we shall continue to do so, world without end.

Of the lilacs we all know that "the fragrance is very sweet"—usually. I do not think all are aware that there are lilacs almost scentless and therefore, to my mind, worthless; or that there is one other which has so strong an odor as to be unpleasant to some people. Also, we are all aware that their flowers are purple, white or lilac and sometimes almost pink.

Indeed, it would seem that there is very little new information to be disseminated with regard to these shrubs; for who does not associate them with the oldest that we have here in America? And what dooryard is there that hasn't its clump?

Yet, of course, it is true that the things we are the most familiar with are the things of which we very often know the least. So
I am moved to start at the beginning, just as if lilacs were a brand new find. Associated as they are with the earliest days of our forefathers, it would seem that their original home must have been England, for they were not native here. Yet this is not the case; only in southern Europe, in China, in Persia and Japan do lilacs grow wild—save as they have escaped from old dooryards here and taken to the road. The oldest in cultivation probably is the lilac of southern Europe (Syringa vulgaris) and this is still the best, all things considered.

For lilacs—I shall not call them syringas except as I must use the name technically—are not improved by doubling. And though new varieties of great beauty and merit have been developed by hybridizing, after all is said and done, none is sweeter than the old common purple and common white. The most that we want more than their sturdy beauty and ravishing fragrance is a longer period of it, lasting all summer!

Succession Bloom and Masses

The nearest approach to this is of course attained by the development of varieties that bloom at different times, and so keep up a succession; and this has been so successfully done that one may now carry "lilac time" a third of the way through summer at least, by proper selection.

One of the essentials of good effects, however, in the use of this species en masse, is the confining of a group to one variety. Lilac mixtures do not impress the eye; masses of one kind alone are necessary, if the most that this shrub has to offer in the landscape is to be realized. Hence, in order to enjoy a long season of bloom, one seems to be bound to have considerable space to give over to lilacs; yet this necessity is modified somewhat by the fact that it is possible to use several varieties in a mass if they are not actually intermingled. One each of several kinds planted together is worse than none; but small groups of from three to seven each, of several kinds, planted to form an unbroken mass, will give the desired extension to the season of bloom and a happy effect as well.

The Earliest Bloomers

Earliest of all to blossom is a Chinese species, distinguished also by being the only lilac whose foliage turns to a fine color in the fall. This is Syringa oblata, a native of northern China, consequently very hardy and equal to any climatic vagaries which we have here. In this connection, however, I think it well to call attention to the fact that there are seldom found in the warm sections of the country lilac specimens as fine as New England and the northern states show. It would seem, therefore, that unless one of the tenderer species is chosen, the lilac prefers a rigorous climate, with good old-fash-
Quite the most interesting factor contributing to the success of this country house dining-room is the set of authentic Chippendale chairs. They are of an early design with swept whorl top-rail, vertically pierced splats and carved crested knees.

The house lies low to the ground. As seen in the photograph below, one steps from the living-room or porch out to a broad stretch of lawn. The boundaries are defined by a hedge, and beyond lies the flower garden rich in bloom.

THE RESIDENCE OF
W. SEWARD WEBB, JR.
MANHASSET, LONG ISLAND
CROSS & CROSS, Architects

A typical farmhouse type, the plan is balanced and the fenestration regular. At one end is a service wing and at the other a porch. The house is of wide lapped shingles painted white, and the blinds are green.

Photographs by Contant
IN PRAISE OF BREAKFAST ROOMS

With Which Are Mingled Some Practical Color and Furnishing Schemes—Building a Room Around China

DAVID SCOTT

The breakfast room is dedicated to that subtle meal which finds us in the most sensitive of moods, which may mean anything from a collation to a swallow, but which to all save the total abstainer has the power to make or mar the day.

A tremendous responsibility rests upon this room—upon its location, its decoration and the manner of its furnishing.

First of all the breakfast room should be situated in a part of the house where it will receive the full benefit of the morning sun. Better breakfast in the cellar or in a mid-Victorian dining-room of walnut and red damask than in a sunless breakfast room. If your house is not yet built, you have an enviable chance for selecting an easterly spot; if it must be a matter of adapting a house already erected, make the best possible choice of a bright corner. Never lose sight of the fact that this is in this room that the real business of the day is to begin.

Time was when breakfast was a highly solemn affair. The entire family had to be assembled, clothed in suitably decorous garments, before an eggshell was cracked or a slice of bread toasted. This sacrificial ceremony was performed in the room dedicated to the rites of dinner.

MODERN INFORMALITY

An informal breakfast in an informal room may work for the weakening of family discipline in the eyes of an older generation, but it means that life has become immensely more livable. The dignity of modern architecture—directly concerned with expressing the needs of modern life—is to give a fitting diversity to the hours and tasks of life. There are bedrooms to sleep in and dressing rooms to dress in; reception rooms to receive in, and living-rooms just to "live" in; and by no means least important dining-rooms to dine in and breakfast rooms to breakfast in.

Informality will indeed be for most of us the keynote of the breakfast room decorations. This is partly because breakfast has almost universally become a meal so informal that we could not revive the old dignified institution if we would. Then, the very situation and architectural requirements of the room throw it into the comfortable class of morning-rooms and sunrooms—restful, refreshing spots of naive decoration, large window space, early sunlight. These are rooms in the house, yet not altogether of it, partakers, too, in the sights and sounds of the world outside.

This is the room where you may indulge in all sorts of quietnesses and quiddities, of which you may be coldly Colonial or frankly futuristic or anything else your taste directs. Here may be used that gay cottage chintz, that cunning painted furniture, which outrageously refuse to conform to the other seemly sed-colored rooms of the house. Whether the breakfast room is the admirable supplement to the comfort of your jolly little thatched cottage or the one humanizing note in the twenty rooms of a gingerbread encrusted castle-by-the-sea, it will justify its existence a thousand times.

The cheerful of backgrounds should be given the breakfast room. Yellow, light green and even light blue and white, used in combination with other tones, make an excellent setting. There are various papers on the market which show these colors in simple patterns. The Chinese designs in two tones of light blue and light grey are especially pleasing. Much of the work could be finished in a darker shade of grey or blue, and the furniture painted French grey with blue decorations. Cream sunfast curtains and blue willow pattern china on a linen cloth worked with blue crewel complete the scheme of a very charming and restful room.

Then there is the plaster wall which permits a variety of treatments. It may be painted in warm yellow, ivory, pale blue or green. If you like, it may have stenciled designs in a not too obvious color. I have long been partial to Italian silhouettes in blue—a frieze of dancing boys and girls. With such a background the furniture might be painted a shade lighter than the walls, with curtains of blue or green silk piped with yellow—like a streak of sunlight.

VARIUS TREATMENTS

Another suggestion in Italian decoration is embodied in a small square room of creamy plastered walls, pale blue painted Dutch peasant furniture. The focal point is a low mantel of severely simple lines, surmounted by a blue and white Della Robbia relief of Madonna and Child. On the cream-painted floor is a rush mat, and the china is plain pottery of a deep cream color. Always filled with white or pale-mauve flowers, this is a room for those rare souls who like to begin the day quietly and go to their day's work with a lasting sense of peace upon them.

For a gayer taste was planned a very effective breakfast room of faded orange walls and a set of willow in green-blue. The cretonne combined these colors with a stripe of black and a black rug was used on the floor. A Dutch blue room with a small tulip motive on plates and furniture was very appealing, while not the least

This Louis XVI breakfast room is unquaintly attractive, albeit somewhat too fragile and formal in furnishings to suit most tastes. It is decorated in soft tones of rose and grey. Mrs. Lorraine Windsor, decorator
of delightful memories is a quaint room of floral paper and black painted furniture of slender lines which duplicated in a conventional decoration the nosegays on the wall.

The decorations of a breakfast porch may almost be built around thechina one chooses to use there. Imagine what can be done with a set of Italian peasant ware. The background is cream—paint the walls cream. The figures are red, blue, yellow and green—this easily leads to yellow curtains with a piping of blue, and bright blue flower-boxes beneath. The plants will contribute green, and the rug may be of green or blue fibre, while a complete résumé is found in a stout little set of peasant furniture painted pale green with flower decorations in suitable shades of red, yellow and blue.

Of course, the architecture of the room will, in a large measure, decide the type of furnishings used. The little French breakfast room shown on these pages would be spoiled by a rag rug, while an Aubusson would be anathema to the farmhouse porch.

**Types Illustrated**

One of the rooms shown here is thoroughly French in spirit. Another is a country house room of dignified simplicity well carried out in its decoration. The third, a porch breakfast room, was well adapted to decorated furniture of farmhouse lines, and the fourth, the Colonial kitchen, demanded Colonial furnishings.

Consider these rooms in detail. The Louis XVI room, decorated in rose and grey, represents the extreme to which formality can be carried in a room of this sort. Despite paneling, circumplex curtaining and furniture of the royal boudoir atmosphere, this room draws from its small dimensions, its many windows and growing plants a daintiness and freshness that give it individuality. Probably never a very popular type of breakfast room, it is undoubtedly well suited to certain homes and tastes.

In spite of its dignified lines, the country house breakfast room scarcely escapes the accusation of naïveté. There is something of the cottage atmosphere in the straightness of the chairs and the long console with its two candlesticks. There has been a blessed knowledge of what and how much to omit, which largely accounts for the charm of this room. In a matter of fact, it is Chinese in decoration—porcelains, rug, lacquered furniture, and even small tasseled chair cushions of Chinese silk. The combination is full of attractive possibilities.

The predominating attributes of the breakfast porch in the home of Philander C. Knox, Esq., at Valley Forge, Pa., are simplicity and cheerfulness. Walls and ceiling are of white painted boards, the floor is of grey stones, and the fireplace has a plain wooden mantel and a chimney breast of white-washed plaster. One of the walls of the porch is glazed, its long casements opening on a terrace that overlooks the garden. Particularly appropriate in this setting are the sturdy gate-leg table and the ladder-back rush-bottom chairs, painted in warm grey-brown with bright floral conceits.

**A Colonial Room**

In the converted Colonial kitchen, everything has been subordinated to the oldtime spirit. The walls are painted white above a low white wainscot, and the ceiling is of white boarding with brown stained rafters. Smooth grey stones laid in white bond compose the floor. In line the furniture is straight and austere. There are two capacious cupboards, the corner one showing glimpses of fine old lustre ware. The fireplace is furnished with rigorous simplicity, and the hardware is of black iron. Old china is ranged along the high shallow mantel, where it is thoroughly in keeping.

One of the best things about the breakfast room is that, in spite of the apparently limited class to which it belongs, it is susceptible of a wide variety of treatments, a fact clearly shown even in this brief discussion. It offers an excellent opportunity for a display of individuality. It may represent a consistent development of the scheme of your house, or a welcome and diverting sport from its type. In any event, its possibilities and attractions are endless, and the problem holds as many charms for the novice in creating unusual and artistic interiors as it does for the decorator of long experience.
THE GAY AND RADIAN T LADIES OF FRENCH PRINTS

Who Survived the Fury of the Revolution to Grace the Walls of Our Rooms Today

PEYTON BOSWELL

ABOUT the year 1792, or it may have been 1793 or 1794, a Parisian workman stopped at a meat shop and selected a generous portion of the butcher's stock. The proprietor wrapped it up in a rectangular piece of paper, which he roughly crumpled as if angry because it wasn't large enough to suit the purpose; then, grabbing another sheet from the same pile, wrapped the meat the other way and handed it to the customer. The workman paid his bill, looked at the package, scrutinized the wrapping, contemptuously shrugged his shoulders and walked out.

When he arrived at his home, his little daughter took the package from his hand and, hurrying to a table, unwrapped it.

"Oh!" she cried, holding up the first piece of wrapping paper. "See! Isn't it pretty?"

The child regarded the paper, stained though it was by the juices of the meat, with ecstacy. She danced around the room with it, then stopped before the candle again to enjoy the beauty of the picture imprinted thereon.

"Oh, see the pretty lady sitting by the side of the wood. Oh, papa, when are we going to the country again? Isn't it nice?"

"Here, Marie, give that piece of paper to me at once."

The father spoke harshly. He took the piece of paper from the hand of the little girl, gave it a hasty glance and thrust it into the fire. The child began to sob as if her heart would break. The man picked her up in his arms, stroked her hair and kissed her tenderly. His mind was on the picture he had just destroyed and his daughter.

It was one of the most beautiful of French prints. Its title was "Pauvre Annette" and it was one of the masterpieces of Delecourt, the great French engraver. It depicted a pretty young woman, seated in grief by the side of a wood, her heart breaking at the wrong she had suffered, a broken vase on the ground in front of her symbolizing the love tragedy that had overwhelmed her life when she met one of the gallants of the king's court.

The French workman thought of the girl seated by the wood, and he clasped his own little daughter more closely to his breast. He clenched his teeth and was glad that he had burned the print, which typified for him the wrongs of the old regime, swept away a little while before in a crimson flood. In its destruction he felt a sense of personal satisfaction and justification.
bought many sheets of "Pauvre Annette" more cheaply than he could have bought plain wrapping paper. The hated "l'estampe galante" had become worse than worthless, and it was appropriate that meat for the people should be wrapped in it. The emancipated citizens of France destroyed them wherever they could find them. They were the hated symbols of the aristocracy, even though they were exquisite creations of the most exquisite period of French art. And they were no longer art, even, for had not David and his school come in with the Revolution, depicting for the world in cool greys the austerities of classic Rome? The artists of the old regime were reduced to starvation, or were making a scanty living imitating David and the new republic school. Beauty and gayety had gone into eclipse, not to emerge again until succeeding generations had been able to get the right sort of a focus on art and on the Revolution.

Some of these superb prints perished to the last copy. The colored edition of "Pauvre Annette" almost suffered that fate. Only one copy exists today, the one in the possession which Mr. Joseph E. Widener acquired last season from the Knoedler Galleries, and which had been formed by the French deputy, M. Christophe. This particular print is almost priceless. If it were sold at auction it might bring $10,000 or more. Only a few copies of the black and white edition survive, in the portfolios of collectors.

**Why Prints Are prized**

Thousands of other prints did survive, however, zealously cherished and hidden away by the monarchists. Other thousands were of such a harmless nature that even the republicans, affected by their beauty, kept them for decorative purposes. And today, 18th Century French prints are especially prized by American home builders, because they give an excellent and dainty touch to a French room. They are almost indispensable to a Louis XV or a Louis XVI room, being out of the very nature of things a part of the furnishing, and they give a certain welcome relief to the more austere appearance of a Louis XIV room. If consistency is sought in a Louis XIV room, the portrait engravings of Nanteuil and the best of his contemporaries are in every way suitable.

In a French room, whose walls, with their delicate paneling, are a pale grey, pictures of the strength of the Dutch or English schools would strike a discordant note. They would upset the harmony of the arrangement. Even an English mezzotint, done by a master of the art, would speak too loudly from the walls, though its subject were as gentle as one of Reynolds' fair ladies posing as a goddess under the shade of a romantic English tree.

But the French color print, with its carnations and its limpid blues, supplies just the right note. The gay and radiant ladies of the court coquetting with their gallant beaux, the poignant little romances that are told, seem altogether at home with the inlaid tortoise shell table, the graceful chairs, the frail looking—but strong—cabinet, the debonair clock and the other delightful objects that belong in a French room. And the verdant landscape backgrounds that go with the engravings of famous pictures by Fragonard, Lancret and Pater are in perfect consonance with the bits of tapestry, pastoral and airy, that adorn the furniture of the period.

These 18th Century prints have given almost indispensable aid to our American architects. Many of them depict interiors, and the engravers have limned to the last detail all the elegancies of the furnishing and decoration of the walls. Never before and never since have artists lovingly supplied such detail. Even the titles of books lying on the table before my lady appear in these prints, together with the fine tracery of tapestry chairs and delicate carvings of mural borders. These prints also show just how the prints themselves were used for decorative purposes in the rooms constructed in the last years before the Revolution. So, in the hands of the architect and the interior decorator they form an artistic circle, being decorations themselves and pointing the way to other harmonious decorations.

**FACTS FOR COLLECTORS**

Because "Pauvre Annette" is worth $10,000 it must not be thought that 18th Century French prints are at all prohibitive in price. Beautiful examples for decorative purposes can be had for modest figures.

The high priced ones are "collectors' pieces." The publishers put their wares on the market in an age of collectors, and they soon found that, no matter how beautiful a print might be, it appealed to the collector only when it was rare. Therefore a few "finished proofs before letters" were pulled, having only the name of the artist and the engraver. Made next, a few "finished proofs before letters" were pulled, having only the name of the artist and the engraver. Then an edition would be printed with the arms of the noble to whom the print was dedicated, the title and the name of the artist. Lastly would be a popular edition with

(Continued on page 82)
ARCHITECTS AND MIRACLES

THE great trouble with miracles is that they are so very clear but few of us can understand them. We have to call them magic.

If I were to say that an architect can perform miracles, you would not believe me. But when I ask you to consider the architect as magician, all is plain.

You may not believe that Moses smote the rock and water gushed forth, but you can believe that engineers smite rocks and oil gushes forth. You may question the reality of the serpent that twisted up Aaron's rod, but I dare you to question the reality of the green concrete vines that twine up the brown concrete chimneys of magical hostleries at Atlantic City...

Now I claim that an architect is a magician of no small merit. Conceive beneath our feet the T-square wand of his T-square wand brings forth. Today granite lies in the shoulder of a great hill. Tomorrow it stands on a street corner higher than a hill, and men go there to labor and to play. Today the oak towers proudly in the forest and snatches at the hem of clouds. Tomorrow it lies humbly supine, a rough-hewn roof beam beneath which men dwell in peace and safety. Today a heap of stones and a pile of dust lie by the pavement. Tomorrow a green concrete vine grows up a brown concrete chimney.

MOST magicians are content with producing rabbits out of top hats. The architect never ceases until he can make commercial cathedrals out of rock-ribbed hills, homes out of stult-ward forests—and green vines out of dusty concrete.

Ask the conjurer to do a trick, and he will pull sixteen red handkerchiefs out of your pocket and lay them on a table before you. Ask the architect to work his magic, and he will take your personality and crystalize it into brick and stone and wood, and set that image in a pleasant place. And men who pass by will marvel and say, 'That's just the sort of house I knew Jones would build. It looks like him. It has his personality. I wonder how he did it?'

You may call this magic, mes frères, but I would call it a miracle. I would call any act a miracle whereby a man takes the crude things of this earth and fashion them into lasting visions of loveliness and strength.

In the Gospels, the mud of the roadway was placed on a man's eyes that he might see. From the same mud of common

TODAY— I write as we face hostilities—the world is watching a gigantic miracle performed. It is seeing an old vision born anew in the travail of the universe. It is listening to the blunted voice of democracy. On a stage vaster than the world has known, and with actors innumerable, an ordinary, everyday day is being transformed into an extraordinary day.

Five years ago, were you to speak of the sacredness of the home, men would smile at your simplicity. Today these same men have been going forth to die for the very ideals that make home possible. A Divine Magician has taken the whitened bones of these men and is building with them a new ideal. And the ideal is this—that the power of a people comes not from a palace but from the home. 

And the home is the essence and union of democracy. To make it livable and pleasant is the great democratic ideal. To make it safe for this generation and the generations to come is the miracle that is being wrought in the trenches today.

When the war began we had arrived at a pass where—unknown to most of us—it was necessary that the seemingly insignificant, utilitarian things of life be made great and noble. The stone that the builders refused was sorely needed for the headstone in the corner. We needed to make the role of women more free, we needed to simplify the lives of eating and drinking, we needed to make the fabric of the home— a sacred thing, a living thing, a thing that produced its fruit with the Dionysian gush of magic. We needed to make the ordinary things of life and work—real enchantment.

LINES IN A GUEST BOOK

When does man endure the Utmost? Does it come beside the Pole?
As the white floe breaks asunder and the Arctic waters roll?
And the icy hand of horror grips the marrow of your soul?

Does it come on field of battle, tune of “Soldier Come to Me”?
When a panic strikes the column, and the enemies turn to flee?
And the drummers die in glory for a careless world to see?

Does when the man endure the Utmost? In the tempest's rolling path?
On some shipwreck flotsam floating, while the waters work their wrath?
Giving each reluctant seaman an involuntary bath?

Does it come in darkened sick-room, when you're flat upon your back?
When the Doctor calls the Rector and the Nurse begins to pack?
And your wife has daily fittings for a dress of widow's black?

No—it comes in country houses as the hour draws to ten.
And they bring their ghastly Guest-Book and a rusty, dusty pen,
And command you to be funny. Man endures the Utmost then.

H. P. Riano.

THAT is the difference between magic and miracles. The magician takes the extraordinary and makes it ordinary—we are all accustomed to seeing the old tricks. The worker of miracles takes the ordinary and makes it extraordinary. Even the wisest of us has no conception of the wonders which will greet the eyes of the genera-
THE STORY BEHIND STONE

We are apt to forget the romance of stone—the fires through which it passed to fuse its rich colors, the ages of cooling when were crystallized those glistening particles that give even the humblest boulder life and action. Grasp that story, and you will make more use of stone in your garden. You will appreciate its ruggedness, its color, its life. Perhaps you will even be inspired to build, as was built here, a garden wall that is romantic and lovely in itself. It is in the garden of Benjamin Joy, Esq., at Harvard, Mass., of which Ralph W. Gray was the architect.
The “Lord Thomas and Fair Eleanor” printed kerchief shows that gentleman, halting in his pursuit of the deer to look at the fair Eleanor who is not obdurate to his attentions.

An English rural landscape printed chintz of the 18th Century. It is quite a busy little chintz. The more one looks at it the more he sees, for every niche of space is occupied.

“William Penn’s Treaty With the Indians” formed a favorite subject for chintzes printed in the early 18th Century. The print has fine action and historic realism that recommends it for framing.

The Washington kerchief below is an example of a 19th Century printed neck kerchief with Stars and Stripes motif.

The Declaration of Independence with portraits of Washington, Jefferson and Adams, and medallion seals of the thirteen states was printed on chintz kerchiefs. This is from the collection of Charles Allen Munn, Esq.

The Funeral of Nelson,” an early 19th Century printed chintz. The repeat pattern is clearly shown. Nelson’s funeral car is here pictured. From the collection of the late Alexander W. Drake.
May, 1917

PATRIOTIC PRINTS OF BYGONE DAYS

Old Kerchiefs and Cloths for the Collector

GARDNER TEALL

The "Washington Bust" printed kerchief assures us that George Washington was the "Patriae Pater," and the portrait is appropriately surrounded by shields and laurel wreaths. From the collection of Charles Allen Munn, Esq.

"The Allegory of Franklin and Washington" is one of the most sought for and prized printed chintzes in this field of collecting.

Biblical subjects preceded the introduction of patriotic themes. Here Joseph is shown in a French printed chintz of the 18th Century.

CHINTZ has been called the tapisserie d'Aubusson of the cottage home. Its place in the affections of the collector of antiques and curios has long been secure. For fully fifty years and more lovers of household ancestry have gathered to their appreciation bits of old printed fabrics.

Originally the word chintz was applied to the printed cotton fabrics from India, each piece being called in early days a chint, a name which was derived from the Hindu cint, Bengal cint and Sanscrit chitra, meaning spotted or variegated. Afterwards it came to be applied to the glazed printed calicoes of European and American manufacture, gaily patterned with flowers and birds and figures in diverse colors on a white ground. Its calendered, dust-shedding surface made the material a great favorite with careful housewives.

Cretonne, the French substitute for chintz and a heavier material than it, was not introduced until somewhere around the year 1860.

The old-time chintzes are not so easily picked up nowadays. However, there are still excellent chances of occasional "finds," even in this antique-combed land where collecting is now one of our chief pastimes. I know one collector who has been so fortunate as to obtain many quaint specimens of old printed fabrics at small cost from an upholsterer in his own town. From time to time chairs and sofas were brought to the upholsterer to be re-covered. Often these had several layers of material under the outer one, and below those of later days be now and then would find coverings of old printed cotton fabrics. Among these were a lovely spray-pattern chintz of the Queen Anne period and a hand-print of pastoral design by one R. Jones, a manufacturer of Old Ford, London, who produced patterned chintzes about the year 1760.

Many of the new printed cotton fabrics have borrowed their patterns from these interesting textile ancestors, though nowadays, in the case of monochrome and duochrome prints, the color effects are somewhat richer than those obtained in the printed fabrics of the 18th Century, with their cold chocolate browns, bottle greens and ox-blood reds. For the collector there will naturally be an inimitable charm about the original pieces, not to mention their historic interest, while the (Continued on page 58)

"The Orphan Boy," a printed kerchief from the collection of the late Alexander W. Drake, is an unusual example of the text-and-picture type of printed fabrics.
THE SUREST FLOWERS FOR THIS SUMMER'S BLOOM

Bulbs and Tubers that Can Be Planted Now for Quick Effects, and What Can Be Done with Them

F. F. ROCKWELL

SUMMER flowering bulbs and tubers of all kinds offer very important advantages to gardeners who want good garden results quickly—particularly to those persons who are not certain that another summer will find them with their present garden and hence do not care to make permanent plantings that cannot be easily removed. These advantages are practically certain results and sure satisfaction with a minimum cost and with minimum care, and at the same time an investment that can be counted on for the future.

The summer bulbs are less expensive and more lasting than potted or bedding plants; they are more certain to succeed, and more easily cared for than annuals; they give quicker results, and are much more easily removed—and if necessary, carted about with the family Lares and Penates—than the regular hardy perennials.

While gladioli, dahlias and cannas are universally known and grown, there are a number of minor summer bulbs which are altogether too little appreciated. I would particularly urge every flower lover who is not familiar with the less known bulbs described in this article to try at least two or three of them in her garden this year. The very fact that they are not universally grown lends to them an added interest.

DAHLIAS OF TODAY

It would be hard to decide between gladioli and dahlias in the race for popular favor. The recent development of each has been little short of marvelous. Not only new varieties, but distinct new types of both have been added until sometimes one has to pause and wonder where the development will stop—if indeed there is any stopping point! In the limited space of this article it is not possible to enter into any detailed discussion of varieties. But a word or two concerning the different types of both will undoubtedly be helpful, particularly to beginners. Let us first consider briefly the dahlia of today.

Every time the gardeners think they have the dahlia cornered, it "breaks" into a new form. With the possible exception of the zinnia there was never any flower much more stiff and inartistic than the compact, solid "paper flower" show dahlia. It had and still has many admirers. Like the zinnia, it has its uses. But I think that most flower lovers will agree that in beauty there is no comparison between the old dahlia and the newer cactus and peony flowered types. To be sure, the new forms will not succeed so well under unfavor-
formed. Where only one or two bulbs have been planted in a place, this usually will not be necessary.

The first of the positive commandments is to plant deep; 5” or 6”, unless your soil is heavy and wet. In any case, cover the tubers 2” or 3” until they start growth; then gradually fill in. This will make the plants much more self-supporting than if they were planted near the surface. Feed liberally after the plant has reached the stage where the buds are beginning to develop, but not before that period.

Do not set the plants too close to each other; 2’ should be the very minimum, and 3’ is better—in heavy soil, for large varieties, 4’ will not be too much. To get the largest and most perfect flowers, only one or two should be allowed to develop on a stalk; more than that means less size.

GLADIOLI—EIGHT INCHES WIDE AND SIXTEEN WEEKS LONG

The gladiolus has won to the forefront of favor among summer flowers by leaps and bounds. The characteristics which have most marked it for distinction are its great beauty and wondrous variety, the ease and certainty with which it can be grown, and last but not least its moderate cost. First-class bulbs of many of the best varieties can be bought for 5 to 10 cents apiece, or 30 to 50 cents a dozen. And as each bulb makes a new bulb and many little bulbs for the succeeding year, it is no wonder that it has been called the flower “for the million.” There has been just one point in which gladiolus have brought disappointment—the short period of bloom. For this reason, I want to emphasize the simple means by which the gorgeous flowers may be had from June and July until frost.

Let the gardener realize in the first place that the gladiolus, unlike the majority of summer flowering bulbs, can be planted out with safety early in the spring. An early planting is therefore the first step toward a long period of bloom. The second is to make at least part of this first planting of an early flowering variety, such as the primulinus hybrids. The Le Moine type is also early flowering, as are the new Praxos, or Fordhook hybrids. In the late flowering group come the Childs and Groff hybrids, and most of the new hard-flowered main sorts of the present day, although some varieties, such as Pink Beauty and Halley, flower earlier than others.

If you will use varieties of different flowering periods, making plantings a month or so apart in April, May and June, you can be assured of a succession of gladiolus until freezing weather.

While gladiolus like plenty of sun, they are not otherwise over-particular as to soil. They will thrive well in any good garden soil, but if old manure or bone has been worked into it, results will be still better.

The bulbs should be planted about 4” deep. They may be set in groups or in single rows, the bulbs being put from 4” to 6” apart. If you want to make a succession of bloom in the same place, make the first planting from 8” to 12” between bulbs and place the next planting between these. While they are not as dependent upon water as some flowers, irrigation or thorough watering should be given occasionally during any periods of prolonged dry weather.

One great advantage of the gladiolus is that as a cut flower it will keep for a very long time—up to ten days or two weeks. Buds which did not show any indication of unfolding when the spike was cut will open up perfectly in water. In cutting the stalks, get them well down, but leave three or four leaves. This helps its further growth and maturity. Of course, the water should be changed daily, and it is well to cut off 1/2” or so at the bottom of the spike when changing the water.

CONSIDER THE LILY—Canna!

The new varieties and developments among cannas are not as well known to the general gardening public as the progress which has been made with gladiolus, but they are no less important. Cannas are, if anything, more vigorous and sturdy growers than the gladiolus. They are to be had in practically all shades but blue with blooms (Continued on page 84)
Between meals the dining-room of the larger country house assumes an air of dignity befitting its furnishings. Along the refectory table is spread a strip of brocade of a color that tones in with the upholstery and hangings. It is bound with galloon that has been antiqued. Midway is a tall bowl of spotless Cantigalli or Gustafadeig filled with fruits. Wrought iron candelabra stand at either end, silhouetting against a mellow tapestry or paneled wall.

Then there is the mahogany table that needs a touch of linen and silver and the delicacy of flowers to relieve its austere undress. The centerpiece should be simple white work or filet. The bowl is low or high according to the flowers chosen, and the blossoms are arranged with as much care as though company were present. For that is the reason for dressing the table between meals. It should always be presentable—even in negligée. Howard Major was the architect and decorator.
Fruits and flowers are the best summer decorations. Use them to your heart's content—but choose them first with a view to their decorative possibilities. There is the pineapple, for example. In England they never used to dream of eating the pineapple—it was too valuable as a table centerpiece. Here it is wreathed with laurel—an unusual decoration for a cottage table. Frederick J. Sterner, architect.

In the dining-room to the left the lighting fixtures are silver. It created a pleasing harmony, then, when the between-meals decoration was a silver bowl of beautiful lines. It was but a passing affinity, yet upon such small points depends the success of a room.

Another method of treating the refectory table is the design below. The long line of the table is broken with an old vestment or strip of brocade. On it is set a bowl of black pottery filled with flowers of the season.
MOUNTAIN GARDENS IN LOWLAND SITES

DR. E. BADE

yellow-tipped mountain willows and the starry blossoms of dwarf azaleas and silenes show amongst dark foliage.

To bring these mountain plants from their fastnesses to the confines of a garden is a task of rich rewards, though by no means an entirely easy one.

MOUNTAIN CHARACTERISTICS

Unusual atmospheric conditions—strong, intense light; thin, clear air; rapid changes in moisture—combine with the evaporation from the plants themselves to create a form of vegetation peculiar to the highlands. The shoots of the shrubs are stunted and the leaves remain small. The growth is trim and short, whether the plants grow in a velvety expanse over the fields, or cling in thick little clumps to the boulders. In contrast to the stems from which they grow, the flowers are of great size and beauty, and lend a cheeriness scarcely expected in the grandeur of their surroundings.

With the passing of winter from the mountains come warm days, short nights and many hours of sunshine. The air is very dry and there is plenty of light, but the mountain plants suffer severely from storms. There is sufficient food-sap, and often a nourishing soil rich in loose salts. The sudden changes of temperature hinder the upward growth of the plants, and incidentally save them from windbreakage and evaporating.

So hardy are the mountain flora that they are found even in regions of eternal snow, where they spring up when the warm rays of the summer sun have melted the lighter drifts of snow. Driving their roots into the crumbling cracks and crannies of the stones.
they bloom in miniature gardens among the glaciers. The period of blooming begins in late midsummer, the season of growth lasting but six weeks in the highest altitudes, as opposed to a period of five months at comparatively moderate heights. Among the flowers which endure the coldest atmosphere are Ranunculus glacialis, Androsace glacialis, the rough Saxifraga aspera, the blackened Achillea atrata, and the short-leaved Gentiana brachyphylla. These are primarily plants of the high altitudes.

Making the Garden

In making a garden of mountain plants, one should aim to reproduce the close mossy areas of growth, without attempting the impossible task of imitating the wild majestic environment from which the plants are taken. In structure the garden must be simple and unpretentious. Anything in the nature of formality must of course be avoided; naturalism is the keynote in work of this sort.

The beds should, of course, be small and should rise to a terrace, if possible. Rocks and stones of various sizes should be utilized, but not stalactite. Too many rocks, indeed, will spoil the effect, which should be that of a profusion of flowers. Certain garden plants of short growth and plentiful bloom may be mingled with the mountain varieties, if care is shown in their selection and arrangement.

A rock garden should not be placed in the sunshine, but rather in soft half shadow among trees and shrubs. If there is no terrace in the garden, an irregular little hill may be built of rubbish, rubble and stones, and then covered over with earth. On this foundation the rock garden should be made, with provision for an informal path, and for steps made of flat stones. Large areas of the garden must be left free from rocks in order that bolster forming plants can grow successfully in their characteristic mats.

Soil and Care

After the structure is built, the question of soil arises. Since the plants cannot thrive in too much moisture, they must have porous earth through which the water can easily penetrate. This does not mean that the mountain flowers must be kept dry; on the contrary they should be well watered, but the water must penetrate into the soil quickly and not lie in pools on the top. For this reason the rock foundation should be loosely laid. The soil itself should consist of rotted leaf mold mixed with sand. The flowers that need rich soil do best in a mixture of top soil and manure, while those accustomed to calcareous earth require the introduction of some lime.
TWO SMALL SUBURBAN HOMES AT HARTSDALE, NEW YORK

Inspiration for the architecture of both houses was drawn from the English farmhouses and this spirit was carried through in walls, roof, windows and timber work. They are houses rich in color and livable in design.

MANN and MacNEILLE, Architects

On the first floor the indentation of the porch causes an unusual and interesting disposition of rooms. The dining-room, hall and living-room are open and large. Upstairs are a masters' suite and three other bedrooms.

Photographs by Gillies
Again we have an unusual arrangement on the first floor. The stairs are confined to one corner. The hall is made an ante-chamber to the big living-room. Beyond is the dining-room — these two opening on the paver veranda through French doors. Both these houses were built of hollow tile and stucco. Brick trim and lattice in this house break the plain surface; in the other a section of half timber. Casement windows carry on the cottage tradition. Inside the floors are chestnut and the woodwork throughout is painted white.

A long narrow passage divides the master's suite from the other bedrooms. Again the stairs are confined to small compass. Two baths and a plenitude of closets are well placed and make the arrangement eminently practical and livable.
MIDWAY BETWEEN HOUSE AND GARDEN

The New Swedish Note in Porch Furnishings—Cool Color Schemes

AGNES FOSTER

THE modern porch, like Joseph’s coat, is a thing of many colors—and a variety of pieces. A new note has been sounded. We greet it with enthusiasm, for in no other part of the house do we strive to do more daring things. Each porch tries to outdo in brilliancy of color and novelty of furniture and arrangement the porch of the preceding season and the porches of interested, inquisitive and envious neighbors who have eyes to see.

THE SWEDISH NOTE

This new note is Swedish. Two seasons ago we went mad over things Viennese and Hoffmanish. Then things Russian and Bakstish were adored. Now there has come a singularly adaptable mode for porch furnishings in the Swedish colorings and designs in use today.

The construction of Swedish furniture is pre-eminently solid, bold and simple. This is also true of the coloring. The red is red—with no suggestion of blue or of yellow about it. The blue is marine blue and the yellow is intense, full of splendid warmth and brightness. And always there are masses of white—not ivory, not cream, but pure white. These are the main colors.

It is the simplicity of their color units and their limited variety that make for telling effect. The wonderful but complicated semi-Oriental color schemes of the Russians have somewhat lost their popularity. It is by their very direct naiveté that the Swedish colorings hold their charm for us. It is the coloring of the bread and butter age—blue skies, red roofs, yellow sunshine and dancing white waves. And what could be more suitable than these for porch furnishings?

USING STICK FURNITURE

A porch could be built up using blue stick furniture. Stick furniture is made of heavier reeds than willow. It is more simple, of straighter line and more durable. It requires for finish a coat of paint, whereas reed and willow may be left in their natural state or stained. But stick furniture, or Swiss reed, as it is sometimes called, must be painted and enameded. It also is better in line and has much more style, as it is woven vertically and horizontally, not diagonally as in the case of willow.

There should be a pair of high back chairs—only two, as high back chairs are sworn enemies to broad brimmed garden hats—and four more comfortable small armchairs. In addition, a couple of stools, which can always be used for low tables. If a porch is any sort of a porch it should boast a chaise longue, that delight of the summer novel fiend. If a chaise longue seems too luxurious and fastidious, however, a swinging hammock seat might answer almost the same purpose. Hammocks are not the maximum of beauty and convenience, but they serve their purpose. Add to this group a large reed table with a
wooden top, or an iron table, and see to it that there are two or three little wooden tables in reach. Little oval coffee tables, whose leaves can be dropped by twisting the top around and made into most compact oblongs, afford an excellent opportunity for the use of interesting color. Painted white, with moldings brought out in blue and red, they are very decorative.

Oblong benches can be used, with cut-out side supports pinned in with wooden pegs showing peasant construction, and lending themselves wonderfully to stripings of blue and white on a red background. One can stencil a design on them, but that detracts from the smartness. Smartness is achieved not only by knowing how daring to be, but when to stop.

On the floor a red and white, or black and blue, or red and blue checker-board rug could suitably be used. These rugs are saved from being glaring by being woven with wool; the checkers are softened by the fibre of the wool.

For hangings and upholstery, that is, the necessary cushions—as stick furniture does not look well upholstered—a black and white 2” stripe linen with a dashing spot of color made up of a vert flower pot with two red flowers on the white stripe. If one prefers some other motif, black and white striped linen may be bought and one can stencil a design of her own on the white stripe. The same design could be stenciled on the furniture. If one uses chairs with splats at the back an excellent opportunity is afforded for a little design. The chair seat cushions can be of black and white striped sateen, which is inexpensive and proves a good fabric for stenciling. These same suggestions may be carried out with wicker furniture that one has on hand.

The first coat should be very bright as the varnish will dull the color somewhat.

Grey, Green and Orange

A more conservative porch may be built up on a scheme of grey, green and orange. The windows, which are divided in several groups, can have a fitted shaped valance of beautiful linen with orange, yellow, grey (Continued on page 86)
The background is white; the trees and pagodas, two shades of grey. You have a cool, restful bedroom background where the furniture would be painted French grey striped with rose. The curtains could be of rose silk and the rug a rich mauve.

For halls with much sunlight and white woodwork comes a paper with a cream background, grey and blue birds and grey and pink blossoms. The paper is covered vertically with fine white lines that subdue the tones and give the design a pleasing effect of depth.

On a greyish, rough fabric weave background are set birds and flowers and tiny temples in soft shades of blue, green, rose, red and taupe. In living-rooms furnished with wicker or reed no paper could be better placed. It is light, airy and perpetually interesting.

**SUMMER WALL PAPERS**

Shown by Courtesy of Richard E. Thibaut, Inc.

A month more, and the summer home will be ready to move into. Meanwhile there is the new papering to be done. As a last call we offer these seven suggestions from the latest stocks. Purchases can be made through the Shopping Service, House & Garden, 445 Fourth Avenue, New York City.

Stripes always fit in, in the summer home. This one is especially adaptable. Narrow grey and cream stripes are relieved by bolder stripes in black, red and blue.

An rich living-room paper shows blue and dark grey birds on a light grey linen weave background. Blossoms are rose, red and blue and the trunks of the trees brown.

Another stripe has a woven background with heavy blue stripes edged with black and lighter stripes between of black and red. It is open and restful in effect.

On a light greyish crackle background are grey jackdaws and blossoms that give this paper a place in the hall or living-room where bright curtains furnish color spots.
ATTENDEZ, mes soeurs! 

Pierrot stood moping by the garden wall. His heart was all but crushed, his spirits low. The fickle Columbine had led him a merry chase, and now had abandoned him to his grief. Down the moonwashed path her shadow and the shadow of Harlequin blurred between the lacy silhouettes of rose and bell-flower. Behind them patted Jacques, the fuzzy toy poodle.

"If you would but command me..." cried Pierrot.

Columbine turned her head.

"I will prove my love is as deep as the sea and high as the sky and bright as the moon."

"Then go whitewash the moon," she called back.

Of course, she never thought that he would. But she didn't know Pierrot. That night when the moon was in high heaven Pierrot dragged his ladder to the garden wall and began to climb. He pail on arm and brush in hand. Up and up he went over the wall, above the treetops, till he was a mere silvery speck against the turquoise sky. And at the foot of the ladder Harlequin whispered pretty nothings into Columbine's ear, while Jacques frisked about and chased fireflies.

In less time than you would think

And the Earth Blossomed and Grew White with Snowy Dogwood

LAMSON N. ETHRIDGE

Pierrot reached the moon. He was dizzy but unafraid. And the Man in the Moon smiled at his courage and bent his face nearer as Pierrot dipped his brush in the pail of whitewash.

At that moment a firefly lighted on Jacques' pudgy little nose. He struck at it with his paw. It darted to the bottom rung of the ladder. Jacques plunged for it. The ladder slipped, swayed, crashed.

Down from the moon tumbled Pierrot. Down, down the sky he ricocheted. Over and over he turned. The brush floated off into space, but the pail swayed and twisted at his elbow.

He neared the earth. The roses made a bed to catch him.

Like a dart he plunged toward them, arms widespread. The pail slipped from his grasp. It threw its silvery whitewash litter and yon in a shower that spattered on tree and bush.

And there, mes soeurs, is the legend of how the earth first blossomed and grew white with snowy dogwood!

Each spring we see them, these flowers of Pierrot, white drifts along the distant hillsides where the green of leaves is but just clothing twig and branch. In the warm days of early May the dogwood blossoms are a woodland feature whose message to flower lovers is the more welcome for that it comes among the first.

Time was when the members of this Cornus family were rarely seen in cultivation, but those days are happily passed. Hardy and ornamental, thriving in either sun or shadow, the dogwoods are desirable alike for their springtime blossoms and their autumn color in leaf and berry. From shrubby C. racemosa to C. florida's tree-like form, they are many and varied, with a range adapted to the requirements of any reasonable landscaping scheme.

The photographs on this page suggest the beauty of the "flowering dogwood" (florida), our commonest wild variety and the one most widely used in ornamental work. Three inches across its petals often measure, of a dull white or greenish tinge, surrounding the true flowers of yellowish green. In autumn come scarlet berries, a treat to the eye of the beholder as well as to the palates of the birds which gather to feast upon them.

Of a different type of beauty are the red-twiggged sorts, such as alba Baileyi and sanguinea. Here is no such glory of flower display as characterizes the larger florida, but in its place is a color in branch and twig of which the taller tree cannot boast. In the leafless winter landscape their red tinge strikes a cheery note. They are best used with this fact in view, an effective place for them being against a background of other trees - evergreens or white birches, depending on your preference.
A Tree Surgeon's Romance in Two Reels

Films by courtesy of Davey Tree Expert Company

Reel I, Part III. Finally, Tree's interior is washed out with antiseptic. Edges are carefully cut away to a watershed and waterproofed. Tree Surgeon skillfully fills hole with cement, fitting it in sections. Wind can now sway branches, and Old Thing never knows she has new heart and ribs.

Reel II, Part I. Discloses Nature, the First Villain. She grows a Tree with branches so widespread that the trunk can't stand the strain. A crack appears. . . . Enter Second Villain, Man With Cement. He caulks up the hole. The last state of that Tree is worse than the first.

Reel II, Part II. Tree Surgeon fills up cavity with cement sections. Ribs and backbone are covered. Venerable Tree more alive than ever before. Villain foiled. Nature smiles deceitfully, and grows a new bark over the filling.


Reel II, Part III. Tree Surgeon fills up cavity with cement sections. Ribs and backbone are covered. Venerable Tree more alive than ever before. Villain foiled. Nature smiles deceitfully, and grows a new bark over the filling.

Reel II, Part II. Tree is doomed. A little time, and its shade no longer will make pleasant the passing of men and women and laughing children. To the rescue comes the Hero, Tree Surgeon. Cuts away decay. Gives poor old trunk new set of ribs. Nature's neglect is defeated. Tree lives happily.

A LITTLE PORTFOLIO OF GOOD INTERIORS

Into the making of a good interior goes the trained thought of the decorator and the trained skill of numberless craftsmen. That is why a good room is so rich in suggestions for those who would make their homes beautiful. At their command is also the advice of The Information Service which solves all manner of decorating problems. Address it care of House & Garden, 445 Fourth Avenue, New York City.

Photograph by Gillies

The possibilities of studio decoration are legion, and they run the gamut from the Greenwich Village futurist hole in the wall to the stately rooms of limestone walls, such as here, with early English furniture, wrought iron fixtures, rows of noble casement windows and ranges of priceless tapestries. This is the studio of W. A. W. Stewart, Esq., at Cold Spring Harbor, L. I. Grosvenor Atterbury, architect.

Photograph by O'Connor

An interesting bay window curtaining is found in the dining-room above. The windows range from ceiling to floor. The curtains hang loose from the top trim and middle mullion.

Photograph by Gillies

Restful walls are half the battle in the living-room. To the left the plain walls are a shade of tan, the rug is tan and the furniture walnut. The Italian wall closet by the desk adds a note of interest to that corner. Mott B. Schmidt, architect.
An unusual arrangement of davenport and table between is found in a library decorated by B. Russell Herts. The rug is sand color, walls taupe, furniture walnut with blue damask upholstery, curtains blue velvet and cushions rose and gold.

In the residence of George E. Ide, Esq., at Locust Valley, N. Y., is a lounging room that is the very essence of comfort. Walls are paneled in walnut and the upholstery is a light, cool green. James Gamble Rogers was the architect.
A luxurious entrance hall has been created by Mrs. Lorraine Windsor in the residence of Hathaway Watson, Esq., in Chicago. Old tapestries cover the walls. On the floor is a large Persian rug. Thus the furniture is given a fitting background which brings out its best qualities.

A certain authority has prophesied that the prevailing mode after the war will be a classicism based on Adam. Certainly here, in this fireplace grouping in the home of E. T. Stotesbury, Esq., is an indication of early Georgian classicism adopted successfully.

The vogue for Italian furniture is unquestioned. It has great dignity and lends a dining-room an air of richness that few styles can establish. The room to the right, in the residence of Dr. Charles Adams of Chicago, was decorated by Mrs. Lorraine Windsor.
In this specimen of early 17th Century work the carving is circle and convincing. Its affinity to Fig. 5 is obvious.

16th Century walnut side chairs and armchair covered with red velvet. Note carved and gilded finials of back posts and carved stretchers.

A specimen of 16th Century table-making. Note truss supports and brace or stretcher. Detail of carving is shown in Fig. 3.

An early 17th Century long walnut table with baluster turned legs and moulded stretcher. It stood against an old salon wall.

A 16th Century carved walnut Venetian chair with trestle supports and triangular back.

This form of Venetian chair is of early origin. Its seat is set in with a backward rake.

A salon in the Villa Curonia where the dignity of Italian architectural and furnishing ideas is well set forth by the individual pieces.
APART from the great intrinsic interest attaching to it, there are three good reasons why Italian furniture should be the object of study at this time by all who are concerned, either professionally or individually, with interior decoration.

First, the vogue for Italian furniture is le dernier cri in matters mobiliary, and it is well that those who cherish an obsession for the very latest fashion should have some definite knowledge of the object of their pursuit and not be at the mercy of nebulous impressions.

In the second place, the Italian trend in American domestic architecture is a fact that those who are at all observant of current architectural developments must realize is bound to react upon the style of furniture that will naturally, to some extent at least, be employed in equipping houses in whose design and plan Italian ideals have been expressed. Here, again, accurate knowledge is necessary to intelligent constructive results in decoration.

Last of all, whether or not we realize our ultimate obligation to the Italian designers and craftsmen of the Renaissance, the leaven of their inspiration has thoroughly permed the manifestation of decorative art in all the other countries of Europe and in England, so that a knowledge of Italian furniture is indispensable to a sound understanding of the mobiliary forms of the 16th, 17th and 18th Centuries in France, Spain, Switzerland, the Low Countries and England and, of course, colonial America, since our furniture heritage is unquestionably the same as England’s. Unless we have this knowledge, our conception of the latest development cannot but be faulty.

In examining critically the Italian furniture of the 16th and 17th Centuries, it will conduce greatly to our appreciation of its qualities if we keep in mind some of the general characteristics of the interiors of the period. One of the most striking characteristics of these interiors was their austerity, due in great measure to restraint in the number of pieces of movable furniture used. By austerity and restraint we are not to understand lack of comfort, but rather a spaciousness and breadth of effect and a freedom from the well nigh cluttering “cosiness” of some later French and English interiors, a fullness perhaps permissible in colder climates but obviously inappropriate in Italy. Of the sterling worth (continued on page 62)
First you will need porch rugs. A Flanders rug is two toned with a dark panel border line. Of cotton chenille, it comes in a mottled effect, as shown above, or in a solid color. A variety of tones are available and the rug can be made in many different sizes with or without the panel. $4.25 per square yard in widths of 30”, 3’, 4’ 6”, 8’, 9” and 12’ white special widths are priced at $5 a square yard.

From Japan comes a hand-made cotton rug in various colored backgrounds, light blue, pink, green and grey, and the predominateing colors are blue and rose. In all regular sizes up to 9’ x 12’

Tent cover for a couch hammock. 6’ 10” long, 5’ deep. Height to eaves 5’, to top, 6’ 4”. Fits any hammock, $19.50. Stand, $5.50. Roof of striped material, plain sides. Hammock in striped green and white or red and white, $30

Make this resolution. “On the First of May I am going to begin living out of doors. I am going to sleep out of doors and eat out of doors. Meanwhile I am going to furnish my porch and my lawn with some of those delightful things shown in House & Garden, and I will immediately write to the Shopping Service of House & Garden, 445 Fourth Avenue, New York.”

With the breath of the heather, comes a Scotch Dhurrie wool rug. It has a small basket weave pattern with fringed ends, and is reversible. If desired, it can be made up from any two colors chosen from a color range of over sixty different tones. Basket weaves, narrow stripes and solid color are all available. It may be had at the price of $4 a square yard for widths up to 12’, with a small additional cost if special colors are desired.

Scotch-Wilton carpeting in regimental stripes of various colors can be made up into a rug with black border. May be had by the yard for covering entire floor or in any rug size desired. 27” wide, $4.50 a yard.

From Japan comes a hand-made cotton rug in various colored backgrounds, light blue, pink, green and grey, and the predominateing colors are blue and rose. In all regular sizes up to 9’ x 12’. This size, $50

Tent cover for a couch hammock. 6’ 10” long, 5’ deep. Height to eaves 5’, to top, 6’ 4”. Fits any hammock, $19.50. Stand, $5.50. Roof of striped material, plain sides. Hammock in striped green and white or red and white, $30

(Below) High backed chair in natural willow upholstered in bold cotton taffeta. 5’ high over all, a spread of 4’ at top, $75. Settee to match, 6’ long, $150. Upholstery material has buff background with peacocks and pink and red flowers.
A new design in willow furniture is stained soft silver grey. Side chair, 3' high, 2' across, oddly curved back, $7.50. Cushion seat and back, $3.75 extra. Armchair, 3' high, 2' wide, $10.50. The table is of French willow, 24" wide, $8.75; also comes 27", 33", and 36" wide, $11. The cretonne used for upholstery is a bird pattern with broad stripes in dark blue against a buff colored background with brilliant birds and flowers, 36" wide, 59 cents a yard.

Another striking set is shown to the right. Imported willow was used. The open chair measures 31" high and the seat 13½" from floor. May be enameled in any color desired, $9.25. In stained willow, $8. Seat pad of linen rep with appliqued chintz motif, 15" wide, $6.25. Price in natural color, willow, $6.75. The chair to the right is also of imported willow, 35" overall. In natural color, $12.25; stained willow, $14.50; enameled, $15.50. Seat and back cushion, $8 for the two.

An unusual set of imported willow. Back of the settee measures 28" high, seat, 44" long and 19" wide. In natural color, $25; stained, $24.75; enameled, $27.25. Side chair, 21" high. Seat 16" wide. In natural color, $8.50; stained, $10; enameled, $11. The table is 30" in diameter and 26" high. In natural willow, $11.50; stained, $12.75; enameled, $14. Armchair, not shown; natural color, $10.50; stained, $12; enameled, $14.25.

You can swing high or you can swing low in the hammock swing below. It measures 25" wide and 7' long. In natural Willow, $21; stained, $23.75. It is very substantially built with a strong wooden base, and will last several seasons. The cushions are not included but can be made to order in any material that will harmonize with the color scheme of the porch. These swing hammocks present a great opportunity to create an interesting and colorful porch corner.
Not infrequently on a woody road in early spring you catch the indescribably sweet perfume and follow it to where the little evergreen leaves and pink-white blossoms nestle close to the ground.

THE CULTURE OF TRAILING ARBUTUS

Hints for Taming a Wild Flower of the Forest to the Environment of the Garden

O. M. BERTRAM

A PRELUDE to spring is the cry of "Sweet arbutus!" in the city streets. There comes to memory the freshness of the woodlands and on a dark, laurel dotted slope a quick surprise of fragrant pink and white rosettes, almost hidden under luxuriant greenery.

That arbutus can be subjected to cultivation is a triumph of gardening too little understood. Many an ambitious gardener has transplanted arbutus only to see it wither and die in a month or a year. The greatest care may have been given to the roots, with plenty of the native soil about them, and the plant may have been out of the ground only a few hours. But something in the new situation is unfavorable. Some element in the soil, some matter of exposure or drainage results in the death of the transplanted vine.

Arbutus which has once grown in a certain situation almost never succeeds in another. Apparently the trouble lies largely in the roots, which seem unable to withstand the shock of moving. In some cases the plants live for two years, but fail to bloom; finally their leaves turn brown and drop off.

PROPAGATION FROM SEED

The best and surest, although slowest, method of propagating trailing arbutus is by seed. It seems almost incredible that the fruit of such a well-loved plant was very little known until a few years ago. Arbutus is, of course, very inconspicuous at best, in the blooming season, and interest in it has been general only during this short period. To these causes the neglect concerning its fruiting season may be attributed.

Instead of setting a few seeds in a dry pod, the arbutus forms a sort of berry-like fruit, juicy and edible, often borne in abundance on vigorous plants which perfect female blossoms. Ripening at the same time as the wild strawberry, the wall of the matured though still green fruit splits from the center into five parts, which turn backward and expose the whitish, fleshy interior, about ½" in diameter and thickly dotted with tiny dark brown or blackish seeds. All these years the ants and some of the birds have known the secret; they have been enjoying the juicy pulp and incidentally planting the seed far and wide.

It follows, then, that you must be on the alert to gather the fruits before the wild things consume them. The plants will be more or less concealed by the foliage, but careful search in a good arbutus locality should disclose enough to grow all you will want. I have counted as many as seventeen fruits on a single plant, three or four growing together in a cluster.

Each of the fruits commonly bears from 200 to 400 odd seeds. When ripe they may be rubbed loose from the pulpy part by a slight pressure of the fingers. The pulp is quite juicy when crushed, so the fruit must be rubbed back and forth until the surface of the seeds is dry and they may be rolled off on a sheet of paper. They should then be shifted to a smaller sheet folded into a trough, from which they can be pushed a few at a time by means of a pencil tip or sliver of wood.

Sow the seeds at once in a well drained, shallow box, filled with a mixture of two parts finely sifted laurel thicket peat and one part clean sand. It is well to secure these ingredients in advance and dry them out so that they can be easily mixed, and that there need be no delay in planting the seeds once they are obtained.

A covering of about 1/16" of the same soil mixture will be sufficient, and the whole flat should then be thoroughly watered with a very fine rose, taking care not to uncover the seeds in the process. If covered with glass and kept from direct sunlight, they may not need to be watered again before germination. Protection from ants is frequently required after the seeds begin to come up, three or four weeks after planting; this is easily accomplished by setting the seed boxes on flower pots inverted in pans of water. In midsummer, neither the young nor the old plants should be exposed to strong sunlight; the arbutus often grows naturally in shady places, and will never succeed under adverse conditions.

POTTING AND CARE

When the plants are about ¾" in diameter, three or four months after germination, they should be potted in 2" pots, with the same soil described above, though in different proportions. Put in nine parts laurel thicket soil to one part sand, and add a few pieces of clean, broken crock to lighten the mixture and make it more porous.

Potted arbutus plants grown in this way will continue to grow all through the first winter if kept in a greenhouse with a night temperature of 35° to 60° and a day temperature running from 65° to 70°, and in the following summer some of them may form a few clusters of flower buds and bloom the succeeding spring. A great many, however, do not bloom until they are two and a half years old. At this time they will be handsome, stocky plants with rosettes 7" to 10" in diameter—much more flourishing in appearance than their wild relatives.

The flower buds form from midsummer to autumn, though I have seen them well defined in late June. But if the plants are kept in a warm greenhouse all fall and winter, their blossoms seldom open. To make them open normally, it is necessary to subject the buds to a long period of chilling, though actual freezing is not required. The best chilling temperature for the greenhouse is a little above freezing—say about 35° Fahrenheit. Alternate freezing and strong sunlight are likely to injure the foliage, though after the chilling period sunlight

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MOBILIZING SISTER SUSIE

The farmers are the fifth line of defense, and if the men go to war it will fall upon the faithful American women to keep the gardens growing. But war or peace, we recommend these garden uniforms. The Shopping Service at 445 Fourth Avenue, New York City, stands ready to help the nation by supplying you with one of them.

As a high private Sister Susie strafes Hunnish weeds. Her uniform consists of a green linen apron smock and sunbonnet to match. It has deep pockets and a wide belt and is smocked in white silk. The sunbonnet is finished with a feather stitch. The uniform may be had in any color linen. We advise a dirt color so that the bugs cannot see your approach. The price? Oh, yes. $6 complete.

This garden bag looks like real work. It is made of heavy canvas and is fully equipped with pockets that hold gardening gloves, scissors, pad and pencil and markers. $2.50.

We don't know much about war but we're willing to bet that Sister Susie in the smock below will do her bit. The smock is of heavy silk and cotton mixed, in burnt orange with black wool embroidery and stitching. $10. The birdbath, 21" high, has wood standard stucco bowl and a bird on the rim. $5. Bamboo basket, 3 sizes, 50 cents to $1.

Can't you see the enemy presenting arms when Sister Susie appears in this uniform? It is made of finely striped brown gingham with a white hair line. A deep sailor collar is of white pique and the wide belt of white kid. The pockets and front of coat are trimmed with white pearl buttons. Baggy bloomers give plenty of knee room for trench work. $5.50 complete.

La Femme du Poilu! She wears a two-piece garden costume of white duck or heavy canvas with big pockets and roomy knickers. $3. White canvas hat to match, $1.25. The casque she wears here doesn't exist. We just put it on the dear's head for effect.
THE POSSIBILITIES OF A SMALL FORMAL GARDEN

Prim Paths and Orderly Beds That Will Make a Little Jewel of Blossoms in Any Garden

In the very heart of a middle-western city there is a small garden hugged close between a private residence and a tall office building. It is sheltered from the street by a wall of cream brick, in the center of which is a gate of green painted wood, flanked by two stiff little Kate Greenaway bay trees in blue earthenware pots. The garden itself, to him who opens the green painted gate and steps within, is as decorous as the grounds of a French chateau.

Every sprig of grass is trimmed to even length, every blossom primly placed. There are neat plots of green, and flower-beds of careful Variegation, and geometrical little gravel walks. In the center, replacing the familiar sun-dial, is a Chinese lantern of wrought iron on a stone base. Its yellow globe, when lighted, casts over the garden by moonlight, a warm glow of perpetual moonlight.

This is a garden to be worked in, rested in, always to be enjoyed. It is a hundred miles from the city street it borders on.

Even though a formal garden measures only 50' x 70' as this one does, results are not to be had without careful thought. Indeed, the smaller the garden, the more carefully one must plan. A single plant of jarring color will spoil everything.

As to Color Harmony

Another point is that in the small garden the color of the house and other buildings must be considered in your garden color scheme. Possibly the day has passed when magenta phlox and petunias are planted in a garden with a red brick house for background, but almost as great offences to good taste are still perpetrated by the inconsiderate gardener who plants without thinking of his colors. A crude color like magenta is ruinous to the beauty of a garden. Particularly for the small garden, soft colors are most satisfying, though a brilliant splash of color may occasionally be dared so long as it blends into the whole.

One woman who owns a very perfect small formal garden has chosen blue, white and pink as the color scheme of her garden and adheres to it rigidly the season through. At one time last summer her garden was a mass of blue and white delphiniums, white Japanese iris and pink roses, as exquisite a bit of Dresden china. The owner of this garden has systematized her work (she is her own gardener) by planting her seeds or roots in a plot of ground separate from the formal garden, and transplanting as the flowers mature and the last set cease to bloom. By this method she can select the most promising plants for the garden scheme itself.

Another small formal garden consists of a narrow strip, possibly 25' x 70', of ground that lies between a vineyard and the vegetable garden of a country place in the South. The color scheme here is unusual. The owner has chosen vivid reds and yellows on the theory that these colors are needed to offset the dull greens of the domestic onion and turnip tops and the grey greens of the grape vines. From the red and yellow tulips, the Dutch hyacinths and the gold jonquils of early spring to the shaggy yellow and red button chrysanthemums of late fall, the garden is rich with vivid color. It is laid out in stiff little circles and fancy shaped beds, but the outline is softened by the use of dwarf nasturtiums.

PLANNING THE GARDEN

Before you select any form in which to plant your small garden take into consideration the architecture of your house. A beautiful house may be marred by its setting, just as a beautiful picture can be injured by its frame. If the planting of your garden is out of harmony with the lines of the buildings, it will disfigure rather than beautify your place.

Of the three styles of gardens more frequently used—the geometrical or Italian garden, the English or natural, and the picturesque gar-

The plan here is practically for a suburban place where the land is limited, for this garden can be planted in a plot 70' x 100' or in even less space.
den—the Italian is the most practical for a small plot of ground. Its very formality simplifies its planning. While an Italian garden with marble seats, fountains and statuary is quite inappropriate to a 50' space, the geometrical plan is excellent; and a garden of this type is certainly easier to keep in shape than the picturesque sort with its irregular edges and careless grouping.

The small garden may be expressed by straight lines, some forms of ovals, circles or parallelograms, with paths that cross at right angles or that are part of an arc of a circle, just as the garden that covers an acre or two of ground. There is much room for originality, but the principles of harmony, unity and variety should be observed in whatever style is selected.

Before you begin your small garden, plan it on paper. The ruled architect's paper will simplify matters. Working out the plan on paper, even to the color scheme, is much easier than going into the garden without a definite mental picture.

Simplicity, always a safe keynote, is almost a necessity to keep in shape a small garden. The position of the ground, of course, will be a factor in determining the arrangement of the garden, and the planting of tall shrubs should be made contingent on the beauty or ugliness of the background.

Flowers in the small garden must harmonize with each other as well as with the surroundings. If the buildings are of grey or cream a color scheme is not hard to plan, but where they are of red sandstone or brick it is a more difficult matter. If, after you have planted the flowers, you find the colors jar, do not hesitate to tear up your beds and replant until the effect suits you. Put your own personality into the garden.

A DEFINITE SCHEME

The suggestion for a small formal garden offered in the accompanying working model is capable of many variations without altering the general lines. The walks can be of gravel, crushed stone or concrete. The latter, while inartistic, are preferred by many because of their permanency. The center of this garden is of grass and has a Chinese lantern on a stone base—an idea borrowed from the city garden before mentioned. A bird bath, small pool, sun dial or gazing globe could fill the center just as well, if the garden is too far from the house to have electric connection for the lantern.

The beds nearest the center can be filled with early tulips and hyacinths, to be replaced later with bedding plants. If the shallow rooted annuals are afterwards used they can be planted over the bulbs without disturbing them. The plants that occupy the most prominent position should be those that bloom the entire season. The baby rambler (Anchen Muller) is a continuous bloomer, and its color, a deep warm rose, blends well with nearly every flower here suggested. With the baby rambler lavender and violet verbenas form a happy combination in two of the central beds. By way of reversing the color combination, the other two may have heliotrope in the center, surrounded by Rosy-morn petunias.

Across the walk from these central beds are four others. In these roses occupy the greater part of the space, their exclusive natures demanding wide breathing space. As companion plants for the roses use dianthus pinks, pansies and sweet alyssum.

Against the hedge at the back of the garden may be planted a double row of the beautiful Hungarian canna, while a Hia-watha rose can be used for the gate arch.

IN THE CORNER BEDS

In the two rear corners of the long beds one may have Hydrangea arborescens, grouped with belladonna, delphiniums, candidum lilies, and pink and cream gladiioli, (America, Niagara and Panama), flanked on either side by masses of hardy phlox. The R. P. Struthers and the Pantheon phlox are the best to use, as they are both a clear, deep rose-color. The front corners of these beds can be planted with buddleia—the summer lilac—and Hydrangea paniculata. The warm colored Chinese wool plant, which has a deeper tone than any of the other flowers, would give added character.

Over the seat, at the right as you enter the garden, is a good place for wisteria. On either side of the seat may stand immense clumps of pink hydrangea, (the E. G. Hill variety is best used here) and back of it all groups of stately hollyhooks.

The sides of the long beds should be filled with perennials and annuals. In filling these beds the gardener can follow his or her fancy, for there is a wonderfully large number of plants to choose from. There are many small plants of scarlet or orange tones that can be worked in as fillers, since it is necessary that the ground be all covered to protect the roots from the sun. Drummond phlox, ageratum, gypsophila and mignonette are especially recommended for this purpose.

(Continued on page 76)
May

THE GARDENER'S KALENDAR

Fifth Month

What is so sweet and
As a prosperous morn
The confident prime of the day,
And the dauntless youth of the year,
When nothing asks for blits.
Asking bright, is de-
And half of the world a bride?
—William Watson

Hitting should not be overdone; but peas, beans, corn, etc., need it

While still small, spray cabbages and cauliflowers for caterpillars

1. Plantings of all hard wooded trees and shrubs, evergreens, perennials, etc., must be completed at once; late planting always gives inferior results. Water well and mulch, all new plantings to keep the sun from drying them.

2. Sow now in rows or hills—and thin later those requiring it—lettuce, garlic, sweet corn, beets, carrots, chives, chives, celery, cress, globe artichokes, parsley, parsnip, cucumbers, spinach, squashes, okra, onions and lima beans.

3. If you haven't planted from the greenhouse or frame, sow in the open soon to rows later; kale, Brussels sprouts, cauliflower, parsley, Swiss chard, eggplant, peppers, cauliflower, endive, leek and tomatoes.

4. Plant potatoes when the ground is not frozen. Use plenty of fertilizer, cut the seed to one eye, and don't neglect to soak the seed in formaldehyde to prevent potato scab. A good crop will be worth having.

5. If you have early sown plants from the greenhouse or can buy your early lettuce, cauliflower, early celery, parsley, Swiss chard, currant, broccoli, onions and leek can be set out at this time.

6. If you have melons now you can sow melons now. Have good hills and set the frames over the hill for several days before setting; this will thoroughly and warm the soil and provide a quick starting of the seed.

7. All bulbous stock should be planted, such as dahlias, gladioli, montbretias, caladiums, cannas, etc. The plants should not be set out during excessive wet spells, else they may die before root action.

8. This is the time to spray rose bugs and beetles. Just as the flowers begin and with the foliage thoroughly with a solution of arsenate of lead. A second spray in a few weeks will save the foliage.

9. Roses should have a good dressing at once after the danger of having no winter mulching was practiced. A little bone meal will start vigorous growth and give better results.

10. If rhubarb is desired it must be kept cool as soon as the buds break they should be given a good application of manure water. The plants should also be sprayed with arsenate of lead and Bordeaux mixture.

11. Weeds cause more ambitious gardeners to lose heart; they do not do any other one thing. Keep after them all the time, the weeds in your garden and hand weeds in places where you can't cultivate.

12. Don't forget to spray all fruit trees—apples, pears, plums and cherries. Keep the ground well worked and with a cultivator. Do not allow weeds back very little at any one time.

13. Early celery: should be set out in the bed where the ground is well prepared. Make the row about 15" apart and plant 1" to 2" apart. Keep the bed well watered. Keep the row clean. Spray for rust about every three weeks with Bordeaux mixture.

14. Cutworms are likely to attack your currants this time. Peppermint oil, or para-phenylensulphide, or sulfur, will save the plants, with a curative effect. A mixture of brassica and Porte green placed on the ground will attract them.

15. Paris eight days, 1885. Don't let the currant worm get the upper hand—it doesn't take it long to destroy your currants. Spray with poison such as arsenate of lead, arsenious acid, or Paris dust, or Bordeaux mixture for foli-age diseases.

16. Queen Victoria born, 1837.

17. Clean out the rose house and make a clean sweep of all weeds and such places where no winter mulching was practiced. A little bone meal will start vigorous growth and give better results.

18. Ifittests had been looked at, they should be given a good application of manure water. The plants should also be sprayed with arsenate of lead and Bordeaux mixture.

19. Weeds are continually growing and it is necessary to keep the soil clean. The planting of vegetable plants from seed is not the only kind that should be applied to prevent the evaporation of valuable soil moisture.

20. If you have early sown sweet peas in pots, they should be planted out, about 5 inches apart. Use plenty of manure and leaf mould in a trench for ground and the plant in place where you can't cultivate water. Perfection should result.

21. The space around newly planted trees and shrubs should always be kept constantly stirred. If it is not done any time a mulch of this kind should be applied to prevent the evaporation of valuable soil moisture.

22. The young plant should not be planted too deep, but the soil needs firming.

23. Don't neglect to cross the rows in the orchard. Use a hoe and turn the top under, then keep the ground well worked and with a cultivator. Do not allow weeds back very little at any one time.

24. Grass grows rapidly this month and needs frequent cutting; until it gets well under way.

25. Preparations should be made to take all late plants. Do not let them lie overdone; but peas, corn, etc., need it

26. Sow now for succession, peas, beans, lettuce, carrots, beets, cucumbers, spinach, radishes, and kohlrabi. Proportion your sowings to the demand, but don't fail to sow at proper intervals.

27. Evergreen possums, made ready for various forcing plants that are grown in the summer, such as corn, and courses, dairy, etc. Have it all ready in time. Evergreen possums, made ready for various forcing plants that are grown in the summer, such as corn, and courses, dairy, etc. Have it all ready in time.

28. Decorative Day. Take care vegetables such as egg-plants, melons, etc., may be set out now. Keep the plants free from weeds. By planting these too early, when the soil is cool, night will check them back a little to induce stocky growth.

29. If weather is favorable, bedding out can be started. Do not neglect to prepare the bed properly; break the soil on the sunny side of the young plants by scratching the bottom and pinch them back a little to induce stocky growth.

30. Asparagus lovers note. Give the beds a good application such every three or four weeks during the season. Besides nourishing the plants this will do much toward keeping down the weed growth.

This Kalender of the gardener's labors is aimed as a reminder of the essential tasks in May. It is a general guide to the conditions of the Middle States, but its service should be available for the whole country if it be remembered that for every one hundred miles north or south the dates should be from five to seven days earlier, in order to perform garden operations. The dates given, of course, for an average season.
THE SECOND CALL FOR WARM WEATHER FABRICS

In April we showed our first selection of new fabrics. Here we present the last together with some suggestions for their use. They may be purchased through the Shopping Service, House & Garden, 445 Fourth Avenue, New York City.

A cretonne with 3" black stripes, gay colored ostriches, light stripes in red, yellow, pink, lavender, green. 34", 60c.

A futuristic orchard scene shows brown and black trees on black background, a patch of blue sky, and bright orange fence. It is shown at window and on chair to right. 36" wide, 45 cents.

A cotton taffeta comes with dark green background, and light green petal design. Other colors are cerise, mustard, brown, green and blue touched with white. It comes 36" wide and costs 65 cents.

A cotton taffeta comes with plain old gold and black stripes. Design in wine color, green, purple and yellow. 36", 55 cents.

In a cream ground is an allover flower design in brown, green, purple, blue and tan. Birds and butterflies make pretty color notes. 34", 85 cents.

Cream stripes 12" wide, large flowers between narrow black stripes. Deep red, old blue, yellow and cream. 34", 75c.

Chinese pattern cretonne with buff, slate gray or old rose background, foliage and birds in green and red, blue, purple and yellow. 36", 75c a yard.

A summer living-room group provides a day bed 6' long. Natural willow, $35; stained, $29. Cretonne upholstery extra. It is yellow with red, black and green floral designs, 36" wide, 35c a yard. The table, 4' long and 30' wide, comes in willow at $25; stained, $29, enameled, $30. Arm chair 46" high is $2 in willow; seat, $1.50 extra.

On a cream ground is an allover flower design in brown, green, purple, blue and tan. Birds and butterflies make pretty color notes. 34", 85 cents.

The willow chair is of unusual design. It is upholstered in cretonne to left. In natural willow, $3; stained, $1.50 extra; enameled, $2 extra. 36" high. Seat cushion extra.

Dotted putty stripes and bright baskets between old blue stripes and red, blue, black and green flowers. 36" wide, 85c.

Dotted putty stripes and bright baskets between old blue stripes and red, blue, black and green flowers. 36" wide, 85c.

On a cream ground is an allover flower design in brown, green, purple, blue and tan. Birds and butterflies make pretty color notes. 34", 85 cents.

The willow chair is of unusual design. It is upholstered in cretonne to left. In natural willow, $3; stained, $1.50 extra; enameled, $2 extra. 36" high. Seat cushion extra.
Visions of tea and cakes on a zephyr-swept lawn. And the maid brings out tea on a tray with a Circassian walnut border and under the glass, a design on natural linen of peacocks and flower vases. The tray also comes with mahogany frame. $8

Since grape juice is the great American drink we recommend a special set to serve it from. The cups and pitcher are American Belleek in a cream tint with a blue enamel peasant design. Chinese tray painted cream with blue edge. Spanish linen tray cloth crocheted in blue. $45

Breakfast out of doors on a table all your own. And on the table an individual tray set embroidered in cross stitch design of blue, yellow, pinks, green and purples. A roll hem is whipped in tan threads. Tray cloth 20" x 13½". $6

A new kind of flower box is made of long tiles, 11" x 5½", highly glazed and in various motifs. This has brown and blue designs on a white background, 12½" x 7" wide by 5¼" high. $2.50. Inner compartment is galvanized metal

The tea cosies in the center above are of heavy crash. One has an Egyptian design of cut-out gingham with edges stitched in blue and costs $5. The other has white oil-cloth flowers sewed on with green and orange wool with edging and hand in orange thread. $5

When the average house builder enters a shop he has so many things to see that he often misses the choicest opportunities. The articles on these pages are selected by shoppers trained to see the sort of things you need. Each of them finds a use in the house or the garden. For the names of the shops or for purchasing you can avail yourself of the Shopping Service, House & Garden, 445 Fourth Avenue, New York City.

As a finishing nautical touch comes a sloop weather-vane for the boat house. It measures 3' 2" long x 2' 7" high. The boat and sea and figures are painted in realistic colors and the sails will fill with any wind. Complete, $50

For the guest room desk, a letter post box 18" wide and 8" high of antique chrome with Italian designs. A small drawer holds stamps. $45. The lamp has a dull gold standard 38" high, $8.50. Shade, painted after an old French design in ivory and rose pink, $9.50
You can have your own little hanging gardens of Babylon on the porch if you arrange the flowers in a woven willow wall pocket with a galvanized lining.

In natural willow, $3.50. Stained, $4.25.

Another hanging basket in a woven willow with arms by which it is suspended from a willow covered bracket. The bracket comes with the basket. In natural willow, $4.40. Stained the color desired, $6.50.

The octagonal sewing basket above is covered with imported cretonne of a Chinese design and trimmed with gold band and gold tassel and beads. Thimble case at one end, needle pocket at the other. 8" long, 6½" wide, 7" high. $2. With it is a yarn winder of black lacquered wood with a Japanese gold lacquer design as decoration. Adjustable arms. 8¾" high and 22" wide. Plain, $1.75; decorated, $3.50.

Of course, you must imagine it filled with candy or biscuit. But then, it is attractive in itself. For it has a satin cover decorated with prim, conventional satin fruits and gold braid and lace. It has a brass holder. 7½" diameter; holds 3 pounds. $2.90.

At the top center of the page is an unusual country house desk set.
The letter box of wood in two sizes, 10" x 14" x 2½" or 9" x 13½" x 2¼" in a rich ebonized finish with an old English coaching scene in bright colors. $5 and $7, according to size. The call record and telephone memo pad has the same finish and is 8" x 7" x 4½" with a quaint English news crier painted on the front. $5.

There can really never be too many attractive trays to call into service in the summer house—they are always in demand. Here is one that is ebonized in black with a Japanese gold lacquer design as decoration. It measures 14" x 11" and sells for $2.50.

And still another bridge table cover. Of the new designs we have selected one of black duvetyn which when smoothed out will not slide. It is 36" square, edged with one-inch gold braid. In one corner is a conventionalized flower of rose duvetyn appliqued and corded on with a contrasting color silk. The price of the cloth is $7.
THE miracle of plant growth which is maintained throughout the season is no less wonderful, although it may occasion less wonderment than the germination of the seed and other facts and phenomena of plant life which we have already considered in their relation to actual garden work. Success from now on will depend just as much upon the gardener's understanding of what is taking place, and upon what in the light of that understanding he does, as it did in the steps we have already discussed.

In order to bring freshly to your mind such of the facts about plant growth as I have already mentioned, I will briefly recapitulate them, because they have a very direct bearing on what you have to do this month to keep things growing. The ground is not solid, but is largely nothing but air spaces, or interspaces, much like those you might find between the pieces of furniture packed in a van on moving-day—they can't be packed any tighter, but because of their irregularities there is a good deal of unoccupied space between them. So it is with the particles of rock, soil, decayed vegetable matter, etc., which compose the soil.

Another surprising thing is that the same soil which, when we take up a handful of it, seems so cool and moist, is in reality composed of particles which are dripping wet; examining it through a lens, we might almost imagine ourselves looking through a glass window in a submarine. Every object in view is encased in a thin film of water; each crag of rock, boulder, lump or piece of log—which viewed without the lens would seem a minute particle of soil—appears to be dripping wet on the surface. In fact the general atmosphere of the place is that of saturation. You would not want to venture far through that glass partition without a raincoat and a pair of rubber boots, and you naturally wonder that there are not more vegetables of the oyster plant family growing in your garden.

**ACTIVITIES UNDERGROUND**

And the first thing that you notice is that the soil you suppose to be dead and inert is very much alive! For, at the least, most of the room seems to be rented to very active citizens. In fact, as the spot we are looking at has been made quite rich with old compost, and has been under cultivation for some time, there seem to be many of them and they are anarchistic in their tendencies, apparently attacking everything.

But even as you look down from above to this dark, strange country, there comes forcing its way irresistibly, pushing aside lugs, boulders, or twisting around them, an interminable white submarine. You needn't shrink back, for it is not a subterranean serpent—only a little rootlet, magnified by your lens. But how can that fit? you ask. Wait and see.

As it grows it throws out almost up to the ever-advancing tip innumerable transparent loops or cylinders, matting so thickly together that they quite cover it, sticking out like iron filings on a magnet. "Ah! those are the feeding roots of the soil," you exclaim. "But still how do they eat? I see no mouths or openings."

There is none. But watch and you will see what we have been waiting for. The moisture is disappearing, wherever these films or walls of tubes come in contact with it. It is not sucked up but absorbed by their porous surfaces; and the plant foods in the soil which were in solution in the moisture are going along with it.

"But," you say, "these greedy roots are not getting all of the water. It seems to be moving upwards everywhere."

And so it is, for the sun (which has been getting most uncomfortably warm on the back of your neck here in the vegetable pit) has begun to heat up the surface of the garden soil, by which the water from below keeps traveling up through every square inch of soil in your garden. It is high time to get out of the pit and put a stop to it!

**THE GARDENER'S WORST ENEMY**

So climbing out of our pit, we go down the garden path to where maylap Pat, the old gardener, is pausing for a moment in the hot May sun to wipe the sweat from his furrowed brow. Ask him why he is using his hoe so diligently over the beans, and after a look which questions your sanity, you get the expected time honored reply: "Why, sure, to be killin' them before they are after killin' everything else. I would have done it in the cool o' the mornin', but you can't trust 'em with the dew on, or by the Virgin, it will put the hight on the vines. But for the weeds I'd as soon be workin' here as in the garden of Edson; they are the worst enemies we have, not excelin' the thistles.

But if we look at the ground where Pat has been so diligently using his hoe, we will notice something just as curious. For, although he has destroyed many weeds as there were. The surface of the ground in the row ahead of him is firm and feebly growing. Its soil is soft and loose, and at the end of the row where he began work it is already quite dry. In fact, after ten minutes in this bright sun, the soil begins to dry on the surface, while in the adjoining row not a foot away it remains dark and moist.

Why? Simply because Pat with his hoe, thinking that he was doing nothing but destroying weeds, has by disturbing the surface of the soil put a stop to just the process which we saw through our glass walls just now, going on under the surface—the upward movement of the moisture in the soil to replace the surface moisture evaporated by the sun and the wind. Getting under the surface and breaking up the crust has destroyed temporarily the moisture channels or tubes which the moisture has made for itself in rising. The upward movement cannot be re-established until the rows have been hoed and the surface broken down to admit more moisture right below the dry surface, while that in a row perhaps only 2' or 3' away, which had been left untouched might look still more moist on the surface but would be perceptibly drier at a depth of 3' or more.

So our evening's observation will have taught us at least two tremendously important things: first, that the growing plants can obtain their food from the soil, even when there is enough moisture present to hold it in solution; and second, that we can save the moisture in the soil and hold it for future use by keeping the surface constantly stirred so that there is always a dust mulch upon it.

So far, however, we have not considered only surface cultivation. Let (Continued on page 76)
THE CURVED FLAT ROD

The advantage of the curved, flat rod lies in the fact that it is curved and it is flat. The curve holds the drapery from the door or window and forms a basis on which a valance can be built; it also gives a nicer finish to the sides of the curtain. The flat shape of the rod makes it much easier to slip through the curtain hem, and holds the heading and the hem in the exact position desired, thus setting the curtain off to the best advantage. These rods come in several finishes,—satin brass, oxidized copper, green, white and other colors to suit the color of the fabric.

They are easily adjusted, the rounded knob on the end fitting readily over the catch on the window trim. This knob also causes the rod to slip smoothly through the hem.

CASEMENT OPERATORS

The bother with casement windows usually comes in summer when, if they are screened, one must raise the screen to open or close them. Below is a simple device designed to do away with this trouble. It is simply a bar on a socket. At one end the bar is attached by a hinge to a plate on the bottom of the frame. At the inside end is a handle which, when turned, adjusts the casement in the position desired. The device may be installed concealed in the frame of the window; as it is pictured below, or exposed, fastened on the window sill.

C O N V E N I E N T D E V I C E S F O R T H E H O U S E

In reviewing the ideas our readers send us and the new products that appear on the market to lighten labor in the house, we are presenting the same sort of service that a book-review column in a literary magazine offers its readers. Send your ideas to House & Garden, 440 Fourth Avenue, New York City.

The flat curtain rod with curved ends presents many advantages among which is its ease of adjustment.

A GARBAGE INCINERATOR

No labor-saving device can be more appreciated by cook and housewife than a garbage incinerator. The type shown above is built into an enlarged base of the kitchen chimney wherein is placed an arrangement of grates which permits the draft to pass over and around as well as through the material to be burned. No fuel is required, the system being based on the fact that in the normal household there is more than enough combustible material in the form of waste paper, rags and the like to dry out and insure the complete combustion of all damp, wet or otherwise non-combustible material. The incinerator is fired once a week. A hopper door is placed in the chimney flue in the kitchen. Into this is dropped all the household refuse, including tin cans and bottles, which hold the mass in a loose condition. When it is touched with a match from the basement door, the mass is ignited and wholly consumed in a short time. There is said to be practically no odor.

Creosote, with which the interior walls of the incinerator are painted, combines with the flames to keep the chimney clean so that no objectionable after odors remain when the incinerator is not used. The hopper doors fit snugly and prevent odors while the incinerator is being filled.

Instead of having to push open the casement windows, you simply turn the crank and the device does the trick.

Objections to the delivery of coal are removed by the new grade line chute that is efficient and unobtrusive.

A CONCEALED COAL CHUTE

Few residences but bear scars of coaling. Either the foundations are battered and discolored, or the cellar window is irreparably scarred. Instead of the old method is a grade lever chute designed to be built into the foundations. The door folds back protecting the wall from disfigurement. When coaling is over, the door automatically locks and can be opened only from the inside, thus making it burglar-proof. This type comes in two sizes, 18" x 24" door, $24.50; 24" x 30" door, $41.50. Another type, built with a door that fits against the wall, has a glass panel permitting light into the cellar.

Bridget may look disdainful, but that's because the artist cut her kitchen floor to show how the incinerator works.

An all-metal screen is easier to handle than wood, permanent and more dependable in fitting.

ALL METAL SCREENS

Among the new screens is an all-metal type that well-nigh defies destruction. It slides easily in metal guide strips attached to the window casing. On the side is a lift by which it can be pulled from the guide strip and removed, side springs holding it in place. Being all metal, it is not affected by changes in the weather which usually make wooden screens stick and warp. The screen itself is of bronze wire which is rust-proof. The frame is of galvanized steel finished in hard enamel, in colors to suit the color of the house. Copper and bronze frames are also available.

The guide strips which accompany the screen are fastened the entire length of the window so that the screen can be adjusted for either top or bottom ventilation.
CONSTRUCTING LOG CABINS AND CAMPS

Facts For The Man Who Would Build His Own

E. L. A VIN E

THE log cabin is the direct product of its environment. Its architecture, however primitive, is direct architecture. Cabin life is life reduced to its bare necessities. The requirements are few and the demands on the cabin itself are relatively small. Nevertheless, it must be structurally viable—weather-proof and cold-proof, and it must "stand up" under the drive of the elements. That much is fundamental. Whatever is added in the way of exterior or interior decoration is a matter of choice, but it should bear the same general characteristics of the environment.

THE CHOICE OF LOGS

Success in building a log cabin depends mostly on the type of logs selected and the way they are handled. In selecting your logs, see that they are as straight as possible and uniform in size. A good average size is from 6" to 7" in diameter at the small end.

Cedar is the best wood for this purpose, as the bark will adhere if the timber is cut in winter. Should you prefer to peel the logs, however, the best time for cutting the trees is in the spring when the sap is in them.

After the cabin has been built the best way to finish it is to strip the bark from the logs on the inside and oil them with linsseed oil, but it is generally conceded to be more artistic to leave the logs "in the rough" on the outside. If left unstripped in the interior, the bark is apt to make too comfortable a resting place for horseras and objectionable bugs. The linsseed oil will fill the wood sufficiently to prevent this.

Perhaps the best way to describe the process of building a cabin would be to refer the reader to the little camp shown on the upper part of this page. The cabin is 10' x 12' with a fireplace and a bunk, as the plans show.

HOW TO BUILD A CABIN

The number of logs required for the structure is about twenty-four 6" x 14', twenty-two 6" x 12' and nine 6" x 20'. The last are for the chimney.

Select the largest logs for the sills, or foundations. First lay two 14' logs on the ground, and place on them two 12' logs; square them up, allowing the legs over each other so as to leave an extension of 6" on each log. This extension is seen on the floor plan. Using a saw, mark each end of the first 12' log on each side of the 14' log on which it is resting. Next, roll the 12' log over and, with an axe, notch it out between the saw marks you have just made so that it will fit over the 14' log to about half its thickness, then roll it back in place over the 14' log. Repeat this process on the other end.

At the back of the cabin, place a 14' log on top of the 12' logs, mark and notch it at each end as has been explained, and roll it into place. This method of fitting the logs together is continued throughout. Note, however, that when the logs are in place all the notches should be underneath.

Should a fireplace be decided on, an opening in the required size must be left. An opening smaller than 3' is not advisable.

When the sill is complete the door jambs should be put in place. Both jambs and window frames should be made of 2" x 6" material. The cabin in the continuation of this article has casement windows 2 5/8" x 3 and a plain door 2 9/16" x 6'. Such frames can be obtained at any lumber yard for a small expense, and they will save labor by purchasing rather than attempting to make on the spot. The door jambs should be set down in the sill about 2". Continue building until about 3' above the sill, then place the window frames in position, setting them down into the notched log about 1". See that the tops of the window frames and door jambs are about on the same level, so that when you swing up the top plate—the topmost log—it will be level all around.

Make the ridge pole about 3' in diameter and 16' long, and the rafters 3' wide by 8' long. This will provide a 2' overhang with a 2' pitch. After the rafters are set in, place out on the (Continued on page 56)
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Patriotic Prints of Bygone Days

(Continued from page 25)

old multi-colored chintzes cannot be surpassed in loveliness.

"The old chintz of the eighteenth and early nineteenth centuries was one of the highest artistic merit," says Arthur Hayden in "Chats on Cottage and Farmhouse Furniture." In the heyday of its fame the fabric was exceedingly fashionable amongst the richest persons, and there are abundant records of the popularity of old English chintzes upon the continent.

For, at its best periods, the chintz was not a cheap imitation of more expensive fabrics; it did not, for instance, occupy the relationship of pewter to silver or moulded composition to woodcarving. On the contrary, the designing of chintzes is an art of distinction, governed by canons which bear little relationship to other decorative textile crafts."

The Chintz in History

A 16th Century Portuguese writer, by name Joao do Barros, gives us an interesting early reference to printed fabrics: "Great quantities of cotton cloths, admirably painted, are held in highest estimation." But even some 200 years before his time the makers of these cloths had also been celebrating the chintzes of the Coromandel coast. Doubtless the printed fabrics of the earlier centuries attained an intricacy and beauty that were long denied to Indian printed textiles which they inspired. Early examples of the latter are in no way comparable, artistically or technically, with contemporary Indian prints. Even to-day it would be difficult to improve esthetically on the beautiful printed stuffs that came to us from the countries of the Orient.

We do not know with certainty the circumstances of the introduction of chintz into Europe of the manufacture of printed fabrics. Long before English weavers had undertaken the industry, the printing of fabrics flourished on the continent. The 16th Century references to printed cotton cloths may be so enigmatic and vague that we are practically without knowledge of the earliest manufacture of chintz in English fabrics. We do know, however, that a veritable legion of skilled craftsmen in the textile arts in the British Isles during the latter half of the 17th Century. It is to them, probably, that the art owes its introduction there.

An Old Printer at Work

The Print Room of the British Museum exhibits a quaint old trade card—its impression of a woodblock such as the cloth printers used—which bears the representation of a cotton printer at work. In the context of his time, the reign of James II, he stands before a long, broad Jacobean table, lengthwise of which lies a pile of cloth, one-third showing the pattern which the printer has impressed on it. Behind the left end of the table is set a Jacobean stool on which rests a circular basin containing the color which a boy is waiting to apply to the wood block for printing. The master-printer is in the act of impressing a section of the pattern on the white cloth by means of the wood block, which he is hammering with a wooden mallet. The text, incised of the period, reads: "J. Jackson living at ye signe of the Callicoes Linings Silks Stuffs New or Old at Reasonable Rates. This old mode of block printing maintained for fully two hundred years, until the inventive genius of the 19th Century joined hands with commerce to the craft's almost complete discouragement. However, a revival of interest in the old arts was inspired by such men as William Morris. The hand printed fabrics have been restored to favor, and today they again play their part in the decoration of the modern home.

Early Processes

Richmond, Bow and Old Ford, London, became the earliest centers for printed chintzes. But the few extant specimens of 17th Century chintz show us that the early printed cloths were crude enough. At first more than one color was not attempted. The next step appears to have been to add to the monochrome effect by applying washes of dye, by either freehand or stencil application, to the outline pattern. This was done by brushing the color on as required, a process slow, laborious and fraught with uncertainty. An examination of these early pieces, though they are from an antiquarian point of view, reveals a smugly appearance resulting from the use of the dyed inks white with which the patterns were printed. The early materials were very coarse canvas, or calicos.

With the advent of the 18th Century the cloth for receiving the printed patterns was much improved, and it was not long before finely woven textiles supplanted the cruder ones. This greatly faceted development of textile color prints and the Queen Anne chintzes were, in consequence, infinitely superior to those of Charles II, James II, and Mary reigns. So popular did these improved patterned fabrics become that the chintz trade not only rivaled that of the silk weavers, but for a time threatened to drive the latter out of business. It latter became the feeling on the subject between the two crafts, that riots resulted and an appeal was made to Parliament for protection by the silk manufacturers of Spitalfields.

History records that the silkworkers were so enraged because William Paine did not immediately forbid the wearing of chintz that the delegation which had carried their appeal to London gave vent to its wrath by tearing off all chintz gowns that were encountered on the streets of the city. Finally Parliament passed an act of 1736 forbidding printed cottons and linens, an act which was repealed and followed by an increased vogue in chintz. In France as well it was at one time considered expedient to prohibit the manufacture of printed textiles; the restriction extended until 1759.

The Golden Age of Chintzes

Authorities seem to be agreed in considering the middle of the 18th Century as the golden age of old-time printed chintzes. Collectors eagerly seek specimens of this period, though they are all too well aware of the charm of the period, and the difficulty of securing specimens. Even the best of the early specimens of chintz are not without their defects. The colors are usually fugitive, and have not survived the test of time. However, the best specimens are today in a private collection.
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The Culture of Trailing Arbutus

(Continued from page 40)

In a general way, the plant prefers rocky, wooded hillsides with a northern exposure. Often found under hemlocks, it also grows on the open, hardwood slopes, where in early spring the only real shade comes from the laurel bushes. Again, I have often found it along roadside banks in that porous, poor-looking soil which seems unfit to grow anything but wintergreen and a peculiarly short, grayish moss or lichen. Sometimes, too, it will be found in the sandy soil of dry valley bottoms. In almost every case the northern exposure seems to be a requisite.

In a natural state, at least, neither rich nor deep soil need be necessary. You will often find thriving, healthy plants growing almost on the rocks, especially where there are little pockets of soil such as occur at the foot of broken ledges.

Of course, the best time to locate the trail is during April or early May, when it is in bloom. Not only is it more visible then because other and concealing things have not grown to any great height, but the blossoms themselves often lead to the discovery. On a sunny, windless day their heavy fragrance is noticeable at a considerable distance—considerable, that is, in view of the small size of the blossom. Not infrequently on a woody road in early spring you catch the indescribable sweet perfume, and follow it to where the little evergreen leaves and pink-white blossoms nestle close to the ground. That this fragrance can be brought to life again within the confines of an earthen pot is one of the triumphs of the gardener's efforts to transplant a bit of the wild and conserve it for the enjoyment of himself and others.

Patriotic Prints of Bygone Days

(Continued from page 58)

rose and famille noire porcelains of China furnished many a motif for the chintz designers of the 17th Century. In the Chippendale period buff grounds were introduced, whereas in the earlier chintzes the grounds had been blue.

The third quarter of the 18th Century witnessed an innovation in the manufacture of printed fabrics. Various mechanical devices were perfected and led to an enormous increase in chintz manufacture. Cotton printing was taken up in the north counties and soon the trade center shifted thence from London, its old cradle-town. Engraved copper plates and roller printing came into use. Still, as has already been said, hand printing was destined to survive.

American Prints

The collector of these various printed cottons will find the historical group especially interesting. Take, for instance, the "Apotheosis of Washington" or the "Allegory of Washington and Franklin" subjects.

In both the figures of Washington were taken from the famous Trump bull portrait. In the "Apotheosis" the medallions containing portraits of thirteen famous personages of early American history are after engravings by Dufay. The "William Penn's Treaty with the Indians" forms the subject of another patterned chintz of special interest to American collectors. Then there are the later political subjects which the 19th Century's early history inspired. The printed kerciefs also came within the province of the collector of printed cloths. Many of these kerciefs are especially well adapted for framing. Such is the "Lord Thomas and Fair Eleanor" kercief and the one bearing the title of "The Token or Sailor's Pledge of Love." Some of these old kerciefs and also many of the printed chintzes of historic interest have found their way into American public collections, such as those in the Metropolitan Museum of Art, New York, through whose courtesy some of the accompanying illustrations are reproduced.
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Early Italian Tables and Seating Furniture

(Continued from page 43)

of such austerity and restraint we still have much to learn, particularly in regard to the equipment of our summer houses.

Design and Workmanship

Another cardinal characteristic of early Italian interiors was that, while the pieces of furniture were comparatively few in number, they were admirable in design, material and workmanship and the "absence of fussy nonentities" allowed them to count for their full value.

A writer in the Connoisseur, some years ago, well summarized the rationale of the restraint in the furnishing of some of the more magnificent interiors and, at the same time, the entire congruity of the furniture with its environment, in saying that "when the walls of the galleries and salons were covered with frescoes, or hung with tapestries, rich velvets from Genoa, or with stamped and gilt leather; when the ceilings were painted or heavily carved and gilded; when the floors were inlaid with the choicest mosaics, many objects about would detract from the magnificence of the whole and leave a confused impression on the mind. This the unerring taste of the 16th Century decorators fully realized. The few pieces of furniture that were admitted, however, were in keeping with their surroundings."

He might, with equal truth, have added that this same furniture was just as much in keeping with its surroundings when the architectural setting lacked all the aforesaid polychrome and gilt gorgeousness; when the environment was marked by the utmost simplicity and austerity in every respect; when the floor was of stone or of bare boards; when the walls were of plain grey plaster or else whitewashed, adorned save for a single hanging, perhaps, or a painting; when the ceiling was groined and vaulted or of undecorated wooden beams and boards.

The secret of it all was that the furniture was inherently dignified and genuine, every item of it, and while, in the former case, with a rich and brilliant background, it supplied the requisite degree of contrast in the ensemble, in the latter, its effect was

(Continued on page 64)
The heart of the home

In planning your new home, or in remodeling, think first of the bathroom. It is the heart of the home. Without the most modern plumbing ware in the bathrooms, your home will not be all you want it to be. For these reasons be sure to select Kohler Ware, always one quality—the highest.

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The more light, air and moisture your vines have the better they will grow and produce blossoms and leaves. They get all they need if they have an Excelsior Rust Proof Trellis on which to climb and spread their glory to the elements. They are made of extra heavy, strong steel wires, held at every intersection by the Excelsior steel clamp, which is a patented feature. This gives them rigidity and strength to withstand heavy winds and sudden shocks.

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We also make a full line of Excelsior tree guards, bed guards, fences, railings, gates, etc.

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The shingles are warmer than English tiles and the coloring is much softer and richer owing to the texture of the wood and the deep velvety tone of the stains. The stained timbers, in old smoky browns and dark grays that bring out the grain, harmonize perfectly and weather out beautifully. Cabot's Stains are artistic, inexpensive, lasting; and the Creosote preserves the wood.

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50 Church St., New York City

Clapham & Candolle, Architects, New York
Early Italian Tables and Seating Furniture

(Continued from page 62)

heightened by the severity of the foil against which it appeared.

Just as the melon-leaf motif for English furniture prior to the middle of the 17th Century was oak, so the staple material from which Italian furniture of the 16th and 17th Centuries was made was walnut, except when the chest, cabinet, or whatever it might be, was to be covered with polychrome and gilt decoration, in which case pine, cypress or some other such wood was used. Of course, in addition to and in conjunction with walnut, other woods were employed to a limited extent for purposes of inlay. So far as tables and most of the seating furniture go, however, we shall be chiefly concerned with walnut.

The Tables

Early Italian tables exhibit a great variety in sizes, shapes and methods of structure, according to the uses for which they were intended or the amount of carved enrichment to be bestowed upon them.

The kind of Italian table with which we are, perhaps, ordinarily most familiar is the long, narrow type such, especially, as those shown in figures 16 and 5. Figure 5 is one of a pair of early 17th Century tables that came out of an old palace in Rome which had been wont to stand against the wall, one at each side of a central doorway in a long salon. It is a pair of mellow toned walnut tables standing 9' 3" long, 3' 4" high and 3' 4" wide. It will be noticed that its beauty, like the beauty of many other Italian pieces of the same date, lies in its purity of line and its truthfulness of proportions. The mouldings, both of the underframing and of the stretchers, are refined in profile and well considered in arrangement and, in this respect, are thoroughly characteristic.

The design is simple, straightforward and vigorous and entirely free from the saccharine absurdities that some folks, unfortunately, associate in their minds with Italian furniture. Indeed, a great deal of the early 17th Century furniture is simple and virile almost to the point of severity; witness some of the credenzas and cabinets which we shall have occasion to discuss later. The resemblance between figure 5 and some of the English refectory tables invites comparison. While the dimensions are pretty much the same, it will be noted that the lines of the Italian table are graceful and slender, especially in the detail of the baluster-turned legs, while the melon-bulb turnings of the correspondent contemporary English type are apt to display a degree of "bogginess," a defect which is hard to justify, it may be, to the genius of design imposed by the nature of the wood.

How They Were Used

While tables of the type just mentioned were habitually used, singly or in pairs, in positions similar to the attic, in the description of figure 5, they were also used against the wall in halls or in dining rooms, where they sometimes served in place of sideboards, or rather, to be accurate, in lieu of the nearest approach to sideboards the Italians of the period were considering possessed. The locations they occupied in Italian houses at once suggest possibilities of suitable placement in our own interiors—against the wall in large halls, living-rooms or dining-rooms, or standing out from the wall in libraries, or, indeed, as dining tables, for which purpose they offer definite advantages.

Figure 16, a long table of the latter part of the 16th Century, shows a different sort of structure which is also typical of a large class having a long stretcher or brace running from one side to the other and bearing a succession of balusters that hold up the middle weight of the table and the drawer underframing. The scroll-shaped, lion-footed truss supports at each end exhibit a contour that is thoroughly representative of a great many of the 16th and 17th Century tables.

The same principle of construction (figured in support connected by a brace or stretcher and the same general line of contour, though much simpler and flatter, is exemplified by figure 16, another specimen of late 16th Century workmanship. Figure 17 is a table 4' wide and 9' high, also a specimen of 16th Century table-making, not only exhibits the same general principle of construction as figures 16 and 16a, but, furthermore, proves an admirable example of the wood-carver's art and shows the characteristic qualities to be found in nearly all the carved work of this period, full of sweep and vigour and yet full of refinement of conception and execution of detail. Looking at such carving, one instinctively feels the virility and its suitability to the medium; that it is really carved wood, and not merely a carving applied on wood.

Quite as typical, in its way, is the small octagonal topped table with four turned legs (figure 1) of the early 17th Century; a resemblance to figure 5 is patent. Other small, octagonal, hexagonal and round-topped tables were supported on pedestals, plain or deeply carved in the manner of the 16th Century.

Notaries' Tables and Others

Notaries' tables were not unlike in general plan to the modern ironing tables with tilt tops that form a settle-like seat when the top is up. The chest-like shape in the base held papers and parchments and the drawers in the underframing held pens, ink and sundries. Then, again, other tables of the 16th Century produced square tables, sometimes with elaborately inlaid tops, with caned, scrolled and carved legs, often appearing to be unconnected by stretchers.

Draw tables, too, were made in the 16th and early 17th Centuries and a pair of them may be seen in the Metropolitan Museum. The draw table is simply an inlaid and seating capacity "by means of two shelves under the central top but so arranged that upon their being drawn out the upper top falls into their place, thus forming a level surface." The particular draw table mentioned is 4' 3½" long, when the leaves are pushed in, 2' 8" wide and 2' 9½" high and the seven turned legs, connected by stretchers, no ingeniously disposed that, whether the leaves be open or closed, none of the sitters is inconvenienced. Closed, this table will seat four people comfortably and opened it will hold eight. A dining table is one to talk easily with his ris-a-tis as well as with his next neighbor, and altogether it is of a pattern well worthy of reproduction.

To sum up, then, the principal types of tables of the 16th and 17th Centuries, there are tables that support at each end, connected by a stretcher or brace with or without balusters extending upward from it to the bottom of the table or underframing, and some of these tables
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IF YOU use a wood or coal range it makes your kitchen too hot in the Summer; if you use a gas or oil stove, it doesn’t keep your kitchen warm in the Winter. Two ranges are a waste of money, for the DUPLEX ALCAZAR gives you two kitchen ranges in one.

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Alcazar Range & Heater Company  
379 Cleveland Ave., Milwaukee, Wis.
Early Italian Tables and Seating Furniture
(Continued from page 56)

The seating furniture of this same period showed considerable diversity and embraced, besides armchairs and side chairs, stools, benches, double chairs or settees and a form of bench known as a cassa banca (shown in figures 14 and 15).

One early type of chair, two examples of which are shown in figures 6 and 8, apparently of Venetian origin, had a small seat resting upon two shapely and heavily carved trestle-like supports, splayed outward and resembling the trestle supports of contemporary tables. The back, made of one piece of wood heavily carved, was set into the seat with a backward rake.

The examples of 16th Century armchairs shown in figures 10, 12, 2 and 7, are thoroughly representative, being in contour, ornamentation and manner of covering. Comparative examinations will show that the legs either stand upon round feet, with carved toes and claws in front, or else rest directly upon the floor; in the former case stretchers are often dispensed with, except perhaps between the two back legs, while in the latter case there is apt to be a broad pierce, or pierced carved stretcher between the front legs and stretchers also at the sides and back; that the seats are usually square; that the arms are high above the seat; that the backs are raked slightly; that the chair is nearly for in fronts which, in the case of 2, 10 and 12, are the customary carved and gilt acanthus leaves; that when the chairs are not covered (v. figure 7) the crossrail and toprail are apt to be much carved and also to display flat panels enriched with inlay in beech or some other light colored wood; that when the chair seats and backs are covered with either tooled and gilt leather or with velvet, and garnished with either brass-headed nails or with fringe and gimp, the frames are apt to be comparatively plain with little turning or carving, save the gilt acanthus finials of the backposts. Side chairs (v. figure 2), whether upholstered or unupholstered, displayed the same general characteristics as the armchairs already described.

While chairs of these types continued to be used and made in the 17th Century, other types appeared that had lower seats, were more comfortable in their measurements, had legs more consistently framed by stretchers and displayed a greater amount of well-proportioned turning and little or no carving (v. figure 17). In some of these chairs the backs were raked while others were quite perpendicular. Some of the backs were even covered with velvet, brocade or leather upholstery (figure 17); others were composed of turned spindles and occasionally showed a close resemblance in pattern to some of the English spindle backs in the 17th Century. Such as the 16th Century example shown in figure 13, were merely armchairs of double breadth which require no special comment. Benched with carved or turned legs and low curved backs, somewhat after the fashion of contemporary Spanish benches but exhibiting distinctively Italian technique of carving, afforded another resource in seating.

The Cassa Banca
The most monumental and impressive piece of seating furniture was the cassa banca, which was frequently of more in length and was raised on a low dais above the level of the floor. It was in reality a chest with arms and back of architectural proportions (figure 9), having only a back and no arms (figure 14). In some instances the back was carried on a large considerable height and adorned with carving, thus establishing a visible line of descent from the canopied Gothic seat of the 14th Century. In one case, a seat of state and ceremony, although the 16th Century cassa banca was of purely Renaissance design and construction in detail, of decoration. Seats of this sort were intended, of course, to be used only against the wall and in large apartments either at the end or in a long wall space at one of the sides.

There is scarcely an old Italian table or piece of seated furniture to be met with that will not well repay close study and measurement; and the lessons to be learned from such an examination will bring their reward not only in greater concrete knowledge of the interiors, but also in the consideration, but in a riper and broader appreciation of the methods pursued and the subtlety of the proportions followed, methods and proportions that have profusely influenced all subsequent mobiliary history.

The Natural Beauty of Wood
is a most important consideration when choosing the material for the interior finish and trim of your home.

That beauty is dependent principally on the texture and "grain" - the varied arrangement of the fibers in individual pieces. Because of its close, even, velvety texture and its wonderfully varied and pleasing grain, the ideal wood for interior trim is Southern Yellow Pine

Southern Yellow Pine not only makes a handsome appearance finished in its natural color, but because of its light tint, it is especially suited to stenciling. It takes stains, varnishes, paints and enamels perfectly, and there is absolutely no effect of color or tone that cannot be obtained with its use.

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SOUTHERN PINE ASSOCIATION

Constructing Log Cabins and Camps
(Continued from page 56)

shingle lath or boards and cover the roof with tar paper. Wood or asbestos shingles can be used for a finish; in fact, it is desirable to shingle, because, with only a tar paper roof, the building looks unfinished.

Caulkling the Chinks
In laying the logs, fit them as close together as possible. This will make caulking both easier and better. Caulking can be done in many ways, the simplest and best of which is to use cement. This is done by two men working at either, one on the outside and one on the inside. With trowels each applies the cement simultaneously to the same chink, so that each can prevent the cement applied on the opposite side from running out, thus making a neat and thorough job.

For a cabin of the size illustrated above, two bags of cement are required. The mixture should consist of three shovelfuls of sand to one of cement. Care should be taken not to use too much water, since the cement is easier to place when it is quite thick and heavy.

The bank can readily be constructed. Use four 4" posts as uprights, running them from the floor to the roof, with two cross pieces the width of the bed springs to be used. These cross pieces should be fastened 2' from the floor and the springs and mattress placed upon them.

If an additional bank is required, fasten two more cross pieces to the uprights 5' from the floor, and place the springs and mattress as on the tier already built below.

(Continued on page 68)
Vermont Sea Green Slate

For Generations to Come

Would you roof for your children's children — roof with Vermont Sea Green Slate! The one roofing that will outlive you, that'll shield you 'gainst fire; shelter you thru the worst of weather without costly repairs and paint, and each year will add to its beauty.

Man-made roofs are temporary. They wear and you repair and paint. Wood roofs encourage fire. But Nature has made Vermont Sea Green Slate and it has been thousands of years in the making. Yet it costs no more than other roofings.

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Please send me FREE your beautifully illustrated book, "For the Generations to Come." I am interested in roofing a kind of building.

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—the biggest things to attain in big and little homes. No other feature will add so much in beauty as casement windows; none so much convenience as C-H casement adjusters.

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From an original oil painting made especially for
The Lowe Brothers Company
by W. E. King, of New York.
Constrcuting Log Cabins and Camps

(Continued from page 66)

These are the simple facts of the
crudest sort of cabin, but they apply
to any structure of this sort. Using
these building facts, one can con-
struct a cabin of pretensions size.

The division of rooms can really
be made with wall board partitions
held in place by studs.

The other type of log cabin is shon
on page 50. In this instance
the logs are used vertically. It is a
small mountain camp of decidedly
rustic exterior. The walls are of
large logs, averaging approximately
18" in diameter, with their bark re-
moved. They are cemented together
and rest on a stone foundation. The
gables are of half colored cement
stucco, and the roof is of tar paper
composition. Across the front is
porch, the roof of which is covered
with slabs and palm leaves. The
cabin has a frontage of 24' and a
depth of 17'.

The interior is partitioned into
a living-room, a bedroom and a kitchen,
the partitions being of dressed pine
flooring. The living-room contains
a large stone fireplace, with a box seat
at one side and book shelves at
another. The kitchen is equipped with
a sink with cupboard space beneath,
and a cook stove. All inside walls
except the partitions are plastered
instead of being left rough.

Computed on the basis that the
logs were obtainable near the build-
ing site (which is in California), this
mountain camp is estimated to have
cost about $400, including all labor.

Brush Studies of Bird Life

If bird pictures have meant to you only the illustrations of "How to Know the Birds", if you conceive their repre-
sentation as preternaturally
stolid and definitely col-
cored fowls, accurately per-
ched on a botanically ap-
propriate twig, with a six-
line paragraph on habits
and distinguishing traits
beneath, then you know
that there is still before you a rare
pleasure in viewing H. C.
Denslow's water colors of
bird life, recently on ex-
hibition at the Arlington
Galleries.

Not that Mr. Denslow's
pictures lack in accuracy. "Birds Every Child Should
Know" has no advantage
there. Before he was a
painter, Mr. Denslow was
a taxidermist, and his
knowledge of ornithology
is unquestioned. His pic-
tures have the fidelity of
photographic reproduc-
tions—they are incidentally
life size—but they are
far more interesting be-
cause they are drawn true
to nature and are works of art as well.

There are all the bird lovers' best others. "The Battle Royal" shows
known friends—the robin, thrush, high in the clouds an American
oriole and bluebird, the scarlet tanager
harassed by king-birds. "The
Marauders", one of the
most beautiful paintings in
the exhibition, shows the
scolding flight of three jays through the yellow
leaves of an oak tree.

The domestic scenes are
altogether delightful and
refreshing. Again there
lakes pictures of a won-
derful thrill of suspense in
them, such as "Innocence",
which shows a serpent
coiled close to a nest of
young wood thrushes. It
is about to strike, and one
small thrush is watching
with silly, impersonal
entrancement. A picture
of this return to the nest
by is "The Evil One", a
weaseled, erect and malic-
ious, on the back of the
mother grouse he has just
slain. In the nest still lie
the remains of a broken
eggshell, and the tiny
chicks cluster about, curi-
os and bewildered, two
or three seeking refuge
close to their dead mother.
It is a picture at once true
and tragic.
Bobbink & Atkins

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FLOWERING SHRUBS
HARDY OLD FASHION FLOWERS
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The Greatest Grass-Cutter on Earth
Cuts a Swath 86 Inches Wide

Floats over the uneven ground as a ship rides the
waves. One mower may be climbing a knoll, the sec-
ond skimming a level and the third paring a hollow.

Drawn by one horse, and
operated by one man, the
TRIPLEX MOWER
will mow
more lawn in a day than the
best motor mower ever made,
cut it better, and at a fraction of
the cost.

Drawn by one horse, and
operated by one man, it will
mow more lawn in a day than
any three ordinary horse-
drawn mowers with three
horses and three men. (We
guarantee this.)

Does not smash the grass to
earth and plaster it in the mud
in springtime, nor crush out
its life between hot rollers and
hard, hot ground in summer, as
does the motor mower.

The Public is warned not to purchase mowers infringing
the Townsend Patent No. 1,209,519, Dec. 19th, 1916

Send for catalog illustrating all types of Townsend Lawn Mowers

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enclose radiators with harmonious
treatments of wood panelings, com-
bined with our decorative metal
grilles, that their obtrusive objec-
tionalness is entirely overcome.
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This is what "zerowater" will bring
to your home—that home you seek to fill
with every comfort. Those comforts which
come with water of rain-like softness and
spring-like sparkle will be yours, when
you have equipped your home with

The Water Softening Filter
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Write today for the booklet, "Velvet Water, Velvet
Skin." Read what new delights as well as worth-
while aids in life are at your disposal through the instal-
lion of zerowater in your home.

THE PERMUTIT COMPANY
30 East 42d Street, New York
When Syringas Turn to Lilacs

(Continued from page 16)

lected winters and all the rest. Certainly its habit of starting into growth even before winter is half over, in the latitude of New York, would argue for its endurance. A few warm days will bring its leaves out in many places around New York City; and frequently these leaves will show blackened tips, when grown to full size, the result of this premature6 bursting of the protective winter sheath before the last cold weather.

Where a plant has the tendency to start thus over-soon, a cold climate generally suits it better than a moderate one, for then there is no encouragement to grow until the proper time arrives.

This variety just mentioned (Syringa oblata) blooms about May first, in the latitude of New York; sometimes it is a few days later, and of course a prematurely early season will force it along a bit sooner.

Following close upon this introduction of the season, the common Syringa vulgaris takes its turn along with the great many of hybrids springing from it. Whatever the latitude, these are about a week behind Syringa oblata. With or close to them, come the bloomers of the species which I spoke of as being unpleasant to some because of its scent—the Syringa Chinesis, commonly called Chinese lilac although not a bit more Chinese than certain others. It is generally conceded now that it is probably an artificial hybrid, of great antiquity, between the Persian lilac and the common species, Syringa vulgaris. It is one of the showiest of all, with a very large, loose clusters of flowers. This loose character of growth, indeed, is carried almost too far, to my taste; the thyrsus or flower cluster takes on an untidy, sprawly look sometimes, that gives the impression of its being decidedly past even when first opened.

The Persian lilac (Syringa Persica) blooms about the same time as this Chinese species; but as it is a small shrub in comparison, averaging only about 5' in height, while the Chinese grows usually to 10' or 12', it is sometimes desirable to use before the tall growing species.

For June Flowers

These species usually carry the bloom week or two—a day or two at the end of the month, certainly up to the appearance of the flowers of Syringa pubescens on the scene. This is also a small growing species, attaining 6' to 7' ordinarily; its flowers are particularly rich in the characteristic fragrances; and their color is a delicate and very lovely lilac or mauve. They are in rather small clusters or clusters, but make up by the number of these for their diminutiveness. The foliage is particularly beautiful, being a rich dark color, and the habit of the bush is pleasing. Altogether, Syringa pubescens is perhaps the most charming species of them all, a species we pass the common but delightful old standby, Syringa vulgaris, already mentioned.

A cluster of three or more lilacs of this sort, or a group of these, is used for the purpose of screening or for decoration purposes. Syringa vulgaris, I believe, is the name by which it is known in the trade.

The Pekin lilac (Syringa Pekensis) is later still, producing its creamy flowers around the middle of the month, after it attains a considerable maturity. Frequently it disappoints in the years immediately following its planting, by not blooming; but ultimately it makes up for this. It is a great thyrus, 10' in height, and when it is one, it starts to flower. It is a lusty shrub, too, growing 15' or more high and branching freely and satisfactorily.

Last of all to bloom is the tree-like Japanese lilac (Syringa Japonica), sometimes as tall as 30' in height and often taking on the true form of a tree—that is, growing with a single trunk. A group of these becomes in time almost a little grove. They are very beautiful, for the flowers are light in color and the clusters huge—sometimes 1' long! This therefore is a fitting vedictorian, blossoming appropriately at the end of June.

A Planting of Seventy-Five

Here, then, are eight species to be used, if the very longest possible bloom is desired. Where one has room for no more than one shrub, I should not advise aspiring to the longest period of bloom; choose rather one kind, having a worthy show the first and second weeks of June, over-soon, when my nursery is used because of the jumbled effect bound to result where too many varieties are used in any one grouping.

In allotting the varieties in a total planting of seventy-five one should not, of course, divide the number evenly between the possibilities. This would mean nine specimens of each variety in the collection of thirteen, wherein the evenness of the numbers planted would be deadly in its effect. Plan rather to have a big show at the height of the season, with a few early and a few late to taper off at either end.

Of the earlier bloom, Syringa oblata, which grows about 12' high and therefore is suitable for a back shrub. From the middle of the month time is the species which harbors the one really tender variety—Syringa villosa. This is not tender itself; but Syringa villosa Euphly is, although it comes up from the Himalaya mountains and therefore, by every token, ought not to be. The flowers of this—not the variety, but the species—are rather pallid as to degree of color, but decidedly firm as to quality, for they are tinged or suffused with a rose glow.
These Beautiful Terraced Gardens owe much of their beauty to the pure, marble-like whiteness of the concrete work which was finished with Medusa White Cement.

These Gardens are unique in that they are terraced up instead of down, a great hole having been cut in the hill back of the house to allow for the elaborate and beautiful system of concrete terraces, walls and steps.

And this pure white finish is permanent because

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Whether you contemplate building immediately or not, find out about Medusa Products now.

Write for free illustrated booklets, "The Medusa White House," and "Medusa Waterproofing," a book that describes the integral method of waterproofing. These books tell you how to permanently beautify your home, gardens, etc.

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Architect, Foster Graham, of Chicago, Minn., designed this handsome S. A. Todd residence. Roof is of Imperial Greens tiles. This detailed metal sheet is shown in border of advertisement.

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offers the only perfect shelter. It also adds to the architectural beauty of a building and increases its value. It is absolutely leak-proof—takes up no moisture on the underside to cause decay—requires no paint, stain or repair, and lasts forever—is the only roof which is absolutely fire-proof.

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**LUDOWICI-CELADON CO., Manufacturers of Terra Cotta Roofing Tile**

General Offices 1107-17 Monroe Building

CHICAGO, ILL.
When Syringas Turn to Lilacs

(Continued from page 70)

is plain Syringa vulgaris. Group these all together, but with three or four at one end separated enough from the rest to show masses of green between them. This will be an abundance of the early flowering white, unless you prefer white lilacs to the others. In that event, let there be twenty-five to one of these, and less of Syringa vulgaris, the ordinary lilac colored form.

For myself, no lilac is so definitely a lilac to my eyes as to this last mentioned, and if I could have only one kind I should choose it. Therefore, unless someone says me nay, of the sixty or thereabouts remaining for the mass of seventy-five, twenty-five at least shall be Syringa vulgaris; and the next fifteen shall be the low growing Persian species, Syringa Persica. This leaves twenty to divide between Syringa pubescens, S. villosa, S. Pekinensis and S. almifera.

So after all there will be only six species and seven kinds in the group of seventy-five; Syringa vulgaris and Syringa alba being divided into two kinds of a single species. White forms of a flower never, in themselves, can constitute a separate species.

If it were not for extending the season of bloom, I should be quite content to confine a planting to Syringa vulgaris, S. vulgaris alba, Persica and S. pubescens. These are the choicest, and any one of them is excellent without the others, either as a single specimen where space is at a premium, or in hedgerows or masses of from fifty to five hundred.

FALL PLANTING BEST

My preference is for fall planting with all lilacs, just as it is with everything else that can be handled at that season. Fall is early enough to have early blooming things, however, for these always suffer and lose a year if shifted in the spring when they are ready to start into bloom. But the fact of not being able to plant last fall would not prevent my planting in the spring. If there be a reason or another available only at such time.

All lilacs flower on the wood of the previous season’s growth, the winter buds containing, as a matter of fact, the embryo flowers of spring—even as the winter buds of the flowering dogwood shield its great white bracts. Remembering this, one will never be tempted to use the pruning knife on a lilac bush in the winter—nor indeed later than immediately after the flowering season is over. For pruning postponed means almost surely loss of flowers, inasmuch as it is likely to be postponed beyond the time the lilac buds formation; and when it is finally done, buds are sacrificed quite as surely as they would have been if the work were done in the midst of winter.

Actually, there is seldom reason for pruning a lilac if its flowers are picked freely or if the dead flower stalks are cut away as soon as they grow unsightly. Of course, overcrowding of branches can not be allowed, nor should the army of “suckers” that invariably spring up in and about the roots of lilac bushes every summer. Repeet these as they start, for they are not good for the plant and the longer they grow the more they take away from its vigor. Remove also all weak and stringy looking wood, annually. This may be done while the bushes are bare of leaf, in the winter; because at this season it is easier to tell just where to cut. The sacrifice of a few scraggy blossoms at the tips of weak branches, moreover, is not an overwhelming catastrophe.

RESTORING GOOD FORM

Everyone is familiar with the tall and naked appearance of many old and neglected lilac bushes—great bare stems rising perhaps 15’ into the air, with but a tuft of leaves and blossoms at the top. With such specimens heroic treatment is necessary.

Rake back to the limit of the ground, cutting out at the ground the inner branches that crowd and rob against the outer, cut out the suckers also and keep them cut all summer, thus forcing the strength of the plant into growth which is right and proper. That is, along the branches you have permitted to remain. Thus the proper form will be restored and the bush again become slightly; and usually the spring following such treatment there will be an abundance of bloom. I always encourage blossoms, however, by applications of bone meal dug in around the shrub; and if the soil is poor, it is well to give lime, for lilacs seem to dislike sour soil, and express their dislike by refusing to bloom.

SPRAY FOR SCALE

Scale insects sometimes trouble lilacs, and there is a borer that makes life a burden once in a while. As this latter insect is unable to kill off plants if they are on their own roots, for the very simple reason that such plants continually send up new sprouts to take the place of those dying, the one best remedy for his depredations is in not planting grafted specimens. Grafting is usually practiced only with the fancy varieties, so there is little likelihood of getting grafted plants if one is purchasing only the common species or varieties. If, however, varieties are chosen from among the grafted stock, be sure to set them deep into the ground and keep the shoots which rise from the stock cut away as fast as they appear. Eventually the top will take root if you do this, and thus the plant will become an “own root” specimen.

Scale must be sprayed for, exactly as it is on apple or other trees. Controls are chosen from among the grafted stock, if scale appears; but unless it prevails on other material in a section, it will hardly infest the lilacs.

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The KERNERATOR

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saves on repair bills because of the solid construction throughout, saves in time and labor because the food compartments are clean and stay clean.

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MABEL F. BAINBRIDGE

The first use for hand-woven coverlets is the logical use for which they were so patiently made: covers for beds. Although many modern housewives find them scarcely dainty enough for their own beds, they are especially adapted to boys' rooms, since they prove strong, do not muss or crush, and wash perfectly. For summer houses, where the aim is to get away from the fuss and furbelows of winter furnishings, such a coverlet looks well, and can be used as an extra covering on a cool night, thereby taking the place of both blanket and spread.

Most of the coverlets that we find in New York are dark blue and white, although I have seen very attractive ones of red, brown, tan, yellow and green. The designs are varied and beautiful, and are known by such names as "Rose in the Wilderness," "Pine Top," "Windows and Doors," "Log Cabin," "Maiden's Fancy," "Lover's Knoll," "Lee's Surrender," and a hundred or two more. The sheep were raised; wool spun into yarn and dyed; the flax or cotton grown and spun generally by the same person or at least family who wove the coverlet. Weaving on primitive old looms was both intricate and laborious, but the worker felt amply repaid for her patience.

After their use for coverings for beds comes their value as portieres. The spread was always woven in two breadth, sewed together in the center, so that it could be divided without injury. Half a coverlet makes a perfect width for an ordinary single door. They hang especially well, are heavy enough to keep out draughts, and can be taken down and washed, which is a valuable asset. Housekeepers could see the dirt which comes out of mine at their annual tubbing, the seldom cleaned velours would be discard-
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on the home you are going to buy or just what section you want to live in, turn to the House & Garden Real Estate Department in the front of this issue.

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JOHN A. BROOKS
2358 Fulton Street, Toledo, Ohio

How Your Garden Grows This Year
(Continued from page 76)

growth. These are all important.

Now you may ask that there is some difference in the time and the way we cultivate to accomplish these results. This is a matter of practice and not of theory, but there are some guiding principles which even the inexperienced gardener will find helpful to learn.

Cultivation primarily to remove weeds will, so the theorists tell us, never work if we neglect to do it as frequently as we ought to keep the soil loosened and stirred up and the dirt surface kept tilled. But the garden where the gardener does not have to worry much or none is not one that will ever be certain of either of these things, at least a few times during the season, is in my experience very rare.

The weed seedlings will start as soon as or sooner than the vegetables you have planted. For that reason it is well to sow with slow germinating things, such as onions and carrots, and a few seeds of turnips and radishes, just as we sow the rows quickly. If a seed drill was used, this is not so necessary, as the roller on the machine will usually leave a marked path plainly where each row is located.

WHEN TO CULTIVATE

The first cultivation should be given as soon as the soil can be seen; if possible within ten days after planting. Weeds should never be allowed to grow as far as the second true leaf. I think it would be no exaggeration to say that every leaf that stems is allowed to form increases the difficulty of destroying it about 100%.

As a general thing you can easily get over the soil between the rows with a modern wheel hoe before the weeds in the rows can be taken out. But just as soon as seedlings are big enough to be distinguished, the first hand weeding—which is the most tedious and tiresome of all garden operations—should be done and done thoroughly. When weeding in the row, do not make the mistake of pulling individual weeds. Use a hand weeder, and touch over or break up with the fingers every square inch of surface. By doing so you will destroy with every weed that is big enough to pull, a dozen weeds that are just starting. And by establishing your dry soil mulch between the plants in the row as well as between the rows, the second crop of weed seeds will be stopped and some additional moisture saved for the little seedlings.

WHEN A VEGETABLE IS A WEED

A weed is in reality only a plant out of place. And when your plants stand too thickly in the row but thin out elsewhere, the weeds are, as far as the others are concerned, weeds. It is just as important to thin your little wheel hoe rows as your seedlings and give those remaining ample room to develop as it is to take out the weeds. Thin all of the row crops—beets, turnips, carrots, radishes, etc., except onions—as soon as you are sure that all the other vegetables are getting along finely. Even a few days' delay will not only make the job a good deal more tedious but will mean greater injury and a consequent check to the plants which you want to save.

If, inadvertently, the weeds in the rows get quite large, you may find getting rid of them in a wet season a very difficult job. The quickest and the only way to do it is to cultivate shallow with a very sharp hoe that will cut them off clean, just below the surface. If they do not wilt and dry up quickly, there is some chance of their rooting again just the way that cuttings do; and you will find them much more difficult to remove before, for each little plant will have a fibrous bunch of roots instead of a single tap root. To prevent this, if the plants do not wilt and dry up quickly by the next day after you have cut them off, go over the ground again and make this work as thorough as possible, rake over and gather them up with a fork and wheelbarrow.

SAVING SOIL MOISTURE AND STIMULATING GROWTH

Cultivating to save soil moisture, or to maintain the dust mulch, should be given in general about every week or ten days, and always immediately after every rain. This sounds formidable, but isn't as bad as it seems, and most victuals in the garden have not been allowed to become weedy, can be done with the greatest rapidity. Light, shallow cultivation will leave the soil loose and level is all that is needed, and with the wheel hoe one can walk right along and still do a good job.

Cultivation to stimulate plant growth is a little more difficult matter, both in the work and the time and judgment as to when it is best to do it. As soon as the little plants are well started, it is necessary to change your tactics and give a deep cultivation which will pulverize and stir the soil for some inches in depth and loosen it thoroughly. This should be repeated during the early stages of growth frequently enough to keep the soil from getting packed down and hard at any time.

As the plants grow larger and the soil between the rows is filled with roots, more care will have to be exercised to see that injury is not done by cutting off too many roots. This is more likely to occur where deep cultivation has been neglected during the early stages of growth and the roots have been consequently grown near the surface. With some shallow feeding crops such as corn greater care must be given than with the general run of things. As vegetables and flowers rather take a lighter feeding, to some extent be substituted for deep cultivation in the later stages of growth, as it answers the same purpose of providing increased available food supply for the hungry roots.

And now a word as to how to cultivate. I have spoken of Pat's and his hoe. And his hoe is not to be despised. You must have it for some jobs—but if your garden is of any size, do not think of attempting to do the work in it without an up-to-date double wheel type; this can be used both as a double wheel and as a single wheel hoe, and will suit both kinds for different jobs.

In cultivating to remove weeds, use the hoe sense described in the previous discussion, with extra high heels or standards (they are called Greenland hoes, and have both a regular wheel and shoe equipment), or, if the soil is free from stones, the disk attachment. Both of these shave very close to the row without turning the soil over the little seedlings. For the destruction of larger weeds the ordinary hoe, kept sharp, does quick and effective work. For weeds in your flower garden and in the rows and around hills of all sorts, use a
More Crops From Your Garden

This book shows you how to use your soil the most times in a season by tinsing the planting of different things in the right rotation—how to get the biggest production from every inch of soil according to character of soil, shade, etc. (or to force growth—to fertilizer, and guard against pests. Few people know how to get the big yield possible from a small garden. This book tells how.

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A Good Garden cuts down the grocery bills.

But it is the downright joy of growing things, the table pleasure of vegetables five-minute fresh, the physical and mental good, a profitable outdoor interest—these are the big values of a garden. And right now it is practical patriotism to grow a garden. Now is the time to start.

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A new novelist with a fresh touch, writing about a burglar, a priest, some butterflies, two villains, and Mary Virginia

SLIPPY McGEE

By Marie Conway Oemler

ONE night Slippy McGee dropped off a train in a little Southern tank-town, and they picked him up with a leg so mangled that it had to be cut off. They bore the young man and his kit containing burglar's tools to the home of Father de Rance, who had several rooms always open for anybody in distress. The priest hid the burglar's tools inside a statue in his little church. A long time after that they were taken out again when Father de Rance and Slippy McGee cooperated in a glorious job of safe-cracking which endangered their reputations and their bodies but thrilled their souls.

From opposite ends of the social and physical worlds the priest and the young burglar, both with broken lives, each with much in common in temperament, met by accident and remained together in spite of difficulties that sometimes seemed unovercomable.

In the fabric of the novel is woven a love story of great charm and tenderness, and an exciting story of blackmail and other villainy.

"Slippy McGee" is a novel for the reader who likes a story with unusual plot and entertaining characters and done in a style of freshness and vigor.

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has been especially designed for garage use. Doors hung on Stanley Hinges close" weather-tight—and Stanley fastenings keep them so.

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Write today for booklet H-14 on Stanley Garage Hardware. It will be of interest to you. All the better Hardware Dealers carry Stanley Hardware in stock or will gladly get it for you.

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Made from long-recognized sub- stances in our factory by the one direct to the user. Quick delivery of our single rooms or the whole house worked out for you in harmony with your individual whim from our standard line.

New block prints for curtains and other hanging upholstery pieces made for any state.

 respectfully, in appeal: Model in prize try answering your needs, and we will give them immediate and detailed attention.

For our complete Catalog "A-6" call at Exhibitio, Denver.

ERIKSINE-DANFORTH CORPORATION
2 West 42nd Street
New York
First Door West of Fifth Avenue, 6th Floor
How Your Garden Grows This Year

(Continued from page 78)

wheel hoe cannot be used, choose the smallest and lightest hoe you can find, and keep it sharp. The heavy, old-fashioned, clumsy draw hoe makes needless work for the gardener who insists on using it, unless he has big weeds to chop out, or very hard ground on which the wheel hoe is used.

In cultivating to save soil moisture by maintaining a dust mulch, either the regular flat hoes on the wheel hoe, or a gang of vertical teeth which slightly tear through the soil instead of under it may be used. Sometimes where there is a considerable crust the ordinary hoes merely cut under it, leaving it intact. Whenever a crust forms, always break it up thoroughly, even if you have to go over the garden two or three times in succession. In a light, clean soil, free from trash and stones, the "rake" attachments can be used to good advantage. The dust mulch should be maintained even after the plants are grown enough to make it difficult to get through the rows with a wheel hoe. For this work use a scuffle or slide hoe. The modern form works much the same way as a wheel hoe, being adjustable to a regular depth. They do better work, and do it much easier than the old-fashioned plain push hoe. In the flower garden an ornamental scuffle hoe, or a prong hoe may be used; but it is just as important to keep up the soil mulch here as in the vegetable garden.

For deep cultivation or stirring of the soil, the regular cultivator teeth so constructed that the inner one cuts the deepest and the widest and the one nearer the row the narrowest and the shallowest. For hilling and deep cultivating in wide rows, such as potatoes, beans, and celery, the regular plow attachment for the wheel hoe does very quick work.

If you are just beginning your garden work, let you by all means not to skim on the tools you get. Be generous with yourself in this regard, and buy the best of whatever you do buy. Then take care of it—that is the right policy to pursue if you want to have the upkeep expenses for your garden held down to the minimum. To get good results cultivation must be thorough and frequent. With good tools, it is easy; with poor ones, it is difficult and discouraging. And discouragement is bad for garden success.

Spring Flowers for Winter Days

Blossoms are always welcome about the house, and never more so than during the bleak winter time. The present writer has tried, with great success, a plan by means of which almost any quantity of the most lovely spring blooms may be secured with a very small amount of trouble. The scheme may be followed at any time after the turn of the year and, if a few precautions are taken, it is nearly always satisfactory. Branches of any kind of spring flowering tree or shrub are gathered. Some kinds are naturally more attractive than others but amongst the best may be mentioned ornamental cherry, wild plum, monard, rib, and Japanese quince. These are only a few of the suitable subjects, and the list might be very much extended.

When picking the branches it is a good plan to see that these are of a nicely balanced growth. Try to secure some boughs of really artistic design. Another matter of importance is to be sure that there are a good number of flower buds on the stem as distinguished from those which will produce mere leaves. It is not difficult to decide between the two for, in almost all cases, the buds which will produce blossoms are thicker and somewhat more blunt at the tip than those which will be responsible for foliage alone.

Displaying the Branches

It will now be needful to gather together a number of bowls and jars to accommodate the branches. These should be filled with water and it is a good plan to drop a lump of charcoal into each. This is not essential providing the water is changed very frequently. At the lower portion of the stem of each branch gathered cut away the rind for 3" or 4". This will aid the bough in absorbing water more freely than otherwise.

The boughs are now arranged in the jars or bowls and these are finally conveyed to a sunny window. The rapidity of the stages of development will depend very largely upon the warmth of the spot. When the temperature is fairly high the buds begin to swell very soon; first of all the leaves peep out and finally the blossoms appear on the scene. In quite a short time it is possible in this way to have an immense quantity of the most lovely spring blossoms without any expense and with extremely little trouble.

Forcing and Retarding

In order to provide a succession of bloom it is a simple matter to start the boughs as indicated at intervals. Should it be desired at any time to retard development this will be found to be an easy matter. The only thing to do is to place the boughs (in the jars, of course) in a dark, cool place; the position must be frost free. Here the branches can safely remain in a state of suspended animation a week, or even longer, at the end of which time they can be brought out into the light again. Branches from any of the common garden trees, which do not flower attractively, can be used in this way for the sake of the delicate green foliage which they will produce. The pretty leaves will come in very useful for arranging as well as for the sprays of spring blossom and the combination will be a gladsome sight on a dull winter's day. Flower and foliage brought out in this manner will be found to have a lasting quality which is wanting in growing stuff developed on more ordinary lines.

S. LEONARD BASTIN.
Tea and Cakes in an English Garden

What fortunate person has been guest in an English garden and not come away enchanted?

The turf, the roses, the glossy dark hedges, the gracious Englishwomen so beautifully at home, the delicious seclusion and privacy—"how well they do these things," one has reflected, "in England!"

The fact is, America is just learning how easy and how delightful it is to live out of doors at home. The out-of-door sleeping room, the lawn marquee, the tennis court, the tea house, the breakfast piazza—these are no longer luxuries but necessities to the intelligent American family.

How to make them—and then how to make the most of them—this is the theme of

JUNE

House & Garden

The Garden Furnishing Number

How to build a tennis court; when to prepare a lawn; where to install a garden pool; where to buy delightfully outrageous painted furniture; designs by our own artists for out-of-door living rooms—these are a few of the things by which June House & Garden has planned to lure you into your garden this summer; and, once out, to keep you there.

If you haven't yet subscribed to House & Garden, remind your newsdealer to keep a copy of the June issue for you. So many people are thinking about gardens now that the Garden Furnishing Number is usually bought up early on the news-stands.
Perhaps You Don’t Know

that **Enamolin** is the whitest enamel in the world—

that one gallon of **Enamolin** will finish over 600 square feet of surface—

that woodwork, furniture and walls finished with **Enamolin** can be washed with soap and water or Sapolio, with never a chance of hurting the finish—

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**Send for list of trees and shrubs for late planting. Satisfactory growth guaranteed or replaced free.**

HICKS NURSERIES, Westbury, L. I., Box Q. Phone 68

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**The Gay and Radiant Ladies of French Prints**

(Continued from page 21)

the arms, the dedication and all of the letters.

These different "states" vary in rarity and consequently in price, the most pleasing combinations being little sets from which the collector, who keeps his precious engravings in portfolios, and being regular enough they are placed within the reach of the home builder who wants them merely as decoration both in his wall and his gallery.

Again, the collector wants nothing to do with a print if its margins are cut away, or if it has suffered damage in any part. However, for decorative purposes, when they are mounted and framed, these prints produce just as good an effect as any other. Cheapest of all are the most perfect modern reproductions of the best of the old prints, some of which are so fine as almost to deceive an expert, and which, aside from the sentimental value of having an "original," produce much the same effect of daintiness and elegance in a room that the genuine example is sure to give.

Many 18th Century copper plates still exist in France, and modern impressions are being made from them, but they are of little value, the lines being blurred and feebly and the effect lacking the brilliancy of the old work. The plates have been "worked over" time and again, and much of the detail is changed.

**THE MASTERS ARTISTS**

Daintiness and delicacy of tone are the characteristics of the French color prints, the prevailing color being blue—blue in varying shades, fading softly away and never aggressive or glaring. The artists whose works are most prized are Janinet, Debucourt, Descourts and Desrais. The prints of Debucourt are inimitable, and his work, as well as that of Lannart, has a pure and limpid opalescent tonality that has proved the despair of modern imitators.

These men were the engravers, and they were among the most celebrated painting by Fragonard, "The Swing," was once destroyed at Dover as being likely to corrupt the English taste! This work is now in the country, and on one of the most beautiful products of the engraver's art, and the perils flight of the lady through the trees propelled in the swing by the arms of Fragonard himself, while the lover looks on from the ground, is not regarded as in the least improper.

These prints reproduce the very spirit of the times of Louis XV and Louis XVI, light-hearted and gay, and make an artistic unity with the furniture and wall decorations of the times. They emphasize the character of the contents of a French room, being at once a part of a complement thereof. Scenes are depicted of pleasant domesticity, of various forms of pleasure, and of love.

---

**"Pauvre Annette," by and after Debucourt, is unique. It tells the story of a paupert little romance.**

(Continued on page 81)
Roses

YOUR rose garden should be a joy spot of beauty and delightful fragrance all summer long. That's just what you can make it with our sturdy-rooted American grown roses. They are unexcelled for vigorous growth, beauty, bloom and hardiness.

They will thrive practically anywhere; coming up smiling after rigorous Winter. With them you will have a sure first season's bloom profusion and be a constant delight in years to come. This is a rose stock that is bound to make friends because of its surpassing beauty.

My Rose Book tells the whole story of this out-of-the-ordinary rose stock, and describes the most popular varieties.

Gladioli

Joy-Givers For Your Mid-Summer Garden

The modern Gladioli is excellently adapted for either bedding or rock garden planting. The wonderful combination of colors that it embraces, and the way in which the magnificent flowers and buds, to the most delicate, is charmingly graced with habit, is truly fascinating.

Our American grown Gladioli bulbs are all plump and healthy: teeming with life. They are quality bulbs in the true sense of the word.

Send for my New Gladioli Catalog, illustrating the most popular varieties of our Gladioli bulbs (to make them appreciated). I will send a selection of bulbs, selected bulbs of named varieties, anywhere in the United States for $1.

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Are you being married, this season?
Consult the Brides and Summer Homes Number of Vogue—May 1.

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You will find novel suggestions in the Travel Number of Vogue—May 15.

Would you look your best in summer?
There is the Summer Fashions Number of Vogue—June 1.

Are you opening your country house?
Decorations, gazettes, society are In the Country Number of Vogue—July 1.

Do you look smart in sports clothes?
Consult the Hot-Weather Fashions Number of Vogue—July 1.

Do you entertain a good deal?
It is simple when you have at hand the Hostess Number of Vogue—July 15.

Will you need fresh frocks in August?
For the Jug-end of the season, the London and Paris Number of Vogue—August 1.

Must you select school outfits?
Just turn to the Children's Fashions Number of Vogue—August 15.

And Then—

The All-Important Autumn Silhouette

Not only will you have all these helpful and delightful summer numbers of Vogue, but the first two autumn numbers, featuring weeks ahead in the smart modes of the 1917-1918 season, the Autumn Millinery Number of Vogue, dated September 1, and the celebrated Forecast of Autumn Fashions, dated Sept. 15.

You may have these ten issues of Vogue for $2—Simply write your name on coupon opposite.

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Outside shutters opened and closed bound in any position and balanced, without raising each or letting if you use the MALLORY SHUTTER WORKER. Operated from the inside.

CHEAPER THAN WOOD.

CUT IT FROM A BOX 10 IN. SQUARE.

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In this interesting establishment, for twoscore years devoted exclusively to Furniture there are gathered together those appointments which will impart to each room decorative distinction and a pleasing sense of appropriateness.

The reproductions and adaptations of Old World Cabinetry on view here recall every notable epoch in Furniture history and include many unusual pieces not elsewhere retained—available here, withal, at no prohibitive cost.

Suggestions may be gained from the large prints of well-appointed interiors, sent gratis upon request.

New York Galleries
Grand Rapids Furniture Company
Incorporated
34-36 West 32nd St., New York

The Gay and Radiant Ladies of French Prints
(Continued from page 82)


The greatest collection of French prints in America is that of Mr. Winder, which comprises about 500 specimens and represents in value approximately $50,000. Many of the prints are of the greatest rarity, for the wrath of the Revolutionists throughout France has consigned to the flames all but a very few specimens. Another notable thing concerning this collection is the freshness of the colors, the prints having been taken away from the light as much as possible for a century and a quarter. During Revolutionary and Napoleonic days, they were too valuable to be in the hands of their owners, so as to prevent their destruction; later they were kept in the portfolios of collectors, so that light has only partially dimmed their pristine beauty and bright coloring.

Having chosen your print and made up your mind just where you are going to place it, the task then devolves upon you of choosing a proper frame. It is not at all safe to leave this matter to the frame maker, for the setting of a frame print is just as important as anything else in a French room, and if a mistake is made, the like effect may be marred. Even a Whistler frame won't do. Two styles are eminently appropriate. One is a simple little carved frame with an ornamental top—a crest of some sort which, however, must not bend low enough to obscure any of the picture. The other is a beautiful little ribbon design lightly and coquetish, outlining all around the print.

One point remains. A person may grow tired of the mastery of a Rembrandt, of the beauty of a Velasquez, the repulsiveness of a Degas, but one never will grow tired of a French print. Voila!

The Surest Flowers for This Summer's Bloom
(Continued from page 27)

which are truly gigantic in size. In selecting varieties for the same bed, choose colors which will harmonize—solid colors which produce a striking and artistic effect. The height must also be considered, for arrange all the way from 4¼ to 6½. Three dozen bulbs, will plant a circular bed about 10' in diameter.

In planting, the roots may be started inside in March or early April and set outside after danger of frost. In planting the bulbs, it is best, as with dahlias, to plant single or double roots in preference to whole clumps. Only two should be put in one place. They like very rich soil and need abundance of water. The roots should not be planted deep, the eye or tip of the tuber being left with level of surface after being covered and the soil lightly pressed down.

Another excellent flower from many viewpoints is the tuberous rooted begonia. To produce immediate effects when planted out, they should, of course, be started earlier indoors. But it set out late in May it will fill the height, rich soil, and the well watered as they begin to develop, they will reach the flowering stage very quickly. Until frost they will be an ever-increasing mass of bloom. The bulbs, which are round and fleshy, should be planted with the concave side up and not covered very deeply. In light soil they can be put in 2' or 3' deep, but only barely covered at first, the soil being filled in later for better support. Two new double sorts, especially worthy of trial, are: a rich orange-red, scarlet; and Lafayette, bright crimson. The plants are quite dwarf, not over 4' in height, and they flower with the greatest freedom.

The BEST BULBS for FOLIAGE

For an effective background for plantings of bulbs or flowers a treatment of the gladiolus, caladium or cycas is the best thing to use. Given a rich soil, a somewhat shady position and plenty of water, most gladioli fans will grow at marvelous rapidity, throwing up gigantic leaves several feet in length, and over 2' wide. The fancy-leaved caladium may be grown outdoors successfully under the same general conditions.

Other plants of tropical effect are some varieties of the calca lilies, Richardia Elliottiana, which has large yellow flowers with healthy dark green foliage. St. John’s Wort; Alba maculata, with green leaves mottled white and white flowers with black centers; and one out in May after the ground is thoroughly warmed up. They may be dug up in the fall and stored for the winter like other summer flowering bulbs.

Two very pretty and very cheap little bulbs (they cost two cents each in quantity) are the ‘Irish’ anenomes and summer flowering oxalis. The former is a mixture of flowers of various colors 4" or more in diameter. The latter, while growing only 1' or so in height, produces the greatest profusion of pink or lavender flowering clusters. Both are good for edging and bouquets.

SUMMER HYACINTHS and ISMENES: BEANS

Of more imposing growth are the summer hyacinth and the giant Ismene bean. The former produces gorgeous effects, and the plants of life have a large and splendid effect, and throws up imposing stalks of flowers which look not a little like the well known hardy yucca, or Adam’s Needle. The Ismene is still unknown in many gardens; it is one of the quickest of all bulbs to produce results, flowering within a few weeks after planting. The white flowers somewhat resemble a giant amaryllis, but are much more graceful and artistic in form. Either the hyacinth or the Ismene can be used with telling effect against a wall or in the background of evergreens or shrubs.

Two bulbs of somewhat similar habit, but less bold and more dainty than the last, are the tigridias, and shell flowers. The newer or giant flowering montbretias are distinct from the old sorts and worthy of a place in any garden. They produce strong flower stems resembling those of the gladiolus, 3' to 4' in height, with individual flowers opening to a width of 3' to 4'. They are quite hardy; in fact, as low as 20° or 25°, or even 30°, is plain safe in our winters where the gladiolus perishes—and can be planted early. Even the finest varieties cost but 20 to 30 cents a dozen. The tigridia is one of the most gorgeous, and also one of the most distinctive of all garden flowers. It is truly valuable because of its long continued season of bloom.
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tific method for using inorganic salts, while watering lawns, gar
dens, shrubbery and foliage. Greatest time, labor and money saver ever invented for garden lovers. Write for illustrated pamphlet.

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Is A Wonder

For Cooking

Although it is less than four feet long it can do every kind of cooking for any ordinary family by gas in warm weather, or by coal or wood when the kitchen needs heating.

There is absolutely no danger in this combination, as the gas section is entirely separate from the coal section as if placed in another part of the kitchen.

Note the two gas ovens above—one for baking, gas paneled and one for broiling, with white enamel door.

Gold Medal

Glenwood

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When in a hurry both coal and gas ovens can be operated at the same time, using one for meats and the other for pastry—It "Makes Cooking Easy"

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fers. The bright berries and glossy leaves add a most desirable touch of color.

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EVERGREEN THORN

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INTERIOR DECORATOR
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Interior Decorator
10 E. 46th St.
New York

The porch of a House & Garden subscriber shows a pleasing and simple use of brick flooring, screen panels and white furniture

Midway Between House and Garden
(Continued from page 35)

and green in foliage and birds. We can take this linen as the chief point of decoration. It is too striking to be used in large quantities, but used as a valance one gets color that challenges the brilliancy without on sunny days and gives the impression of sunshine and warmth on dull days. The undercurtains, which serve only to soften the light, can be of grey scrim hung in straight, soft folds.

The furniture will be grey enamelled—a pair of rush seat peasant chairs, a wooden bench, some useful wicker that makes no pretense at decorative effect, and a long, narrow, low table painted grey with green moldings. At either end are two orange bowls for fruit or flowers. At either side of the porch mantel, which is brick with orange bonding, can hang two wrought iron brackets. One visualizes flowers in them, or ivy twined against the high, semi-circular back.

BRACKETS AND FIXTURES

Wall brackets of iron, tin, wood, rush and reed are becoming more and more a necessary adjunct to the properly furnished porch. The holders themselves are semi-circular that they may fit snug against the wall, and the flowers are contained in a galvanized pot that slips into the pocket of the bracket. It is highly important that the decorations at the back of the bracket be interesting and not grotesque. Unfortunately many impossible wooden flower holders have been put on the market. It is silly to try to make a holder for flowers more interesting and colorful than the flowers themselves. Fancy modest mignonettes trying to hold their own against a gaudy, pecking, beetle-eyed parrot?

There are many interesting mantel garnitures for the porch fireplace. An Italian majolica plaque, crudely done, is always telling and suitable. A wrought iron grill, repeating the design of the fenders and andirons below or a large wrought iron framed mirror will make striking overmantels. The iron could be painted and antiqued, repeating the colors prevailing in the upholstery.

The most suitable lighting is had from wrought iron torchers. One design, made after a bird cage stand, holds a simple, striped parchment or tin shade. Such a lamp, with the leaves and foliage touched in green, would add distinction to any porch.

Six-sided lanterns of the linen or cretonne of the upholsterer are easily made. One has to get the wire frame made and then the linen is tightly stretched over it. They may or may not be shellacced. Both lighted and unlighted they add interesting color spots to the porch.

A LIVABLE PORCH

One porch I know, furnished mainly in Canton furniture, has for its color Tango and Prussian blue. The floor has Tango colored tile with a border of blue. The curtains were made of theatrical gauze dyed with benzene in which had been mixed burnt Sienna and raw umber paint, making them a copper color. The linen has small vellum-looking birds in white and dark brown, and the curious flowers are of Prussian blue. This was used to cover two wooden settles. The lamps were of copper and were the two tall candlesticks on the mantel above the fire. The fireplace screen were of copper as well. One Prussian blue bowl stood midway on the mantel shelf, and in either corner were jars of crackleware pottery showing blue and copper where the glaze had been over-fired. Two rugs by the entrance were of heavy square fiber in browns and black, and before the fireplace was a big black bear rug. There was nothing very expensive about the porch, and it was restful and thoroughly livable.

One often gets in the way of thinking of porches as places where we sit only to hide from the blistering sun. If the truth be told, we use the porch quite as much at sundown and in the evenings as in the day. Hence we welcome a mellowness of color and the comfort of deep chairs in this spot which lies midway between house and garden.
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A ROW OF GARDENING BOOKS

That the general principles of tree repair are the same for both sides of the Atlantic is clearly shown by A. D. Webster in Tree Wounds and Diseases (Lippincott). The book is English throughout, but there is much in it that the American lover of trees can profitably take to heart. It is more comprehensive than the few previous volumes on the subject which have appeared from time to time, and includes special chapters on injurious insects and the care of fruit trees. It should be in every horticultural reference library which makes any pretensions to completeness.

The normal child never lived who did not love birds and animals, and we cannot conceive of one to whom colored pictures of these same creatures would not appeal far more strongly than mere printed descriptions. So in the Wild Animal Primer (New York Zoological Society) we have what should prove a most excellent little gift book for the small boy or girl. There is in it forty-nine simply written animal stories which should hold a child’s attention while at the same time giving information, and for each one is a colored photograph of the bird or beast described. The pictures are made in stamp form and supplied in a separate envelope, so that the child can paste them in their proper places. The book has the official approval of Director Hornaday of the New York Zoological Park, which is ample guarantee of its authenticity and educational value.

Better than ever is the new and revised edition of The Old Farmer’s Almanac (Scribner’s) for 1912. The book has the official approval of the United States Department of Agriculture and the American Society of Landscape Architects. It is a comprehensive, reliable, and helpful book, and is an absolute necessity to every owner of a country home.

In Studies in Gardening (Scribner’s) Mr. A. Clutton-Brock has given to the flower loving world a book which is as nearly exhaustive in its particular field as any we have seen. With marked skill the author has combined charming literary style and ideas with practical information. If we wished to generalize, we might say that here is a book primarily of impressions and suggestions, rather than instructions. Secondly, however, a careful reading will disclose a fund of practical information which is at once adequate and well presented. Unlike most English gardening books, the differences from our American horticulture have been taken care of by the careful editing and footnotes of Mrs. Francis King, than whom we know of no one better qualified to judge of flower conditions on this side of the Atlantic.

No gardener or student of landscape can pick up Stephen H. Hamblin’s Book of Garden Plans (Doubleday, Page & Co.) without seeing at a glance that it is a str stuntively sane and sensible volume that is practical in the best sense of that overworked word. Without a non-essential line the author presents some twenty blueprint plans with their accompanying keys, a brief synopsis of the conditions to be met in each case, and numerous halftone illustrations showing the individual effects which can be ob-
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May, 1917
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Fighting the English Sparrow

It was Dr. Henry Van Dyke, I think, who once said that, "the kingdom of ornithology is divided into two parts: real birds and English sparrows." That the Princeton sage spoke accurately and with full knowledge no reasonable observer can deny, for of a truth the small bundle of imported feathers that is scientifically known as "Passer domesticus" has by way of birthright an inexhaustible fund of hardihood, aggressiveness and cheer, bluntly "brassy" nerve which sets him widely apart from our own native birds and justly merits for him the enmity of his intended predators.

It is hardly necessary here to go into the many tangible concrete reasons for the feeling against an animal that, among birds—his destructiveness to garden crops, antagonism to many of our most desirable native birds, his greedy appetite, quarrelsome qualities and less desirable habits, etc. These are all common knowledge to countryman and suburban dweller alike, but the methods which can, and should, be used to decimate, if not actually eradicate, the sparrows from any given locality, are deserving of consideration and application. Briefly, and in order of importance, they are: Destroying nests, shooting and trapping.

Destroy the Eggs

Without becoming involved in the time-honored argument as to whether the nest is destroyed and the eggs will hatch or not, it is obvious that the future supply of sparrows would be seriously curtailed were all the eggs in any breeding season destroyed, or at least the nests broken up before the young were old enough to fly. Every full set of eggs that is prevented from hatching means five or six less sparrows a few weeks hence, and as an egg cannot fly away and change its residence from your neighbor's ridgepole when you go after it, you will destroy much additional mischief.

The nest season begins very early—often in the first part of March you will see some of the more enterprising "Englishers" commencing their housekeeping—and continues well into the summer. Keep a sharp watch on the birds, as they peruse the various parts of your house, hidden away in the eaves of the house, the hollows of old apple trees, the boxes intended for wren or thrush tenants, the rafters of barns and outbuildings, the wallpapers, leathers, cornices, and similar places. When a nest is completed and the eggs laid, tear it down. If you cannot reach it in any other way, get a long pole with a hook on the end, and let your family that in two weeks the rounds again and keep an eye open for new sites, for English sparrows are nothing if not prodigious in activity and persistent, and a fresh crop of nests will be ready for gathering in a month or forty-five days. The more cooperation you can get in this work the better, and a regular campaign of destruction should be organized if possible among the neighbors.

While it is true that sparrows will nest almost anywhere, they prefer such places as a bird house put up for martins, bluebirds, or any like. One day a pair take possession of such a house and they will usually hold it against all comers. To the nest on the bottom of the box, the nest being hinged so that it can be opened from below, the nest may be readily and easily from the charm of blooming the hinged way so that it is held hidden by a hook or top button which can be reached and operated by a pole, and when you judge the nest within is completed, unhook the bottom and let the contents of the box fall unceremoniously to the ground.

Another plan to discourage the box fall soon discover the opening of the box too small to admit them. A circular doorway one inch in diameter will be large enough for house wrens, but not for sparrows. Of course, it will not do for bluebirds or martins.

Potshotting Sparrows

The method second in importance for cutting down the sparrow supply is, in my opinion, shooting. There are many occasions where this plan cannot be followed because of the proximity of other houses, etc. The results of effective shooting can, with care, be done.

The best plan is to hate the birds with grain, spreading it in a long, narrow strip on some level piece of ground, and allowing the flock, which will soon discover it, to feed there undisturbed for several days. Then, secrete yourself about twenty-five yards from the strip of grain loaded with a heavy charge of No. 10 shot, and when the bunch has gathered for the feed, rake them along and aft along the length of the grain strip. Often a single, well-directed shot will in this way account for forty birds, and, after a few days, you can repeat the performance in another place. In cases where the sparrows seed in chicken yards, a long board may be set up on pots, the grain scattered thereon, and the birds fired without danger to the poultry.

Another method of shooting is to use a 22 riie and pick the birds off one by one as opportunity offers. This, of course, calls for a certain degree of skill and patience as to whether each bullet will go after it passes through or by the mark, but if practiced persistently its effect on the sparrow supply will be considerable. A friend who lives at the edge of a small town tells me that with his R. 22 equipped with a 22 sight and a silencer he rarely fails to connect with one or two sparrows every morning before he begins business, and his monthly total is astonishing. Let me repeat this caution, however, to be very careful in using the .22, for the tiny .22 bullets have a wicked speed that makes them very dangerous, even after they glance.

Trapping Methods

There are several more or less complicated sparrow traps now being manufactured and used, but I doubt if any of them are more successful than the old-fashioned, simple "sieve" trap. This is merely a shallow box made of wire, with a bottom, and with a roof of 1/4" mesh wire, the whole painted an inconspicuous gray or brown and laid on level ground, and one side is raised 18" or so by means of an upright stake driven into the earth, the food being scattered inside and the sparrow allowed to come and go at will until they become thoroly intent on the harmless food. Then substitute for the stake a straight tight, the lower end resting against the board bottom of the box, the upper end tightly supporting the trap, and having a long cord attached, which is carried over the side where you can watch without being observed. Now, when the flock is well within the trap and ready with the food, simply give the cord a strong jerk and let the whole contrivance fall on top of them. R. S. TEMMON.
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**THE SMALL HOUSE NUMBER**

The Small House Number is based on the theory that good goods come in little packages.

Hereofore, the small house has universally been considered the cheap house. Because it was small and because it was cheap, it could be forgiven many lapses of good taste in its architecture and its furnishing. This fallacy will soon be exploded. Good taste is fast becoming common property and the man who does not exercise it in the construction and decoration of his little house, will soon enough be taboo. The small house should be a miniature of a big house, a simplification of a larger and more elaborate house, and the same discrimination that is employed in furnishing the expensive homes should be exercised in furnishing these palaces in parco.

The Colonial house, always a popular type, will be shown in varied forms in the July issue for closets that really hold things. Many types of houses will be shown and many localities represented—stucco houses from a dozen different states, half timber houses, Colonial houses, portable houses, bungalows from California.

The main feature of this issue will be three houses especially designed for this issue of House & Garden, by Aymar Embury II, Eugene J. Lang and Frank Coutreau Brown. Plans, elevations and specifications will be shown so that the finished house can readily be visualized. The three architects making this contribution are well known for their work on small houses. House & Garden has never made so valuable an offering to its readers.

Of the many gardening articles, space permits mention of only two: "The Old-Fashioned Garden," a universally popular type, and Grace Tabor's story of "The Best Blue Flowers." They are both up to the high standard set by House & Garden gardening contributors—both make you want to make a garden and both tell you how to make it.

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**JUNE, 1917**

**Cover Design by Porter Woodruff**

**Frontispiece—Stairs Into the Sky**

**Putting the Farm on a War Footing**

**There's Nothing New Under the Sun in a Garden**

**Roses of Yellow and Roses of Gold**

**Editorial**

**Out of Town, by Viola Brothers Shore**

**A Glimpse at "Wild"**

**Sword-Guards of Feudal Japan**

**On the Lawn, In the Garden**

**The Residence of J. Clarence Parsons, Esq., at Phoenixville, Pa.**

**William Copeland Furber, Architect**

**Country Cottage Under-Curtains**

**Early Italian Wall Furniture**

**Abbott McClure and H. D. Eberlein**

**The Best White Flowers**

**Grace Tabor**

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**Copyright, 1917, by Condé Nast & Co., Inc.**
Garden paths are one thing, garden steps another. Paths wind and wind. They flow whither they will, like capricious brooks, between flowery banks, dart under trellises that span the stream for honeysuckle and rose, and lead out into the infinity of some hay-scented meadow. But garden steps are always steps. Direct, resolute, persistent, they go toward their destination, leading from height to height like stairs into the sky. And this is true whether they are on a formal estate or in the tangle of an old-fashioned garden such as this, at the residence of Richard Arnold Fisher, Esq., Newburyport, Mass.
PUTTING THE FARM ON A WAR FOOTING

The Food Supply for Ourselves and Our Allies—What We Have Done and What We Can Do to Increase Our Food Output

F. F. ROCKWELL

The destinies of the nations of the world may be hanging by the microscopic threads of Phytophthora infestans! These two formidable words, translated into the language of the Irish potato, mean late blight, the disease which last year upset the calculations of the German government by destroying a large percentage of the potato crop. To say that the potato will decide the war may be exaggerating, but there is little doubt that food, rather than gunpowder, will ultimately be the determining factor in conferring the laurels of victory. With modern methods of transportation and communication, national organization for war becomes such an intricate and far-reaching thing that every last individual capable of contributing to the national welfare is reached by it. And in every nation the army at the front and the army behind the front, the workers at home, must be supplied with three meals a day.

Abroad every government that has entered the war, with the possible exception of Germany, has been slow to recognize the importance of the food supply. Today this question is looming up as the most gigantic of those which will demand immediate attention. It is for us a problem not only of feeding ourselves but those with whom we are making common cause.

Recognition of the seriousness of the problem has brought forth many schemes from organizations and individuals. At the Conference for Agricultural Preparedness, held at Washington early in April by the National Agricultural Society, there were almost as many plans as speakers. They ranged all the way from the organization of local societies to utilize every back yard for vegetable planting, to plans for wholesale government operation by putting the farmers on the government pay-roll, either directly, or indirectly by the guarantee of a minimum price for crops.

Agricultural Progress

My purpose in this article, however, is not to rehearse the various plans which have been proposed, but rather to sketch the lines of agricultural progress which have been followed during the past few years, and to suggest how still further developments are possible.

In much of the work which has been done there is great potential value, but the information has not yet been put to use. Many of the discoveries are not generally known. It has taken a time of crisis to put us on our mettle as an agricultural nation. Yet it is only fair to say that it is not the farmer’s fault that he has been slow to adopt the new methods which the government has placed at his disposal. Time after time the farmer has grown big crops, only to receive for them prices so low as to leave him without profit—often, indeed, with actual loss. We have given the farmers as a producing class every incentive to grow small crops rather than big—and have paid them much more for the lesser than for the greater service.

The problem of making two blades of grass grow where one grew before is a very complicated one, and little will have been gained if in the solution it costs as much to produce the second blade as it did to produce the first.

To the average person thinks of the problem of increasing crop yields as one to be solved by a long nosed chemist with a new fertilizer or by some wizard of horticulture who will outwit Nature and trick her into growing a cabbage plant with two heads or a stalk of corn with six ears.

As a matter of fact, however, the business of insuring higher crop production is a slow and painstaking process. All the factors involved must be considered and developed together, for while concentration on one aspect alone may result in discoveries very interesting from a scientific point of view, it will fall short of bringing about an increase for the demands occasioned by war-time.

Biology and Increased Production

Probably the most important of the various lines of intensive effort—certainly the most interesting from the layman’s point of view—is that of improvement by breeding and selection. The biologist has played and must continue to play a leading role in making this country economically independent. His position is an important one, for in spite of our gigantic industrial corporations and our “war brides,” nearly 70% of our total national wealth is in agriculture—land, buildings and live stock.

Let us look at our king crop—corn.

A glance at the accompanying photograph will show what the biologist has done with this crop. (Incidentally the biologist usually did not call himself by that name. He worked in a pair of overalls out in a field, and was known by all his neighbors as a good farmer who was something of a crank on selecting seed!) In that photograph the biggest ears of yellow Dent corn are representative of two varieties largely grown in this country. The corn crop is a serious business with us. It occupies over 25% of the land given up to crop production. In 1915 we grew over 3,000,000,000 bushels,

from

The President’s Message

Upon the farmers of this country . . . in large measure rests the fate of the war and the fate of the nations. May the nation not count upon them to omit no step that will increase the production of their land or that will bring about the most effectual co-operation in the sale and distribution of their products? The time is short. It is of the most imperative importance that everything possible be done, and done immediately, to make sure of large harvests. I call upon young men and old alike and upon the able-bodied boys of the land to accept and act upon this duty—to turn in hosts to the farms and make certain that no pains and no labor is lacking in this great matter . . .

Let me suggest, also, that every one who creates or cultivates a garden helps, and helps greatly, to solve the problem of the feeding of the nations.

WOODROW WILSON.
Corn clubs for farm boys started by the government have stimulated good cultivation and produced larger crops because the men compete with the boys. Sherman Hall (above) raised 107.33 bushels of corn on an acre in Arkansas where the average crop is only 20 bushels.

Good crops depend fundamentally on good seed. One of the best things the government has accomplished is raising the standard of corn. Compare American varieties with South American.

The one-man tractor which has recently come on the market will help solve plowing and cultivation on the small farm. The farmer merely guides the machine down the furrow.

Bad roads have been a serious deterrent to farm success and the marketing of crops. The two views, to right and below, show a stretch of Tennessee road before and after improvements. It is in the South, incidentally, that the greatest strides have been made along these lines.
or about 30 bushels per capita.

These figures need cause us no self-congratulation when we consider that the average production for the ten year period 1906-1915 was only a little over 20½ bushels per acre. The main reason why this yield was no larger was that the American farmer realized from years of experience—that he may not have expressed the idea in terms of economics—that it would not pay him to go to any additional expense in increasing the production.

An instructive story is that of the little boy in the photograph on page 16. He planted and cared for his crop according to advice given him by a Government official, and secured a yield of no less than 107.33 bushels per acre. This is, of course, an extraordinary case. The average crop produced by boys in his state—where, by the way, corn is not a leading crop but one of the most neglected—was over 50 bushels per acre. The average yield for the adult farmers of the state was about 20 bushels per acre!

This work has not stopped with the boys. In Culpeper County, Virginia, where the average crop of corn was 21 bushels, a demonstration of the county agent during the first four years' work covered 1,160 acres, and secured an average yield of 58.7 bushels per acre. Of the forty-eight boys enrolled for corn club work for 1914, thirty-seven reported, the average crop being 75.7 bushels per acre. A farmer who has watched this work from the beginning says, "It has done the men more good than the boys, because while apparently not paying any attention to the boys' corn club they are trying, as hard as they know how, to beat the crop the boys make. Today in traveling over the country one sees everywhere well selected ears of corn hanging in cribs, barns, porches and kitchens—a rare sight five years ago."

**Improving Crop Varieties**

Selection and cross breeding have produced wonderful results in improving strains of wheat and many other grains and grasses as well as vegetables. Work along this line is by no means confined to making two blades grow where one grew before. The work of the plant breeder is often times to get one blade where none grew before. Most interesting work has been done with the drought resisting plants, for example. Important results have been achieved with soy beans, milo maize, sorghum and a number of other crops. Equally important has been the introduction by the Department at Washington of a number of plants not formerly in general cultivation, but particularly suited to dry climates or other unusual conditions.

Increasing production through improved strains or varieties has not been limited to plant life. Just as valuable work has been done in the breeding of live stock and poultry. "Scrub" cattle, hogs and chickens are still in the majority in most agricultural sections; but their time has come and slowly but surely they are being replaced by thorough lines of stock well adapted to their locality. Especially in the South great progress has been made during recent years.

Many people realize the tremendous importance of this kind of work, until they make some such comparison as, for example, that of the average cow with her 3,100 pounds of milk and the belle of California, Tillie Alcartra, who gave in her record year 30,000 pounds. Of course, that is a record we cannot hope to approach under ordinary conditions, but there is no doubt that the production per cow could at least be doubled within a few years. If a campaign for that purpose were to be inaugurated with the thoroughness with which the Government is taking hold of the munitions supply for Army and Navy. Then there is the steel-spring legged, rubber-breasted hen that lays 60 eggs a year, compared to the 312 eggs laid by Lady Eglington in making her year's record. If our hens were divided according to measurements known to indicate laying capacity, those that did not quality being used for the table, the production per hen could easily be doubled. Feed and care alone are not sufficient for large egg fields.

**Good Methods as Important as Good Varieties**

The wonderful results mentioned in the case of corn crops were due largely to the introduction of better varieties than were formerly used in each case. Along with the better varieties went better methods of culture. We in this country like to green ourselves upon being a great agricultural nation. We are—but let us look for a minute at the following table which is of particular interest at this present time when the country with which we are at war supplies the "odious comparison."

**Average Increase in Crop Yields in Twenty Years.**

<table>
<thead>
<tr>
<th>Crop</th>
<th>United States</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>2 bu.</td>
<td>10 bu.</td>
</tr>
<tr>
<td>Oats</td>
<td>4 bu.</td>
<td>23 bu.</td>
</tr>
<tr>
<td>Rye</td>
<td>4 bu.</td>
<td>12 bu.</td>
</tr>
<tr>
<td>Barley</td>
<td>2 bu.</td>
<td>13 bu.</td>
</tr>
<tr>
<td>Potatoes</td>
<td>23 bu.</td>
<td>80 bu.</td>
</tr>
<tr>
<td>Average</td>
<td>20 bu.</td>
<td>62 bu.</td>
</tr>
</tbody>
</table>

Not a pleasant pill for our national pride to swallow! However, there are extenuating circumstances. We have been farming extensively while Germany has been farming intensively.

While each person engaged in agriculture in Germany has had to take care of 4.1

(Continued on page 78)
THERE'S NOTHING NEW UNDER THE SUN IN A GARDEN

Photographs by J. W. Gillies and M. H. Northend

The trellised garden (left) has the flavor of prim-pathed gardens of yesterday. Charles A. Platt, architect

A New England garden made last year but reminiscent of three generations ago. Kilham & Hopkins, architects

Another year, and the niched trellised garden wall below will look a hundred years old. James L. Greenleaf, architect
June, 1917

Ras bordered and rose arched—these were the gardens of yesterday. And the newest gardens are just a reflection of the past. Charles A. Platt, architect.

Imagine yourself in an English garden close. You really are in the garden of Mrs. Harry Payne Whitney at Old Westbury. L. I. Delano & Aldrich were the architects.

Below is still a third view of the new old-fashioned garden. This would have been considered ideal a hundred years or so ago—and still is.
ROSES OF YELLOW AND ROSES OF GOLD

Find their Garden Places where Stronger Colors Would Not Serve

GEORGIA TORREY DRENNAN

One of the finest of all roses of whatever color is Kaiserin Augusta Victoria, a lemon-white hybrid tea

OFFHAND, what color subconsciously suggests itself to you when someone mentions roses? Pink or red, isn't it?—"red as a rose," you know. At any rate, I don't believe it is yellow, unless some particular association has fixed that color in your mind. Yet roses do come in yellow, and though their presence in the garden is relatively uncommon, they merit estimations in which their various shades are far preferable to the stronger pinks and reds, or even to the pure whites and flesh tints.

There are yellow roses and yellow roses, to be sure. They are fewer in number than those of any other single color, yet more numerous than any one garden requires.

The Maman Cochet group is strikingly hardy. The five colors—white, pink, red of two shades, and yellow—are alike in strength, vigor and perfect beauty. They are persistent bloomers from spring till the last cold autumn days; and they merit their reputation of being the most distinguished group of roses of recent years in Europe and America. Perhaps the most distinct and beautiful of the whole group is Yellow Maman Cochet.

THE COCHET AND OTHER YELLOWS

The positive statement has been made that of the hundreds of roses available in this country the Cochets are the best. This does not quite coincide with my own opinion which is based upon the roses as they bloom in my own and my friends' gardens. Not that I dispute one word of praise for the Cochet roses. They deserve all that can be said in their favor—and even more than has yet been said in praise of the clear, deep, golden Yellow Maman Cochet—but I would not accord them undivided meed of praise in all respects.

There are other constant, hardy, free and beautiful yellow roses, closely in competition with the Cochets. Everybody knows Kaiserin Augusta Victoria as the hardiest of all the hybrid teas, and also as one of the most perfectly beautiful creamy white roses in existence. But perhaps everybody is not yet well acquainted with the more recent Yellow Kaiserin Augusta Victoria, or Perle von Godesberg. It is a superb yellow rose of clear canary shading to saffron. It has all the good points of Kaiserin Augusta Victoria and in my estimation is almost as fine as the Yellow Cochet. The differences of shades of yellow in the two roses make pleasing variety, on the bush as well as in the vase. The Cochet roses are hardy everywhere if given some protection. The same may safely be said of the Kaiserin Augusta Victoria and Perle von Godesberg. They are so hardy, vigorous, and free in habit, that I wonder why both groups are not recognized as hybrid teas.

Another good yellow is Etoile de Lyon, a very beautiful tea rose. It is much more hardy than the equally beautiful variety known as Perle de Jardins.

The teas and hybrid teas now number over forty handsome roses in all shades of yellow, except deep orange. William Allen Richardson, the climbing tea, is the only deep orange except the Persian Yellow rose. It is several shades deeper than Marechal Niel, which is a clear cloth-of-gold yellow, and is a free flowering and beautiful rose at all seasons, though excelling itself in autumn. The orange yellow, by the law of the radiation of heat, intensifies and deepens as summer wanes and the nights grow frosty and cold; the roses, roped and garlanded by hundreds and hundreds, are more and more striking and effective until the killing cold weather comes and ends their season.

THE HARDEST SORTS

The very hardiest yellow roses, such as are free and florescent in far northern parts, are the climbers and early summer bloomers. The yellow rambler, Aglaia, is a deep yellow, of free and hardy growth and for six weeks a most wonderful bloomer. One thing in favor of this and other once-blooming roses is that for their brief season of flowering they are much more profuse than the constant bloomers, for their resources are drawn upon for all the roses of the year at one and the same time. Aglaia is as profuse as the crimson rambler and in all essentials the same rose except in color.

It would hardly be just to the rose family to omit the rare hybrid tea treated to those interested in reports from the fairy land of sun-gold roses, to omit the almost forgotten Austrian, the Persian Yellow and Harrison's Yellow. These are regarded as fine flowers, very hardy and long-lived; but so many new and rare strains are being introduced that interest attention that the Austrian and Persian are not generally known and grown.

Of the trio, Harrison's Yellow is the most common. It is a light primrose yellow and single flowered. It bears a resemblance to the sweet briars, but the ruset glands on the under side of the leaves do not secrete the aromatic oil that imparts the fragrance of the latter.

Harrison's Yellow has no fragrance of foliage and not much perfume of flower. Its single blossoms are as light and airy as butterflies—I remember their blooming early in the spring with daffodils and jonquils. All about were peach trees in their own shade of pink; sweet scented plum trees in snowy white; and dogwood, red bud and maple making the wild woods gay. Yes, this rose was one of the components of all gardens of the Old South.

Persian Yellow was long considered the deepest yellow rose in cultivation. It has more substance than Harrison's, and is of a deep chrome yellow. The two roses come and go together, blooming for a period of about four weeks.
The Austrian Yellow stands alone as regards color. The peculiar coppery red of the inside of the single cup-shaped rose, combined with the pure gold of the outside, has no duplicate among roses or any other flower. Like the others of this trio, it is a wreath rose, blooming at short intervals along the trailing branches. Fountain-like, arching its branches, dipping its tips to the green earth on a bright sunshiny day, the striking brilliance of this unique briar of Indian red and gold will catch and hold the attention of even the most casual observer.

None of these roses propagates well from cuttings. The Persian and Austrian are budded upon Manetti or other hardy stock, but Harrison’s Yellow reproduces itself by scions. Although single flowered, with pollen laden stigmas, it is a very shy seed bearer; yet it has the distinction of being one of the seed parents of Lord Penzance, the only yellow rose among the Lord Penzance hybrid sweet briars. It is the result of the cross between Harrison’s Yellow and sweet briar Simplex. Its primrose yellow is inherited from one parent and the sweet scented foliage from the other.

Salmon is as much pink as yellow. Gloire de Dijon is distinctly salmon, beautiful in pink and yellow with blendings of intermediate tints; nevertheless the full blown roses are frequently pure golden yellow. It is the most conspicuous example in the world of one rose very much more hardy than any other of the numerous roses of its class. Just what is the reason for this we cannot be sure, but the fact remains. The color of a rose makes no difference in its mode of culture. A rose is a rose no matter what its kind or where it grows. The class to which the majority of yellow roses belongs is not entirely hardy north of Baltimore or Washington. Some protection must be given, but whether for better or worse depends upon several things. First, the roses ought to be prepared to meet the cold of winter by having water and stimulating culture withdrawn during late summer and early autumn. This tends to check new and tender growth and to harden the wood. Then they had better stand cold enough to show visible effect, than to be put under a protective cover too early in the season.

When the weather forecast is for severe cold, is the time to cover roses. They are then dormant and will remain so until spring. Some ventilation is essential through whatever material the covering consists of; this is one reason why evergreen boughs are so popular as protective agencies.

As important as anything pertaining to winter protection is not to uncover too early in the spring. Warm waves are followed by cold, and having been covered, roses are more injured than benefited by exposure to the inviting sunny weather of early spring.

Winter is winter, even in the orange belt. There are climatic differences, north and south, to which roses must be adapted. Cold in the north is settleli and consistent; in the south, fickle and capricious. The warm blanket of snow covers the northern gardens safely through the winter. In southern gardens, growth is induced by warm waves all winter long, and the succeeding cold waves make the plants suffer proportionately and sometimes seriously.
LONG before this the alarm has been sounded.
The cry has gone down the land to all who labor in the fields, "Raise your bit!"
America must feed herself and her allies. The President has warned us that we cannot be found wanting in "the things without which mere fighting would be fruitless."
The trenches of our war, then, are the furrows of the field.
The man behind the plow is fighting for this great cause of liberty as much to-day as the man behind the gun.
The American farmer will ultimately "see it through," for he is helping to make this world a safe place for Democracy by feeding the forces that are fighting for Democracy.
The lines of defense are Fighters, Funds, Factories, Food.

THREE springs had come, three summers; and thrice we gathered in the harvest.
This spring, we thought, would be like all the rest—the warm and gentle rains, the suns that coax to life the tiny seed, the wakened bud, the green shoots above the furrow, the sturdy crop. Another summer would creep past, and then another autumn when, happily, we could put the ripe harvest to the sickle.
Suddenly we turned and faced the hideous fact. For three years we had hid from it, denied it in our hearts, labored to put it out of mind.
Spring came, and with spring the War— their war, our war. We are in it now, in it that the world may henceforth be a safe place for men to live and labor. No longer can we flee from its realities, no longer deny our responsibility. We have placed our hands upon the plow. And with that plow shall we win.

WE must raise our bit, or we and our war-worn allies will starve.
This is a solemn fact. The surplus from last year's crops—which was far below normal—has been drained for the nations overseas. Some of it has been lost in torpedoed vessels, some of it destroyed by incendiary fires. We must make up not alone what will suffice for our consumption now, but enough to see us all through until the harvests of 1918. That means 100,000,000 mouths to feed here, and many millions more over there.
We must raise our bit, or hosts of men will have died in vain. As the President has phrased it, "Without abundant food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail. The world's food reserves are low. Not only during the present emergency, but for some time after peace shall have come, both our own people and a large proportion of the people of Europe must rely upon the harvests in America."
Our hands, weaponed not to smite,
A G L I M P S E  AT " W E L D "

Unquestionably, one of the finest gardens in America is "Weld," the estate of Larz Anderson, Esq., at Brookline, Massachusetts—no petty distinction when one considers the high standard set by American gardens today. The view shown here of the belvedere by the lake is one of its most picturesque glimpses.
SWORD-GUARDS OF FEUDAL JAPAN

Tsuba of Samurai Glory That Find Their Way from Nippon to the Collector's Shelves—Their History and Adornments

GARDNER TEALL

SMALL objects beautiful to contemplate, exquisite in workmanship, intrinsically valuable and at the same time rich in historical associations have attracted men of all ages. Little wonder it is that the collector of the *objets d'art* of the Japanese craftsmen finds in them an ever refreshing delight.

The tsuba, or sword-guards of Japan, are famed for their workmanship, beauty of design and historic interest, while their rarity is not such as to discourage the collector. A few years ago, indeed, these remarkable examples of the skill of the old-time Japanese metal-workers could have been picked up in the Japanese shops in America and Europe for a song. Though the price has advanced somewhat precipitously, fine specimens of sword-guards may still be had at far from prohibitive prices, when one considers that almost every tsuba can be counted a supreme example of the metal-worker's art. There are men of genuine Japanese sword-guards precisely alike. Each is distinctly an original and unique object, into whose fashioning has gone the best effort of those tirelessly patient and conscientious craftsmen of the Flowery Kingdom.

THE SWORD LAID ASIDE

Feudal Japan has disappeared, and with it the need of the old armourers' art. Fifty-eight years ago a noted Japanese official sought in vain through Yedo—now Tokio—for a countryman who might prove to be conversant with the English language, a fact that gives one a suggestion of the rapidity with which the old order of things has been thrown off and the new taken on. It was just forty years ago that an imperial Japanese edict abolished the wearing of swords. Chamberlain says that "the people obeyed the edict without a blow being struck, and the curio shops at once displayed heaps of swords which, a few months before, the owners would less willingly have parted with than with life itself."

It is clear that, as a result of this edict, a vast number of swords were brought into the market. Naturally enough, as collectors had not then discovered the tsuba, countless sword-guards were thrown into the melting-pot. Later when European, American and Japanese connoisseurs came to rescue the tsuba from oblivion, the sword-craftsmen, still possessors of a recent heritage of skill, fell to making sword-guards for the market. Yet even these late 19th—and one must suspect 20th—Century tsuba are often beautiful, ingenious and interesting enough to be desirable acquisitions on their own account.

ARMS AND ADORNMENT

Marcus Huish, in his book "Japan and Its Art," said: "It can readily be imagined that in a country where internal wars were constant, where private quarrels grew into family feuds, where the vendetta was unhindered by law and applauded by society, where the slightest breach of etiquette could only be repaired by the death of one of the parties, and where a stain of any sort upon character necessitated sword thrusts, attention was very early directed towards obtaining perfection in the only article of defense or offense which a Japanese carried. Nor would it long remain unornamented in a community where artistic instincts were universal, and jewelry and other ornaments were not worn. Personal ornaments illustrate better than anything else the individuality of their wearer, and collectively the taste of the nation. Especially is this the case where the article in question is worn as a privilege, is held in respect, is handed down as an heirloom, and is the subject of the most carefully prescribed etiquette. Not only the manufacture but the adornment of the sword was for centuries a profession reserved to artists of the highest attainments. The ornament lavished upon it illustrated religious and civil life,

A Japanese short sword in a sheath of black lacquer lined with gold. This shows the position at the hill of the tsuba or sword-guard

The two round cuts above are the front and back of an 18th Century landscape tsuba

Both front and back of the tsuba below are copper and gold. 18th Century

Front and back of a rare 18th Century guard of brass and bronze with inset coins

Bronze and gold have been worked into a landscape design of the 18th Century

Views of a rare enamelled 19th Century guard. Enamelled in full color and rim damascened

An early 19th Century guard, an excellent example of Nanakoji or fish roe surface
history, heroism, folklore, manners and customs, and the physical aspect and natural history of the country."

The Japanese Sword

The ornamental "furniture" of a Japanese sword consists primarily of the tsuba or guard, a circular or oval (sometimes square and occasionally irregular) piece of metal, with a triangular aperture to receive the sword-blade. On either side are smaller openings to close over the tops of the two smaller implements that accompany many of the Japanese swords—the short dagger or kōkatana, and the kojiri, a skewer-shaped instrument. After the tsuba or sword-guard come the smaller ornaments placed on either side of the hilt to enable the wielder of the sword to have a firmer grasp of it. These small metal ornaments are called menuki. We find them, too, on the scabbards of swords, especially on the daggers or wakizashi. Of great beauty and interest are the kashira, metal caps fitting the head of the sword-handles, secured in place by means of cords laterally placed. The fuchi are oval rings through

which the blade passes; they encircle the base of the handles where the blade is secured. The kiri-kata are cleats for securing the cords (sageo) which held back the warrior's sleeve whilst he was fighting, and finally there is the kojiri, the metal endpiece to the scabbard.

There is not one of the ornamental decorations of a Japanese sword that would not have awakened the admiration and envy of Benvenuto Cellini. And to think that after the edict of 1877 they were, literally millions of them, relegated to the rubbish heaps of the Japanese junkman! Too few of the menuki escaped melting up. Theirs is a fascination difficult to resist, but the tsuba more directly engages our attention for the present, and the smaller ornaments have been referred to here only in order that the reader may have some suggestion of their relationship to the tsuba.

Gōtō and His Followers

According to Huish, "The earliest period in connection with artistic work which will interest the general reader is that known as the Ashikaga, a time that covered the products of the first of the Gōtō, Miochin and Uméta families. At its commencement, 1390, there lived at Hagi Nagato Nakai, Mit-sutsune, the earliest name to be met with on sword-guards. Later Kaneyé of Fushimi in Yamashiro, Uméta Shigeyoshii (the renowned swordsmith), Gōtō Yūjō (died 1504), Miochin Nobuyé (1507-1555), Ira-ken Yamakichi (1570) and Hoan were all renowned for their tsuba. Thin and soft iron with a heavy reddish patina distinguishes the tsuba of Nobuyé. On his work and that of his followers for a time we find left the hammer marks. The refined academic work of the Gōtō family is, in Japanese estimation, given the first place. Gōtō Yūjō, the founder, lived and died in Mino (1426-1504). Work by him and by his descendants is not known to the Japanese as iyébori, which, translated, is equivalent to 'style of the family.'"

The work on those sword-guards whose surface is punched into a texture of small dots until it resembles fish roe is called Nanakoji, and for tsuba so finished the Gōtō family were without rivals. Mosle suggests that one of the requisites in a Japanese connoisseur's education is to recognize the iyébori (personal style) of the first thirteen centuries of Gōtō!

Piercing, chasing and in a few instances inlaying and damascening came into the practice of the metal-workers with the advent of the 16th Century. Uméta Shigeyoshi, who has been called the "master of masters," began the free use of the graver in ornamentation. To him mainly are due the decorative changes that marked the tsuba which were made during this period.

The close of the 16th Century brought a stretch of 250 peaceful years after the turbulence that had shaken Japan until then. Naturally in the years of war, the sword of the Japanese fighter called for a guard practical and tough in texture, something that would deflect the powerful blow of an opponent. In the years of peace the tsuba were mainly adapted to court use and for the adornment of the person. The tsuba makers of Osaka produced marvels of ornamental work.

(Continued on page 62)
The fence gives individuality to a garden. Original designs can be made up, and to their originality they add the value of exclusiveness. Estimates for the type shown above will be submitted on application.

Visualize this hammock beneath the pergola and you will envy the woman who has one. It has a nickel plated frame. Upholstered back and sides covered with cretonne or duck, 6½' long, 30" deep. $65.

The bird bath to the right is of semi-porous concrete. Bowl 17" wide, standard 39" high. $15. A larger size, $25. The flower pots at either side are in an old ivory tint. Made of pottery guaranteed to stand weather. 29" high, 29" wide. $35 each.

A water lily bird bath of cement with rimmed edge is shown below. It measures 18" in diameter and costs $6. The birds will appreciate this in the hot months.

To some extent the garden fence should reflect the architectural character of the house. Here a simple classical design has been effectively used. Designs for individual types of fences or estimates for this design will be furnished on request.

Names of shops may be had on application to House & Garden, 19 West 44th St., New York City.
The drawings on these pages by Far- guson, Fuller, and Craven, with some original designs by Mr. Craven.

It stands 3' 5" high — a hand-made cement sundial with a leaf design on the shaft, $50.

Bench (above) heavily white enameled cedar, 1'7" by 60" by 15' high. $20. Pottery flower pot in old ivory tint, 1'7" high, 14" wide, $6. Sun dial of wood, 11'5" by 42", $15 without dial.

Unusual garden gates can be made after your own patterns. Estimate on application.

A fitting lawn or terrace set, one of numberless patterns. $54.

The gate should be part of the garden, blend with it. Therein is the charm of the roofed gate to the left. Estimate on request.

Mistress Mary tops the 4' stick in this garden basket. The basket itself is natural color wicker with green bindings and handle. $4.50.
The rich simplicity of Colonial design makes an inviting hall. Between the paneled wainscot and the cornice the walls are covered with a heavy paper in browns, reds and greens that harmonize with the colors of the rugs. Woodwork and ceiling are tinted ivory.

The Colonial feeling predominates in the architecture. House and garage are similarly treated. Local stone, showing a diversity of gray and brown shadings is used for the construction, laid in raked-out joints. Roofs are sea-green slate. Woodwork is white and blinds are green. Red chimney pots and red quarry tile porch floors add warmer notes.
"Day's at the morn; morning's at seven," and the first rays filter through white scrim. There's a border design of hemstitching in blue or rose, as you choose, and the hem may be had in blue or rose. 38" long. $1.25 a pair.

Curtain at the top is ivory colored striped net, the net being heavier in stripes. Edged with narrow lace. 38" long. $2.95. In center, white voile with narrow lace edge. 38" long. $1.25. Bottom dotted Swiss with hemstitched hem, narrow lace edging. 72" long. $2.95.

A net to catch the sunshine in! Cream square mesh net dotted, the curtain being hemmed and edged with narrow Cluny lace. 2½ yards long. $2.75.

For cottage casement windows comes a very fine, imported dotted Swiss curtain with ruffled border finished in a fine scallop. 2½ yards long. $4.50 a pair.

COUNTRY COTTAGE UNDERCURTAINS

And you can get them so easily by ordering through the Shopping Service, 19 West 44th St., New York, or asking for the names of shops which supply them.

Muslin of good quality is always interesting for underdrapes in some rooms. The border is stitched with five fine tucks forming a square at the corners. Edges finished with hemstitching. 2½ yards long. 32" wide. $1.10.

Double sash under-curtains of net give a pleasing effect at living-room windows. The overdrapes in the room shown below are mauve and green linen, the furniture mauve enameled striped in green and the rug is beige. Leeds, Inc. were the decorators of the room.
EARLY ITALIAN WALL FURNITURE

The Cassone, the Credenza and the Bed

UNDER the general term of “wall furniture” are to be understood all those pieces which, from the nature of their design and structure, are intended to stand against the wall—in other words, everything not comprehended under the head of seating furniture and tables. To be strictly accurate, not a few of the tables, ceremonial benches raised on a dais, and high-backed chairs were treated as wall furniture; but, as they have already been discussed, we may address ourselves directly to the cabinet work on which artisans and artists of the period often expended their best efforts.

THE CASSONE

One of the most characteristic articles of the Italian wall furniture of the 16th and 17th Centuries was the cassone or chest. It was not only an important item in the equipment of every room, but in one or another of its various forms it embodied all the decorative processes and types of decoration employed for the enrichment of furniture in that golden age of Italian mobility art. The cassone was an object of utility from the earliest times, but from the middle or latter part of the 15th Century on it assumed a highly significant position as a decorative adjunct as well. In the exuberance of Renaissance invention it displayed the peculiarities of contour and all the wealth of decorative detail charac-

ABBOT McCLURE & HAROLD DONALDSON EBERLEIN

teristic of the period; early in the 17th Century, in like manner, it showed the restraint of form and embellishment we see in other contemporary pieces of cabinet work.

In considering not only the cassone, but also the other wall furniture of the 16th and 17th Centuries, it is necessary to keep constantly in mind two things that were pointed out in the preceding paper. These two things are, first, the character of the architectural background and the relation of the furniture to it; second, the scantiness of equipment as compared with the usage of later periods. In the first place the furniture had sufficient individuality and intrinsic interest, both in form and color, to give the requisite contrast with its background, no matter whether that background was elaborate or austere. In the second place, the furniture was designed and made in the full realization that each piece would display its excellence without crowding.

While it manifested sundry minor variations, the cassone occurred for the most part in one or the other of three general types, all unmistakably of the same family.

THREE GENERAL TYPES

(1) There was the cassone of sarcophagus contour with projecting acanthus consoles and shaped top, such as the gorgeously ornate Florentine example of about 1475, shown in Figure 10, or with shaped sides and flat top, supported on a plinth or
V-shaped bracket feet, such as the 16th Century specimen in Figure 9. Different combinations and adaptations of these features occurred from time to time, but the similarity is traceable throughout.

(2) The second form, seen in Figures 7 and 8, had a flat top, was wholly rectangular, with straight sides, rested upon feet and had the front divided into one, two or sometimes more decorative divisions, with lesser panels placed between or sometimes at the ends.

(3) The third type of cassone was not dissimilar to the two preceding forms, so far as the actual chest was concerned, but stood high upon trestles or trestle-like supports, one at each end, like the specimen shown in Figure 13. This last-mentioned form of cassone gave rise, in all probability, to a slightly later and modified piece of furniture, the madia, a buffet-like standing cupboard, such as the example shown in Figure 6, which belongs to the latter part of the 16th or to the early 17th Century. It should be noted that, as the 16th Century wore on, the wealth of Renaissance detail in the decoration of the cassone gradually subsided, until in the 17th Century the erstwhile exuberance was almost wholly replaced by a severe simplicity of paneling and moulding, with but little relief of carved devices. There was a simplification in contour likewise, and the sarcophagus form of cassone did not continue in the 17th Century.

We have said that the cassone epitomized the decorative processes and types of decoration characteristic of the period, so that one may gain from them a comprehensive grasp of these decorations in their application to other representative pieces of contemporary furniture.

The decorative processes were polychrome painting and gilding, both on flat grounds and in carved relief, applied over a

(Continued on page 78)
THE BEST WHITE FLOWERS

GRACE TABOR

Photographs by N. R. Graves

USED hit or miss, flowers are certain to be lovely. Used with discernment for their particular attributes, they add distinction to their loveliness—distinction for the garden fortunate enough to entertain them under such auspicious circumstances.

Some gardeners contend that the liberal use of white acts as a harmonizing influence, setting discordant colors at peace with one another; but I cannot agree with this theory. It is only a theory, and is not borne out in fact. White is not a harmonizer; it is a divider, a separator, if you will; and only in this sense is it the “peacemaker” that some are fond of calling it. It is too showy to be a harmonizer indeed, it is the most showy of all colors, and it demands more careful consideration than any other, whether it is used in combination or alone.

The Character of Line

Let us consider first the character of flower mass as exemplified in line or form. There are two very distinct divisions, strongly marked. One is vertical, the other horizontal; and the latter is modified often times into what amounts to circular. That is, by the scattering of the flower heads over the plant, an all-over effect is created, which presents itself to half closed eyes as a circle, or globe, roughly speaking.

All of the creeping plants are horizontal, pure and simple; but such things as feverfew and achillea, hardy chrysanthemums and the hardy asters are more than horizontal—they are all-over, or globular, if you look at them through half closed lids to get the impression only.

It is always the custom to consider the form or habit of growth of a plant when selecting for a special place or purpose; that goes without saying. But I do not think it is usual to give any more consideration to this when they are white one is choosing than is given to flowers of any other; yet white flowers, by reason of their showiness, emphasize to a remarkable degree these lines of the flower mass. So if they are inharmonious lines, or inharmonious forms, the effect is much more pronounced than the same combinations would be in color mixture, or even in any other single color. This is the plain logic of the situation, and we have to conform to it if we would succeed.

With the thought uppermost that white provides always the strongest contrast when used with any color, introduce strong contrast in the form of inflorescence also. Contrast in every way should be the essence of the effect resulting; vertical lines combined with horizontal, and combined with the most startling abruptness possible.

There are white forms of so many of the familiar flowers that it seems hardly anything need be omitted, even though one purpose to confine himself to white alone. But when using white with other colors select those things which have no duplicates in the other colors in your garden. That is to say, do not include white larkspurs in a flower border where the blue larkspurs are also planted. All the force of contrast is lost in such a combination; and neither the white lilies, nor the blue flowers are impressive. Use a different species entirely—plants like achillea or white campanula or white Stokesia.

Certain combinations with white are happier than others. All flowers of delicate coloring are intensified by proximity to white, naturally; and similarly, all flowers of strong color are strengthened. If a startling effect is desired, choose bright and strong colors to combine with white; but if delicacy is wanted, select the palest mauves and yellows to use with it. Pink, curiously enough, is not improved by the company of white, whereas for pink is so luminous a color of itself that the combination lacks character. Probably the most effective combination is white with yellow, as white phlox with yellow lilies, white iris with the yellow hardy asters, or white campanula in connection with yellow Iceland poppies.

I am speaking, of course, of white flowers as they appear out of doors in the garden, and not as they may be combined in the house; their garden use presumes that they shall take their proper place in a picture, and it is to this end that careful planning is needed. For, being conspicuous, they will “jump” at the observer, if used too freely, or in the wrong places. A light scattering of them throughout the garden is agreeable; but never large masses in any one place, save as they are used to form one of the contrasting color combinations just referred to.

WHERE A WHITE GARDEN FITS

Color schemes are so largely a matter of taste that it seems almost presumptuous to condemn

The white hollyhocks, from 6' to 8' high, will provide a vertical note in June
one or recommend another; but a white flowered garden seems conservative enough to find room almost anywhere. Yet there are a great many who would reject it as impossible, on the ground that it would be insipid. However, there are subtleties and degrees in "white" that altogether escape ordinary observation.

One may choose to have a white garden wherever a blue or a pink or a yellow garden would be acceptable—that is, anywhere at all, so far as general conditions are concerned. But I would not choose to devote a garden to white flowers alone, with buildings of any but the lightest colors and preferably in stucco. Dark stained shingles and the somber dignity of half-timber demand depth of color in all that approaches them; white painted houses, on the other hand, are likely to be somewhat stiff without a certain gaiety in garden planting; houses painted in other hues are too uncertain to enter into generalities of this sort; and brick houses are too rare.

Given the brick house, however, or a house of stone, there is almost as good an opportunity for the use of white flowers alone in the garden scheme as the stucco house affords; although with stone it is perhaps rather better to play some diversity in color and the introduction of warm tones.

Of course, color does not matter so greatly where the garden site is not immediately adjacent to the dwelling; but even where it is removed sufficiently not to be brought into relationship with the latter at all, I still would adhere to these general principles in adopting white as the motif. For one reason or another, white flowers exclusively are more suitable when used in connection with the materials I have just enumerated than with anything else.

**How to Plant It**

I have already said that there is greater necessity for careful consideration with regard to the use of white flowers than with any other color; this is doubly so of the selection and the planting of an all white garden. It must have character and not be an inane conglomeration of white and green. The character comes with the lines—and the grouping with due regard for these lines. Important as these are anywhere, they are more important than usual in a garden devoted to one color; and most important of all in a garden devoted just to white. It is like an artist's study in black and white, wherein composition and line afford him his only opportunities. Indeed, it is hardly exaggeration to say that anyone can make a lovely garden in colors, but it takes a genius to create one all in white.

It may be great or small; it must be well designed. It should be simple in design, and of course, it ought to be enclosed in one way or another. Nothing is a garden without being thus set apart.

**Simplicity vs. Originality**

Simplicity of design is one of the most difficult, and at the same time one of the easiest things in the world to accomplish. It is difficult because there is invariably the wish present with the designer to create something "differently." Now there is no such thing in the world as entire originality, and anyone who deludes himself into the belief that he has created a design hitherto unthought of has worked upon his own credulity to an alarming degree—or else he has actually gone over into the realm of mental shipwreck, and "designed" something too awful for contemplation.

There are gardens that I suspect have been developed in just this fashion; they are original and "different"—and they are nightmares! Avoid anything of this sort at all costs, even if you have to settle down to a single brick path bordered with flowers. There is not the slightest degree of originality about this. It is as old as the hills.

(Continued on page 64)
Instead of the usual iron hospital cot generally used on the sleeping porch, why not a daybed? The color is green and the striping lapis-lazuli. Cushions and cover can be corn color. Chairs and table are painted to match the bed. A blue glazed pottery bowl holds the light. Steamer chairs and deck rugs complete the scheme. The windows are arranged as in a trolley car.

The ceiling bed is raised and lowered by turning a crank installed in the wall. As the bed comes down, a false top panel automatically closes, leaving the ceiling complete. Sagless spring, iron bed, upper false ceiling, lower ceiling bed bottom, and necessary gear. Courtesy Sorhen Bed Co.

Why should the sleeping porch in its revolting bareness smack so much of a sanitarium? Make it livable with painted day-bed, chairs and tables. The floor or a floor painted to simulate tile, one or two wicker chairs, and curtains of silk or linen in a shade to harmonize with the color scheme of the room. Here is a sleeping porch that is presentable at any hour.
NOW, I want it distinctly understood that if you two girls are going to take down your bed and sleep in two droopy hammocks out on the upper piazza, I am not to be routed out of my comfortable bed, in a decently warm room, no matter what happens. So don't get colds or any other ailment, for I mean what I say, and shall not lend my room.

"Not going to be sick ever, because sleeping in the open air is the greatest thing for the health, and hammocks!—there is nothing so relaxing or so restful, swaying as they do to every motion or every breeze. Why, they're just——"

By sewing the sheets, blankets, counterpanes and canvas covering into sleeping bags, they were kept in place. To insure safety, each occupant of the hammock laced herself into its meshes, so that the result was suggestive of two mummies in boudoir caps of water-proof canvas, the which was viewed mirthfully by callers of maturer ages. But the two didn't care.

A FLIGHT INTO EGYPT

The mummy idea, coupled with the fact of school studies in Ancient Art, suggested the decorative scheme for the sleeping-porch. They had the wall of the house painted a warm stone color, and a quarter-inch line in Egyptian red framed the windows, giving a panelled effect to the side wall. The railing bounding the piazza was stone color, with red line running down each spindle. The floor was painted dark red and divided into eight inch squares by lines of the brownish-black of the Egyptian style. A cream-white awning, whose heavy roller kept it back out of the way on starry nights, and rolled it down over the pergola-like open roof beams and dropped it to the railing or floor in times of storm, was adorned with bands of lotus flowers, framing a panel of stern Egyptian figures in the characteristic reds, dull yellows, blue greens and brownish blacks. Nor were the canvas sleeping-bags without their lotus decorations.

When the porch is of sufficient size, beds are far better than hammocks to sleep in. There are iron cots which cost as little, if not less than hammocks, and whose well-stretched springs, with a good hair or felt mattress, offer greater comfort to most people. The ends are no higher than the mattress, so that in daytime the bed gives the appearance of an inviting divan. For cold weather warm things must be under as well as over the sleeper, and a waterproof covering must be made to protect the entire bed and hang well down over the sides, arranged with an opening large enough to slip the head through. Then the head must be covered with a cap or helmet, also water-proof, as a protection against colds.

To be sure it is not always winter on a sleeping-porch, and many people enjoy reading or writing in bed. Therefore beside the bed stands a convenient table to hold the lamp and books and other accessories, while over the lap rests an invalid's bed-table—a wonderful attribute for an indolent "lounger."

THAT SANITARIUM BARENESS

Many regard a sleeping-porch as merely a sort of medicinal sleeping place used only for the "misery" of night time. Nothing

(Continued on page 68)

The day bed below is wicker, 6'2" long, 30" wide. Fitted with removable box and cushion covered in denim. The chair, stained or natural, can be had with or without cretonne cushion seat. Courtesy of Minnet & Company.
In the corner of the garden of E. J. Berwind, Esq., at Newport is a lovely Venus mounted on an ivy covered pedestal and silhouetted against dark foliage.

GODS OF THE GARDEN
Pan Pipes The Birds to Song

Statuary can find no nobler spot than at the end of the garden axis surmounting the exedra behind a curved bench and the shallow basins of a fountain.

A young centaur holds up the dial to catch the laughing hours. He is in bronze and graces the lawn of Franklin Murphy, Esq. H. Van Buren Magonigle, architect.

COME OUT AGAIN
By Many a Stately Fountain

They drink from the fountain's rim, these children; their chubby hands clutching at the edge. It is called "Joy Fountain", by Edith B. Parsons. Courtesy of Gorham.
COUNTRY HOUSE WATER SYSTEMS

O NE of the first problems which confronted man when he ceased being a hunter and became a grazer, was that of water supply for his stock.

As much of the grazing land was more or less elevated, it followed that it was generally deficient in natural water sources. Hence, the birth of the water works; and thus we face the proposition of today, with hundreds of years of experiment and experience back of us. Indeed, many of our present methods have an ancestry far longer and far more interesting than our own.

When a man builds himself a house, he naturally picks a dry spot, and the finished result has the chance, at least, of being a beautiful thing. When he plans for his water supply, it is generally after he has built, or at least located the house; he then picks what he can get for his water. It is here a question of suitability—the avoidance of low places, in which the surface water may gather; and the ridges, from which no water is to be gotten. How he may locate his hidden supply is a question outside the province of this writing.

The home service is best supplied by gravity, from a naturally high and sufficient source. But this is not for most of us. Ours is generally the low source, the force-pump, and the raised tank or reservoir which furnishes our gravity flow.

THE SOURCE OF SUPPLY

The common supply is found in the well, which may be spring fed or an interrupted flow. The well may be either dug or driven. For drinking purposes, the dug well is the better, as the water does not stand so long in the pipes. A good spring source is best enlarged to be contained in a neat reservoir, thus giving a reserve supply, even should something go wrong with the working of the system at any time.

When your property is on low land near a river, the banks of which are of sand or gravel and the water naturally good, a well may be located at a little distance from the bank. Here are natural filtering and a copious supply. A dug well is best constructed with a smooth interior and of solid masonry down to nearly the depth of the inflow. Below this the wall should be porous. Well water is generally pure and wholesome; cool in summer and warmer in winter than that taken from ponds or rivers. Thus it is less liable to freeze than that of the more exposed sources of supply.

The copious spring may partake of the above qualities. It often has possibilities with the hydraulic ram, and as such is a valuable possession. The ram is a mechanical device which enables us to raise a small body of water by utilizing the power of a much larger body. Or in other words, the impulse of flow is automatically checked and a portion of the flow diverted into our supply system. It is necessary to the working of the ram that the drop of the inflow or feed pipe be at least 18" below the source of supply, and that the length of the feed pipe be not less than 25'. If the ram must be nearer than this to the spring, the extra length of pipe may be laid in a 6' coil.

The ram may force water to a distance of from 1,600' to 3,300' and raise it from 100' to 200'. Water carried to a distance of 1,000' and elevated to a height equal to ten times the fall from source to ram, will deliver about one-fourteenth of the water used. Twice this delivery will be made if the elevation be only five times the fall. From this we see that our spring must be copious; the greater part of the water is not delivered and goes to waste.

The installation of the ram is perhaps best effected in a concrete pit, which is sufficiently large to allow working around the machine. There should be an effective drain about its base to keep the water from flowing over it, and the outlet to this should connect at once with a lower "splash pit" to save the water from digging too deeply into the soil.

A wooden cover for the ram pit is best made in the form of a low pitched roof which swings back upon hinges. Ventilate this through the small gables. It is hardly necessary to mention that all covers and doors, which guard both reservoirs and mechanical contrivances, should be under lock and key to be safe from invasion and possible injury.

The waste of such a supply at once suggests a water garden with bordering poplars, pussywillows and like water-loving growth. Perhaps there can be an irrigating system beyond, where the water is collected in a fairly shallower basin than it may get the benefit of the warming sun.

The delightful possibilities of the screening of the ram-pit and the spring form a problem both simple and unusual. Success lies entirely in the judicious use of small trees, shrubs and plants. And it might be mentioned here that in all cases where a protective structure is built about any of the essential units of the water system, the introduction of planting may be used more effectively to tie the structure to the landscape and lend it harmony.

THE STORAGE TANK

So much for the first step, the source of supply. Next comes naturally the provision of a storage place into which the water may be conveyed, in order that it may be fed by gravity into the house system. The most common system is that in which the tank is installed in the attic. This may be satisfactory for a small supply, but care should be

SOURCES OF SUPPLY AND HOW TO UTILIZE THEM

CHAS. EDW. HOOPER
There may be many modern entrances that reflect the Colonial spirit, but few do it so faithfully and so successfully as this. The iron balustrade is especially beautiful.

Although divided into separate parts, the buildings are co-ordinated into a unit. The living-room, hall and dining-room form one division, linked by the kitchen with the garage.

An upstairs sitting-room is one of the advantages of the second story plan. Bedrooms are arranged to command maximum light and ventilation. Closet space is plentiful.

Arched French windows on the lower floor and the pillared entrance relieve the straight Colonial lines. There is nice Georgian balance in the porches at either end.
If you question the ability of an architect to crystallize personality in a room, you have only to consider the masculine qualities established in this man's room. There is a virility to the very walls, a solid austerity to the paneling, and a pleasing grace to the linen fold above the fireplace. Mellor & Meigs, architects
“Laurel Hall,” the residence of S. H. Fletcher, Esq., at Indianapolis, is a music room of piquant charm. The Chinese rug is old gold and old blue. Draperies are damask in old gold on mulberry. Furniture is French walnut, the walls cream, side chairs upholstered in needlepoint tapestry, and the cabinet is amber color lacquer. Cooper-Williams, Inc., decorators.

The library of “Laurel Hall” has a fitting atmosphere of studious dignity. Woodwork is oak, the mantel Caen stone. The rug is plain taupe. Curtains are blue velvet in an antique weave. The furniture is oak and walnut, the upholstered pieces being in blue and gold mohair damask, plain blue velvet and needlepoint tapestry. Cooper-Williams, Inc., decorators.
One of the bedrooms at "Laurel Hall" has a large floral patterned paper on a cream ground. The furnishings are simple—simple mahogany beds with plain satin covers, and plain upholstered chairs. Cooper-Williams, Inc., decorators.

There should be something intimate about a bedroom fireplace. It need not be formal, although it should have a dignity in keeping with the character of the room. The carved mantel and paneled overmantel mirror in the bedroom shown to the right make a happy combination.

The charm of this sun room lies in its simplicity. The floor is ivory and green tiling, the furnishings ivory covered with green satin. Benches are marble with velvet cushions of rose geranium. Puff shades of green gauze. Mrs. Lorraine Windsor, decorator.

The walls of the dining-room at "Laurel Hall" are paneled in walnut broken by a carved Caen stone mantel. Curtains and portieres are of tapestry in an Italian design. The furniture is Italian walnut upholstered with plum colored figured silk velvet. Cooper-Williams, Inc., decorators.
A velvety lawn is not a perpetually self-maintaining stretch of grass that will withstand abuse and neglect. Its possession is bought by careful preparation, suitable soil, good seed and thorough, well considered care.

GREEN LAWNS AND GRASS SEED FOR EVERY STATE

A Summing Up of the Best Varieties for All Conditions and How to Sow and Care for Them

HUGH SMITH

TIME was when the lawn, as popularly conceived, belonged almost exclusively to large estates. It called for a setting unmistakably grand, a setting wherein ivy-covered brownstone and turreted gables seemed essential to the effect of the sward itself. In a word, lawn spelled wealth.

Happily, now, those days are past. The increase of homebuilding by all classes, an awakening to home beautification, and an increased civic conscience have made the production and maintenance of lawns a matter of general interest.

Yet fundamental principles are often disregarded in lawn making. Poor results follow. It is difficult to impress on some people the fact that a lawn is not a perpetual, self-maintaining stretch of grass that will withstand every conceivable sort of neglect and abuse. To the average man its making is but the process of scattering an unknown seed mixture, purchased at any corner store, over a piece of ground that has been decorated with parallel scratches by his garden rake. Once the seed is sown he carries no further responsibility for the product that is to result.

LAWNS SOILS

The character of the soil is the first consideration in successful lawn making.

Whenever possible a sweet, mellow loam should be secured, and the lawn soil should have depth. Several feet of rich black earth is the proper foundation to work from. A layer of an inch or two of soil over a sterile, heterogeneous mass of refuse is the cause of many failures. The capillary connection between the surface soil and the subsoil must be good, so remove all debris from the ground before placing the surface layer upon it.

Besides depth there should be uniformity of texture. Let no great lumps of earth be intermixed with the surface soil. Remove all stones and other grit from the surface soil. The lawn is not like a cultivated field that can be plowed and planted with a rotation of crops. Lawn soil must furnish available plant food in large quantities over a considerable period of time. This means that there must be a large amount of humus in it. It is best to build up the soil to a high degree of fertility before the grass cover is grown upon it; it is much easier to incorporate the humus with the soil at this time.

SURFACE AND DRAINAGE

Stable manure, preferably that which is well rotted, should then be applied and plowed under. The surface should then be thoroughly worked into a smooth seed bed; simply having a smooth appearance on top does not mean much. The upper soil should be worked over with a garden rake until it is of very fine texture; in fact, it should form a dust mulch.

The soil must have sufficient drainage. Low, wet spots become sour. It is dif-

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<th>NORTHERN DIVISION</th>
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<td><strong>Soil Condition</strong></td>
<td><strong>Supplementary Grasses</strong></td>
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<td><strong>Major Grasses</strong></td>
<td><strong>(Only 5% to 15% of each in mixture)</strong></td>
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<td>Leach soil</td>
<td>Ry. bent</td>
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<td>Clay loam</td>
<td>Ky. blue</td>
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<td>Sandy loam</td>
<td>Creeping bent</td>
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<td>General</td>
<td>White clover</td>
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<td>Clay soil</td>
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<td>Sandy soil</td>
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<td>Extremes of sandy condition</td>
<td>Redtop</td>
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<td>Slightly acid condition</td>
<td>Creeping bent</td>
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<td>Breckland conditions</td>
<td>Dense flowered bent</td>
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<td>Semi-arid conditions</td>
<td>Buffalo grass</td>
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<td>Shady conditions</td>
<td>Native grasses</td>
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<td>Wood meadow (deep shade)</td>
<td>Red fescue</td>
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<td>Various leaved fescue</td>
<td>Redtop</td>
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<td>Slopes and terraces</td>
<td>Dense flowered bent</td>
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difficult to secure satisfactory results unless the soil is open and warm. If necessary, under-drainage by means of tiling should be resorted to. This is a technical subject governed largely by local conditions, and anyone having work of this sort to do should make a special study of its engineering phase with reference to the problem.

Lawn soils not in the limestone regions are apt to be somewhat acid. This condition should be corrected by an application of air slaked lime at the rate of thirty bushels to the acre. This is best applied as a winter dressing.

**SEED MIXTURES**

To the average buyer the various trade mixtures of lawn soil on the market smack of the alchemy of the Middle Ages. There is something awe-inspiring in the elaborate number of varieties they combine into one package of seed and the relative efficacy claimed for each special combination. To clear the subject in your mind here is an analysis of what to use, and where:

The map in Figure 2 graphically shows the regions to which the principal lawn grasses are adapted. There are three divisions. The first or Northern, shown by the unshaded portion on the map, embraces those States where Kentucky blue grass is the standard for practically all situations. The chief exceptions to its full use are in the Atlantic coast region where the moist clay soils are inclined to be acid. Here you will find redtop and the other bent grasses as the basis for lawns.

In the extreme northern part of the United States, in some localities are found rather gravelly and sterile soils. Upon these the growth of Canada blue grass has been found to excel that of the Kentucky. In some arid portions of the Great Plains region the grasses which are native to the special localities grow better than others.

The second or central division is shown by the cross-hatching on the map. In this group of States no distinct line of demarcation between the grass areas exists. The blue grasses predominate in the northern part, but Bermuda grass supersedes them in the southern and warmer parts of the States. Those contemplating the building of lawns in this section should carefully study the varieties in common use in their particular locations and make use of the grass which is giving the best results.

**GRASS IN THE SOUTH**

The third or southern division, shown by the shaded portion of the map, is the region where Bermuda grass is the standard for lawns. A few other varieties are used in special cases, but Bermuda grass has thus far exceeded all others for common use. The chief exception to the use of Bermuda grass in this region is St. Augustine grass. This has proved to be better adapted to shady conditions than the other and is consequently becoming more popular for this particular use.

(Continued on page 74)
**House & Garden**

**THE GATE INSIDE THE HOUSE**

A Medieval Precaution That Has Become a Decoration Today

In the New York home of Reginald DeKoven, the composer, is a wooden Tyrolean gate placed between the entrance foyer and the stair hall. Door openings to receive the gate were designed by John Russell Pope, architect of the house.

In old times castles were provided with inner gates of iron and wood designed to withstand attack should the enemy penetrate the inside walls. After the adoption of gunpowder, and with it the ability to destroy from a distance, the efficiency of such a method of defense was ended. But as the gates presented a certain decorative value, they were refined into ornamental forms. And that is the romance behind these gates that open into the music room of the residence of William McNair, Esq., in New York. H. Van Buren Magonigle, architect.

A novel assembling of the coats of arms of various branches of the family has been made on the gates in the residence of Stuart Duncan, Esq., at Newport. The house is Tudor Gothic and the gates are a characteristic decoration of this architectural style. John Russell Pope was the architect.

Between the entrance lobby and the main foyer in the New York apartment of Murray Guggenheim, Esq., are gates of the period of Louis XIV. They are of black wrought iron with decorations in gilt, fashioned after designs by McKim, Mead & White, architects. These illustrate the decorative value of interior gates—they withhold the view beyond and yet do not entirely obstruct it. They mark a division between rooms with less abruptness than would a door or portieres. They also add the significant sense of richness all hand-wrought iron gives.

The gate in the residence of H. H. Rogers, Esq., at Southampton, L. I., is after an Italian Renaissance design. It stands between the loggia and the upper house terrace. Although not a typically medieval use, this serves decoratively, being silhouetted against the light. Walker & Gillette, architects.
IT is only fair that those who work the miracle of good taste preach its gospel. Decorators, like good wine, need no bush, but they deserve explanation. The touchstone of good taste that they employ has made both them and their work not a little mysterious to those who have never chance to fall into the merciful hands of a decorator. And they are merciful hands, for with rare diplomacy they guide a client's choice into the right path.

But is there only one path? Scarcely. Here are eight books by as many decorators, and while all claim allegiance to the same fundamental rules of decoration, each interprets them in a different fashion.

THERE is "The Art of Interior Decoration" by Grace Wood and Emily Burbank (Dodd, Mead, $3). In a crisp, direct, readable style the authors have set down the facts of decoration as their varied experiences have proven them. Every phase of the house is considered, including some that decorators usually neglect—rooms such as the bathroom and the servants' quarters. There are short chapters on the periods, on collecting, on table decoration and pictures, to name a few of why and wherefore of each principle is clearly explained. You hear an old message in new words. And the new concept these decorators present is the idea of considering the room as a picture—a rounded, complete setting for life. Excellently illustrated, admirably presented, "The Art of Interior Decoration" is one of the few really good books which have appeared on this subject.

ANOTHER approach to the house in good taste is made by Amy L. Rolfe in "Interior Decoration For the Small House" (Macmillan, $1.25). It is written with the wittily modern idea of making people with moderate means apply those means to the best advantage in the decoration of their homes. And to that end it lays down the fundamental principles of convenience and comfort that we all demand. Recent prices also give some idea of what the improvements in the home will cost. A concluding chapter on how to go about studying interior decoration is a valuable feature.

"THE HEALTHFUL HOUSE," by Lionel Robertson and T. C. O'Donnell (The Good Health Publishing Co., $2), approaches the decoration of the home from the angle of its effect on the health. "What we have attempted," the authors say, "is to insist upon the health importance of beautiful colors and beautiful lines and masses, beautiful wall and floor coverings, equally with fresh air and light—to present to the reader, in short, a house that is healthful because it satisfies the demands of hygienic and esthetic sense alike."

A FOURTH interpretation of the decorative principle is found in Hazel H. Adler's "The New Interior" (The Century Co., $3). The subtitle reads, "Modern Decoration for the Modern Home." To show how the modern movement has developed, the author surveys its various expressions in the different fields of art, and then goes on to explain how decorators are doing their share in the work. This subject was explained at length in "What Is Modern Decoration?" in the April House & Garden. It is mainly a liberal use of strong color, the employing of craftsmen in the ages attempt to find color schemes and lines other than those of the accepted periods and their current adaptations. How much of the movement is passing fat would be difficult to say. A close student of decoration is apt to criticise this book; however, for including much material that is far from modern. Surely Ralph Adams Cram would not consider his private chapels—fashioned along the lines of those in the Pyrenees—as being modern. They are distinctly medieval. That craftsmen are employed in the work seems to be about the only reason for their being called modern. The value of this book lies in its survey of the recent art movements, in its chapter on new groupings of color and its excellent illustrations.

A LITTLE handbook by Helen C. Cande, "Jacobean Furniture" (Stokes, $1.25), is a detailed study of a period for which Mr. Cande is well known. Those who have used her "Decorative Styles and Periods"—and who has not?—will find this monograph of equal interest and help.

IN the "Practical Book of Early American Arts and Crafts," by H. D. Eberlein and Abbot McClure (Lippincott, $6), the authors have set forth the fascinating results of the various forms of craftsmanship practised by our forebears of the Colonial and post-Colonial periods. The record cannot fail, in the first place, to produce greatly an intelligent appreciation of the many decorative art manifestations discussed, whether on the part of the habitual collector or of the chance admirer and occasional purchaser. In the second place, it cannot fail to spur modern crafts-workers to emulation of their predecessors; performances either by reproduction or adaptation. Indeed, one important item of the book's appeal is found in the stimulus and inspiration it affords the present-day craftsman and crafts-woman.

The subjects covered include early American silver; glass; decorative metal work in iron, brass, copper; movement in pottery, both within the present bounds of the United States and the majolica of early Mexico; decorative painting on household gear in its many ramifications; early portrait and allegorical painting; weaving; handblock printing on fabrics and paper; carving in wood and stone; and finally, lace-making, this latter chapter being contributed by Mabel Foster Bainbridge, who has done more than anyone else to revive this ancient craft.

The book, as its title implies, is thoroughly practical, in that it supplies exact data for the collector; for the layman, for example, the silver chapter with its list of silversmiths and their marks—and also an exceptionally readable and comprehensive volume of reference for the average person interested in one or another of the early decorative art manifestations. Furthermore, the presentation of subject material is of such value pointing to the ready possibility of a revival and adaptation of the old crafts for the enrichment of our architectural and interior decorative resources.

To this list of books on decoration we add two on architecture. "Domestic Architecture," by L. Eugene Robinson (Macmillan, $1.50), is a handbook designed for the layman and beginning student of architecture who would understand the principles that must be observed in building a house. It fits its purpose well. In addition to the ordinary facts of history and building are well written chapters on costs, on the practice of architecture and the relation between architect and client that will be found of value.

(Continued on page 72)
THE FINAL TOUCH TO THE LANDSCAPE SCHEME

Is Supplied by the Water Feature, Be It Pool or Fountain, Stream or Lake—Suggestions for Planning, Construction and Care

ROBERT S. LEMMON

A ND when you have left the desert, and come again to the fresh green of the river valleys, the last thing to which you grow accustomed is the sound of running water."

The last thing and, it might be added, the most welcome and soothing and wholly refreshing thing. In the glaring heat of the cactus country one misses keenly the softening effect of water in the landscape. By day, at least, the desert lacks intimacy, and when the reason is analyzed it is found to lie largely in the absence of flowing streams. For whether in Nature's gardens or in our own small imitations of her handiwork, water as a purely esthetic feature fills a place which no other one element can hope to attain.

There is no need here to dwell upon this humanizing influence of water in our gardens—our interest is centered rather on how it can be brought to serve our needs. The running brook admits of the greatest variety of effects, perhaps, but for comparatively few of our gardens is it available. Most of us must of necessity turn to the various forms of pools and pond-like water gardens. In the planning, making and care of these are certain well-ordered rules.

**Formality and Naturalism**

Broadly speaking, there are two kinds of water features: the formal and the naturalistic. The first may take one of several forms, such as the fountain basin pure and simple; the lily pool of regular contour, round, oval or rectangular, placed usually at the intersection of the garden axes; and the geometrically accurate pool whose primary purpose as a mirror of the surrounding trees and architectural features is served without the use of any water plants.

It is not my purpose now to take up in any detail the subject of garden fountains and their accessories, as these fully deserve an article all to themselves. Today one can find in the open market all manner of fountain designs especially executed for garden use, and the only confronting problem is the selection of that one of them which will harmonize best with the planting scheme in general, and the exact location in particular.

All of these fountains, of course, have one point in common: they call for a source of supply which has enough force to cause the water to flow from the opening provided for it. Provision must also be made to carry off the surplus water while the fountain is in operation. In some cases this overflow can be
The automatic and intermittent jet is simplicity itself. Some arrangement must be provided to take care of the overflow.

**THE INTERMITTENT JET**

Should you not care for any of the conventional “architectural” fountain designs, and wish something simpler, several good possibilities lie in the various forms of jet arrangements which anyone with a little ingenuity can install. One of the most effective of these is the intermittent jet which operates as regularly as clockwork, quite to the mystification of the uninitiated beholder.

This system is almost absurdly simple, and entirely automatic in operation so long (Continued on page 70)
The Colonial Plan

William B. Bragdon

A "Colonial" plan consists of a narrow hall continuing through the center of the house from the front door to the rear, thus cutting the building in half. The stairs, which with the fireplace mantels form the principal architectural decorative features of the interior, rise from this hall to the second story. From the entrance hall to right and to left two rooms open off on each side; these rooms are usually of equal dimensions, and their separating partitions stand at right angles to the direction of the hall. There are fireplaces in all the rooms, arranged back to back in pairs with a single chimney-pit in the center and dividing partitions; or each fireplace may have a separate chimney on the outside wall of the room. These rooms were used as reception room and library on the one hand, and parlor and dining-room on the other. If the house was a small one, the reception room was used as a dining-room and the room beyond as a kitchen, although it was more usual to locate the service quarters in an attached one-story wing with a lean-to roof.
at the rear of the dining-room. Often we find only one large room on one side of the hall, which has come to be called our living-room. In the smaller plans we find no porch at all, except at the front entrance or possibly a small one at the rear—but in the pretentious houses porches were placed at each end of the building, accessible from the reception room and library on one side and the parlor and dining-room on the other.

The stairs were made the principal architectural feature of the interior, because they were near the entrance and also admitted light to the lower hall from a window on the landing or at the top of the stairs. In some cases the stair is in a continuous run from floor to floor, and in others it is in a long run to a landing and a short return back. The balcony formed in the latter case is an attractive point on account of its balustrade. The more elaborate examples have either two sets of stairs, one against each wall, continuing to a common landing and returning in the center; or a central flight to a landing, returning in two separate runs, either in the opposite direction or to right and left, respectively.

However, many departures from any fixed rule are made by introducing intermediate landings where the stairs box in three side walls or graceful circular runs from a first to an attic floor. Still the type mentioned above may be called the usual one—a single stairway against one wall with a long run to a landing and a short return. The landing is placed high enough for passage under it to the rear door in the hall below by means of an arched opening.

Second Floor Arrangements

On the second floor there is a repetition of the first story hall in the center, with two bedrooms on each side over the rooms below. There is no bath, and rarely a finished attic story or a cellar.

In adapting the Colonial plan to modern requirements, the small front entrance, narrow hall and single stairs have been maintained, with a large living-room on one side, and a dining-room on the other with kitchen and pantry beyond. A service stair is also introduced in connection with the second floor, or a short run to the main stair landing. A fireplace is usually located in the center of one side of the living-room with the chimney on the outside wall, and a corresponding chimney in the middle of the outside wall on the opposite side of the house. This latter chimney is used for the kitchen flue, and possibly for a corner fireplace in the dining-room. In the modern house, there is generally a porch at one end, and an enclosed porch,
or sunroom, balancing it at the other.

The second story contains, as in former times, the central hall and four chambers, with the addition of a bath at the front end of the hall. Sometimes a large owner's chamber is located over the living-room, and an extra bath may be introduced between two of the bedrooms by permitting one of them to be carried out in the rear, in case there is a kitchen extension.

The Attic and Cellar

Often the attic is finished with two rooms, one at each end, and a store closet or an additional bath in a position similar to the bath below. In this case the main stair continues to the attic, either forming an open well to the first floor, or closed off at the beginning of the attic flight by a door and a partition.

As a final improvement on the old type of Colonial house, the cellar is excavated for furnace or boiler, laundry, preserve closet and toilet.

Throughout modern work, some general variations from the original plan are permissible, variations made excusable by the fact that customs and conveniences have altered so materially from colonial times. The requirements of good house planning today are in certain respects radically different from those of three generations ago, and he would be an ultra-lover of the antique who would insist that they be disregarded merely for the sake of adhering line for line to the original examples.

Yet it goes without saying that the 20th Century reproduction of a Colonial house may be varied only with extreme caution, else it will lose that atmosphere which is one of its architectural excuses for existing at all. Too frequently we find this atmosphere sadly impaired in the completed house, even though the original conception may have been virtually correct. Period reproduction of any sort can be successfully carried out only by one who has full knowledge and appreciation of the historical precedents.

Comparatively few laymen have the time to attain such a mastery of Colonial architecture, or the natural aptitude to apply it consistently. Special training in the fundamentals of the plan as well as the details of its development is essential to success. That this training is seldom possessed except by a professional architect is no more than natural.

(The discussion of "Defining Colonial Architecture" is to be continued in two other articles which will take up exterior design and interior treatment respectively. They will appear in the July and August numbers of the magazine.)
Once on a time we thought of slip covers only as a summer device to keep the house looking cool and clean. So soon as autumn came we packed them away. Now they have become an all-year device and in that capacity they serve a multitude of purposes. Besides keeping the upholstery beneath them free from dust, they cover up objectionable features of line and ornament which could otherwise be removed by changing the chair or getting rid of it entirely. In addition the cover offers an opportunity to give the room an interesting color spot.

Folding Windows

The porch or breakfast room should be built so that it is ready for all changes of weather. To meet that requirement have been discovered the folding windows which do away with the bother of having the windows removed when summer comes, and prevent the sticking, leaking, and rattling of windows loosely hung. These windows work easily and quietly, they open outward and do not interfere with screens; they are self-adjusting, staying just where you place them. In a minute the porch can be enclosed against the sudden summer storm and in an equally short time opened to the cooling breezes.

The Closet Slide

Not a one of us but knows the bother of diving blindly into the depths of a dark closet for that coat we hung a month ago on the last hook to the back. And when we do find it, we have to wiggle our way out. Here is a device which removes that trouble. It is an extension rod attached to the top of the closet. You pull the rod, the entire line of clothes rolls out within reach, and you make the selection easily.

A Wood Waiter

You are sitting beside the fire and the last log glows and pales into ashes. Utterly lazy, you would rather freeze than go down to the cellar and stagger back with an armful of wood. Why not then arrange for a wood waiter as a closet beside the fireplace? It can be readily built by any carpenter—a box with ropes and weights to make the raising easy. A shelf will divide it into two compartments, the upper and larger one for logs, the smaller one for kindling wood and paper. The man who tends the furnace will see that the waiter is always loaded with kindling and logs, and all you will have to do is unload it.

Slip covers can cover up a multitude of objectionable features in a chair.

For a summer change, why not dress the bed in a cool, clean slip cover?

Seasonal Changes

It is unwise to tire of your furniture. If you must live in a house the year round, see that distinct changes are made when summer comes. Of course, you have always done this with the living-room and porch, but has it occurred to you to make your bedroom summery? In place of the heavy curtains put up scrim or net and cover the rug with denim. With white or natural colored linen make a cover for the foot and head boards. It can be stenciled and the edges piped with a gay color crewel. Over the bed itself throw a cover. To the sides can be attached a full valance.
Go over the evergreens twice a year to keep them clipped to shape.

Right after blooming is the time to prune flowering shrubs like spirea, etc.

THE GARDENER’S KALENDAR

June

SUNDAY

This Kalendar of the gardener’s labors is aimed as a reminder for undertaking all his tasks in season. He is supposed to be fitted to the latitude of the Middle States, but its service should be available for the whole country if it be remembered that for every one hundred miles north or south there is a gain or loss of from five to seven days later or earlier in performing garden operations. The dates given are, of course, for an average season.

Boxwood hedges should be trimmed now. Use the regular hedge clipper for this.

MONDAY

Here in this seques-
ted garden:

Bloom the hyacinth and rose.

Here beside the modest stock

Flaunts the farring hollyhock:

Here, without a pang, one sees

Ranks, conditions and degrees.

All the seasons run their race
In this quiet resting place.

If you have no wheel barrow, better get one and keep it working this summer.

George V born, 1865.

1. Crowd now for fall, a cabbage, cauliflower, running-hoofed celery, kale and Brussels sprouts. For succession sow lettuce, beets, carrots, corn, beans, endive, peas, etc.

2. Bedding out of all kinds should be finished. Keep the plants pinched and well cultivated. In a few days all have a few extra hands to replace any that may have been broken and set back by accident.

3. Soy now for fall, a cabbage, cauliflower, running-hoofed celery, kale and Brussels sprouts. For succession sow lettuce, beets, carrots, corn, beans, endive, peas, etc.

4. Hodges require attention now. Keep them pinched and well cultivated. Practically all the annuals and some of the perennials, such as calceolarias, asters, calendula, phlox, stocks, and others.

TUESDAY

Stop cutting apparatus just as soon as your peas come into bearing, and earlier with young living. When they are a bed a top dressing with hay, keep the weeds down, and watch for apparatus beetles.

6. All kinds of fruit evergreens such as boxwood, rhododendron, etc., should be trimmed in the fall. Even though you don’t like these trees still and formal, they should be clipped.

7. Transplant from seed beds into prepared soil, and tied up. Be sure of your plants. Where the vines are already trained, cut the wild they fruit late and the fruit is small.

8. All kinds of vegetables which cannot be killed by the frost should be clipped. Even though you don’t like the plants of sweet corn, beans, peas, brush lima beans and peas, keep down the weeds everywhere.

Charles Dickens died, 1870.

9. Don’t neglect thinning vegetables that require it. While doing this remove by hand all weeds in the row which can’t be reached with a cultivator.

10. You can’t kill rose bugs with poison. They are bantered, and if your rose bed becomes infested, you must resort to hand picking. Spraying the bugs is a sure way to keep them at bay.

11. All kinds of climbing plants should be gone over and shoots partially trained. If not pruned now it will save many fruits from breakage, and growing in undesirable places.

12. When the melon plants fill their frames, the latter should be removed, the plants spread out evenly and pegged down in the desired position. Then spray regularly with Bordeaux mixture.

13. Don’t neglect the orchard. Keep a sharp lookout for “yellows.” These pests penetrate in the ground, cut down and burn any damaged trees. It is advisable to apply the “fog blight” among apples and pears.

14. Keep your tomatoes trained, and pinch them as often as necessary. Where the vines are already trained, cut the wild and pinch the plants to induce proper growth.

15. Roses can be improved in quality by the application of liquid manure, and the prompt use of borax, or other such compounds. All suckers from the root should be cut out.

16. Successional sowings should be made of corn, beans, etc. Keep the ground well-stirred and don’t burn the roots to death. Some suckers from the root should be cut out.

17. What are you going to do to protect your strawberries from the birds? A fish net or other protection must be provided. When the bed is, heat, mosquito covers the air and spoils the berries’ flavor.

18. Bitter bitter of the tulips, next to seeds, the following year. Make your bed of from nine to twelve inches, from two to four feet wide.

19. Don’t neglect to stake your tall flowers. A sudden storm blows them down. Hollyhocks, sunflowers, rockcress, helianthus, dahlia, lilies, mandrazas, all need adequate staking.

20. On all newly planted trees, shoots, and vines, a mulch during the winter is necessary. Avoid that from continued artificial warmth.

21. Carnations in the field should not be neglected, as next winter’s flowers depend largely on what is made now. Keep the ground well-stirred and pinch the plants to induce proper growth.

22. Keep your tomatoes trained, and tied up. Be sure of your plants. Where the vines are already trained, cut the wild they fruit late and the fruit is small.

23. Keep your tomatoes trained, and tied up. Be sure of your plants. Where the vines are already trained, cut the wild they fruit late and the fruit is small.

24. Keep your potatoes well cultivated, but don’t till them up until the plants show flowers. They must be pruned with poison to kill the berries, but Bordeaux should be used for black spot.

25. Don’t be afraid to pick flowers—if this is done during summer hot, the plants will not die. When you have finished gathering flowers, and foliage, they may be pruned tine the morning. Prune flowers in cold weather.

26. Sow frames or greenhouses that are being used during summer should have a slot trellis or some other form of shading. Don’t use whitewash on the glass, as it gives too much shade.

27. Spraying is always necessary around your grounds. Use arsenical Paris green for leaf eaters, and a strong solution of emulsion for sucking insects, and Bordeaux for fungous diseases.

28. The dead flowers should be removed from the chrysanthemums. Break off the old flowers, using the thumb and forefinger and being careful not to injure the new shoot in doing so.

29. Summer pruning of fruit trees that have reached a bearing size is also advisable. Remove all thin, weak shoots, and pinch out the tips when you want to stop growth.

30. Thinning fruit trees at this time and a much better quality. Also, don’t forget to bag your grapes; bags made for this purpose can be had from any supply house and are well worth the trouble.

FRIDAY

1. Bulbous plants such as tulip, daffodil, etc., can now be dug up and planted in a dry, sheltered place to ripen. These bulbs can be used for planting again in the fall.

2. The most important job to be done for the month is to thin out crops of sweet corn, beans, peas, etc., by hilling up corn, beans, peas, brush lima beans and peas, keep down the weeds everywhere.

SATURDAY

You must hand pick cabbage worms after the plants start to head up.

Newly planted trees that are late in starting should be cut back severely.

Tie up the tomato plants before they start to spread unduly. This makes for better fruit.

Go over the evergreens twice a year to keep them clipped to shape.

Right after blooming is the time to prune flowering shrubs like spirea, etc.

You must hand pick cabbage worms after the plants start to head up.

Corn should be well filled. One reason for this is to stiffen it against the high winds.

Sixth Month

Week ending June 23, 1917
Crystal is now the smart thing for the dressing-table. These Colonial candlesticks, with Chippendale bead design, 9" high, $2.50 each; Colonial tray 12" long, $5.50; cologne bottle, Mayflower cutting, $4.50.

Of cut crystal, this oyster or soup plate—$3.25 a dozen. Glass cocktail cups, $1.50 per dozen.

English dinner service of crystal. Colonial gold decoration. Dinner plates, per dozen, $8; dessert ditto, $5.50; tea cups and saucers, $8; bouillon ditto, $12. Baker, $1.50; casserole, $4.50.

You may match your tea set, your breakfast room decorations or your morning gown with a colored china jam jar 3" high. Cover, plate and spoon are of Sheffield silver, $2.50.

Be it never so luke-warm, iced tea must seem chill and refreshing from a set of crackled glass. The eight pieces come for $5.75.

A water pitcher and half-dozen glasses of exquisitely cut crystal—$5 complete. The mahogany serving tray, 19" diameter, costs $4.25.

When my lady does not arise, she will enjoy her own particular breakfast china, bordered in basket design with pink flowers. Sixteen pieces, $6.50. Enamelled breakfast tray, 23" long, $2.75.
Straw garden basket with trowel, twine, shears and straw cuffs, 10½" wide, 5¼" deep; black and yellow, $3.50.

White enamel wardrobe cabinet and mirror, cretonne covered drawers. 16" by 30" by 64" to top of mirror, $34.

Brass Chinese hook of interesting design—for flower-bowl, bird-cage, etc., $3.

Night set with flower decorations, $7.50. The pitcher has a tightly fitting, dustproof cover.

Felt or cretonne covered folding card table, white, ecru enamel or mahogany finish, $3.75. 30" by 27". Leather, $8.50.

Damask with which table above may be covered, 36" or 50" material. Other coverings to order.

To the left, the interior of a threefold wardrobe screen, with shelf and hanger. It is 5' 8" high, each panel measuring 1' 6" wide.

Right, the same screen closed. In oak or mahogany with tapestry panels, $33.50. A fourfold screen, in any special color enamel with 80-cent cretonne covering, costs $48.
THE HOT WEATHER TRENCHES

D. R. EDSON

From the middle of June to the middle of August, there is usually hard dodging in the garden, and particularly in the beginner's garden. This is partly because the garden is new, and partly because the gardener is new. Scorching hot, dry weather comes; plants that grew most enthusiastically in the spring get tired; weeds grow luxuriantly, and if one attempts to pull them, they may carry some of the rightful inhabitants of the garden along with them; plants similar to those that one transplanted readily in the spring, in apparent proviso the operation, now, but within two or three days lie down and die. Even seeds from the same packet that sprouted vigorously in the spring are put in the ground now, only to disappear mysteriously—they won't come up themselves, and when one goes to dig them up, have vanished entirely.

And yet the garden over the fence or across the way may be green and flourishing, as though the roots in it could reach down to hidden springs, or its owner possessed some magic by which he could ward off this midsummer blight.

Why the difference?

It is not sufficient to put it down to any such general cause as dry weather, or bad luck. The beginner almost invariably tries to find solace in the belief that he should have selected other varieties of vegetables or flowers. Let him not lay that flattering function to his soul! In nine cases out of ten a selection of varieties, regardless of whether or not ideal, is the least important of the several factors concerned.

The factors that are always important are:

Loss of moisture; lack of air; shortage of plant food; shortage of available nitrogen; and neglected old age of the plants themselves.

How to Handle the Situation

The practical problem of how to prevent these things from interfering with the success of your garden remains, however, even when you realize where the trouble lies. The possession of this information will not only show you what to do, but help to give you courage to keep up the fight against what to the beginner sometimes seems overwhelming odds. To be forewarned is to be forearmed—if you act upon the warning! Let us take the several obstructions to the success of your garden in order, and see what can be done about overcoming them.

From what we have already seen in the preceding articles of the part which moisture in the soil plays in all plant growth, the tremendous and immediate effect which a shortage of soil moisture would have on the development of everything growing in the garden must be selected other.

Yet this form of the slackening up of garden growth is so gradual and insidious that the beginner hardly ever senses the full extent of the damage that is being done. If the cutworms chew off five of fifty cabbage plants, his loss is not, at once, fully apparent—he is likely to report to his seatmate on the way into town the next morning that this exasperating pest has destroyed about half of his cabbage crop. The loss looks to him much bigger than a 10% one. On the other hand, dry weather might reduce the growth of his cabbage plants 30%, compared to what they would have been if a full abundance of moisture had been present, without his thinking much about it. There is perhaps something of a feeling that the weather is sent from Heaven, while Beelzebub supplies the bugs; so that we have more reason for complaint in the latter case. As a matter of fact, the remedy for the former is much more certain and available than for the latter—but leaving that point for still a little later, let us see how to make the most of such moisture as Providence may supply in the normal course of events.

Last month we spoke of cultivation especially to "conserve soil moisture." For those who did not see that article—and to give a little more emphasis to a thing which can hardly be over-emphasized—let me repeat briefly what to do:

After the first two or three cultivations or hoeings in early spring, they carry some of the early crop fairly free from weeds, a light, shallow cultivation should be given every week or ten days to keep the surface a good over the garden continually broken up in the form of a layer of dry dust 1" or so deep. It is particularly important to get over the entire surface of the garden after every rain. Start your wheel hoe or scuffle hoe, just as soon as the ground has dried out enough so as not to be muddy and sticky, and break up the surface or crust which immediately begins to form as the soil dries out on top.

Still more effective than the dust mulch, or rather in addition to it, where it can be utilized, a mulching of light manure, old compost, or even of the cut grass and trimmings from the lawn and around the place will help to keep the moisture in the soil to an almost incredible degree. I have seen even ordinary field stones or boulders from 2" to 4" in diameter successfully used as a "mulch" around fruit trees. Among the things especially benefited by mulching are currants and gooseberries, strawberries, cauliflowers (the summer kind) and egg-plants. A mulch around the tomato plants will help to keep them going until finishing off with the plants. A mulch should be put on 2" or 3" deep so as to keep the soil underneath it shaded from the sun and cool, but it should not be light and open enough so that air can readily penetrate it. A further advantage of such a mulch is that it helps to smother the weeds which always strive for supremacy.

Don't Smother Your Plants

A thorough stirring of the soil around growing plants almost always results in a noticeably increased or stimulated activity in their growth. No soil moisture has been added by this operation, but two other important things are accomplished. First, all of the plant roots need to breathe as well as to eat and drink. When the surface of the soil is left alone for long intervals, it becomes tight and hard, and air cannot readily enter it. By thorough cultivating, however, the soil is completely aerated and ready to use, so until the surface becomes hard again from being walked over or neglected. Besides admitting air each cultivation breaks up a portion of the soil which has escaped previous pulverization, thus exposing latent plant food to the moisture and the bacteria in the soil, converted into forms that the plant roots can use.

So you can see that even in dry weather there is every reason to keep your wheel hoe going, even though the soil may be dry and the rows clear and free from weeds.

Four main conditions make for good summer vegetables: sufficient moisture, air circulation, plant food supply, and freedom from weeds.
CAST back in imagination, if you will, to Arthurian days in Merrie England.

On the greensward behind a feudal castle a strange scene is being enacted. Regal ladies in girdled brocades are wildly applauding two knights in armor who cavort chivalry on either side of a bank of earth that stretches between a bastion on the one hand and a lance stuck upright in the ground on the other. With his mailed fist each strikes at a ball, striving to hit it to the far side of the barrier where his opponent cannot reach it in time for a return.

From within the closed visors of the two knights come sepulchral mutterings. "Forty-six.—forty-thirty—deuce—vantage in"—or whatever were the Arthurian equivalents of these stirring ejaculations of the courts.

Yes, they are trying to play tennis.

Those were indeed the days of real sport, from hawking to hunting the Holy Grail. Of a truth there were giants in those days, as there must have been to wear armor through a hot five-set match—if they ever did. And from then to now tennis has been known and played, a proof, if any were needed, of its worth as a game of wide appeal and undying popularity.

To be sure, the modern game is so widely different from that played by the nobles of King Arthur's and other courts that a casual observer would hardly recognize it. In two respects, however, a similarity can be clearly traced: in both games there were more or less smooth and regular playing surfaces, and in both a division—earth mound or net—separated the opponents' territories. Obviously, tennis cannot be played without a tennis court, and so we come without further preamble to the subject of the present article, the making of a sensible playing ground.

THE LOCATION

The first consideration in making a tennis court is the location. A space 60' x 120' will be required, the latter dimension running north and south so that the game can be played at any time of day without undue sunlight shining in the eyes of any of the contestants. A site nat-
uraly well drained is the best, and under no circumstances should you select a hollow into which the seepage and surface water from the surrounding higher ground will find its way. If feasible, let the court be within convenient distance of the house, so that it may come to be an open-air gathering place, almost an outdoor living-room, perhaps, with the addition of wicker or willow chairs and tea tables, a summerhouse or lawn shelter, and the dozens of other attractive things now made for such summer purposes as these.

Too frequently little attention is paid to the matter of the court's background. A very light background, such as a white stucco house, for example, makes it difficult to see the ball passing across it. On the other hand, crowding trees are objectionable because their foliage is too dark. The ideal background, from the players' standpoint, is plain, ordinary blue sky.

Finally, in determining the site for the court, consider the amount of labor and expense involved in constructing a thoroughly satisfactory playing area. Such items as heavy grading and filling, much blasting of rock, etc., should be avoided if possible, for they are apt to run into large figures; and any slighting of the work will show sooner or later.

Broadly speaking, there are three kinds of tennis courts in use in this country: turf, clay and concrete. Which of these will be the best for you is something you will have to judge for yourself after reading up on and considering the special characteristics of each.

GRASS AND CLAY COURTS

The grass court is unquestionably the most artistic of these types—provided you take care of it. It calls for the best of soil and sodding in the first instance, and frequent rolling and cutting after it is once established. For best results the court should have a 6" layer of stones as under-drainage, covered with 18" or more of good soil. When the latter is perfectly level and compacted by much watering and rolling, it should be given a final smoothing off preparatory to sowing the fresh grass seed or laying the sod, as the case may be. If you turn to the article on lawns on page 42 of this number you will find much that will assist you in finishing and caring for a grass tennis court. If any weeds appear, of course they must be taken out at once, root, stock and branch.

While many a good grass court is made without under-drainage, the clay court virtually requires it. An excavation 1' deep should be made and leveled roughly with a spirit level. Then put in a 6" layer of trap rock or other broken stones the size of an egg, and level this. In ordinary situations a drain made of two lines of terra-cotta gutters should next be laid across the court at the net line. Fill these with stones and slope them enough to carry the water off at the sides—a 2" grade from the center to each end will be sufficient. If the soil is porous you can slope the court itself from the net to each end, giving it a grade of not over 2" and carrying off the water in this way. Where very heavy soil is involved, several lines of drains should be laid lengthwise of the court under the trap rock, sloped toward and connecting with the cross-drain at the net.

With the drains laid according to these suggestions, the next step is to put in a 3" layer of fine broken stone or coarse gravel, which must be pounded hard and level. On top of this goes a layer of clay and sand mixture from 3" to 5" thick, to form the playing surface. An average mixture consists of 1 part of sand to 4 parts of clay, but this is subject to variation according to the quality of the clay used. The ideal to work for is a surface not too sticky to permit the water to soak through easily, nor so porous as to be soft under the players' feet.

Finally, level the surface and roll it repeatedly. If no rain falls, you will have to resort to artificial watering in order to get the court well packed. Should worms become troublesome at any time, destroy them with one of the preparations made for this purpose.

USING CONCRETE

Advocates of the concrete courts so widely used in California claim, amongst other things, that this material admits of playing throughout the year. Unquestionably this is true. Again, a well-laid concrete court is more permanent than one of grass or clay.

One authority states that a 3' base of concrete, in the proportions of 1 sack of Portland cement, 2½ cubic feet of clean, coarse sand, and 4 cubic feet of clean pebbles or broken stone, should be laid on a 6" drainage foundation of cinders. The concrete should be machine mixed if possible. In a joint at the net line is placed tarred felt ½" thick and 4½" wide, and reinforcement in the concrete itself is furnished by wire fabric pressed into the concrete base before the latter sets.

The surface layer of the court is made in the proportions of 1 sack of Portland cement to 2 cubic feet of clean sand, mixed stiff. Half a pound of carbon black mixed with each sack of cement will give a grey shade to the court which will be easier on the eyes than the uncolored mixture.

Where the ground is uneven a court may be made by careful grading and the use of retaining walls.
This illustration represents a reproduction of an Antique Persian "Garden" Carpet of the Sixteenth Century.

The Beauty, the Charm and the Interest of RARE Antique Rugs are embodied in our perfect reproductions.

In the interesting design depicted above is represented a Persian garden in which are shown streams of water, flowing from a central pool, and bordered by rows of cypress trees and flowering shrubbery.

The balance of the design shows a formal arrangement of trees, etc., characteristic of the East.

The above design, and many others of great interest, are reproduced upon our own looms in the Orient, in qualities ranging from moderate prices to those of extreme fineness.

We should be pleased to write you further upon request.

W. & J. SLOANE
Direct Importers of Eastern Rugs
Interior Decorators    Furniture Makers
Floor Coverings and Fabrics
FIFTH AVENUE AND FORTY-SEVENTH STREET    NEW YORK
"Do your bit" to increase the country's food supply by making your garden produce its maximum. Insure the success of your planting and make the most of your expenditure for seeds and fertilizer. Each foot of soil will yield its utmost, regardless of heat or protracted drought, if you install the

Cornell Systems of Irrigation

An arrangement of underground piping leads the water to upright sprinklers capped with the famous Rain Cloud Nozzles which deliver a fine spray or a heavy rain, as you prefer, over every part of the garden. The volume and heaviness of the shower can be controlled perfectly, giving just the amount and character of irrigation which you need. Cultivation is not interfered with by this installation.

For your lawns use the Cornell Underground system with Rain Cloud Nozzles. Perfect irrigation over the whole area and no interference with mowing.

Write for illustrated literature.

W. G. CORNELL CO.,
Engineers and Contractors


Union Square, New York

A successful grouping shows house engine house and elevated tank in a compact unit. Below the tank is provided a room for tools

Country House Water Systems
(Continued from page 37)

taken to provide the tank with some measure to guard against overflow. The further plan might mean much damage to the rooms and goods below. Perhaps the best form of tank is the old style of plant, with proper reinforcement and stay rods, and lined with tinned copper. Another way is to build the wooden structure like a mill penstock—planks laid flat, one on another, each course tarred and spliced together. Whatever form of tank may be used, it is necessary that the house structure be designed to carry the extra load involved.

Elevated Tanks

In connection with this we might mention the elevated tank, which is incorporated in a tower, forming part of the house structure and designed to be a permanent feature of the house for future use. This form has decided artistic possibilities and is practical and cheap where the space below the tank may be effectively used for house purposes. This form of tank is not of recent origin, and many examples may be found in the rambling structures along the coast. Where the nearness of our supply will admit of it, such treatment is not to be passed by lightly.

The isolated cistern of the foregoing is the common wooden stave tank seen so commonly in its undecorated state, elevated on a wooden framework. It is a thoroughly good article and is found everywhere in the United States. But as a thing of beauty, it is just about four hundred per cent minus. However, by enclosing the supporting framework, preferably in some form that has interior utility, and by covering it with something that looks like a roof, it may become even attractive. This may be done at no great expense, and the result is good enough to be used to good advantage. The principle is simple: air under pressure is conveyed into the lower end of the water or conduit pipe, which is at the top and a permanent form for the enclosing concrete shell. It is lined or faced to a higher level below the ground level, as its protruding portion may well be earth and sod covered to the opening at the top. But it is altogether desirable that an interesting shrub and tree planting be devised to remove any possibility of the mound being mistaken for the grave of the family skeleton or a pet elephant.

FORCE AND LIFT PUMPS

The problem of lifting water from the source was solved by the pump. If it be merely a case of lifting it from the ordinary well for the pail or trough, the ordinary hand pump is perhaps the best agent obtainable. But our problem involves more than this, and hence we have to do with the force and lift pump, of which there are many good makes. These pumps work on the plunger principle and are the ordinary type. For a well that is well filled, what is termed an "air lift" pump may be used. The principle is simple: air under pressure is conveyed into the lower end of the water or conduit pipe, which is at the top and a permanent form for the enclosing concrete shell. The pressure of the air through the former raises the water in the latter and forces it toward its place of ultimate delivery.
Owners Like LUTTON Greenhouses

because they always get full value for the money expended; the graceful design and attractive finish are a continual source of satisfaction; built to give long service, their up-keep cost is small; and they are wonderfully productive.

ARCHITECTS endorse LUTTON construction because they appreciate the value of LUTTON improvements, insist both horticulturally and architecturally. They know that an advantage has been achieved in making the frame-work essentially compact, which reduces shadows and permits more light and ventilation. Builders know that they have LUTTON Greenhouses that harmonize with their surroundings.

Full particulars of LUTTON Greenhouses upon request.

WM. H. LUTTON CO.
Main Office & Factory, 272-278 Kearney Ave., Jersey City, N.J.
Show Room, 2nd Floor, Grand Central Terminal, New York City.
Western Office, 716 Sykes Block, Minneapolis, Minn.

MODERN GREENHOUSES
SUN PARLORS
CONSERVATORIES
COLD FRAMES

GARDENERS are LUTTON enthusiasts because LUTTON Greenhouses are so easy to handle. The gardener is sure of excellent results because temperature and ventilation are controlled so perfectly. He is sure of getting all the light and is not troubled with dripping of condensation upon top plants. He appreciates the extra headroom, due to the height of the frame, which permits displaying tall plants to better advantage.

The Uni-Lectric brings to the summer home electric current for both light and power. At a very nominal cost you can have all the lights you need—you can operate the various electrical conveniences and you can have 24 hours' continuous service every day if you wish.

Big Capacity

Because of its generous capacity for power and heat as well as light, the Uni-Lectric makes the ideal outlet for summer homes. Its capacity is sufficient for 50 lights at one time. You can operate an electric water supply system, electric heaters, electric irons, vacuum cleaners, electric fans, percolators, toaster ovens, and larger electric stoves with capacity for breakfasts, suppers and ordinary dinners. Your large kitchen range need only be used for one meal per day.

Then without one cent of extra expense you can charge the six-volt storage batteries of your car or motor boat while using current for other purposes.

No Belts—No Batteries—110 Volt

Our patented, high speed, rotary sleeve valve engine drives the generator with such smoothness that all necessity for storage batteries is done away with and the renewal of batteries and battery up-keep cost is permanently eliminated. Moreover, with the Uni-Lectric the summer home owner is never bothered with the troublesome job of draining off and refilling batteries every fall and spring.

The Uni-Lectric generates standard 110-volt current the same as city lighting plants. Uses the same standard lamp bulbs and electrical devices used in your city home and obtainable in any electrical supply store.

Easy to Care for—Easy to Operate

The Uni-Lectric is built in one compact unit with the engine and generator direct connected. Extremely simple in construction; only 24 inches wide, 25 inches long and 42 inches high. Can be placed in any convenient location, no foundation required. The Uni-Lectric requires only the care and attention that you would give any machine from which you expect many years of service.

Writing may be arranged that engine can be stopped by switch located in bedroom.

Because storage batteries are unnecessary with the Uni-Lectric we guarantee the entire outfit. It has proven its efficiency and economy by actual service in the hands of users.

WATERMAN MOTOR COMPANY
164 Mt. Elliott Avenue, Detroit, Mich.
Write today for a free copy of our big, instructive catalog on electric lighting for the summer home.

Clean, safe, freshly-filtered Water

Is a Comfort and Protection to your Home

For all household purposes—in your bath; in laundry, kitchen or pantry—its value is evident. Trouble from leaky faucets or valves is largely avoided. Bathroom fixtures, piping, boilers, etc., are protected from discoloration and accumulations.

Loomis-Manning Filters

afford the maximum of such protection because they are scientifically designed to keep in excellent working order and are made in a substantial, durable manner. They require no expert care.

These filters can be readily installed without confusion in new or old houses or buildings. The parts can be taken through an ordinary doorway. They cause no appreciable reduction in the flow of water or in pressure, and are suited for use with any kind of water supply system—either city or country. They are made in several sizes and types to meet any water conditions.

Hot Water Discoloration Eliminated

Loomis-Manning Filter Distributing Company
Est. 1880
1445 So. 37th St., Philadelphia, Pa.
where it is an object to save floor space and avoid the plunger type, the rotary pump may be used. The working principle of this pump is that of a revolving piston, which gathers up the fluid and ejects it at a central discharge. It is light, simple and compact as well as easy to operate. It may be driven by belt, wheel gearing and direct in a concrete base or electric motor or other power plant.

As to Mechanical Power
Taking up forms of mechanical power, the first is that obtainable from the wind. The idea is an old one and has been commercialized so as to be quite common. It should be used only in such places as are sure of considerable wind; otherwise it is practically useless. It is hardly worth while in an ordinary home to consider the problem from the point of view of the picturesque examples of Europe. While excellent as mere demands, their adaptation to modern practical uses involves more expense than the tinkering over of the modern engine, and in this problem, there is nothing to be said against the old shape, provided one's wallet is fat enough to buy one. In such a case, it has been done in this way that is excellent in many ways.

The second one is that which adjusts itself to a change of wind without any help from the outside. As an artistic project there are several variations of that of the accentuated storage tank, and its simplest treatment lies in enclosing the frame in wood with perhaps a platform at the top, iron which one might get at the machine to repair it. But there is one caution regarding this: whether or not the location where the wind the sweep is violent; the ordinary type has a sad habit of going to the ground, and a safe, that, though heavier, article is that in which the sails collapse automatically and become non-working under dangerously severe wind conditions.

It is altogether probable that, for ordinary use, the electric motor, if electricity be handy, is as good as any power that may be had. Its handling is simply simplicity itself, and clean above all things. As such it should be excellent for use in the cellar, or any location under the general roof of the house.

When one is familiar with the workings of the gasoline engine, it is the natural power for the home pumping plant. A good motor should be started up with its working parts exposed and easily accessible. As the horizontal type is more rigid on its base, such advantage should be considered when comparing it with certain qualities of the upright type. It is always best to choose a motor of greater power than is really necessary, so that the engine may not be subject to damage from parts in the running of the engine. The engine and gas and exhaust pipes should be as short as possible and all bends made sweeping rather than sharp. As it is almost certain that some unexploded gas will escape, and as such gas is bound to ignite sooner or later, it is safer to have the exhaust pipe strong enough to bear a pressure of seventy-five pounds per square inch, and make sure that the noise from the exhaust may not become a nuisance, muffle the pipe in some thoroughly effective and accepted way.

The foundation for the engine might well be somewhat heavier than that called for by the drawings furnished by the maker. A concrete bottom, tied in with scraps of wire and old iron, will form a solid mass in which to bed the anchor bolts. And as cement deteriorates under the action of oil, a top-plate of iron or flagging is preferred. It may well be remembered that wherever an engine of any sort is to be run, dust, dirt, etc., must be kept away. In the case of a concrete floor with its constant wearing away is not advisable. An excellent arrangement consists of 2"×3" strips laid down and properly anchored, with flooring nailed to them. Do not use a metal ceiling in your engine house else moisture will condense and drop upon the engine. Allow ample space for your mail and chumery (at least 3'), and also ample lighting space. Keep your gas tank outside the engine room. Install a vent at the highest point in your engine room, so that all light may have access.

Gasoline, being easy of volatilization, involves some danger. For this reason, some might prefer the oil engine, which is extremely simple and easy to handle and care for.

The hot air engine is an old and simple contrivance. It calls for low power might well be considered. It takes up but little room and own. Mispolicy can be run with but little knowledge of machinery. It answers many a problem in the cheaper, simpler sort.

Another system that has found favor with many is that of compressed air. The functions of it, but the main idea is that air and water together are forced into a goblet wind, which is, of course, airtight. The pressure of the air upon the fluid raises it to the level required. This system is easy to understand for it need not be placed in the cellar. The tank may be placed in the basement, which is but one of several methods of handling it. With a hot air or electric system, it may be successfully operated by a woman.

ACCESSORIES AND INCIDENTALS
The treatment of the pump-house as a whole is of course limited by the practical considerations. But to one who knows pumps and their temperamental natures, a set of suitable arrangements will be almost human and the building of a good bench just outside the door may not be found out of place. But whatever the design, the building should be made unburnable, on the inside at least. Besides this, a chemical fire extinguisher is a comforting thing to look at, even if it is never used except as an ornament.

Finally, a word regarding pipes: The common conduit is of galvanized iron, and the size may range from 1" to 2". It is said to have a life of some fifteen years under ground—long enough for it to lie without overhaul. In its laying, it should be marked by stone or cement piers, that it may be easily located for repairs, and it should be thoroughly tested for leaks. A line of 2" is filled in. There should be a sufficient pit at either end of this conduit, next the reservoirs and house respectively, for installing good and substantial shut-off. The form of the lower shut-off should allow the main pipe as well as the house upright to drain clear of water, should this be necessary. As a protection against winter freezing in these pits, it would be well to cover the bottom with dry leaves, above which are a couple of bags of sacking filled with stable dressing.

ANCHOR POST FENCES
Mechanical Perfection Insures Permanent Attractiveness

For twenty-five years Anchor Post Fences and Gates have been noted for that perfection in design and material that stamps an article "superior quality."

That there is real economy in purchasing of a manufacturer who rigidly maintains the highest standards of quality in his product, is demonstrated by the thousands of Anchor Post Fence installations which, after years of service, show no evidence of deterioration.

We build Standard and Special Wire and Iron Fences to meet every conceivable requirement and will gladly study your particular fence problem and submit designs and estimates.

Anchors for Suburban Homes

CATALOGS
Our Catalogs describing Lawn and Garden Fences, Tennis Fences, Iron Railings and Gates, Farm Fences, Poultry, Dog and Special Enclosures will be found very helpful. Ask for the one you require.
Is Your Laundry Equipment Satisfactory?

If you could see the DAYLIGHT WASHING MACHINE in operation, you would know why we claim for it SUPERIORITY over all other machines. It PUMPS AIR and WATER, through the clothes, by FORCE and SUCTION, not only cleaning and purifying in the best sanitary way, but giving a renewed WHITENESS not obtainable by any other method.

It does this with LESS ENERGY, LESS DRUDGERY and without the disagreeable noise and clatter, common to other machines.

A handsome, sturdy, complete machine. All parts correctly machined. All metal parts GALVANIZED, with NICKEL PLATED CONTROL LEVERS.

Complete information on request to Dept. H.

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What We Have Done For Others—We Can Do For You

During the fifty years we have been building greenhouses, it has been our privilege to construct Moninger conservatories on many of the most beautiful country estates in America. And we are very proud to be able to say that in every instance, we have been able to completely satisfy the owner’s demand for the best work and service obtainable.

No matter if the greenhouse you are contemplating is large or small, you will find us equally anxious to make your greenhouse a source of lasting pleasure. If you will write us of your wishes, we will be glad to submit sketches and estimates without charge, and to send you our booklet which is full of interesting information on indoor gardening.

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Southern Pine In the Finer Homes

More and more, builders of the finer homes in this country are showing their appreciation of Southern Yellow Pine for interior finish and trim. Even when its exceptionally low cost is given no consideration, its natural beauty of grain, its fine texture, and the pleasing manner in which it takes stains, varnishes and enamels, make it the first choice of a constantly increasing number of the most discriminating. It is

A Wood of Striking Character

finished in its natural color, and because of its light tint, there is no shade or tone that cannot be obtained with the use of stains or paint.

You can see in most offices and stores samples of Southern Yellow Pine house trim finished in all the latest effects. A list of such exhibits will be sent you on request; and we will mail you, free of charge, a booklet handsomely illustrated with color plates, giving complete directions for finishing Southern Yellow Pine.

Southern Pine Association

Southern Pine Association

S054 Interstate Bank Building
New Orleans, La.
A sword-guard in the manner of Mitsu
chii NojiyI, a 16th Century metal-
worker of renown.

Sword-Guards of Feudal Japan
(Continued from page 25)

damascening in gold and silver on
iron. The second Kanshiyo engraved
his sword-guards with copper orna-
ment and Hirata Donin introduced
the use of translucent enamels. The
pierced work of Kinai of Echizen
is supreme in its elegance of form.

NEW SCHOOLS OF TSUBA

The close of the 17th Century gave
rise to three schools of tsuba deco-
rations—the Nara School, rebelling
against the academic style of the
Goto, the Yosho School and the
Omori School. In the work of the
masters of all three of these schools,
the Goto influence may still be traced,
even though such metal-workers as
the Nara tried to get away from it.

The School of Ishiguro (Yedo) of
the early part of the 18th Century
came to be famous for its flat in-
cised work, introducing colored
surfaces. Kato Natsumi may be men-
tioned as the last tsuba maker of dis-
tinction. The tsuba of the period be-
tween 1840 and 1870 were very elabo-
ratey decorated, and obviously could
never have been used for their pro-
fessed purpose. However, the col-
lector will wish to acquire specimens
of them, if only as examples of the
marvelous handicraft of the Japanese
metal-workers.

COLLECTORS' HINTS

Nearly all of the imitations of
genuine old tsuba can be detected
by holding the guard on one's finger-tip
and striking it sharply with another
piece of metal. The genuine tsuba
will emit a bell-like sound, the cast
imitation a dull one.

A perfect patina is always to be
sought for in a tsuba. The following
particulars are quoted by Huish from
Professor Roberts-Austen: "Analy-
es show that the former (shakudo,
one of the principal alloys) usually
consists of 95% copper, 15% to 4%
gold, 1% to 5% silver, and traces of
lead, iron and arsenic. The latter
(shibitsu, another important alloy)
contains from 50% to 67% of cop-
pers, from 30% to 50% of silver,
with traces of gold and iron. The deriva-
tion of the name shibitsu is 'one-
fourths,' which is clearly incorrect.
The precious metals are sacrificed in
order to produce certain results; in
the case of shakudo, the gold enab-
ling the metal to receive a rich pur-
cile patina, or patina, as it is called,
when subjected to certain pickling
solutions; in that of shibitsu, the
alloy forcing the metal to assume a
beautiful silver-gray tint under the
same process. It is one or other of
these influences which gives the
patina to all Japanese metals, and it
is understood by their craftsmen in
a way which no other has yet arrived
at. A worn-out patina will often re-
assert itself by the aid of much
handling, the moisture of the skin
being all that is required. This shows
the artlessness of the producer in
forming his alloy so that the forma-
tion of the patina should be assisted
by a treatment which an article in
everyday use is sure to obtain."

(Continued on page 64)

FLINT & HORNER'S SUMMER
FURNITURE

For Country Homes, possesses that inimitable
refinement and elegance of detail synonymous
with "Flint Quality" and "Hornor Service," and
is designed for the homes of all, however simple
or luxurious the appointments.

Particularly beautiful among the many exclusive
designs in Enamelled and Light Woods which we
have on view, are exquisite pieces, hand-painted
in reproduction of Adam and Sheraton designs,
also Chinese and Japanese Lacquer.

ORIENTAL AND DOMESTIC RUGS AND
DRAPERIES

FLINT & HORNER CO., INC.
20-26 WEST 36th STREET
NEW YORK
Fencing the home grounds

As you can see from the illustration, "EXCELSIOR RUST PROOF" FENCE is quite sturdy, yet graceful and pleasing in design. It has wonderful rigidity and strength because of the overlapped loops, interlaced wires and the Excelsior patented steel clamps which hold vertical and horizontal wires firmly together. AFTER being made it is dip-galvanized, which not only makes it rust proof and long lasting, but firmly binds the whole together.

Send for catalog C and you will have complete and interesting information.

Ask your hardware dealer for EXCELSIOR garden necessities, such as Rust Proof Tree Guards, Tennis Railings, Gates, Bed Guards, Trellises, etc.

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The Invisible Garbage Man

Destroys by burning artificial, natural or gasolene gas, waste accumulations of every description. Odorless, inexpensive, compact, always ready. A type for every purpose.

Free copy of "The Invisible Garbage Man" sent anywhere. Write for it.

E. C. STEARNS & CO.
110 Oneida Street
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The Shelf of a Thousand Uses

Convenient and attractive in appearance, this newly-invented portable shelf solves a multitude of problems for the household. The illustration suggests its use in the library or reading room—it is just as helpful in other parts of the house, on porch—everywhere. Once tried it will be found

A House and Garden Necessity

Hangs on a common nail anywhere, folds when not in use. Made of sheet steel, enameled in various colors. Weight 8 ounces, supports weight of 20 pounds. Size 7¼ inches square. In demand for all sorts of uses by all classes of people, the world over.

Finished for indoor use in green, brown or black. 40 cents each, $1.80 a dozen.

Patent finish for outdoor use in white, light brown, light pink, light blue, dark brown, French grey, tan, gilt, green, gilt or aluminum, 50 cents each, $3.00 a dozen.

Send for booklet.

THE GEO. W. CLARK CO., 259-C Fifth Ave., New York
Patent applied for

Bobbink & Atkins

ROSES
ENGLISH IVY
FLOWERING SHRUBS
HARDY OLD FASHION FLOWERS
OUR GIANT FLOWERING MARSHMALLOWS
JAPANESE MAPLES & WISTARIAS
EVERGREENS & CONIFERS
HYDRANGEAS IN TUBS
RHODODENDRONS
and 150 other specialties

500 acres of Nursery. Half a Million feet under glass. Visit our Nurseries, only 8 miles from New York, or write for our complete illustrated catalogue.

Rutherford, New Jersey

TOWNSENdS TRIPLEX

The Greatest Grass-Cutter on Earth
Cuts a Swath 86 Inches Wide

Floats over the uneven ground as a ship rides the waves. One mower may be climbing a knoll, the second skimming a level and the third paring a hollow.

Drawn by one horse, and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better, and at a fraction of the cost.

Drawn by one horse, and operated by one man, it will mow more lawn in a day than any three ordinary horse-drawn mowers with three horses and three men. (We guarantee this.)

Does not smash the grass to earth and plaster it in the mud in springtime, nor crush out its life between hot rollers and hard, hot ground in summer, as does the motor mower.

The Public is warned not to purchase mowers infringing the Townsend patent No. 1,209,519, Dec. 19th 1916

Send for catalog illustrating all types of Townsend Lawn Mowers

S. P. TOWNSEND & CO., 17 CENTRAL AVENUE, ORANGE, N. J.
Sword-Guards of Feudal Japan
(Continued from page 62)

One of the most important styles of ornamenmtal metal-work is Nikubori; work in this style is carved in relief, low relief being distinguished by the name, Uzumakubori, and high relief, Takakobori. The final style is Oshidashi. This word designating this class of work signifies "hair lines engraved." Kotobori work, produces the waved lines varying in depth to produce the effect of painting. The Japanese hold this style in high favor. The third style of ornamental metal-work is Zogan, a cold style which includes damascening and is sub-divided into: Honzogan work, where an upper design is etched and painted into the surface, this is called Hiraizoug; and if it is in relief, Takamakozan work and Kumasugizogan work which derives its name from surface growing, incised to represent linen mesh. The second style of ornamental working is included under the names Kobori and Katakobori. With kobori work, the lines are finely cut, and the word designating this class of work signifies "hair lines engraved." Katakobori work produces the waved lines varying in depth to produce the effect of painting.

The Best White Flowers
(Continued from page 33)

and as man's migrations over them; but it is beautiful wherever you find it, and there will never be discovered anything in garden design to take its place satisfactorily.

Therefore, I say, simplicity is one of the great things in the world to accomplish. It all lies in banishing the idea of being original, and in accepting that which is good and proven good by long-time usage. In other words, in doubt, play up straight lines, walks that go somewhere, and borders to their field.

Planting combinations that shall be picturesque are innumerable. I have prepared a tabulated list of flowers that are at the head of their section of the floral world, dividing them into the two classes of vertical and horizontal; in each class, into tall and low growing. In the composition of a landscape, an artist chooses horizontal or vertical to be his leading motif, using the other only as an adjunct to this and for emphasis where the other is not needed. Do the same thing in garden composition; choose the one or the other to dominate, and introduce the other as a foil. Usually it will be the horizontal—the broad and sweeping mass—that will dominate; it is to make it look for a flower bed for a clump of meadow-sweet; more marshmallows; next the lilies; it will be the vertical well, for instance, exclamation points, the active principal—the wrathful aspect.

TWELVE GOOD Sorts

As to the flowers themselves, if I could have only a few white flowers, I would choose first, the foxglove; second, the giant marshmallow; third, the white Iceland poppy; fourth, the Japanese bell-flowers (Platyco) 6th, Phlox Aloa, the false dragon's head; sixth, "Fair Maids of France" (Ranuncula aconitifolia & pl.); seventh, the knotweed (Polygonum atropurpureum); eighth, the meadow sweet; ninth, the white Stokes' aster, and tenth, the "snow queen" (Iris Sibirica); then I might add a Speciosum cabinet lily and some flowering spurge, which is Enkophillus corallus. With this even dozen flowers all summer and a composition to delight the eye of the most exacting would be a very pleasing one, if, of course, they were well arranged.

What constitutes good arrangement, gives these twelve to work with.

Let us take the first three. I have named them in the order of their merit—for a beginning, with the hor-izontal seeds that have sprung up around the parent plants as you are going to want, set them out where they can grow all the summer, and next spring, when they are undisturbed, shift them to their proper places in the autumn or early in the next spring before they go to seed.

WHIP-O-WILL-O, the willow furniture of originality, for every purpose, city or country home.

May we send you our large illustrated catalogue and price list?

WHIP-O-WILL-O FURNITURE COMPANY
SCRANTON PENN'A

(Continued on page 66)
At Least Two of its Advantages Well Worth Careful Consideration

As soon as you light a fire in a Kelsey, you at once start getting heat. No waiting for water to circulate or steam to generate.

In the early, frosty days of Fall and the late, bit-dampish ones of Spring; you can with surprisingly little fuel and attention, keep your entire house an even, delightful, healthful temperature.

Compare such an ideal condition with homes you know of, where the fire is started as late as possible, and allowed to go out as correspondingly early.

What is there so essential to the health and happiness of your home, as the comforts of a dependable heat? Not only dependable, but healthful.

In order to be healthful, it must heat with freshly heated, fresh air. It must ventilate while it heats. The Kelsey does.

The Kelsey is a fresh air heat. It's a moist air heat. It's an agreeably delightful heat. It's an economical heat. Costs no more, but does more, than radiator heats. Send for booklet.

The Kelsey
WARM AIR GENERATOR
237 James St., Syracuse, N. Y.

Yale—the mark of identification

The name Yale is put on Yale builders’ locks and hardware for two purposes:

To protect the buyer—a visible guarantee that the product is going to give him the enduring satisfactory service he associates with Yale reputation.

As the maker’s assurance that behind the product stand the resources of the Yale organization—resources that found concrete expression in the quality of the materials, the character of the workmanship and the correctness of the design.

Look for the name "Yale" on night latches, padlocks, door-closers, builders’ hardware and chain blocks. It is your guarantee.

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The Yale & Towne Mfg. Co.
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Fountains

Whether for the open lawn or shady nook, Mott Fountains blend in charmingly with their surroundings.

Let us help you select the fountain that will meet your particular needs.

We issue separate catalogues of Display Fountains, Drinking Fountains, Bird Fountains, Electrolators, Vases, Grilles and Gateways, Sentries and Chalets, Statuary, Aquaria, Tree Guards, Sanitary Fittings for stables and cow barns.

Address Ornamental Department

The J. L. Mott Iron Works, Fifth Ave. and 17th Street, New York
The marshmallows (*Hibiscus moschatus*), giant form, will grow practically everywhere, though they are originally dwellers in swampy or marshy places. If the extremely large giant form is not wanted—they reach a height sometimes of 8’ and the flowers are as large as a plate—select the lovely “crimson eye” variety, which has lovely pure white flowers with a crimson spot in the center. Seen at a distance, their effect is practically all white, so they can be properly included here.

**SEVEN GOOD SPECIES**

The white Iceland poppy grows close to the ground, but its flower stems are about 1’ high; thus the delicate blossoms are lifted well up, where they become counts to the fullest degree. If it were not for the fact that the foliage of the Oriental poppy dies down after the plants have flowered, leaving a bare space of ground until it starts its fresh growth late in the summer, I should include the new white form of this in my list of indispensables. But this habit makes it undesirable for a garden border that must be on view throughout the season.

Knot-weed grows anywhere, and with any soil culture. The Japanese bell-flower is very like the campanulas, but happily is truly perennial instead of being biennial. It blossoms in midsummer usually, grows from 2’ to 3” high, and is perfectly hardy if well mulched in the fall with litter.

Stokes’ aster (*Stokesia laevis* or *patens*) is one of the loveliest of native plants. Its scientific name implies it resembles the cornflower; and its color, in the type, is lavender-blue. Be sure to specify alba, therefore, if ordering the white form. Its height is usually about 1”, and it will grow anywhere in a sunny place.

The false dragon head I have never seen where I did not put it myself, save in one garden—and there they did not know what it was. Why it is not used more frequently I cannot imagine, for it is a beautiful midsummer perennial, always a highly desirable thing to have. Typically it is blue, but the white form is very lovely. It is of simplest culture. So, too, are the Fair Maids of France, which grow about 2’ high, and bloom in May and June, but by the way, are one of the truly old-fashioned flowers; they were highly prized in the flower gardens of two hundred years ago.

*Speculum* flaxes like shade over their roots, but planted in a mass they will provide this for themselves. The flowering spurge is another to-grow, midsummer flowering perennial, very showy and airy and decorative.

Do *NOT OMIT THE WHITE ANNUALS*.

In addition to the permanent flowers, one may always use annuals, if placed on the open ground, soon swell and shrink, open up at the joints and finally rot out, just as the climbing vines are reaching the perfection of maturity.

Union Metal Pergolas come in any length complete with metal columns, beams, rafters and trellis strips ready to put together on the spot. Any worker can erect it or you can do it yourself and enjoy the work.

The Best White Flowers
(Continued from page 64)

**Vertical Tall**

*Artemisia lactiflora*, 3’ to 4’. All of September.

*Aster nudiflorus*, 5’. June and July.

*Beccaria cordata*, 6’ to 8’. July and August.

*Campaugia periculosa*, *gigantea* Morrocan, 2’-, May and June.

*Cniciflva simplex*, 2’- 3’- Sept. and Oct.


*Hollyhock, double white, 6’ to 8’. June.

*Leptinum polyphyllum*, alba, 3’. May and June.

*Phlomis fruticosa*, *virginica*, 4’. July and August.

*Vernicia Virginica, 3’ to 4’. July and August.

**Low Growing**

*Anthericum liliaceum giganteum*, 2’. May.

*Campaugia periculosa*, *sibirica*, 2’. June and July.


*Euonchera virginal, 2’. July and Aug.

*Lysimachia clethroides, 2’. July to Sept.

**Horizontal**

*(True horizontal, or broad and spreading.)*

*Tall*


*Hibiscus Moscheutos* (Crimson Eye), 2’. July and Aug.

*Iris Sibirica* (Snow Queen) 3½’.


*Polygonum giganteum*, 3’. May and June.

*Polygonum cuspidatum, 3*, Sept. *Anemone japonica, alba*, 2’ to 3’. August on.

*Anemone japonica*: *Whirlwind*. Same as above, semi-double.

**Low Growing**

*Anchusa tinctoria, alba*, 15”. All summer.

*Achillea ptarmica, *fl., 2’. June and on.

*Aegopodium chrysanthemum, alba*, 2’. May.

*Alchemilla floribunda*. alba, 8’. May.

*Aster paniculatus*, 12”. July and August.

*Campaugia carpatica, alba*, 8’. June to October.


(Continued on page 68)
Dreer's Water Lilies

THE largest and finest collection in America, embracing the best Hardy and Tender varieties of Nymphaeas, including Day- and Night-blooming kinds, also Victoria Regia, the Royal Water Lily in several sizes. Nelumbiums, in strong pot-plants (or dormant until June 15).

These are fully described in Dreer's Garden Book for 1917, together with cultural instructions on the growing of Water Lilies. The best Catalogue published, containing 288 pages, four color and four duotone plates, hundreds of photographic reproductions, and offers the best of everything in Seeds, Plants, Bulbs, etc.

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We offer free to our patrons the advice of our experts in devising plans for ponds and selecting varieties.

HENRY A. DREER, 714-716 Chestnut St., Philadelphia

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Lawn Silicate

KILLS WEEDS-NOT GRASS

renders invaluable service to every home, estate and club. You can have beautiful lawns—without paying the excessive cost of hand-weeding—without disfiguring the lawn—without injury to the grass.

Merely sprinkle Lawn Silicate on the weeds. Being a powder, it sifts past the perpendicular-growing grass and settles only on the flat-lying weeds. The chemical burns into the weed and is drawn down to the very root—killing the weed permanently.

25 lbs. of Lawn Silicate will cover from 2,000 to 4,000 sq. ft. Prices f. o. b. Bound Brook, N. J., 100 lbs., $1.50; 25 lbs. $1.50.

Special Offer We will furnish you a 25-lb. bag on receipt of $1.50 and this coupon—sent postpaid if you mention your dealer’s name.

CHIPMAN CHEMICAL ENGINEERING CO., Inc.

Makers of Atlas Weed Killer

Grass and Weed-Killing Chemicals

used for maintaining beautiful, weed-free gutters, drives, paths, tennis courts and other grounds. Comes in concentrated liquid form, to be diluted with 20 parts water. One application does for the season.

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Enclosed is $1.50 for 25 lbs. of Lawn Silicate.

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Here we show two houses from the many in our catalog. One an all-year-round Dutch Colonial home, air chamber construction, with two 9 x 12 bedrooms, a 9 x 18 living room, kitchen, etc.; screen, lattice work and benches included in price of Eleven Hundred Dollars, exclusive of plumbing.

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The other a delightful camp for summer use. Either can be put up quickly by unskilled labor.

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This stomach fence with its close heavy mesh and weathered barbed wire overhang, bars all intruders.

100 CHURCH STREET
American Fence Construction Co.
NEW YORK CITY

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**The Best White Flowers**

(Continued from page 66)

Iberis Snowflake, Creeping, large-flowered—May and June.
Iris pumila, hybrid Schneekoppe.
10' Alyssum.
Papaver nudicaule, white, 12'.
Spring and on.

**Annuals**

Tall

Cosmos, extra early, 6'. End of July on.
Campanula cy loreantha, white, 3'. June and July on.
Campanula medium, white 3'. June.
Cleome gigantea, alba, 3'/4'. July end.

Climbing nasturtium, "Pearl," 6' to 10'. Summer to frost.
Nicotiana affinis, 2' to 3'. June on.
Scabiosa, white, 2'/4'. July and on.
Sweet pea, climbing, 8' to 10', June on. Climbing White is the finest of the whites.
Zinnia, giant double, 3'. June to frost.

**Low Growing**


**The Sleeping Porch By Day and Night**

(Continued from page 35)

is done to beautify it, and day time sees it hidden behind forbidding doors while the victims spend the day hours in the heat of closed rooms and steam heat, taking indulgent naps upon the fender, wondering why they are such invalids. They spend largely upon the ventilated fencing and have nothing but the beds and their protection. The floor is dull and unvarnished—nothing speaks of desolation and discomfort and that revolting bareness of "health-cure" unwillingly taken, forgetful that interest, joy, sunshine and beauty are the love of out-door walks, sports, gardening, etc., are quite as important as the night outdoors.

Let us dream a bit! Apple trees silhouette in fantastic shapes against the moonlit sky, the stars are so many and the Milky Way so sparkling. Crickets make their curious little hum among the strange tall back and front of the great world, that keeps one excitedly awake those first nights in the open but one who lets one into soothing sleep when the novelty has become habitual.

**Floor, Shutters and Furniture**

We look within, turning on the light and become abashed by the poverty of man's invention if our porch be bare and merely useful. That will never do! So we begin with the door. It shall be of tile—a wonderful variation of glaze from rich lapis-lazuli to dull jasper green. The house is of a delightful gray stucco with beam and trim of the jade color, the paneling of our porch is jade green with accents of chartreuse. Sliding down into its pierced depths like those of a trolley-car, or extending up to the roof, are shutters with tiled slats whose downward slant sheds snow and sleet or summer showers. Instead of frequent coats we have "day-beds" whose head and foot-pieces have the same height and outward slanting curve. These are painted with coach paint in the jade green and adorned with the lapis-lazuli striping.

The canvas night cover is the color of the stucco with a painted design over the same. The beds have the same color, all the corn leaves and corn ears done like mosaic. And the chairs are painted wood like the bed, and so are the tables. The lamp is pottery with the blue glaze settled richly at the base.

For day use and early evening, there are comfortable chairs of the steamer type with foot rests and tiled and cushioned and convenient deck rugs, for those who enjoy a sleeping-porch enjoy a day-porch whereon to read and sew.

One might love to witness the gathering storm or watch the tempest breaking without, but the sheltering shutters would tempe the view. So, instead of shutters, we have glass windows that can be raised from within the ample paling.

**A LITTLE FRENCH PORCH**

The French, who so well understand outdoor life, make a charming provision against wind and rain by hanging adjustable curtains on rods to close as shelters or open for the view. One sleeping porch borrowed this idea and hanging upon the constructed woodwork of the white house a heavy honeysuckle vine shed forth its fragrance, calling the humming birds most of the year and keeping green perennially. It gave protection to the furniture. Inside the open balustrade, a heavy green sail-cloth-curtain slipped along with ring and puller.

The day-beds, chairs and tables

(Continued on page 70)
Wilson’s Garden and Lawn Sprinkler

Received highest award at the New York Flower Show, Second Central Palace, April, 1916.

The only watering system that is adjustable. Can spray on one or both sides at the same time.

Promounced by leading gardeners and florists as the greatest watering system on the market.

Made with hi-inch pipe, 15 feet long, with 13 nozzles. Price — $29.00.

Send for descriptive circular.

Wilson Products Co., 3 Greene Ave., Brooklyn, N. Y.

Does summer find your garden ready? Will that quiet nook which stood empty last summer have its welcome bench? Will your roses climb a dainty French trellis or twine upon a graceful arbor? These are simple touches that really work wonders.

Mathews Garden-Craft designers and craftsmen have anticipated your needs. From Old World gardens and half-forgotten paintings, from Japanese originals and modern German examples the designers have selected and adapted the choicest designs. With painstaking guild-spirit our craftsmen have reproduced these designs in selected woods. The results are best told by the 72 pages of illustrations and descriptions in the Mathews Garden-Craft Handbook. This garden-lover’s suggestion book will be gladly mailed you on receipt of 18 cents in stamps.

The Mathews Mfg. Co., Designers & Craftsmen
912 Williamson Bldg., Cleveland, Ohio

This is the hallmark of Mathews Garden-Craft. It is a pledge of authenticity of design and of hand-work fashioned and joined with masterwork.
The Sleeping Porch By Day and Night

(Continued from page 68)

were black enameled reed enlivened with green. Cushions and day time covers, which were taken in at night, were chintz with every color of the flower garden and sunsets and sky as though in replica of the view—which no screening impeded, for no mosquitoes abided there and millers and bats were regarded as friendly.

Many a supper party and many a story read aloud from the books kept in the sail-cloth-protected reed book-case were enjoyed by the light of the alcohol-gas lamp—the softest, most caressing known after the candle and without the flicker. Its base was a flowerly Japanese vase with velum shade. That perfection of flooring, cork composition with plain green border, 12" square and border of numerous colors gave avelvet sound to each footfall.

As THE JAPANESE DO

How we envied the two boys whose house being filled with summer guests, betook themselves to a commanding point in their farm and built themselves a house that was all sleeping-porch like many a Japanese house, only they had no sliding, paper-filled screens nor floor sleeping-mats. Instead they had two beds sprung from the roof like hammocks with ample room to walk between. The slanting roof projected each side at least 6 feet beyond the beds, so that no rain could enter. There were camp chairs and tables that folded against the wall when not in use. Simplicity reigned throughout.

The natural bark of the wood decorated the outside. Gray army blankets covered the beds. They enjoyed the variations of nature, the fancies with their accompanying bird concerts, beginning far away with one little bird sound and ending with a revl of music, and the sunsets and moon's phases. When the wind howled they dreamed of the sea, and when the thunder storms broke around them they felt like Norsemen or heroes of old, till all the secrets of Nature and Art seemed revealed to them and they became poets and painters—or were they these before they built the porch, and was it Art that prompted the building?

The Final Touch to the Landscape Scheme

(Continued from page 47)

as the needful pressure is maintained in the supply pipe. As shown in one of the illustrations, it may be installed in a decorative basin and pedestal, but it is equally available for the ordinary pool. The one requirement in the pool is that it shall have a diameter of at least 4'.

A 1" supply pipe is large enough for the intermittent jet, with 1/2" for the nozzle, which latter should be arranged to a rectangular opening before attaching to the larger pipe. About twenty pounds water pressure will be ample to make the jet operate.

In making the installation, the piping is so arranged that the opening of the nozzle is about 3" below the normal surface of the water in the basin. When the water is turned on in the supply pipe (the cock for this may be located at any convenient and inconspicuous place), its force emerging from the nozzle sets up a sort of wave in the basin which, as it recedes and advances, alternates checks and releases the water issuing from the nozzle, thus causing it to spurt up for some distance above the surface at regular intervals.

The success of this device depends on the proper relation between the size of the nozzle, the depth of its submergence, and the water pressure available. Consequently, if the first trial is unsatisfactory, do a little experimenting with some or all of these factors. Whatever combination you finally decide upon, however, see that the water does not spout too high, else it will blow about unpleasantly in a strong wind.

INFORMAL TREATMENTS

A consideration of strictly informal, naturalistic water features leads us into a field which is limited only by the environment and the personal preferences of the garden planter. The possibilities range from a tiny, grass fringed pool of a foot or two diameter to the pond or lake which covers an acre or more.

If there is a brook available, its course can be made into a real beauty spot. The tumbling, rocky stream suggests waterfalls splashing coolly into miniature pools overhung with wild cumbines and ferns; judicious planting will make of the slow-flowing brook a picture at once

(Continued on page 72)
MANTELS
REPRODUCTIONS OF FINE, OLD ENGLISH AND COLONIAL DESIGNS IN WOOD AND MARBLE
Also
DISTINCTIVE METAL-WORK
F OR T H E  G A R D E N
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The book will be sent on request. When you write, we would appreciate your telling us if you have our Book of "CREO-DIPT" Homes and our Sample Colors on Wood.
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ROOFING TIN — Manufactured from Keystone Copper Steel
Highest quality plates obtainable. Grades up to 36 pounds coating. Look for the Keystone stamp.
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A new design of Corbin wrought bronze and wrought steel hardware, which is dignified, simple and pleasing. The deep modelling and high raised borders give an appearance of strength and weight. The sizes are appropriate for general use. The motives and their treatment are modern. Any Corbin dealer can give you full particulars—or write to P. & F. CORBIN
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BUILD YOUR WALLS FOR PERMANENCE
on
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EXPANDED METAL LATH

The Whitest Lath in the world
Soothing and striking with the blue of wild iris, the green spears of their leaves, waving rushes and the gleaming flames of cardinal flowers. In some situations, where the contour of the ground makes such a course possible, even a tiny streamlet can be dammed to form an artificial and yet naturalistic pool of considerable size. Again, water can sometimes be piped from the house system, or from some more distant constant supply, and brought to fill a course which has all the marks of having been put there by Nature herself.

In every case involving a flowing surface, one cardinal point: the water must run down from the point at which it first becomes visible. The illusion of naturalness will be perfect, and this can never be attained unless the founsoothing and striking with the blue of wild iris, the green spears of their leaves, waving rushes and the gleaming flames of cardinal flowers. In some situations, where the contour of the ground makes such a course possible, even a tiny streamlet can be dammed to form an artificial and yet naturalistic pool of considerable size. Again, water can sometimes be piped from the house system, or from some more distant constant supply, and brought to flow a course which has all the marks of having been put there by Nature herself.

In every case involving a flowing surface, one cardinal point: the water must run down from the point at which it first becomes visible. The illusion of naturalness will be perfect, and this can never be attained unless the brook follows the course which the laws of gravity and common-sense mark out for it.

CONSTRUCTING THE POOL

Just as water features can be grouped under two broad heads, so a balance of two general methods of construction which fit most cases. The first of these involves the use of a concrete pool and bottom, and is especially adapted to the formal pool. For a lily pool, an excavation of the desired shape is dug to a depth of 4 or 5 ft, and lined with 8" of concrete, as shown in one of the illustrations. A rather rich mixture should be used, the right proportions being 2 bags Portland cement, 3 barrowfuls sand, and 5 barrowfuls fine broken stone. Galvanized wire netting incorporatecl in the concrete will strengthen it materially. If the pool has a diameter of 10 or 12 ft, it is good policy to use local concrete reinforcing rods instead of the netting.

As the different sorts of water plants require different proportions of soil and water, some sort of vertical divisions should be arranged in the bottom of the pool to hold the varying depths of earth in place. These partitions may be made of concrete, but it is better to make them of course wood, which can be moved if you wish to change the general arrangement of the planting.

The margin of the formal pool may be finished with bricks set in concrete, or of concrete alone. In either case, this coping should be wide enough, and raised sufficiently from the ground, to form a definite boundary. Otherwise it may be a turf or gravel walk, or any other treatment sufficiently formal to meet the requirements of the design.

As far as the underwater lining is concerned, the informal pool may be made in the same way as the formal one, or it may have no artificial lining at all. This latter treatment, of course, presupposes a soil which is sufficiently watertight to prevent the contents of the pool from vanishing outright. Should the natural soil be porous, the bed of the pool may be "puddled," lined to a depth of about 1 with clay mixed into a stiff paste with water and tamped down hard. This "puddling" must be carefully and thoroughly done to be successful.

PLANTS AND PLANTING

If you plan to plant water-lilies or other things in the pool, there must be no more than a very slight current in the water. In fact, the ideal lily pool has no outlets but remains in it except as evaporation and absorption by the plants themselves remove it. The proper depth in such a pool, unless it is supplied from a natural source, can only be maintained by the use of the garden hose, thus doing away with the necessity of installing pumps. Mosquitoes can be adequately guarded against by putting in a few goldfish, which besides devouring the insects' larvae, will be decorative in themselves. A proper balance of aquatic plants and fish will also keep the water pure.

Without a doubt the most popular plants for the water garden are the water-lilies, especially the Nymphaeas and their hybrids in wonderful shades of pink, crimson, yellow and lilac. These varieties need from 1 to 3' of water, and 1' of soil. They are especially suitable for the small garden-sized pool and, like all water-lilies, need full sun.

The Nelumbiums are considerably larger than the Nymphaeas, and consequently require more space. Their leaves stand well above the water, making it difficult to walk on them. The best idea is to use local concrete reinforcing rods instead of the netting.

As the different sorts of water plants require different proportions of soil and water, some sort of vertical divisions should be arranged in the bottom of the pool to hold the varying depths of earth in place. These partitions may be made of concrete, but it is better to make them of course wood, which can be moved if you wish to change the general arrangement of the planting.

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CON-SER-TEX is a canvas rooting chemically treated to protect the fiber from mildew and the detrimental action of the oil in paint.

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C.C. McKay, Mgr.
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Dogs and Boys are Death to Gardens
FISKE WOVEN WIRE
LAWN FENCE
will keep them out.

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Green Lawns and Grass Seed for Every State

(Continued from page 43)

The prospective lawn builder should analyze the characteristics of the common grasses adapted to his di-

vision and their function in any par-
ticular lawn. He may then with a
large degree of accuracy pose a
simple and successful seed mixture.

MAKING THE MIXTURE

Buy each kind of seed separately and mix them at home. Secure your
seed from a reputable seed house. It pays to purchase resealable seed
bags of high quality. It is advisable to have each variety of seed tested for purity and
germination at your State experi-

imentation station. They will warn you of any adulterants in the seed and the presence of impurities.

It is also essential that all seed be of
high viability. The germination report upon your sample will give you sufficient information as to the
ad-

visability of using any particular lot of seed for planting. Never buy seed one year and store it over winter in
a shed or in the basement. Such seed is apt to have a low germination and be worse for planting.

It must be the major portion of the
mixture, as it should eventually take
full possession. Your decision to use other grasses as supplementary ad-

ditions must be guided by this.

Grasses are used in combination for
the following purposes:

THE REASON FOR MIXTURES

First, to act as a nurse crop for an ornamental variety. They may
be on a slope to prevent washing or sim-

ply to cover the ground for the sake
of appearance, and to keep out weeds
while the principle variety is estab-
lishing itself. The latter is especially
true with slow growing grasses such as
Kentucky blue grass. This grass takes from one to three years to es-

establish itself and if it were not for
the supplementary grasses it would be overrun by weeds before it was well started on the road to permanency.

The second use of supplementary
grasses is on a lawn where a great
deal of variation of soil and situation occurs. One species of grass may not grow equally well in all places. This is remedied to some extent by the sowing of several varieties in mixture so that every local bad spot will find some grass more or less adapted to it.

A third use is to reduce the cost of planting. Some seed may be too expensive to sow in large quantities alone. The original variety eventually crowds out the others as it be-

comes established in the lawn.

SOWING THE SEED

Early spring is the best time to sow the seed. If the lawn soil has been brought in from other sources how much has the seed mixture been

It will be of advantage to the owner to follow the ground for a season or to some hood crop upon it, such as corn or potatoes. This will give the large number of weed seeds in the soil an opportunity to germinate and this will greatly lessen the amount of labor that will have to be expended upon it later.

The sowing should take place dur-

ing cloudy weather just preceding a rain. If the day is at all windy it is best to postpone the sowing until some quiet day when a more even
distribution can be secured. To in-

sure even sowing it is well to go over
the lawn again in a direction at right angles to the first sowing and

(Continued on page 76)
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make another application of the seed. The seed should be lightly raked in and the soil moistened.

From the time the seed is placed in the ground the lawn will require careful attention. When the grass first comes up and reaches a height sufficient to allow walking over without disturbing the young plants into the earth, one should go carefully over the ground and remove all weeds that are bearing with the grass. Whatever weeds were present in the seed will appear at this time. They are easy to dig when the grass is thin and sparse. Their removal also aids the new grass plants to a good foothold and make a better stand. The weeds if left to grow at this time may develop into pests that are most difficult to eradicate.

**Pointers on Care**

The first cuttings with the mower should not leave the young plants too closely clipped. Make a liberal allowance of height for the plants and clip only to prevent the formation of seed. Never let your grass go to seed, because the formation has a deleterious effect upon all lawn grasses. Later when the grass is well started the mower may be cut as short as you please and the cuttings made shorter. It is well to leave the clippings from the first cuttings upon the lawn; in fact, it is good practice to leave all of the clippings there. They will act as a mulch and will prevent the growth of weeds; besides conserving the moisture in the soil. Later on, if desired, a grass cutter may be used upon the mower.

Do not sprinkle your lawn—water it. Sprinkling as it is usually done is a waste of water, and when done upon a surface which often causes injury to the grass and rarely does any good. If you have a levelled your lawn with due regard to fundamental principles the grass will grow well even during dry periods without daily sprinklings. In fact, the average rainfall in most localities is sufficient for good growth. However water may be applied, let the hose lie upon the ground and thoroughly soak one spot before moving on to another. This thorough soaking will require that the water be left to run an hour or more upon one place. Ven just a small amount to be present in considerable quantity in your lawn. Do not put off the time for their eradication, for they will become very first to remove them. If you are trying to build a lawn next to a vacant lot, you may cut off a piece of land that produces a splendid crop of dandelion seed for distribution. The weeds if left to grow at this time may develop into pests that are most difficult to eradicate.

Putting The Farm On A War Footing

(Continued from page 17)

acres, each person so engaged here has had to look out for 9.3 acres. We have the added advantage of more machinery, and a matter of fact, the American farmer actually produces as much as the best behind the plow in Germany. Nevertheless, when we are getting an average yield of only 100 bushels per acre of potatoes, while in Germany they make more than 200, it is time for us to look up and ask why.

One answer is that in Germany they use something like seven times as much as per acre as per acre here. We have been depending upon South America for our nitrogen, and while it is true that the potato of southern Germany for our potash, in the form of muriate and sulphate of potash, while we have done nothing to develop our own potash industry, either from the soil or from the sea where there is an unlimited amount of alkali and seaweed capable of being made into agricultural potash. It is conservatively estimated that the use of lime and fertilizer materials in the sections where they are most needed, would result in a 25% increase of crop production in two years. Under our present system of production, however, such an improvement would bring no prosperity to the farmer. It is not as simple as that for the cause of the decline in prices which would result.

**War on Insects and Diseases**

There is another way in which by using the material and information we already have at hand we can take a long step towards helping production, the fight against insects and disease. Take, for instance, the no longer humble potato. Diseases of the potato are prevalent characterizing this crop from a bushel to a bushel for every man, woman and child in the country. This is one of the many agricultural calamities which has been going on unheeded year after year. The annual losses due to animal and plant diseases amount to $20,000,000. Though this item could not be entirely wiped out, the better part of it could be

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In This June Number

for example, we show everything for the country house, an iron fence to a bird bath. There are convenient fittings for the sleeping porch, country china and glassware, clever little screens and wardrobes for the small week-end cottage, a duck of a bridge-table, a decorative couch-hammock for indoor use, and the kind of garden furniture that isn't at all disconcerted by being rained on.

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Putting the Farm on a War Footing

(Continued from page 76)

disposed of, if the task were undertaken with military efficiency.

Bulletins will not effect the change. This is one thing we must realize. How long could an invaded nation exist if its only defense consisted only of notices informing the individual how to protect himself?

When the danger became acute, as in the case of the hoof and mouth disease, the brown-tailed moth, we organized and fought it collectively. Large areas in the South have within recent years been free of the dreaded worm by making it possible for animal husbandry possible for the first time in generations. But this long war was not accomplished until it was recognized that exhorting the individual was not sufficient.

The field of plants is tremendously important and interesting work has been done in breeding and in developing disease resisting varieties. The photographs reproduced here tell their own story, one that to the layman is almost incredible. Take, for instance, the case of asparagus. In large sections the growing of asparagus on a commercial scale had to be practically given up for a number of years, until the final development of a “strain” or “varietal” called “commercially immune”—that is, immune to such an extent that it could be grown with practically no loss. This made a tremendous step in the industry on the very fields that had been abandoned. Soy beans, cow peas, cotton, cabbage, potatoes, tomatoes and many other products have been worked with in the same way, with almost uniformly successful results.

Early Italian Wall Furniture

(Continued from page 31)

preparatory gesso; gilding applied (with an underlying gesso base) to produce a raised relief without the accompaniment of other applied color, to contrast with the rest of the walnut ground; modeling in gesso, or rather gilding up gesso base, with repeated brush applications, over a crudely carved foundation, is a peculiarly simple and plastic "true gold" and gilt enrichment; carving in gold relief, without any additional modeling or gilding, is a decided carving, for which consult Figure 6; marquetry and inlay, and finally, paneling by means of applied moldings.

Building Up the Color

As a preparation for the color and gilding, a coating of gesso was first spread over the surface to be treated, and often an additional red coat was laid on before the application of gold leaf, which was almost invariably the practice to use one of these processes, and frequently both, before applying pigment. The advantages derived from this carefully laid gesso coat were an absolutely uniform color, as there was no flaw or grain or other unevenness in the wood, ease in burnishing the gold, and a gilding or subsequent painting impossible of achievement in any other way. Tempera colors were used, and even today they retain their brilliance to a remarkable degree.

The process of sgrafito work consists, roughly speaking, in an unbroken coat of gold leaf or gold leaf plant being applied over the foundation of gesso and red size. The continuous gold ground solid tempera color was next brushed on, and then finally the gold arabesque design was revealed by scraping or scratching away the last applied layer of pigment with a wooden graver. Hence came the name sgrafito, or scratched.

The Credenza

Next to the cassone, one of the most typical and important pieces of wood furniture was the credenza (Figures 11 and 12), which has two or four doors in front and usually, though not invariably, containing shallow drawers, corresponding to the door divisions, just under or as a part of the cornice at the top. The credenza were about 4' to 4½' high and of a proportional depth, and sometimes stood either upon a pedestal or upon feet. Their length varied greatly. They also varied widely in the amount of ornamentation, some were almost plain and some exceedingly elaborate. They were especially suitable towards the end of the 16th Century and in the 17th Century, when they served as sideboards or writing tables.

Cupboards and Wardrobes

A first cousin to the credenza is the console cupboard such as is shown in Figure 4. This is an almost invariably made of carved walnut, has a pair of doors in front with a drawer above them, and has an arched or moulded plinth and is about 3' high by 2½' wide. Either singly or in pairs, these carved console cupboards lent themselves so well to agreeably use in our modern interiors, that they are not only used as cupboards in two stages, with doors in each stage, they are broader than the consoles and of about twice their height (see Figure 5). Other cupboards larger still, with doors and drawers, were common and there were considerable variations not only in size and shape of the many features of arrangement, but also in the manner and quantity of ornamentation with or without carvings. Sometimes the mental bipartite division, lower and upper, remained unchanged.

Writing Cabinets and Hangers

Writing cabinets (Figures 1 and 2), with drop fronts and numerous small drawers inside were made to be supported either on a table or on a stand especially constructed for the purpose. There were likewise other drop front writing cabinets or secretaries having a solid cupboard base with doors. Both forms were of admirable lines and it is not difficult to trace their descendants in the present-day work of later centuries in England and in various Continental countries. The carved ornamentation was in general the same as that already noted in connection with the cassoni.