



NOVEMBER, 1913

COVER DESIGN: <i>Photograph by Ella M. Boulton</i>	THE MODERN KITCHEN AND ITS PLANNING..... 299 <i>By C. E. Schermerhorn</i>
CONTENTS DESIGN: <i>Photograph by Edwin W. Kendrick</i>	OLD CLOCKS AND THEIR MAKERS..... 302 <i>By N. Hudson Moore</i>
FRONTISPIECE: THE PORCH OF ALLEN W. JACKSON'S HOUSE	A PROBLEM IN GARDEN REMODELING..... 305 <i>By Grace Tabor</i>
WHO VISITS YOUR GARDEN?..... 283 <i>By T. Gilbert Pearson</i>	PREPARING THE GARDEN FOR WINTER..... 308 <i>By D. R. Edson</i>
THE MOTOR EMIGRANTS..... 286 <i>By C. H. Claudy</i>	THE RESIDENCE OF MR. GEORGE VAUX, JR..... 310
BATIK—ITS MAKING AND ITS USE..... 289 <i>By Amy Mali Hicks</i>	THE HOME OF MR. GAGE TARBELL..... 311
CHRISTMAS GARLANDS GATHERED IN THE FALL..... 291 <i>By Martha McCulloch-Williams</i>	INSIDE THE HOUSE..... 312 Some Good Window Plants The Telephone Memorandum Pad A New Hatbox Idea
HOMES THAT ARCHITECTS HAVE BUILT FOR THEMSELVES..... 292 <i>By Allen W. Jackson</i>	GARDEN SUGGESTIONS AND QUERIES..... 314 Garden Uses for Concrete The Winter Mulch Plants Under Glass
TREE WOUNDS AND THEIR TREATMENT..... 296 <i>By Elbert Peets</i>	EDITORIAL..... 316

McBRIDE, NAST & COMPANY

Union Square North, New York

Robert M. McBride, President; Condé Nast, Vice-President and Treasurer; Frederick A. Leland, Secretary; John T. Elsrond, Assistant Treasurer. Published Monthly, 25 cents per copy; \$3.00 per year. For Foreign Postage, add \$1.00; Canadian, 50 cents. Entered as second-class matter at the Post-Office, at New York, N. Y., under act of March 3, 1879.



VOLUME XXIV

NUMBER 5

WILLIAM A. VOLLMER, Managing Editor

Copyright, 1913, by McBride, Nast & Co.





A corner of the terrace of the home of Allen W. Jackson. Instead of appearing an appendage to the house, the terrace is in reality an intimate part of it, and it is so planned that it is adaptable for informal furnishing. There are nooks where it is pleasant to gather when country living finds most of its interests out-of-doors. An old oak tree was cleverly made use of to act as a live awning for this porch



House & Garden

REGISTERED IN U. S. PATENT OFFICE



VOLUME XXIV

November, 1913

NUMBER 5



Who Visits Your Garden?

BIRD CALLERS WHOSE LIFE STORIES YOU SHOULD KNOW—INCIDENTS WHICH HELP TO DEMONSTRATE THE TREMENDOUS ECONOMIC VALUE OF OUR NON-GAME BIRDS

BY T. GILBERT PEARSON
Secretary of the National Audubon Societies

Photographs by Howard H. Cleaves

AT Montclair, N. J., there lives a man who receives visitors every day of the year and he asserts that he never grows weary of their presence. They are a lively set of callers, and all day long they disport about the lawn and garden at will. They never find fault with their host, talk about themselves, nor fail to relish the food which is spread for them with a bounteous hand. Constantly they move about from place to place, singly or in groups. They chatter much as they go and often burst into song. There is no member of the household who does not regret when one of them departs. Some of these merry guests make their home there the year around. Some come in winter, others in summer, and still others, whose homes are in the Far North, pause only for a few days in autumn or drop in for a song or a bite to eat in spring when returning home.

Do you ask who are these joyous visitors—these marvelously welcome guests? Here are some of their names; perhaps you are acquainted with most of them. There are the brown thrasher and the wood thrush, the robin, the blue-bird and the pewee—these are to be seen almost every day in spring and summer. Often the chipping sparrow and some of the warbler family are to be found at the same time. Late one summer evening I heard the long-drawn, shivering cry of a little screech owl issuing from the pine grove that surrounded the house.

"He is one of the most welcome of guests," said my host, "and sometimes his big cousin, the barred owl, pays us a visit. I like the cries of night birds," he continued. "The shriek of the owl, the wail of the whip-poor-will, and occasionally the plaintive note

of an awakened pewee, or the midnight song of the field sparrow, all have the effect of making me forget for a time the fact that I am near a great city, and in fancy I live over again those times when I camped in the wilderness far from the abode of man."

Then he told me many things about his little trusting friends and how he has to guard them constantly or they would be destroyed. Boys, he said, sometimes tried to kill them with slings and air rifles, or would slip on to the place, when they thought neither he nor the gardener was on watch, with a view of robbing the nests.

The English sparrows, he declared, were a great nuisance and should be exterminated as far as possible on every estate, for not only do they eat the food placed on his feeding shelves for the other birds, but they constantly steal straw and grass from the nests of the robin and thrush and make a practice of attempting to take possession of every box that is erected for the accommodation of the wrens and bluebirds.

A colony of foreign laborers had their headquarters perhaps a mile away, and these sons of sunny Italy are all pronounced killers of birds. Sundays and other holidays find many of them in the woods and fields with their guns. No bird's life is safe when these hunters are near, for they seem to eat with marvelous relish any feathered creature which may fall to their guns, regardless of its size or beauty.

Of all the enemies with which wild birds about a town have to contend there is none so destructive as the domestic cat. These household pets, so docile and harmless when sleeping on the hearth, assume



If there are cedars or other evergreens, or even junipers, about your place, the chipping sparrows are quite sure to choose them as nesting sites



The downy woodpecker is found in every old apple orchard as well as about the other trees, where he searches out insects' eggs and larvae

all their wild prowess and eagerness to kill once they cross the threshold into the yard. There are untold thousands of these animals which have been abandoned and are to-day living in a half-wild state in thickets and about outhouses. These cats are constantly alert and ever on the watch for birds, day and night, through the year. It is exceedingly rare to find a cat that will not kill a bird if the opportunity comes. The fact that one is well cared for and fed to the utmost does not in the least change its nature in this regard. They play great havoc in spring with young birds which have just left the nest and are not yet able to fly. In short, the man who would have birds plentiful about his place must use strenuous efforts to decrease the number of these night-prowling, soft-footed scourges of the feathered tribe. Boys, sparrows, Italians and cats must be kept under control if the birds are to be saved.

Entertaining one's friends is one of the greatest joys of any household, but to do this continuously on a large scale generally taxes not only the endurance but the means of the man in ordinary circumstances. The good man with the open house at Montclair, however, is never wearied a moment by his feathered guests, and the simple fare which he provides for them in winter, in the form of crumbs, suet, seeds and cracked

grain, does not add heavily to the month's expenses. On



Soon after it leaves the nest the young cuckoo will commence his endless and effective warfare against noxious caterpillars about the lawn trees

the other hand, he derives great benefit from their visits. Every moment that they are with him they are at work, and their labor means much to the welfare of his flowers, his vegetables and his orchard.

If you will go to his place some summer morning and quietly take a seat in the apple orchard, you may see what the birds are really doing for him. One of the first you are sure to encounter is the chipping sparrow. In fact there is scarcely a garden or lawn in the eastern or central United States where it may not be found at this season. It is a very quiet, demure, little bird that keeps much out of sight. Look sharp, though, and you will see it slipping along through the grass at times more like a mouse than a bird. It is exceedingly active, and constantly it is striking out with its bill as it seizes ants, beetles and plant lice, which infest the vegetation. Out in the garden it hops with alacrity along the rows of vegetables. It eats the worms it finds on the leaves of the beets, the caterpillars that destroy the cabbage, and it greatly enjoys the codling moth, the leaf hoppers, and in fact almost any form of insect life which it can discover.

Everyone knows of the widespread devastation caused to



A yellow-billed cuckoo at its nest. This species is a persistent enemy of the well-known tent caterpillar, of which it destroys countless numbers

shade and forest trees in New England of recent years by the gipsy moth, and how millions of dollars have been expended in fighting this national plague. It is in the larva or caterpillar stage that the moth does its mischief, by eating the foliage from the trees. But woe to the gipsy caterpillar that is spied by the chipping sparrow! No cat ever enjoyed a canary more than the "chippy" loves this juicy morsel. Some years ago, when scientific experts were experimenting with gipsy moths in captivity in order to learn, if possible, some adequate means of destroying them in wholesale numbers, their work was actually retarded by the chipping sparrows which constantly broke through the nets of the enclosures to get at the caterpillars.

A lisping, plaintive, long-drawn *pe-a-we* reaches your ear, and turning you behold on a dead limb nearby a bird somewhat larger than our little neighbor on the ground. It is light beneath, dark gray above, and it sits very erect on its perch. A moment later it darts suddenly away, makes a quick turn or two in the air, snaps its bill with an audible click, and returns to its lookout tower. It is the pewee, and it is playing its part in the great economy of Nature. All day long, if you should find time

to watch it, you would see it repeating the same performance over and over again, only shifting its location occasionally, and perhaps being more active during the morning and evening hours. The pewee gathers its food largely from the air—no slipping through the grass for it. The flying forms of life are usually good enough, although now and then it will flutter before some plant in distress and relieve it of the caterpillars that cling to its leaves.

It is a little difficult to discover just the kinds of insects the pewee eats, unless one is a trained naturalist and makes his observations with great care. If we turn, however, to the published records on economic ornithology we learn that it is known to consume such annoying creatures as beetles and flying ants, flies, gnats, mosquitoes and a long list of other insects, the names of which are seldom used outside the laboratory and the museum.

Birds differ remarkably in their characteristics; some, like the chipping sparrow and pewee, being so modest and retiring that their personalities seem almost colorless when compared with the elusive, search-compelling cuckoo, or the big crested blue jay, whose calls and hilarious shoutings instantly draw attention when one is near. There is just one time of the year when the jay controls its ever-burning desire to make a noise, and that is when there is a nest with eggs or young to be guarded from danger. Then he and his mate will advance through the grove with great stealth, usually pausing many times before going to the nest. But as soon as the young are strong upon the wing, the whole family appear to combine in an effort to acquaint everyone in the neighborhood with the fact that they are about. Sometimes several families unite, until as many as a dozen or twenty birds may be seen flying from tree to tree, voicing loudly the feelings of ecstasy with which their exuberant natures are so well endowed.

The jay bears a rather unsavory reputation with some people

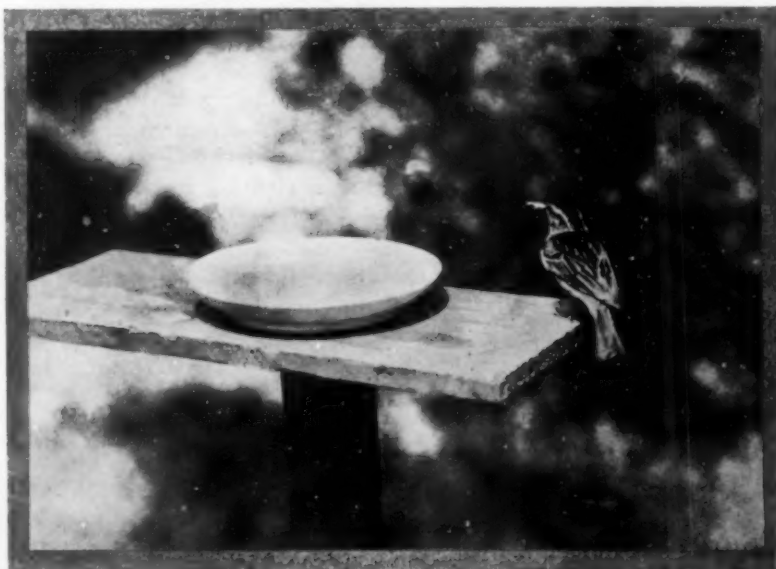


Everyone knows the robin, whose hearty, chuckling notes and aldermanic plumpness fit the sweep of well-kept lawn so well. And yet these birds are shot and sold for food in parts of the South

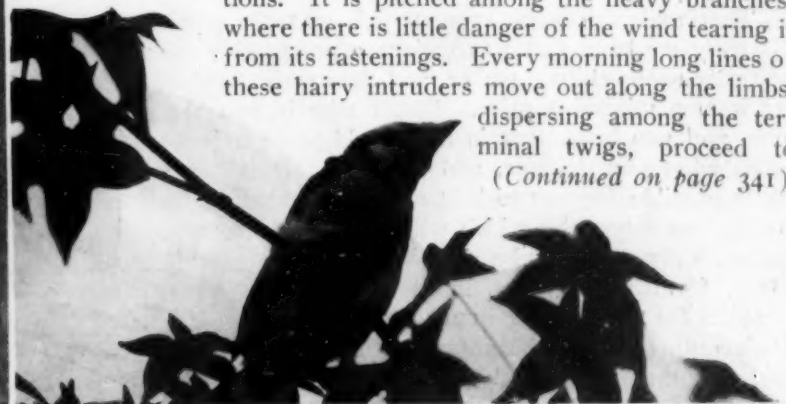
who have discovered that it sometimes pilfers the nests of other birds, and there appears to be no doubt but what some individuals at least enjoy now and then the taste of an egg. Most of us, however, have our faults, but in many instances these might be more easily overlooked did we have as many redeeming features as the naughty jay. It takes a great amount of food to keep its active body in condition, and it destroys many insects. In the autumn, when acorns are in prime condition, jays troop to the oak trees to feed. They tear the acorns off with their feet and a few blows with the bill serve to tear away the outer covering. When feeding, or while flying from place to place they drop many uninjured acorns, either by accident or design, and these falling to the earth help decidedly in reforestation.

Another visitor that comes to the garden in Montclair is the cuckoo—that long-tailed, skulking, mysterious bird so often heard and yet so seldom seen. In a neighboring fruit tree there dwells an army of tent-caterpillars. You can see their great white tent, two or three feet across and with many filmy partitions. It is pitched among the heavy branches, where there is little danger of the wind tearing it from its fastenings. Every morning long lines of these hairy intruders move out along the limbs,

dispersing among the terminal twigs, proceed to
(Continued on page 341)



The chipping sparrow is one of our most domestic and valuable birds. This picture shows well the striped back and distinguishing brick-red crown



Do not consider the young blue jay solely as an evil-doer in the making. When he reaches maturity he will be a valuable aid in reforestation



THE STORY OF A "BACK TO THE LAND" MOVEMENT THAT WAS STARTED BY A MOTOR CAR—CHAPTER V—THE ELECTRIC PLANT AND ITS ADJUNCT, THE ELECTRIC AUTOMOBILE—MRS. SPENCE'S SURPRISE

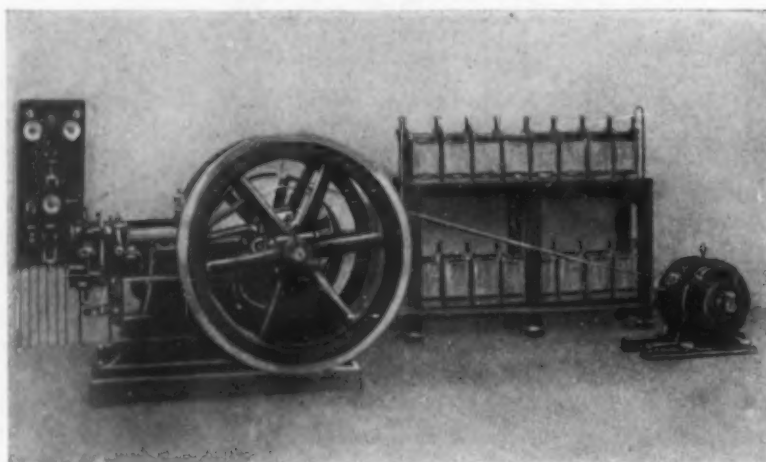
EDITOR'S NOTE: The man whose business ties him to the city may feel the call of woods and fields, but the unpleasant prospects of isolation, lack of transit facilities, provincialism, etc., have deterred him from making a change. The automobile has solved these difficulties for many and has made a home in the rural country possible even for city business men. This is the account of an emigration to a rural district made possible by a motor. The automobile was considered part of the plant, and yet even when its original cost was included in the price of the home, they found that it enabled them to buy quite extensive lands for the price of a place in a high-class suburban development. How a motor served in a variety of practical purposes, brought friends, made the family independent of distance and time-table, is taken from the experiences of a man who has proved his experiment. This narrative was begun in the July issue.

BY C. H. CLAUDY

SINCE the day he had had a telephone conversation with the Countryside Electric Company, Mr. Spence had been revolving a plan in his mind which, he hoped, would complete and round out their Castleton home in a manner not dreamed of by his family. His plan was nothing less than the installation of a private electric plant and a number of motors and accessory pieces of apparatus which would do much of the work about the place now done either by human hands or left undone for lack of time.

"The automobile has made me a complete convert to mechanical assistance," Mr. Spence explained to the representative of the Electrical Company. "You don't have to use any argument with me to show me why an electric motor is better than a pair of biceps. All you have to do is to talk prices and sizes!"

"That makes it very easy, then," was the smiling answer. "Usually we have first to convince a prospective customer that he really needs electric power, and then show him where he can get it at a minimum price. But, I take it, you are a business man, and you know that in this world you get just about what you pay for, and no more. It is perfectly possible for you to beat our prices. You can go to some companies which will sell you a gasoline engine, a generator, and a set of accumulators, furnish you wires, bulbs and accessories for two or three hundred dollars. Their outfits are good, as far as quality goes, but they are entirely too small for such a place as you have. You need about fifty-five lamps, and you want several



When the engine and motor and all the other appurtenances of the electric light plant were installed and it was in operation, Mrs. Spence was introduced to her latest labor saver

motors. As I figure it, you want our type K outfit, which will run seventy-five lamps with something to spare."

"Well, what will it cost? And how long will it take? Those are the things I am interested in just now," responded Mr. Spence.

"Well, I'd rather go over the place and make a detailed survey, first; then I can give you exact figures."

"You can do that, all right," said Mr. Spence. "But you musn't tell any one on the place what you are doing. I don't care whether you are a tax assessor or a building inspector, a carpenter

or a bricklayer, but you musn't be an electrical expert! I want to surprise Mrs. Spence."

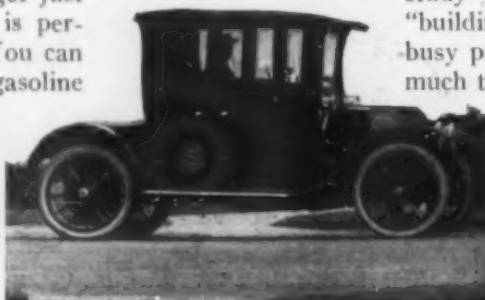
"That's all right—I can be a building inspector very nicely," laughed Mr. Emmons. "But how can I have workmen install this plant without your wife knowing it?"

"Oh, I am going to send her into the city for a visit, and you are going to do the work while she is away. That's why I want to know how long it will take."

Mr. Emmons arrived the next afternoon, and made a detailed study of the house and outbuildings. He was a "building inspector" to Mrs. Spence, and as she was busy preserving some of her own fruit, she had not much time for curiosity.

The next day plans were laid before Mr. Spence.

"I can do the job for \$450, for \$570, or for \$950, Mr. Spence," announced Mr. Emmons. "The first price includes only exterior wiring in your house, use of your present fixtures, installation of



engine, generator and accumulator. The second price includes interior or concealed wiring, your present fixtures, and installation of generator, engine and accumulators. The third price includes all that the second one does, nine additional fixtures, six electric fans, a motor pump to your water supply, to take the place of your windmill, a motor with power sufficient to drive a churn, a saw or a silage cutter, and also includes steel conduit wires for lamps in garage, milk house, wood shed and your chicken houses, and a switch panel with provision for connections to charge an electric automobile.

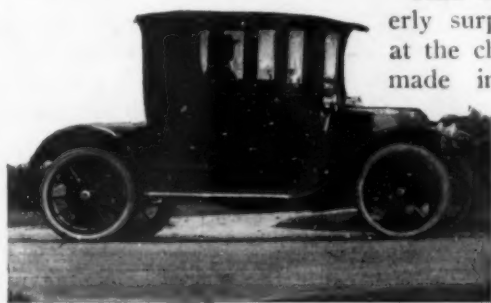
"As I told you before, there are plenty of people who will do it much cheaper. But you don't want undersized accumulators and generator for a plant like this, and it'll pay you better in the end to get them large enough to have a reserve than to buy an outfit just up to the capacity of your lights and motors and have to run the generator all the time."

It was on this basis that it was arranged. Mrs. Spence was duly invited for ten days to the city, the children were sworn to a delighted secrecy, and the workmen arrived "ready to tear the place to pieces," as Mr. Spence ruefully confided to Jack. But the concealed wiring was put in place with only the removal of a few floor boards, and Larry neglected his chickens to watch the men "fishing" their wires through the walls; the "muss" was surprisingly small.

A carpenter built a small outhouse to hold the generator engine and accumulators, and the pump was duly connected with the well. A small circular saw was bought, to Jack's great delight and Larry's pleased anticipation, until he was forbidden to touch the thing or even to go near it. The hand churn which had proved too much for the maids' strength, and which Jack had grudgingly turned at infrequent intervals, was connected to the "motor-of-all-work," as Dorry dubbed it, and a washing machine similarly arranged brought pleased smiles to the faces of the domestics.

But the expression on Eliza's face when Mr. Spence came home one evening with an electric vacuum cleaner was, as he said afterwards, worth the price twice over.

"Shure an Oi'll hov a bonfire wid all the brooms, bad cess to the back-breaking things," she cried. "'Tis a clane house ye'll be havin' now, Mishter Spince, wid elictric whind to blow the dhirrt out av iverything!"



And Mrs. Spence was properly surprised and very happy at the changes which had been made in her home in her absence.

"Though you ought not to have done it, John!" she chided her husband. "What will become of your savings if

you spend them so recklessly?"

"I'm not *spending* my savings, my dear—I'm investing them! Don't you know that I can sell this place for more than a thousand dollars more than I paid for it, because of these improvements? Of

course, the investment won't pay tangible, handle-able money. But it will pay in many other ways. You know I count the principal gain we have had here in our home in the health and strength, the comfort and the happiness, which we have all had. It's more than the money gain. If we had just 'broken even' on the money, and not saved a cent, I'd still think we made a fine investment when we bought this home and Good Fairy. And this electric plant will add to your comfort, make housekeeping easier, and I think will even pay a money profit, in one way."

"How will it do that?" Mrs. Spence asked, preoccupied and

experimenting with an electric button which shut off and lit the electrolier in the living-room.

"Listen then, and I'll tell you. It will save Jack's time on sawing wood—it will give us butter, and it will make our house clean with less expenditure of time, and the time saved can be put, on Jack's part at least, on the garden next year. But there is another saving which I can't explain just yet!"

For the surprises were not yet finished for Mrs. Spence. Her husband loved the theatrical, and although Larry and Dorry nearly exploded with news several times that evening, and she more than once looked at

her family to see what made them act as if they were sitting over a bomb shell, the evening was finished and sleep reigned over the household without the secret being told.

It burst immediately after breakfast the next morning.

"Mother," said Mr. Spence, as casually as he could, "Jack is busy this morning. I want you to drive me to the station, please."

"Why, John! Are you crazy? You know I can't drive the machine."

"Yes, but *why* can't you?" inquired her husband.

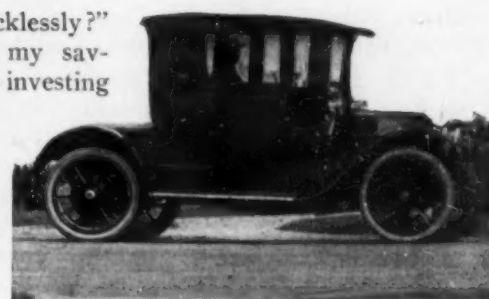
"John Spence! How could I ever learn to run a car with all those levers and pedals and things? If it was just one lever—but there are too many things. Get Dorry to drive you down."

"No, I want *you* to drive me!"

"But, my dear man, I can't—I'd be frightened to death—and I couldn't crank it if I weren't. I'm not strong enough."

"Well, come to the door and see if you haven't made a mistake," he pleaded.

Bewildered, Mrs. Spence followed him. For a moment she looked blankly out on the familiar driveway. Then she gasped and gave a cry of delight—for there, rolling up the road, was an



Instead of being upset by the automobile operating expenses, Mr. Spence felt that whatever gave evidence of usage of his car showed that the country place was productive of a better sort of living than he enjoyed in the city

electric runabout, with Dorry laughingly directing it, and Larry capering before, uttering Indian-like whoops of delight.

"I guess you can drive *this* machine," said Mr. Spence, struggling hard to repress any signs of delight. "It's only got two levers, and it steers starts and stops at a touch!"

This was the surprise he had been planning for months—that Mrs. Spence should have an automobile of her own, which would not only relieve Good Fairy of too much hack work, and this leave him more free for the usages which were always cropping up about the place, but which would make her independent of a driver and enable her to go shopping, calling, or to the station at her own sweet will and pleasure and without regard for time, season, or the other purpose for which an automobile was required.

If Mrs. Spence's eyes were full of tears as she stepped into the runabout, and if, after she guided it out on the main road and out of sight of the house, she stopped and threw her arms about her husband's neck to the imminent danger of the car running into a telegraph pole, there was no one to see but Mr. Spence, and he never told. To her great surprise, Mrs. Spence found that she could manage the machine with ease.

"Why, there isn't anything to driving this," she said, wonderingly. "You just can't help but guide it right!"

"Yes, and stopping is instinctive—push on the handle and push with the foot—and she stops. Release the foot, pull on the handle, and she starts."

"But—but, John," demanded Mrs. Spence. "Aren't they fearfully expensive to keep? I've heard people in town talk about electric bills all the way up to seventy-five dollars a month."

"Perhaps that's the case when you buy current, but we make our own! Costs but little more to run this way than Good Fairy. And the extra time he will have to haul produce and run errands will more than make up for the difference!"

"But the savings, dear—it must have taken them *all* for the electric plant and this—this splendid surprise!"

"It didn't—not all—and there is more to be made. Seems to me a little woman who was born and brought up in a city but who comes happily to the country and helps make a home in the wilderness and stifles her regrets, ought to have some tangible reward beside the happiness of others. And this was the only thing I could think of we needed and didn't have!"

The new "investments" prospered amazingly. Mrs. Spence, whose strength had never been all that her husband wished, found a new pleasure and a new happiness in a car of her very own. From its newness and strangeness she was enticed into the daily drive she had often had to deny herself because Good Fairy was otherwise engaged. She found her social duties easier, and her shopping tours more quickly made that she did not have to depend on a time schedule for the gas car, but could order her own for any moment and keep it as long as she wanted it. Trips to school to fetch the children, to the station to get Mr. Spence,

were suddenly a pleasure to look forward to, and as the car was charged at their own plant every day if it needed it, the expense never entered very heavily into her calculations.

"Nor must we figure our income as a stationary proposition," protested Mr. Spence to his wife, when she again chided him on the unexpected expenditure. "I'm going to make more money. It's not only the new acquaintances I've made out here. It's the broader outlook and more especially the saner life. Look for a minute at the difference between our manner of living here and what it was in the city or in Willisport. In the city there was no mad rush to get off in the morning to catch the early train that there was in Willisport, but there *was* the mad rush home, the crowded cars, the strain of city life in the evening as well as the day. If it wasn't a theatre, it was a party of some sort—if it wasn't that, it was a dinner or a supper at a restaurant. We spent more money, and had less fun than we do here, and we certainly spent more vital force!"

"Here we never go to bed much later than ten unless for our

weekly call or trip to town, and we live such a sane, out-of-door, fresh air, unworried, unharried life that I feel ten years younger. The result is that I work harder, do my work more easily, and I can see right now where I won't make much less than nine and perhaps more thousands this year right in the business.

Of course, any business ought to grow, and I'd expect to increase my income even if I lived in town. But as it grew, I'd grow older and more worried and thinner and go more to the

doctor. I see it all around me. I don't mind my work as I did once—I don't forget, as I used to, and I don't have the hard time thinking up new schemes that I once had. And it's nothing in the world but the country, the garden, Good Fairy and the health, strength and peace at home which accounts for it."

The home prospered as the business prospered. The second year of gardening, though it brought new problems, brought also a greatly increased yield. Dorry was older and made fewer mistakes, and had more strength to give to the garden. Jack had much more time to devote to it, now that he no longer had to drive the children to school if they missed the 'bus, or to go and call for Mr. Spence. Mrs. Spence did this with the electric—not to save Jack's time, it must be confessed, but for the pure love of being out in the open in a car of which she was not afraid and which she could operate with safety and pleasure for herself and her friends.

The whole electric investment meant much to her, and the bloom on the cheeks which had been too pale and the sparkle in the eyes which had grown lifeless in the city, were rewards enough for Mr. Spence, for the expenditure, not counting any

(Continued on page 339)



The surprise he had been planning for months was an electric runabout which Mrs. Spence could operate herself, which would make her independent of a driver and relieve "The Good Fairy"

Batik—Its Making and Its Use

A PROCESS OF WAX-RESIST PRINTING THAT IS ADAPTED TO MANY DIFFERENT FABRICS AND EFFECTS—HOW IT IS DONE AND SOME OF ITS POSSIBILITIES

BY AMY MALI HICKS

THE various printed cottons and woven fabrics of the East are daily coming more and more into vogue. They are used for dress fabrics, furniture coverings, table covers and just now as the colorful background for an ivory bas-relief or a drapery on a bare wall. Though Batik, the Javanese printed fabric, has been known and used here for some time, it is not generally known that the handicraftsman can create these interesting results himself. A great many fabrics may be used, and many interesting designs worked out without especial talent or technical training.

Batik-making is a method of printing fabrics by a process of wax resist, and the process of wax-resist printing, or, as it is sometimes called, "reserve" printing, is the method of protecting certain portions of a piece of cloth from the coloring matter in the dye vat when the cloth is dipped. The wax is melted and deposited on the surface of the cloth, and the hot resist penetrates thoroughly the fiber, thus protecting from the dye the portions it covers.

The wax resist is, of course, always laid on in a design or pattern. When it has been finally removed, the pattern appears on the surface of the cloth and is properly called a "reserve."

Batik can be applied to all kinds of material, but on some with better results than on others. For instance, silk and cotton are the most easily handled. Next would come leather, and, last of all, linen, because in the dyeing of linen there are certain technical difficulties. Wool is never used in batik-making.

Through their possession of the island of Java, the Dutch got their intimate knowledge of the craft of batik-making. The native Javanese are masters of this craft. The lowest illustration on page 290 shows a *sarong*, or native loin cloth. These loin cloths are made of lightweight cotton, a material specially well adapted for the process of



The end of a chignon scarf, printed in black, blue, red, white and green on an orange ground



Good examples of tied and dyed work, or reserve printing without a wax resist

wax-resist printing, as the hot wax penetrates the fiber freely and easily. Cotton can be dyed beautiful and permanent colors; and, moreover, it gets an unusually beautiful texture from the handling necessary in the dye process. The texture it finally acquires through the application of dye and the wax resist has somewhat the effect of velvet in color quality and tone. Where the original color of the unbleached cotton appears in any pattern, it has the look of old parchment. This is because the wax of the resist is never completely removed from the fiber of the material and adds depth of tone to its color and texture.

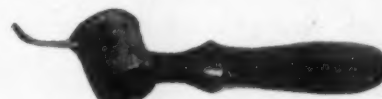
The *sarong* in the illustration is a wonderful example of the art of design and the dyer's craft. In almost all Javanese batiks the design is purely abstract and dependent on its beauty for the relation and arrangement of the line and mass.

However, the type of design applied to batik may be either representative or naturalistic, as it pleases the designer. The pliable technique of batik offers few obstacles in the carrying out of any kind of detail. Indeed, in some instances textures can be reproduced; on general principles, however, it is well for the beginner to restrain a desire for naturalistic ornament, and to try at first for the simpler effects obtained by the wise use of mass and line arrangements.

There are certain features of batik which, so to speak, have grown out of the manner in which it is made. The illustration of the *sarong* shows one of these—a network of fine lines throughout the background. This network is caused by the crackling of the wax resist, as it dries and shrinks, or when the cloth is wrinkled or bent. One can see that the network is thickest where the cloth has been most bent, that is, where it has been hung in the center over a pole to dry the wax. The color in the dye vat gets into these cracks and penetrates the fiber of the cloth when it



The tjanting, or wax container



The tube is for pouring the wax



One of the modern examples of
Batik work

is dyed. This leaves a print of cracks or wrinkles when the wax is removed. This is the most decorative and characteristic feature of the batik, and under the guidance of the wise designer can be used with effect, instead of just being a more or less unhappy accident.

The tools and materials for batik-making are simple. Beeswax, paraffin and rosin are used for making the resist. Denatured alcohol is needed for the spirit lamp to heat the wax, and benzine for cleaning the wax resist from the batik. The



little instrument used as a container for the hot wax is not unlike a small copper teapot with a long handle. It is called a "tjanting" by the Javanese. These tjantings have spouts or tubes for conveying the hot wax resist. And these

tubes are of various sizes, regulated for making fine or coarse lines. This little instrument can be made by any metal worker or skilled tool maker. It is wisest to make it of thin sheet copper, because it is then lighter to hold and heats more easily. The Javanese make their tjantings also of copper, using bamboo for the handle.

All the line work of design can be done with this tube. Large masses or spaces, however, are more easily filled in with very hot wax and an ordinary paint brush.

A small spirit lamp, a tripod to hold the wax receptacles and several small enameled bowls complete the equipment for wax-resist printing. A spool of copper wire might be added, because it is convenient to use a piece of it in clearing the spout of the tjanting. Even after the wax is carefully strained particles of dust are apt to get into the tubes and interfere with the free flow of the wax.

The different kinds of fabrics—cotton, silk and linen—each call for individual treatment, which in each is determined by the character of the fiber of which the fabric is woven. These treatments are carried out by mixing the resist of different proportions of wax paraffin and rosin, and by using different degrees of heat in its application. The paraffin assists the crackle in the resist, and the rosin helps it to adhere to the fiber.

For drawing on silk, where a clean, unbroken line is needed, pure beeswax, moderately heated, should be used. Silk is more easily penetrated by the hot wax resist than other materials and requires careful handling.

In order to keep the wax resist at a moderate temperature, pure beeswax should be cut up, melted and strained through a piece of fine cambric into one of the small enamel bowls. The bowl itself should be kept hot in another and larger bowl of boiling water. The hot wax can be dipped out of the bowl with a spoon, or, if the vessel has a spout, poured into the tjanting. Do not, on any account, when drawing on silk, fill the pot itself with unmelted beeswax and then hold it over the spirit lamp to heat. The

Javanese purposely make their tjantings with the bamboo handle extending out under the base of the metal container, so that it cannot be held directly over the flame without injuring the handle.

If the crackled or broken line is needed, add one-half paraffin to the beeswax. The kind of line used in batik should correspond with the character of the applied decoration. If this is unconventional or naturalistic, a crackled or broken line is appropriate. If the design is formal or abstract, a clear and distinct line should be used. It is then that great care must be taken with the temperature of the wax resist. Very hot beeswax flows quickly through the spout of the tjanting, and spreads unless carefully guided. Then drops of wax are apt to form at the end of the tube, and unless watched will fall off and spot the fabric.

For all backgrounds on silk, where a crackled effect is desired, a mixture of half beeswax and paraffin should be used and a little rosin added. Sometimes a purposely crackled background can be effectively combined with spots and figures which have no detail.

On heavy linen and on cotton or velvet, beeswax should be used very hot for beginners' experiments, and until the possibilities of the wax-resist process are more perfectly understood, it is always safe to use clear beeswax, for it insures with less skill a more even line.

After the wax resist has been applied to the material it is left to dry and harden. It can be then removed by one of two processes. If the reserve has been made on silk it is removed by dipping in a bath of benzine. Benzine dissolves paraffin and beeswax and rosin, and whatever remains can be pressed out of the silk with a moderately hot iron over blotting paper. On velvets the nap must be raised. If it is in small pieces, this can be done over the teakettle; but if in larger pieces, it had best be taken to the commercial dyer. Boiling with hot water and laundry soap will remove resist from linen and cotton.

The treatment for leather is the same as for other surfaces, except that in general a broader and freer line may be used. On leather the crackle of the batik is most effective. Great freedom, too, may be used in the matter of design, especially for screens and wall hangings, where more or less naturalistic motif may be decoratively treated, and where textures may be reproduced.

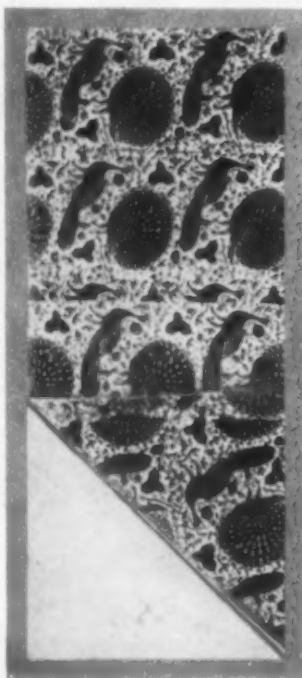
Probably the most satisfactory colors for dyeing batik on linen and cotton are those dyes



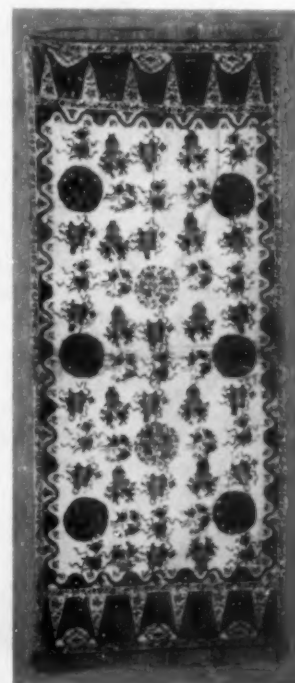
among the natural and artificial pigments which are set by oxidation. The advantage of these dyes is that they can be used in a cold dye bath, which does not destroy the wax resist.

Among the natural pigments, indigo comes first of all and is most important. It is the most beautiful and permanent of all dyes and the base for many others. The vat method for cotton, linen and silk

(Continued on page 318)



A Madras Batik, with corner
turned over



A sarong of Javanese Batik

Christmas Garlands Gathered in the Fall

THE BEAUTY THAT AUTUMN WOODS AND FIELDS PROVIDE FOR HOLIDAY DECORATION—WHAT TO GATHER NOW AND HOW TO KEEP IT BRIGHT FOR CHRISTMAS CELEBRATION

BY MARTHA McCULLOCH-WILLIAMS

BY mid-October, at the latest, begin looking forward to Christmas decorations. Then all the wealth of road and hedgeside is at the fullest; ferns also have reached their best development; wild roses, dogwood, mountain ash, the strawberry bush, bitter-sweet and partridge vine show jewelwise amid the thinning leafage; then, too, milkweed pods are ready to burst into silken fluff, and the wild clematis, known variously as Traveler's Joy or Virgin's Bower, has changed its milky constellations into other constellations of fringy green seed. Each and several these have potentialities of household beauty attainable with a trifle of forethoughted care.

Gather all these late upon a warm, dry afternoon—never in morning damps, nor sharp wind, nor, above all, when it is wet. If a light frost or two has nipped tender greenery, these other things will be but the better—riper, yet less sappy. Cut branches of berried things, instead of breaking them. Use a sharp knife, and make slanting cuts. Beware avarice! Take only the best branches, and those but sparingly. Keep each sort to itself, laying them without crowding in something flat—a wheelbarrow or shallow basket, or, lacking other things, a square cloth, the corners tied over a light pole, and held out at the bottom with strips of lath. Unless frost is imminent, gather one thing at a time. Take home branches quickly, cull and trim, then stand them in earthen crocks with six inches of water in the bottom and lumps of fresh charcoal to keep it untainted, else thrust the cut ends, four inches deep, into clean, wet sand—which must be kept wet constantly. Set crocks or sand boxes in a light, airy place, away from frost or artificial heat. Once a fortnight trim a quarter inch from the cut ends; removing water-logged pores thus keeps the branches fresh. The small ruby-red rose hips should be cut with their parent stems as close to the ground as possible. From the tall-running roses take only the flower stalks laden with big scarlet or yellow-red urn-shaped fruit. A cellar that is clean, light and well ventilated keeps all such things well, provided there is no heat.

Trails of bitter-sweet, cut low, the ends stuck in sand or water, and set high, with vines trailing in clean, cold air, scarcely shrivel. Partridge vine, if possible, should be lifted in clumps the depth of a sharp spade, the clumps potted, well watered, and given air and sunlight without heat. Thus the waxy green leaves and coral-red berry clusters keep their beauty till New Year—and beyond. Unfortunately, the root, perennial, is deep and creeping, but as it haunts cultivated ground, especially creek bottoms or light hedges-rows, removal is not so difficult.

Cut clematis with a free knife—never minding the waste. Untangle, pick out trails most richly fringed, take home and spread flat on big sheets of cardboard or thin boards, or tack up against



The fluffy milk-weed pods, if properly dried and hung head down, will stay together when they burst

a wall. Cardboard is best. Stick stout pins through from the under side, and with pincers bend over the ends so as to hold the vine stems in place. Tacks weaken them to the breaking point; hence avoid them. If drying against a wall, attach them with strips of leather or cloth, tacked at either end. Curve the vines gracefully, or make into wreaths before tacking. Once dry, they hold the shape. To frame a mirror or picture, cut a pattern of it in cardboard, fasten the sprays to it, and lay flat to dry. An airy attic is excellent for such drying; also for storing packed ferns.

Pack only perfect fronds of lace fern, stag horn and maiden hair. Spread first many thicknesses of newspaper, smooth and flat, cover it with ferns well spread; lay on more newspaper—three thicknesses, at least—weight corners; lay on more ferns, more papers, shifting weights to hold them steady, and repeat till all the ferns are packed. Then weight the pack with light boards. Sword ferns, the hardest of all, can be thus packed, but should be dug up, taking care not to bruise them, freed of old and inferior leaves, then the roots packed close and tight in a box or trough, with a very little earth, sprinkled very well, and set under a shed or on the north side of a building. Throw something

over them when it is very cold, or remove indoors. In mild or moderate weather they do better in the open, and will stay green all winter if not frosted. Let alone the tall, branchy brake fern, however tempting; it will crisp and twist to worthlessness, no matter how carefully handled.

Hang milkweed pods, head down, where it is dry, cool and still. By slow drying they will not shatter when they burst. Goldenrod, picked in prime and carefully dried, makes rather handsome fluff, but much less so than a dull pink perennial, whose herbaceous stalks spring up in damp places, and produce great, round heads of small, fine blossoms.

(Cont. on p. 329)



When the roadside clematis has formed its silken clusters it may be carefully brought in to grace the house in winter



The great oak tree determined the physical form of the house and became a factor in shaping its plan. In summer it shades the entire side of the house and the brick-paved terrace. In winter, when the leaves have fallen, the tree keeps off no desirable sunlight

Homes that Architects Have Built for Themselves

THE CAMBRIDGE RESIDENCE OF ALLEN W. JACKSON—A HOUSE THAT TURNS ITS BACK TO THE ROAD AND ADOPTS THE ENGLISH IDEA OF PRIVACY FOR THE GARDEN AND THE MAIN ROOMS

BY ALLEN W. JACKSON

THE architect who builds his own house sometimes has an uneasy feeling that, like the lawyer who handles his own case, he has a fool for his client. The perfect freedom which he has always looked forward to as such an ideal condition for success, he is surprised to find quickly becomes positively irritating. Like a child in a garden who rushes from flower to flower and cannot decide which to pick, he, too, finds so much to attract him in all the styles, with their heterogeneous appeal, that he is soon in a fever of excitement and turns over his books in a flutter of enthusiasm. He realizes that there is not one thing that he has always wanted to do, but fifty. He has visions of a Tudor-Colonial-Dutch manor house, with Italian arcades and steep French roofs. If it were possible to construct a half-timber, brick, plaster, stone, shingle wall, one would really fear for the consequences.

His mind races, like an engine with no load. He begins to wish vaguely for instructions, for limitations imposed from without; something fixed and definite and circumscribed, to make a problem to be solved. For, as the glory of an artist is to work within the limitations of his medium, so it is of the architect to wring success from the imposed conditions as he finds them. With no

crochety owner, who must have *all* rooms on the second floor; or his wife, whose motto is to look after the closets and the rooms will look after themselves; or the daughter, who demands that her chamber must have light on four sides—without these aids to design, what shall he do? Luckily, however, he too has restrictions. His pocketbook will supply one of the most immutable, his location another—and, happy thought, his wife the rest!

I do not know whether, as a general rule, the houses that architects build for themselves are better or worse than the general run of their work. Looking over those one calls to mind, they seem on the whole to be worse. I am not quite sure why they should be less thoroughly and carefully done, although I have an idea that there may be something of the feeling of desire of getting away from the shop. He is rather tired of "architecture," and is quite content to get away from it and surround himself, not with moldings and cornices and the rest of the *mise en scene* of his trade, but rather to refresh himself with the less familiar arts of other men; pictures, furniture and *objets d'art* with the architecture, just enough for a background to tie the thing together. It may be also that if he happens to be in a stale and jaded state when the great time arrives, or extra busy with im-

portant professional duties, he will weakly prefer to do nothing at all, so that all the world will say, "He didn't try," than to make the supreme effort that all his friends will expect of him. Whether or not these are the reasons in some cases, I fear we shall find no blanket reason to explain their frequent shortcomings.

With the house we are illustrating, the location provided the first problem. The lot of land is situated on a well-traveled thoroughfare of a populous suburb. It is on the south side of the street, with its two distinguishing features a mammoth oak tree exactly in the center and an open park on the west. The lot itself is ninety-five feet on the street and one hundred and fifteen feet deep. There was no question but that the oak, a handsome tree with good spread of foliage, must be kept. It remained to be decided whether to build between the tree and the back line, so getting away from the street and having the remaining land and tree in front of the house; or to build between the tree and the street, with a garden behind. The house would, in either case, have to be long, narrow and parallel to the street. This latter location was decided on, because it was thought that while placing the house in this location would bring it near the highway, it would, nevertheless, bring the south side overlooking the garden and away from the traffic. This idea, it was found, could be carried still further, as will be seen from looking at the plan, by placing all the important rooms on the south and garden side of the house, leaving the halls, etc., to form a buffer, as it were, against the noise and dust of the street and the cold winds of the north.

Having decided on this motif of turning one's back to the road, the logical step was to develop and make the most of the long south side of the house overlooking the garden.

The front hall, running through the house, was made to let on to a wide brick terrace, running by the dining-room, and overhung and shaded by the oak, like a great green parasol. This

shades the entire side of the house in summer, but its bare skeleton ribs in winter lets the sun pass through to flood the rooms with its cheerful presence. A weatherproof table and chairs serve for meals in front of the door to the dining-room, and a

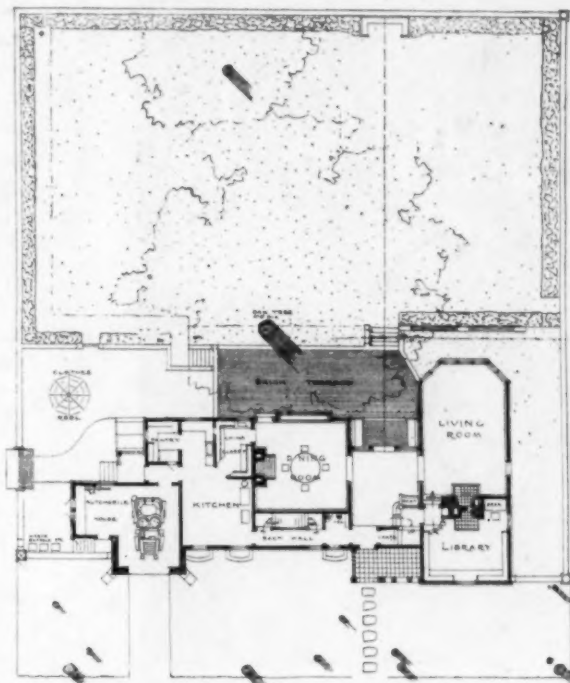
window above the counter in the butler's pantry serves as an admirable slide for serving and clearing away. At these *al fresco* meals, the shade of the oak is very grateful, its large, close-growing leaves making a surprisingly thick, dense shade. This terrace, owing to the conformation of the land, is some few feet above the garden level, so that one looks off and down among the flowers.

The front door from the street, the hall and the door to the terrace, are on an axis which is continued across the terrace by a flight of brick steps leading down to the lawn and across beneath the sweeping boughs which in places touch the ground, to a seat described through the foliage against the boundary wall beyond.

The east end of the terrace, beyond the butler's pantry, is stopped by a seat the width of the terrace, whose high back serves to shut out and form one side of the laundry yard behind. Another flight of rough stone steps, covered with a pergola, runs down from

this end and connects with brick walks bordered by flower beds flanking the lawn on the east. Thus the outdoors is linked with the rooms within, and is really a larger and more airy living-room, the transition being made as easy and without jar as possible. In planning the outdoor part of a house, one must hold his hand in the treatment of gardens, etc., and careful planning is as necessary here as elsewhere. It is important to concentrate the interest and avoid confusion. One's prize effects must not be dissipated, but carefully con-

served and bound together. Here, as elsewhere, not the least part of the impression will be due to the foil afforded by unadorned settings. Nothing is more stupid than the sight of what might have been a dignified, unaffected lawn, entirely spoiled by



The house faces north, but the long hall serves as an insulator, keeping the rooms warm



The decoration of the interior was inspired by the contemporary work in English homes. It is made livable with wide easy chairs and bright cretonnes



The newel posts are capped by little carved and painted wooden figures of saints, probably from a long-forgotten piece of church furniture

being dotted over with timid flower beds or lonely little trees, each carefully insulated by a bit of turf from contact with the other. These pitiful affairs, placed with the idea that they take care of the decoration of a certain number of square feet, are evidently used with the feeling that there is something shameful or bold in a plain surface of honest grass. We will avoid any such lifeless mixture by keeping our flowers together, and in this case use them in a general way as a wall or boundary about our level lawn in the center.

Now, if our garden is to be the great outdoor living-room that we desire, where we can take off our coats and romp with the children without hurting its rugs or scratching its furniture, where we may have tea and gossip with our friends, we shall want walls or high hedges to make it cosy and shut us in from the world. This was the aim of the place we are considering. The lawn has the unbroken center, the flowers, vines and shrubs making a border all around, backed on the east by a high-clipped hedge of Siberian maple, and on the south and west by a high wall. The house forms the fourth side of the quadrangle to the north.

So much for the layout in a general way of the small estate.

The interior arrangement of the house was arrived at by following the direction pointed out by common sense, a path in this instance unusually



To give the subtle charm that permeates an old house, Mr. Jackson built in the antique architectural features he had collected. This is an Italian carved doorway of Sixteenth Century workmanship



The craving for the dignity and atmosphere that clings to old furniture led to the use of several pieces. They are of different styles, but each piece is intrinsically beautiful and harmonizes with the color scheme

clear and well defined; the points of the compass and the desirable views fitted well with the owner's desires in outlook and accommodation. The land adjoining on the west is a large undeveloped park, and this outlook was selected for the living-room, with the small library between it and the street; next, toward the east, is the hall; then comes the dining-room and kitchen, with its appurtenances. Beyond, at the extreme end, is the garage, a name which use has proved it should share with that of "shed." It is a place for the ice chest, waste barrels, bicycles, ice-cream freezer, mops, bottles and all those things that in most houses are put—where are they put? This portion of the land has the least desirable outlook, and this utilitarian area serves, by thrusting itself between the world and the inner sanctuary, to have an ancillary value apart from its main functions.

The bedrooms follow out the central idea of utilizing the south, the view and the garden to the utmost.

The house, being a long, narrow one, it is necessary to string the rooms together by a hall, and this is placed to run along the north, throwing the important rooms on the more desirable side. Here, also, are placed the stairs and public closets, leaving the choicest positions for the more important rooms. No architecture is attempted on this floor, the problem being taken to be the squeezing the

(Continued on page 322)



The terrace is as much a room of the house as any part of it and makes a delightful lounging place free from the prying eyes of passers-by



Casement windows, a paved terrace, a walled-in stretch of lawn, these are some of the elements which add to the hominess of the English house. To adapt them to our conditions is but the recognition of some sounder building ideas than are used in the average American country dwelling

Tree Wounds and Their Treatment

HOW TO CARE FOR YOUR INJURED TREES SO AS TO PREVENT OR CURE THE ROT-PRODUCING FACTORS THAT ARE ALWAYS PRESENT—VARIOUS KINDS OF WOUNDS

BY ELBERT PEETS

WOUNDS are perhaps the most frequent primary cause of the decay and death of trees. The vast majority of the destructive rot-producing fungi can make their entrance into the framework of the tree only through wounds. By wounds I mean all exposed surfaces of wood, all interruptions in the normal bark covering. Wounds are not simply esthetically displeasing, marring, for instance, the fine texture of the bark, nor do they merely interfere more or less seriously with the physiological processes of the tree. Wounds are breaches in the tree's great wall of defense, its bark, laying the precious treasures of its wood open to the unresisted attack of its thousand omnipresent enemies. If you come upon the brown shelf-like fruiting bodies of certain rot fungi in the woods on a bright day in fall, you will see coming from their lower surfaces little clouds of brown dust. Each particle of this fine dust is a spore which has the power to grow and cause decay and to reproduce the mother plant. How certain it is, then, that every wound in a tree will sooner or later become infected by some tree disease, and that every wounded tree is a tree in danger.

There are two general purposes or principles which govern the treatment of wounds. We must handle wounds in such a way as, first, to prevent the entrance of decay and of insects, and, second, to facilitate their healing. The first purpose is of more immediate importance, on account of the slowness of the healing process, which often cannot take place at all if decay precedes it. The second is, however, of great ultimate importance, because healing entirely obviates the danger of infection and helps the tree physiologically and physically.

Any discussion of dressings for wounds must be prefaced by a determination of the things the dressing is to be called on to do and of the influences which tend to prevent the proper discharge of its functions.

The dressing is put on the wound in order to prevent weather, insects and fungi from getting at the exposed wood. The weather does but little harm *per se*, but it is the invariable advance agent of fungi. To be good, a dressing must cover the wound completely, bridging such small cracks as there may be in it, must take tenacious hold on the wood, weather well, and not crack or separate from the wood. It must, in addition, be fairly easy to ap-

ply, and another consideration is that it must if possible be cheap.

That it is hard to find a satisfactory dressing is largely due to the kind of surface to which it is applied. Because the surface to which it is applied is usually moist it is hard to make the dressing adhere, and because the surface is sure to check it is hard to

get a permanent covering. Painting a wound in a tree is absolutely unlike painting a piece of seasoned timber. It is sometimes suggested that the dressing ought to prevent evaporation and the checking of the wood, but in practice it has been found that no dressing will prevent the checking of fresh-cut wood. The wisest thing to do is not to try to put on a permanent dressing until the first checking has taken place. A heavy dressing will then retard further checking and may not be fractured by such checking as does occur.

The various materials which have some value as applications to wounds can be divided into two groups: those which sterilize the wound and cause the death, through their fungicidal properties, of such spores as fall on the wound while the materials persist, and those materials which fill and cover the wood, permanently preventing the access of spores to it. Some of these last have incidental antiseptic qualities.

To the former class belong all sprays used against fungous diseases, such as solu-

tions of copper sulphate and the lime-sulphur wash. Whenever trees are sprayed with a fungicide the nozzle should be held for an instant against each wound, and the trunk should be sprayed as carefully as the bearing wood. The copper solution is made by dissolving an ounce of copper sulphate in a gallon of water. Other antiseptics of value in dressing wounds are corrosive sublimate, dissolved in water at the rate of two ounces to fifteen gallons, and formalin, one ounce to two gallons.

The antiseptic materials used in wood preservation are also of value in treating wounds. Foremost among them are coal tar, creosote and carbolineum, which is also a coal tar product, distilled off at a higher temperature. Creosote comes in several consistencies, the heaviest of them requiring heating. A so-called creosote is made from the tar which is a by-product of the manufacture of water-gas from petroleum, but it has no antiseptic value. In buying creosote demand a guarantee that it is distilled from coal tar. Carbolineum has been the center of much contro-



An oak with a large bark wound. The decayed bark has been cut away and the sound wood treated with creosote and tar



Wounds made by lawnmowers, etc., at the base of a tree, as in the case of this beech, should be carefully attended to

dealers and cost from sixty-five cents to a dollar or so a gallon, do not actually fill the wood in the sense that paints do, but they make the wood impervious to water and immune from the attacks of insects. The reason why they cannot be considered as complete dressings is that they do not to any extent prevent the checking of the wood, even when they are frequently renewed. They cannot in any way fill or bridge over cracks. Checking continues, though slowly, for an indefinite period. Ultimately, the cracks get so large, if they are not covered over, that water gets into them and, freezing, tends to break out bits of the wood, thus exposing the unimpregnated inner regions. For this reason chemical preservatives, as distinguished from dressings which produce a mechanical covering, have not proved successful permanent applications for wounds.

Of those materials which do actually fill and cover the wood, paint is probably the most used. Pure white lead and linseed paint makes a very good dressing for moderately small wounds, especially if the wood is dry when the paint is applied. Its effectiveness is much increased if a second application is made after the first checking has taken place. Paint seems especially suitable for ordinary orchard practice, where the wounds are not large nor inaccessible and healing is fairly rapid. It would not do to ignore Professor Bailey's judgment in such a matter. "My conclusion is," he says, "after having had the question in mind for a decade, that a heavy application of lead paint is the best all-around dressing for common pruning wounds." The tree repairer, however, has often to deal with quite different affairs from ordinary pruning wounds. Suppose a large wound is painted. In a year or two season checks form in the wood and the inelastic paint fractures. Boring insects find little crevices in which to deposit their eggs. The larvæ burrow back and forth in the wood,

versy. Some observers claim it never hurts the bark or living tissue of the trunk, while others can prove that trees have been killed by it. Until it is determined under what conditions it is safe, the manufacturers warn against the application of carbolineum to the bark or to the sapwood close to the bark. To large surfaces it can of course be applied without danger, and for such purposes it has great value, as it penetrates very deep, especially if it is heated.

Creosote and carbolineum, both of which, by the way, are commonly carried by paint

returning as adults to the wound to emerge. At the surface the paint may stop them temporarily, but the strong jaws of the insects soon break it down. Each hole thus left, with a moist mass of sawdust extending back into the wood, is an ideal germinating bed for fungus spores. In four or five years more the wood is quite rotten, large cracks appear in its surface, ants and other insects have free access. Soon the wound is beyond any cure but a more or less expensive cavity treatment. Repeated observation of this process has led the writer to conclude that a single coat of paint is a positively dangerous dressing for large wounds, concealing, as it does, the disintegration which goes on underneath it almost as rapidly as if the wound had not been dressed at all.

A very permanent dressing is the plastic cement used by slaters. It is applied in a thick layer with a spatula. It does not become hard nor crack if it is properly made. It has no antiseptic quality and must be preceded by an application of carbolineum. It is probable that the use of slaters' cement will become more common as the method of making two applications, one for sterilization and one for protection, is more widely adopted.

Grafting wax is too expensive and adheres too imperfectly to entitle it to a place as a regular dressing, but the liquid form has important special uses. It is the best thing to apply to fresh wounds, because it does not in the least injure the cambium. The wax can be made at home according to the recipes to be found in Bailey's "Horticultural Rule-book," or it can be bought, costing about forty cents a pound. To make liquid wax of the ordinary kind, heat it and mix about half its weight of alcohol with it. It may be well to give Bailey's recipe for "Lefort's liquid grafting wax." "Best white resin, one pound; beef tallow, one ounce; remove from the fire and add eight ounces of alcohol. Keep in closed bottles or cans."

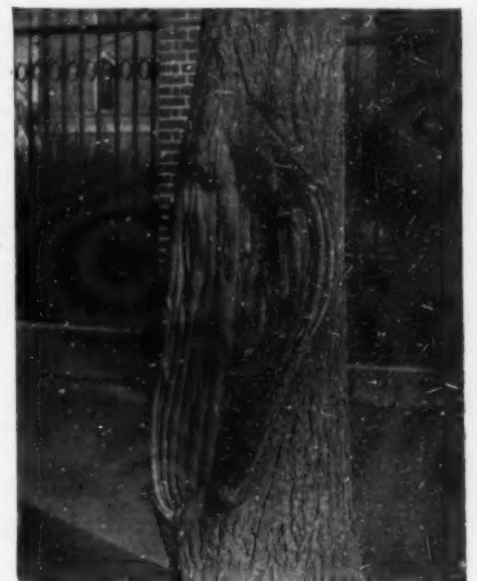
Next to paint, tar has been the material most commonly used as a dressing for wounds. There are several different kinds of tar. To dispose first of the undesirable ones, the material known as "coal tar paint" is merely a solution of some kind of asphaltum in benzine and has no value as a wound dressing. It does not spread thickly, dries brittle, and is rapidly dissolved by water. Pine tar, or pitch, is rather expensive, not very convenient to handle, and in no way superior to coal tar. A special warning should



A cross-section showing a typical frost crack



The frost crack shows as a long, narrow opening lengthwise of the trunk, in time developing pronounced lips



This tree has made repeated efforts to cover its wound with calluses, but the bark has been gnawed off by horses

be sounded against those forms of tar which are hard and brittle at ordinary temperatures and have to be melted to be applied. Such are sure to chip off and be unsatisfactory.

Coal tar is the material intended wherever the word tar is used here. In buying tar for that purpose the only safe way is to get it from, or trace it from, a gas works producing gas from coal. In case of doubt have the dealer sign a guarantee that the tar is wholly the product of the destructive distillation of bituminous coal.

Tar makes a very good dressing if it is carefully applied and if not too much is asked of it. It is at its best when heavy applications are made in winter, when it usually needs to be heated, to dry and not too large surfaces. It is absorbed by a transverse cut and is then to a certain extent subject to the drawbacks attendant on the use of such materials as creosote. It does not adhere well to moist surfaces, blistering up easily. On large wounds it must be frequently renewed. For instance, the writer once had to treat a large wound in an ironwood tree. The exposed wood was dry and sound, though rather deeply cracked. He applied at intervals of a week or two, during the summer, four thorough coats of tar. The conditions were ideal for a perfect job. Four years later there were numerous holes through the tar where insects had escaped and there were even cracks through which the wood was visible. This does not prove that tar is not a valuable dressing. It only shows that in this case four years was too long to wait before renewing the protective covering. That is the great point about the use of tar. It must be renewed at frequent intervals. How long those intervals can be depends upon circumstances. If a thorough second coat is given rapidly-healing pruning wounds up to, say, six inches in diameter, a year after the first coat, they can usually be left to heal without further attention. Larger wounds should receive a second coat the year after the first one and every second year thereafter, until checking absolutely ceases and a heavy impervious layer of tar is formed over the whole surface.

For the little odds and ends—petty injuries and quickly-healing wounds—a thorough daub of tar is quite sufficient. But the strong color and staining quality of tar must not be permitted to lead to careless work with it. It must be flowed on with a full brush, and every particle of the surface must be covered.

The solid forms of asphalt can be used just as they come, being melted for use. There are serious difficulties, however, about applying hot preparations to tree wounds, particularly if the wounds are high up in a tree. Most forms which need melting, also, dry too brittle to be perfectly effective. To avoid these drawbacks, the asphalt is usually fluxed with some liquid in which it will dissolve, just enough of the solvent being used to bring the mixture to the proper consistency. Many substances are used for this purpose, including gasoline, petroleum oils of various consisten-

cies, linseed oil, and other vegetable paint oils. The mixture can be bought ready made or can be made by the user.

Effective as a thorough coat of asphalt paint is, cases frequently arise which call for something even more strong and enduring. The wound may be a very large one, for instance, and difficult of access, so that little dependence can be put upon future renewals of the dressing. If it is an old wound there are probably borers beneath the surface which may be able to break through even a heavy coat of asphalt. To meet such a situation we have always the possibility of covering the wound with zinc or copper. There is a method, though, which secures quite as effective a covering as does zinc, with less expense and less work. That method is the reinforcement of ordinary brushed dressings.

A dressing is reinforced by applying a fabric to the wound and saturating the fabric with the dressing. The materials available for the purpose are numerous, such as cotton batting, burlap, cheesecloth, and canvas. By all means the most satisfactory, though, is cotton padding, a material used in dressmaking. It is a thin bat of cotton, perhaps an eighth of an inch thick. All department stores sell it, the price being about five cents a square yard.

Three steps must be observed in applying the reinforced dressing. First give the wound a thorough coat of the dressing. It is well to let this dry a day or two. Then press the padding against the wound and saturate it thoroughly with the dressing. At this point the padding which extends beyond the edges of the wound can be trimmed off. It takes only a moment to trim the edges if a sharp instrument is used. The writer uses old safety razor blades. When this saturating coat has dried a few days the upper surface of the cotton padding will usually be somewhat exposed. A final surface dressing is necessary in order to protect the cotton from the weather. When the job is done the presence of the cotton is barely discoverable.

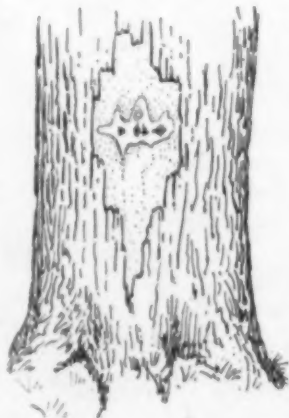
Not all dressings fit this process. Tar is apt to harden at the edges and separate from the wood. Paint would do fairly well, though it would be very expensive. The asphalt compounds work best. The first coat on the wound can be of tar, asphalt being used to saturate the fabric and for the final dressing.

The manufacturers of pruning paints often advertise that their preparations contain nothing which could be harmful to the tree. The writer does not consider that an important point. None of the materials commonly used is seriously injurious to the wood. Tar usually kills back the cambium an eighth or a quarter of an inch, but it is normally killed as far back as that by drying. Carbolineum often kills the cambium a little farther, but is innocuous if it is kept an inch or so from the edge of the wound. Don't choose an expensive material over a cheap one, for the sole reason that its analysis indicates that it contains nothing which could possibly injure the cambium. The cheap one may

(Continued on page 331)



Another instance of how a tree may be wounded. In this case an iron band has eaten into the tree as the latter grew



Most of this cambium has been saved by prompt treatment

The Modern Kitchen and Its Planning

HOW THE EFFICIENCY, COMFORT AND APPEARANCE OF THE KITCHEN MAY BE IMPROVED BY JUDICIOUS ARRANGEMENT AND EQUIPMENT—SPECIFIC CASES IN WHICH THIS HAS BEEN DONE

BY C. E. SCHERMERHORN

Photographs by Mary H. Northend and Others

TO every architect there are certain features about a house which have for him the greatest interest. The kitchen has always appealed to me, probably because my earliest and most cherished memories are of my grandmother's kitchen. At one time there were two rooms, the dining-room and the kitchen, but the partition between had been removed, making one large, convenient room. How well I remember the big chimney-piece, where I could look up and see the stars! It was so big that the cook stove and wood box, which it was my duty to keep filled, were not enough entirely to fill its cavernous space. To the rear of the kitchen was the mysterious "safe" under the hill, which was so dark that I could never be inveigled into it, although my aunt bravely went in and out many times a day. Then there was the pantry, with its cistern and slate floor and shelves, to which no modern pantry, with its tiled walls, porcelain sink and built-in refrigerator, need aspire to equal. For what modern pantry has within its walls such "ginger" and "round-wheel" cakes as grandmother made? In spite of frequent raids, the red-painted tin pans never failed to respond to my onslaughts.

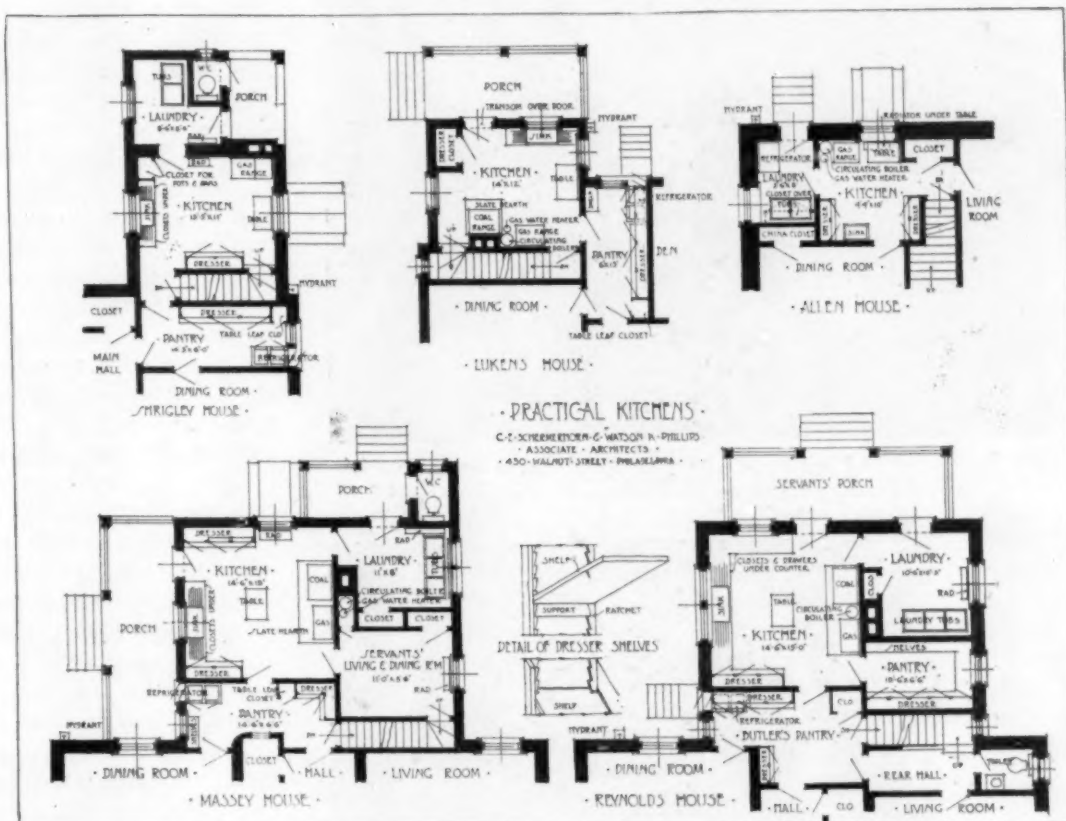
In the middle of the room stood the dining-table, which, between meals, was covered

with a red-and-white - figured table cover. At meal time the table was laid with a serviceable white oil-cloth cover. I never remember having eaten lobster a la Newberg at this board, but never since have I tasted buckwheat cakes and honey, both raised on the place, which would compare with grandmother's.

But turning now from the old to the new, consider the kitchen of Mrs. George W. Massey, of Lambertville, N. J. While some kitchens may contain things not found here, there

are few kitchens so well appointed. Before going further, I must give Mrs. Massey full credit for many of the features herein described, my part being to offer suggestions here and there, and to keep her dressers, ranges, etc., from overflowing into other rooms or out of doors. Mrs. Massey's first instructions to me were that she did not want a house with a Queen Anne front and a "Mary Ann" back. We compromised by making both front and back of Colonial treatment. Should you visit her home, she might, in all probability, take you straight through to the kitchen; so there we will go.

At first you might not be impressed; on one side we see the ranges, on the other a dresser and sink, and at the rear another dresser. Wait



The floor plans of five different houses, showing how their kitchens have been planned to meet the varying requirements. The construction of the adjustable dresser shelves is especially good



When the doors of the dresser in the Massey kitchen are opened everything needful is at once accessible without the necessity of searching hither and yon



A well-lighted sink is desirable for comfort and efficiency. The space directly below it should be left open, thus making for greater cleanliness

until the doors are opened. Here is surely the master dresser. The doors are five inches thick, and are really closets, for they have shelves. When these doors are open, every necessary thing is at hand, without having to go hither and yon for salt, sugar, spices, baking powder, etc. The shelves are supported on movable cleats and ratchets. These are arranged so that the shelves may be raised or lowered one and one-quarter inches. This feature would greatly improve any dresser, for the shelves may then be arranged to accommodate the articles to be placed on them, and the extra cost is trifling. Another arrangement equally good is to use metal plugs and bore holes in the side pieces, similar to the arrangement in bookcases.

Beneath these doors there are three drawers, separated into compartments for the kitchen cutlery and similar articles. Under the middle drawer is a cutting-board for bread and meat. This is a necessity in any kitchen, and by this means is always at hand and cannot be mislaid.

Just beneath the countershelf, and above the open door, will be seen a long, shallow drawer; this is the bread-kneading board. The drawer is 36 inches by 24 inches and 1 inch deep in the clear. It is lined with zinc. Like the cutting-board, it is never in the way when not in use, and may be readily taken out and cleaned. A sliding bracket supports this board. One-half of the lower dresser has the same door arrangement as the upper portion; the other section has drawers for kitchen linen.

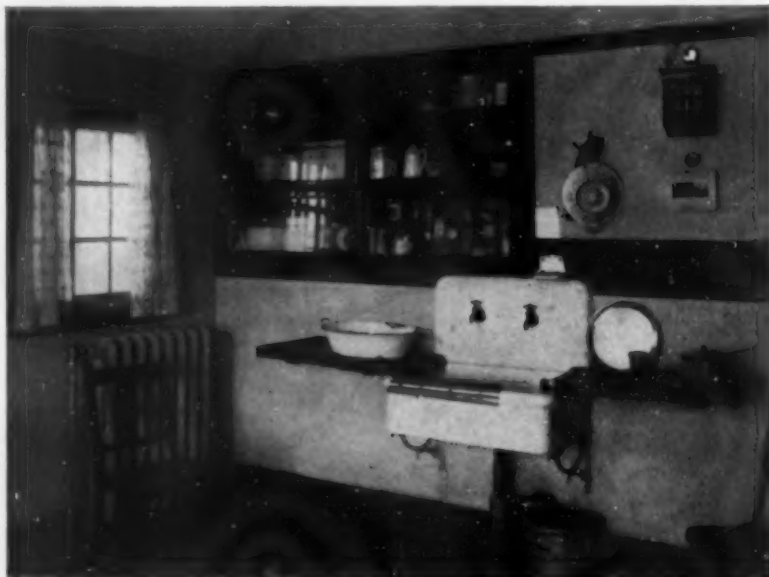
A useful adjunct is the clock shelf, which is inexpensive, and will undoubtedly be put in some time. Why not arrange it when the house is built, and then have it made and finished to match the woodwork?



Tiled walls and floor in the butler's pantry add to its neatness, as do also the glass-doored cupboards

Are you aware that a sink may be set at any height desired? Have you ever felt that your sink was too high or too low? The usual height of a table is 2 feet 6 inches or 2 feet 8 inches. Plumbing manufacturers long ago established 2 feet 6 inches as the standard height for sinks. This was fixed upon so that waste pipes, legs, etc., would be uniform in length. This brings the bottom of the sink five inches or six inches below the usual table height, so that if the pans are placed in the sink one will have to stoop or lean over while working. In the Massey kitchen the sink is set three feet above the floor, which brings the pans at the regular table height. This may be too high for some women, and it is best to consider the matter carefully before the specifications are written, and then specify whatever height is preferred. If the sink is supported on concealed hangers or brackets, the plumber can make the waste pipe change himself, but if legs are used they will have to be specially made, although one large manufacturer of plumbing supplies now makes the legs of lengths that will suit most any case. The sink should not be less than 20 inches by 30 inches, and a 20-inch by 36-inch sink, which will hold two pans, will be more useful. It should have the back made integral with the sink. Most women prefer the gray instead of the white enamel finish.

Where the sink is to be set under a window it is well to have the window designed so the sill will come just at the top of the back. By all means have a slate or glass sill. Nothing disfigures a wood sill so quickly as a piece of wet soap or a damp rag. The difference in cost is not worth considering. Never enclose the space directly under the sink; if left open it will be the more easily kept clean, and there will be no temptation to use it for a catch-all, and thus make it a vermin producer.



In this small country house kitchen the cupboard doors lift up and slide back like those of a sectional bookcase

Both coal and gas ranges were installed in the Massey house. The hot water circulating boiler is placed in a closet back of the range. In winter a hot water back in the coal range supplies hot water. An automatic gas water-heater installed in the closet is used in summer. An ash pit was built in the cellar under the coal range, with a slide and drop under the fire chamber; this does away with ash dust in the kitchen. A novel feature is the maids' room. This is not a sleeping apartment, but a sitting and dining-room for the maids and chauffeur, and provides a place where they may have comforts which a kitchen does not afford. All large houses have servants' halls, but few medium-sized houses have such an apartment. From this room the rear stairs ascend to the second floor.

The laundry, being used but once a week, is well put in an isolated part of the servants' quarters. It is not advisable to put it in the basement, particularly if there is only one maid, for it necessitates a lot of running up and down stairs. Other good points are a closet in the laundry and a toilet conveniently located.

If the ironing is to be done in the kitchen or laundry, and it is desired to use an electric iron, which is a time and fuel saver, besides assuring a cooler kitchen or laundry, have a special outlet provided on an independent circuit. An indicating receptacle should be used, so there will be less chance of leaving the iron with the current turned on, and thus be in danger of starting a fire. In some sections of the country the underwriters require a receptacle as described above.

The pantry, with its refrigerator, dressers, table-leaf closet, etc., is about as complete as one could wish. A sink might have been provided, but this is not considered so essential, except in a very large house.

It is not necessary to have a built-in



There is no reason why the kitchen should not be made attractive as well as other rooms in the house, for there is nothing in it which need be innately ugly



The Massey kitchen has both coal and gas ranges, the latter being cooler to work with in summer

refrigerator. A high-grade portable refrigerator, costing from thirty dollars up, depending on the size, style and lining, may be purchased, and an outside icing door may be included at a cost of about eight dollars extra. A door may also be built in the outside wall for icing. Be sure to have a hydrant placed where the ice man can have no excuse for not washing the ice.

If the "best china" is to be kept in the pantry dresser, I would suggest using glazed doors. If possible, provide

a long, narrow closet at the end of the dresser for the extra dining-room table leaves. Better see if the leaves have aprons attached, as so many of the high-priced tables now have. A closet with lock and key may be built over the table-leaf closet, in which the owner may keep his "appetizers" and cigars. Where the size permits, a center-table will be found very useful.

The Massey and Reynolds kitchens are similar in arrangement, the latter having a greater amount of dresser space; so much, in fact, that a card-index system would seem almost necessary. The dresser in the butler's pantry is continued over the refrigerator. The rear hall provides direct access from the living-room to the kitchen, toilet and rear stairs.

The Shrigley and Lukens kitchens are entirely isolated from the rest of the house, and both are fortunate in having cross ventilation, an excellent feature not always possible to obtain. The Shrigley dresser, and pot and pan closet, have adjustable shelves. A gas range is used all the year. Hot water is obtained from a water generator in the cellar, which is connected to a circulating boiler.

The usual type of dresser is omitted in the Lukens kitchen;

(Continued on page 323)



The dresser, with compactly arranged shelves and drawers containing all necessary materials, lightens the cook's work appreciably

Old Clocks and Their Makers

TIME PIECES OF EARLY AMERICAN MANUFACTURE THAT ARE OF GOOD DESIGN AND IN RUNNING ORDER EVEN TO-DAY—THE CHARACTERISTICS WHICH THE VARIOUS MAKERS PUT INTO THEIR CLOCKS

BY N. HUDSON MOORE

Photographs by Mary H. Northend and Others



A wag-on-the-wall

THE story of clock-making in America is full of interest and surprises as well, and it is unfortunate that so much of it is locked in obscurity and come upon only by accident. The lack of guilds which preserved the names of workers in England is strongly felt here.

To England is usually ascribed the largest collection of clocks in the world, yet in a small town in Massachusetts are two collections, of which the owner of one of them says: "I have quite a lot of old things and about two hundred old clocks, some tall ones. I have about one hundred fully restored, and, being of a mechanical turn, I do all the work myself on cases as well as works, and have derived a great deal of pleasure from working on them. If you can find it convenient to come here, I will show you the largest and greatest collection of clocks in this country, I think. It belongs to the president of our company. He has many more than I have, and generally of a higher grade." From every State in New England, from most of the Southern States, and from the West as far as California have come letters and

pictures of treasured markers of the flight of time, and from these I have selected the facts which follow.

I had said in the "Old Clock Book" that the clock on the Metropolitan Tower, New York City, was the largest in the world. Promptly comes a letter from the Colgate Company in Jersey City with a correction and data with regard to the size of their clock, which is "not only the world's largest clock, but more than twice as large as the next largest. The dial can be read at a distance of four miles. It weighs approximately six tons. The minute hand is twenty feet long and travels at its point twenty-three inches every minute, or over half a mile a day."

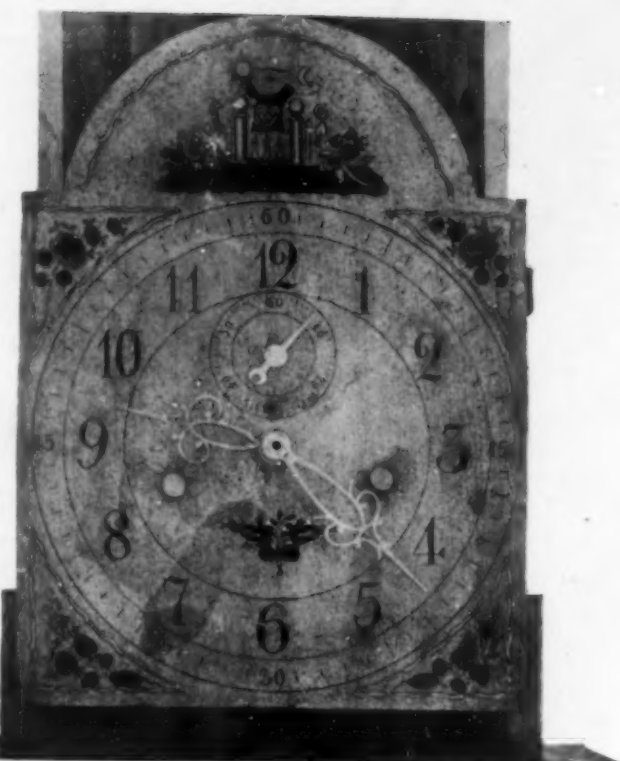
While it is true that there were many distinguished clock-makers scattered all over our country, it is with the men of New England that this article is particularly concerned. That clock-makers, along with other artisans, came early to the colonies is also true, but much of their work is gone, so that so fine a

specimen of a clock as that shown in the lower central illustration on page 303 is unusual. It was made by Gawen Brown, a

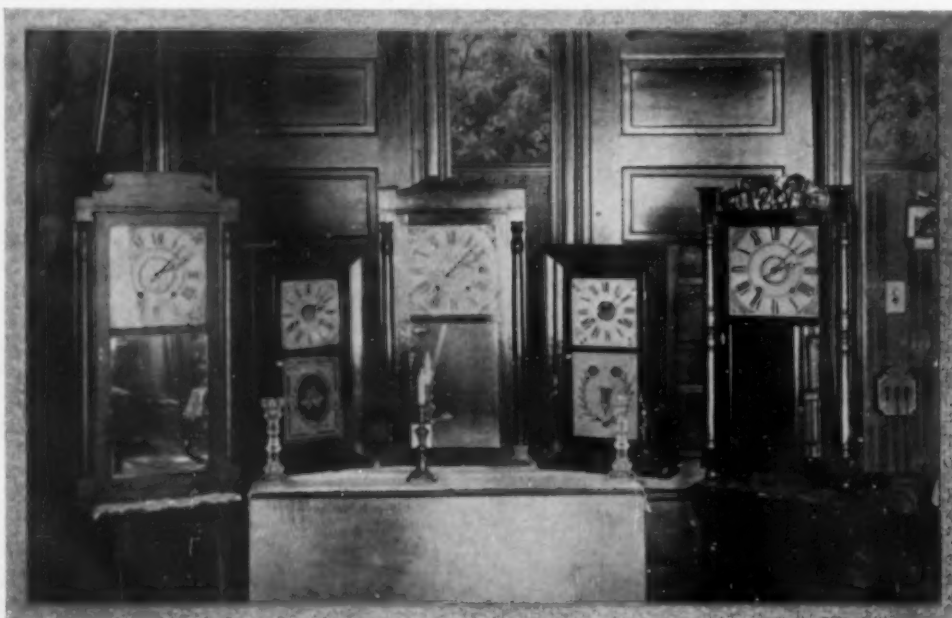
London clock-maker, who came to Boston to

settle by 1750 or earlier, as the owner of the clock thinks it was purchased by the original owner about 1736, soon after Brown had arrived, because the dial bears on its face, "Gawen Brown, London." From 1750 till 1768, Brown had a shop on State Street, Boston, and made the clock in the tower of the Old South Church, showing that he made steeple as well as domestic clocks.

The clock shown is a handsome one, with a silvered dial plate, the rest of the dial being brass, handsomely wrought. The case



An unusual feature of this old dial is its separate outer circle for the minute hand. The face shows characteristic decoration of the early workers



A group of early clocks made at Plymouth, Conn., by Ely Terry, Seth Thomas and others of the old-time makers. They include both wood and brass works

is of lacquer, with figure originally gilded, but the gilt has long since been worn off, showing the sizing only. The clock stands seven feet high, is in running order, and has never been out of the family of its first owner.

The most famous of Massachusetts makers were the Willards,

three of whom achieved distinction as clock-makers. They never made woodworks clocks. While Connecticut ran wild with the making of these, the Willards kept right on with their high-class brass clocks. They began to work about 1765 or somewhat earlier. In the Boston *Evening Post* of December, 1771, Benjamin Willard advertises his removal from Lexington to Roxbury, and there the family remained.

Of this famous family, Simon Willard, who died in Roxbury in 1848, leaving a son of the same name still in the business, was the most celebrated. Simon did not believe much in the virtue of advertising, but relied on the merits of his work and his clock papers. One of these reads as follows:

"CLOCK MANUFACTORY
SIMON WILLARD.

"At his Clock Dial in Roxbury Street, manufactures every kind of clock work, such as large Clocks for Steeples, made in the best manner and warranted, price with one dial, 500 dollars; with two dials, 600; with three dials, 700; and with four dials, 900. Common eight-day Clocks, with very elegant faces and mahogany cases, prices from 50 to 60 dollars. Clocks that will run one year with one winding up and with very elegant cases, price 100 dollars. Timepieces for astronomical purposes, price 70 dollars. Timepieces for Meeting Houses to



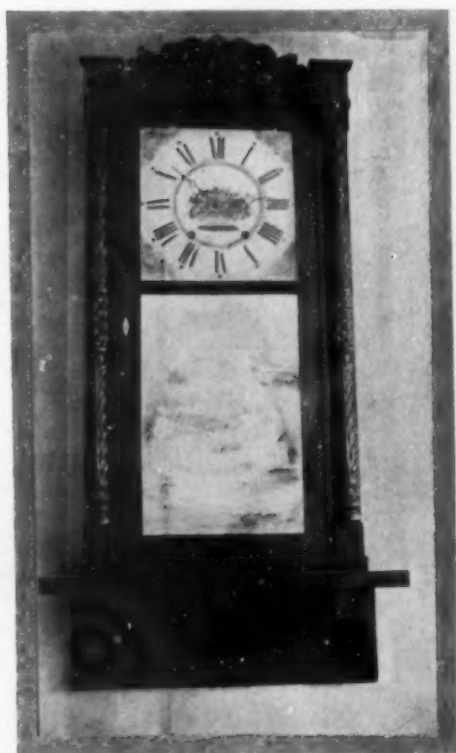
Excellent work was turned out by the New Hampshire makers, of which this handsome Hutchins clock is an example

place before the Gallery, with neat enamelled dials, price 55 dollars. Chime clocks that will play 6 tunes, price 120 dollars. Perambulators are also made and applied to any sort of wheel carriage, and will tell the miles and rods exact.

"Gentlemen who wish to purchase any kind of clocks are invited to call at said Willard's Clock Manufactory, where they will receive satisfactory evidence that it is much cheaper to purchase new than old and second-hand clocks. He warrants all his work, and as he is anxious to give satisfaction he doubts not of receiving the public approbation and patronage."

Clocks by him in going order are by no means uncommon, both tall and of the style now dubbed "banjo," a name never applied to them by the Willards, who called them "presentation" clocks, for they were the fashionable wedding gift of those days. The one shown in the upper left-hand cut on page 304 is an excellent example in several ways, and is owned in Salem, Mass.

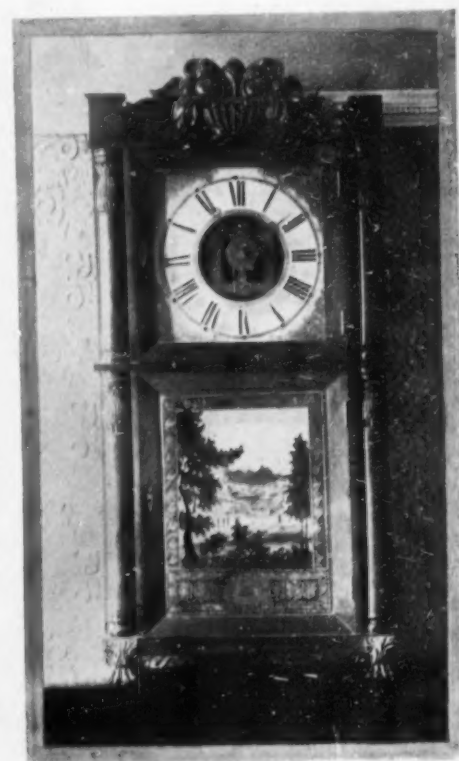
It is a "timepiece," since it does not strike, the term clock being given to a striking instrument. The clock has all the characteristics of the original Willard's, save one. He always used glasses with designs like this, never with scenes or portraits. His cases always showed the natural wood, and were never gilded. Simon Willard never used a spread eagle, like this one, on his



An example of the "bronze looking-glass" clock, by Jerome



A handsome clock by Gawe Brown, of London, probably made about 200 years ago



A clock with brass works, made by Terry, and still in working order

clocks, choosing, instead, a gilded ball or acorn as decoration.

But while Massachusetts had her distinguished makers, Connecticut was the great clock-making State. Many of her silver-smiths were clock-makers also, these two trades providing luxuries which could well be done without by the hardy men and women who were occupied in wresting a living from her rocky hills. The

greatest name in American clock-making annals is Eli Terry, and he was a Connecticut man. But before I speak of him, mention must be made of his instructor in the trade, Thomas Harland. He was an English clock-maker, who came to this country and settled in Norwich, Conn., in 1773, that historic year which saw the great tea party in Boston Harbor. He had many apprentices, some of whom achieved greater fame than their master. The clocks he made—"spring, musical and plain clocks," according to his advertisement—all had brass works, with pendulums forty inches long, and they were put in tall cases, as was the usage in England. A fine specimen of his work still in going order stands in the home of his descendants in Norwich; it is shown in the lower right-hand picture on this page.

In the latter part of the Eighteenth Century there came a demand for cheaper house clocks. People no longer wished to depend on the church clock or on the uncertain noon-mark cut on the kitchen window-sill, which every passing cloud obscured. The clocks with brass works were the only kind known and were expensive, being cast and wrought. At this period, Eli Terry made what was known as the woodworks clocks, which were, it is true, first cut out and sawed by hand, but which were quickly and cheaply made, and good timekeepers.

The history of Connecticut has much to do with wooden objects—clocks, knot-bowls, woodenware, and, her detractors say, wooden nutmegs. However that may be, her woodworks clocks were a great success, and through them Eli Terry and his family achieved fame and fortune. He made his first woodworks clock in 1792, a tall case clock, which is still going in the home of one of his descendants. In 1793 he commenced to make regularly these wood clocks. Three or four were made at a time, loaded

on horseback and peddled through the country. The local carpenter or the village handy man made the cases, but, later, case-making became a regular business.

Many of the clocks were sold uncased and hung up just as they were, and were known as "wag-on-the-walls." There are few of them left, for they became clogged with dust and refused to

go. I have seen one made by Silas Hoadley, a famous clock-maker of Plymouth, Conn., a contemporary of Eli Terry and for a short time his partner. This clock still goes and is owned in Massachusetts. It is the only one of this kind I have known of, marked with the maker's name.

In 1814, Terry made what he called his "perfected wood clock." They were called short-shelf clocks, to distinguish them from the long case clocks. The cases of mahogany were made in sections and then put together. The movements were wood, one-day time, bell strike. The cords ran in top and bottom pulleys, doubling the time the clocks would run if only top pulleys were used. A splendid clock by Terry, with brass works, is shown in the right-hand corner of page 303, made at about the same time. One of the most interesting things about these old clocks is the clock papers found within the cases of so many. The Terry clocks had "Patent clocks made and sold by Eli Terry, Plymouth, Con. Warranted if well used." The earliest all had Con. spelled with one *n*. A clock of the style shown sold for \$15 when first manufactured, but the price dropped to \$12, competition was so keen.

The town of Plymouth, Conn., has an interest all her own, while less historic than her Massachusetts sister. The town was incorporated in 1795, and in 1895 celebrated her hundredth anniversary. On that occasion, examples of her early industries were exhibited. Early clocks made by the Terrys, Seth Thomas, Chauncey Jerome and others were shown, and a group of them included what remains of one of the wag-on-the-walls and an interesting one by Terry without a dial, the figures of the

hours being painted on the glass.

Terry's designs and inventions were seized upon without

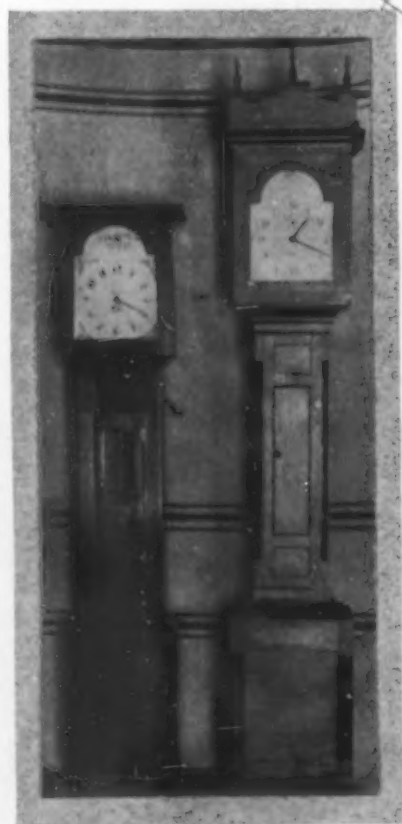
(Continued on page 326)



A timepiece with many of the characteristics of Willard's work



The dials were often made by companies which did nothing else



Two tall thirty-hour clocks, both with wood works



Made by Thomas Harland. Mahogany case, brass works

A Problem in Garden Remodeling

OVERCOMING UNDESIRABLE LANDSCAPE EFFECTS DUE TO LAND CONTOUR BY THE CAREFUL ARRANGEMENT OF TREES AND SHRUBS—HOW THE MATERIAL ALREADY AT HAND WAS TURNED TO GOOD USE

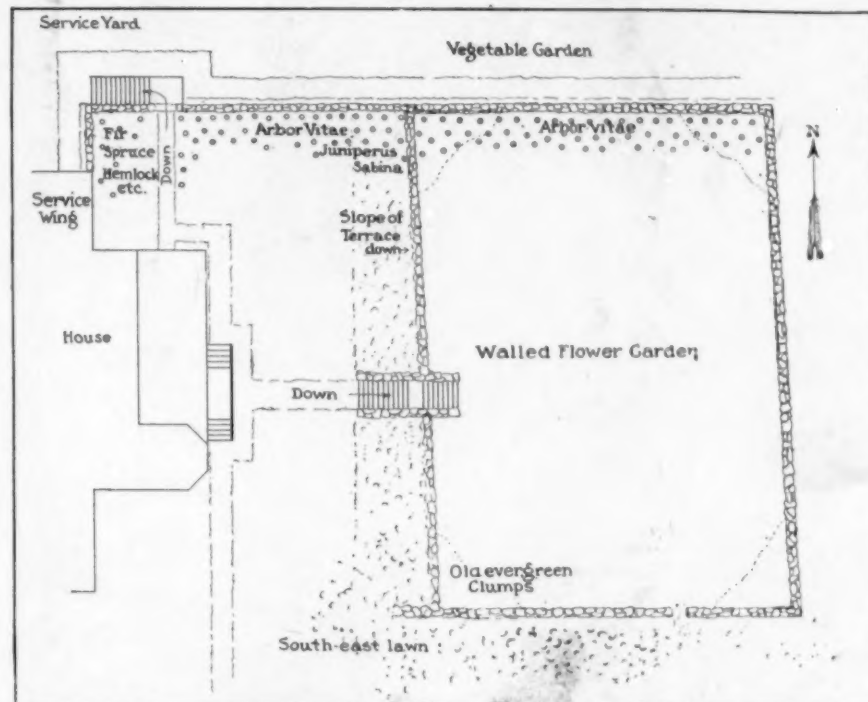
BY GRACE TABOR

MAKING over a garden with the material at hand is sometimes a problem to try the very soul of the gardener. And always it is a problem to try his skill, crucially. For the use of old garden material, while it would seem to be easily accomplished, may really be one of the most thankless of gardening tasks, owing to the mistakes made in choosing this material in the beginning.

I am not of course referring here to the shrubs and flowers to be found in a really old garden, but to the stuff introduced on a place that has been "gardened" under the modern influences so generally at work where planting of any consequence is to be undertaken. There is no end of such places—places where large sums of money have gone into the purchase of quanti-

ties of material, and where just this fact, and this alone, is the most emphatic note in the resultant effect. It is with the resolution of such an effect into something like a garden in the true sense that the problem herein considered deals.

The fragment of plan here given shows the work as completed, and also shows by dotted lines the spaces from which most of the material was taken. From the house it will be seen that the ground slopes gently down toward the south, drops away at a steeper angle which becomes a deep terrace above a walled garden on the east, and descends abruptly over a continuation of this wall on the north—so abruptly, indeed, that it is lost to sight altogether from the house level. The north end of the dwelling is the service wing, and



This plan shows the remodeled garden when completed, and also indicates by dotted lines the spaces from which most of the trees and shrubs used were taken. The results in improving the lines of the place are good



The land slopes downward beyond the north wall of the flower garden, necessitating tree planting along that border in order to relieve the bare appearance. Arborvites were accordingly transplanted there, and now form an attractive line leading to and up the terrace appearing at the left of this picture



Looking down from the terrace to the flower and vegetable gardens; the sharp drop in the land is modified by the evergreen arrangement. The line of these which leads to the foot of the terrace continues up the latter with trees of decreasing height, thus making the break seem less abrupt and harsh

down the hill from the service entrance is the vegetable garden, occupying about the space alongside the walled flower garden but lower than it by from fifteen to twenty feet at the wall. At its northern and outer boundary it is still lower, the general slope of all the land about being down in that direction.

It is therefore easy to understand that from the walled flower garden before the house or from any point below the house on the southeast lawn, the effect when looking toward the north or northwest was desolate and exposed to the last degree. The earth absolutely drops away; and so house and north wall were standing up against the sky—bleak, barren and forbidding. And nothing could be done by planting beyond this wall to enclose or “dress” this barrenness, for the very good reason that the earth lay so far below that even large trees would hardly show their tops above the wall. A few had been set out in the service turnaround, but until these should attain the extremely unlikely height of at least 150 to 200 feet, they would have no effect whatsoever; for the view is all up-hill, bear in mind, consequently it reduces everything beyond the wall in diminishing perspective. Detached and in freezing isolation, therefore and on the brink of a precipice seemingly, the house site defied softening—and the house, long and with all its emphasis on its horizontal lines, looked as if it were trying to crawl down and shrink into the earth to hide its nakedness but could not.

The material at hand was a motley assortment of almost every kind of “fancy” evergreen. At each corner of the walled garden stood one of these dreadful clumps, selected and graded in approved (?) fashion, arborvitæ looming up in the rear with re-

tinosporas, biotas, junipers and all the rest marshaled with due precision before them until about forty specimens in all were stored away in each group. In addition to this most undesirable stuff, numerous fugitive spruces, hemlocks, firs and pines in assorted varieties were scattered about the place with utter disregard of everything save getting as many as possible into the ground. These of course required corralling and reducing to something as nearly approaching order and decency as such mixture would permit.

The walled flower garden was curiously adapted to the planting arrangement finally decided upon in that it was irregularly shaped and longer from its transverse or east-west axis—which was the axis of the house—north than it was from this axis south. This left fortunately a broad space for a boundary screen within the wall along the north, where such a boundary screen was sorely needed. It also suggested a special treatment at that end of the garden, centering on its north-south axis—but that is another story.

The plan shows what was done better than words can explain, I think. The work was started by removing the tallest of the arborvitæ from its place in one of the south groups to a position at the very bottom of the terrace slope against the north wall. The tallest tree was chosen for this lowest place in order to overcome as far as possible the ugly line of this steep, sharp terrace, and flatten it out in effect. With the tallest tree at the bottom and one a little shorter next above and a shorter one still above that, and so on, the tree tops as seen against the sky were more nearly on a level;



Looking up the terrace toward the service end of the house from the northern part of the walled flower garden. This picture shows the excellent effect given by the evergreen arrangement—arborvitæ along the wall and forming the background with the lower growing junipers and shrubs grading down to the foreground

thus the ground's unalterable steepness was somewhat nullified.

Once the top of the terrace was reached, trees of varying heights were used as back material until very near the house. As the house was approached, however, a rule of tree planting that is ordinarily as fixed as a tree itself, was smashed into a million pieces, and a group of Nordmann's fir, with a hemlock and a spruce, were put almost against the building itself, within the corner made by its juncture with the retaining wall.

The effect was instantaneous, for they were fairly large trees—trees that ranged from fifteen to eighteen feet in height. And how that house did take on a pleasant, home-like look—a lived-in, warm, human aspect in place of the air of desolate chill which it had worn!

All along the north wall, atop the terrace and within the enclosed garden too, the evergreen planting was carried, until the wall itself was completely hidden, the sharp slope of the terrace was altogether moderated, and the barren, drop-off-the-earth-beyond look had given way to the cheery limitation of a protective barrier.

There were a sufficient number of the evergreens to carry out the scheme, but the many varieties were a serious handicap. Starting new on such a planting, only one variety would have been chosen for the entire mass; but here were at least ten, including some of the golden foliaged fancy kinds that are an abomination to all honest garden lovers. To use these many kinds in such a border so that a real mass effect would result, it was necessary to group each kind as far as possible, and yet not to do this so rigidly that the mass would appear to be made of small groups.

On the slope of the terrace the Savin junipers were used to fill before the Siberian arborvitæ that, in their turn, had been placed before the taller, slimmer native *Thuya occidentalis*—for the prostrate juniper likes a slope, is eminently suited to it and grows naturally thereon. The golden retinosporas, lower and broader than any arborvitæ, were gathered into two groups or clusters in the foreground farther down—clusters which were not widely separated and yet were distinct from each other. A single silver retinospora was given a place with two or three specimens of *Retinospora plumosa*, which variety it resembles in character; and all the plants of which there was only a single specimen or two were kept as nearly as possible in little masses of near relationship, or of general resemblance where relationship did not exist. In this way the patchy look of the old corner groups was overcome, and a long and dignified border mass having real continuity in color, form and shadow, was developed.

Such a problem as this does not occur often perhaps, for the original site was unusual, and the original treatment of the site had been singularly unfortunate, leaving really no choice in the matter of planting. It would have been perfectly possible, before any building at all was done, to locate and plan the house and grade and lay out the grounds in such a way that all the dreadful, barren north exposure with its up-in-the-air effect would have been avoided. But with stone walls already built that only dynamite and a small fortune could tear out, and with filling and cutting done that would have required months to undo, the easiest way, as above described, was the best way—and the one straight cut to what is, after all, a fairly satisfactory result.

Preparing the Garden for Winter

AUTUMN ACTIVITIES THAT BENEFIT THE FLOWER, FRUIT AND VEGETABLE GARDENS—
PROPAGATING BY CUTTINGS AND ROOT DIVISIONS—STORING THE BULBS FOR WINTER

BY D. R. EDSON

Photographs by Chas. Jones and Others

IF autumn gardening has become a sort of a hobby of mine there is some reason in it. While some of my friends who started out with hopes that were too high have become so disappointed and discouraged that they practically let things take care of themselves, I take pains to make everything that has been grown count. In fact my gardening during the year has been done very largely with an eye to this very time, and in some garden matters, too, I know that, instead of being six months behind with my gardening, I am six months ahead; in other words, I am getting ready for spring instead of for winter. But, of course, all this work has to be done before the ground freezes up and before cold weather sets in.

There are so many things which should be attended to in the fall that simply to go ahead and jot them down one by one would merely result in a mass of details that would be quite confusing. For my own use, in order to be sure that a minimum number of these multitudinous small tasks are overlooked, I make a list that has six main headings, as follows: Cleaning up; Planting; Propagating; Harvesting; Pruning; Mulching. Under

each of these several titles, as the days begin to grow short and the nights cold and one realizes that the time is getting very short before the outdoor work has to cease, I jot down the various things which appear to need attention, and before each of these little reminders I put down a figure 1, or 2, or 3, to indicate which should be attended to first. It would not take you fifteen minutes to get a sheet of heavy paper and mark down upon it such a program as this; and between now and the first fall of snow you

would find it of immeasurable assistance as a practical guide.

The first heading on my list, though unfortunately it happens to be the least interesting, is of prime importance, as you cannot well go ahead with your planting and harvesting until you have attended to it, and pruning and mulching can wait until the last call.

Of course your place will look better for a good cleaning up in the fall, but that is not the most important point. There are thousands of weeds, and some annuals which are almost as bad as weeds, if you let them go, which are hastening to the completion of their life task—m a t u r i n g and planting a supply of seeds which will insure their abundant recurrence in next summer's garden. And besides this, every little heap of old stalks and weeds and bunch of rubbish furnishes a

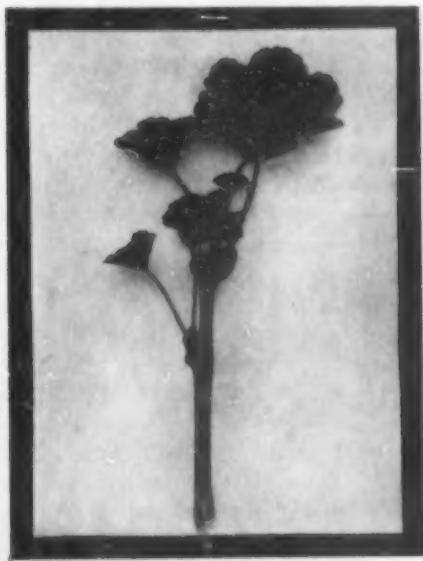
safe winter retreat for the eggs or cocoons of various pests and germs of plant diseases. Garden-pests lurking in this humble and seemingly insecure protection will be full of life and vitality to defeat your next year's efforts to have a perfect garden. Weeds that are full of matured seeds, or stalks and

leaves that have shown some disease through the summer, should be gathered up clean and burned as soon as possible. Any green weeds or the remains of plants or foliage which have been healthy through the summer should be put into the compost-heap, as burning wastes a very large percentage of the plant food which they contain. When in doubt, however, burn, and burn quickly and cleanly.

Besides weeds and the remains of various *passé* crops, you should cut off to within half a foot or a foot of the ground



A good way to keep dead leaves until ready for mulching is shown by this stake enclosure. It might be improved by a roof to shed the rain



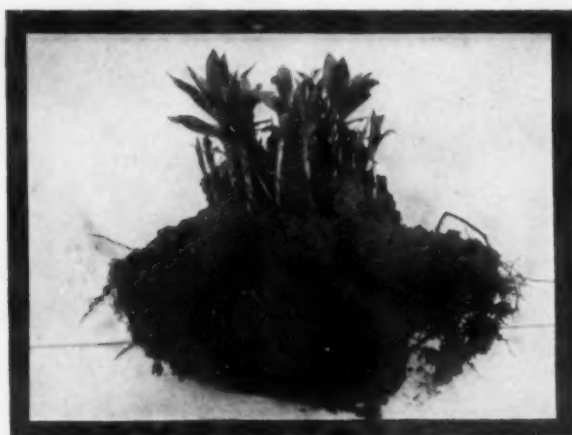
In preparing geranium cuttings cut the stem off cleanly



Pelargoniums are well adapted to "slipping" in pots for house use



The perennial phlox clumps should be cut apart, thus making several plants



A clump of phlox roots that is ready to be divided for replanting, as shown at the left



Delphinium, also, may be divided in much the same manner as the phlox

as die back to the ground each winter. Sometimes I leave a few stiff, strong stalks of things which bear seed freely and which the birds in winter have a liking for. But this is by no means necessary, as you can easily cultivate the friendship of your winged neighbors who incidentally fight a part of your battles with the insect world, by hanging a bone or two or a lump of suet from some branch where you can see it from the window, but where no prowling cat can get at it. But the hardy and shrub borders which you may have thus made bare are not to be left exposed. An important part of your cleaning up job is the raking up of fallen leaves from lawns and drives, and these should be carefully put away and saved for your mulching later on, instead of wasting them by burning. Even if you have more than you can use for mulching, save the rest for the compost heap. One of the photographs illustrates a rather clever method which a friend of mine has devised for saving her leaves until the time comes to use them; its only disadvantage is that there is no roof over it and, being exposed to the weather, the leaves may be in a soaked condition when you want to use them. Much of my autumn gardening is work that cannot, or at least should not, be done at any other time; much of it, however, is work that is usually not attempted at all, or done in the spring—and that is why I contend that this part of my gardening, instead of being done much behind time, is done six months ahead. Instead of waiting until spring and then going to the trouble and expense of buying manure, I use every possible means of obtaining a supply of what the garden-writers call "green manure"—crops to plow under in the soil, there to rot away and furnish the vegetable matter which is so desirable. So when my cornfields have been cut or potatoes dug, the space between the rows is

the frost-blighted tops of such of the herbaceous shrubs, hardy perennials, the hardy lilies and so forth,

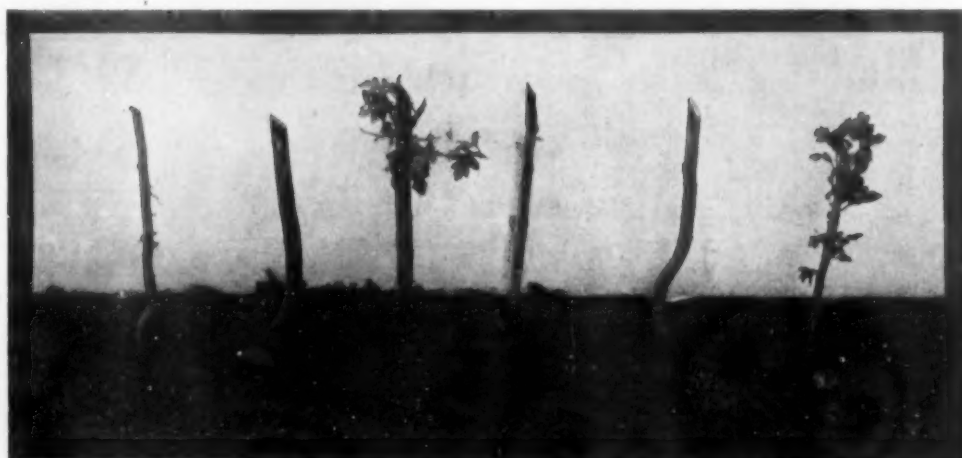
ripped up with a cultivator, which does the work at one-fourth the expense of plowing, and rye or rye and winter

vetches are sown as soon as possible. I do not stop here; the same principle is carried into the vegetable garden, even into the flower garden, and the result is that in favorable seasons, when there is a sufficient amount of fall rain, there is a nice green mat covering the ground before the heavy snows arrive. Those fields and spots in the garden are beautiful the first thing in spring, beautiful enough to make the work worth while even for looks alone; but in addition to this the manure is actually growing at a wonderfully rapid rate and plant foods which would otherwise have been carried off and washed away through the long winter months are being gathered up and stored away for the use of the summer crops. These fertilizer crops should be

sown on every square foot of ground you can get clear, and just as soon as possible. These things stand the rigorous winters in the latitude of Boston; south of New York or in the latitude of Philadelphia, crimson clover may be used instead, and there are few things more beautiful than crimson clover in full bloom. Vetches and clovers are "nitrogen gatherers" and are especially valuable for forking or plowing under for that reason.

But all this is preparatory work, the technique of gardening. Not so, however, are the fall plantings of bulbs, hardy perennials and shrubs, which you should make now if you have an eye to the full glory of your next year's garden. The spring bulbs and hardy lilies must be planted now; the hardy deciduous shrubs *should* be planted now and many of the hardy perennials *may* be planted now. There is one vitally important rule which applies to all of them: Plant them only where there is thorough drainage, in soil of such a character so situated that the surplus winter water can readily soak through it and run off. If this is not

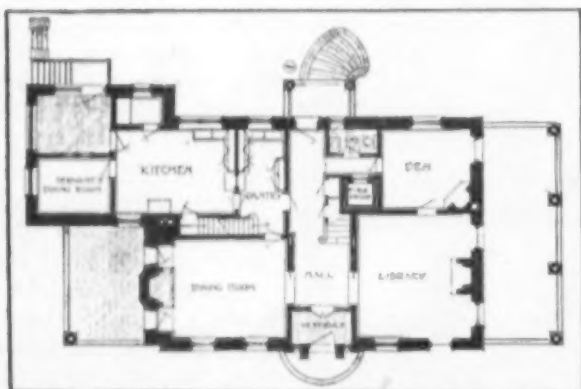
(Continued on page 336.)



Now is a good time to cut back and generally trim up such of the hedges, shrubs and other wood growths as seem to need it. This is a young quick hedge pruned back



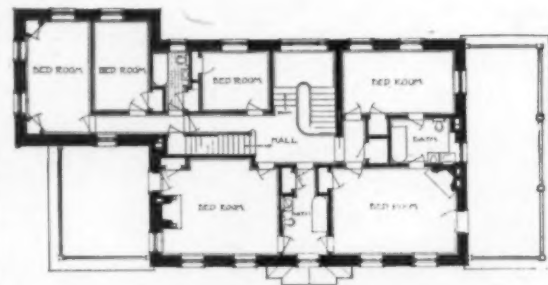
Mr. Vaux's house is built of fieldstone found in the neighborhood and laid with white mortar joints. There is a hip to the roof projecting about the house common to many homes in this neighborhood. Here its strong, horizontal line decreases the apparent height



Between the hall and the den a lavatory has been built—a convenience appreciated by the careful planner

RESIDENCE OF MR.
GEORGE VAUX, JR.,
BRYN MAWR, PA.

*George Spencer Morris &
Richard Erskine, architects*



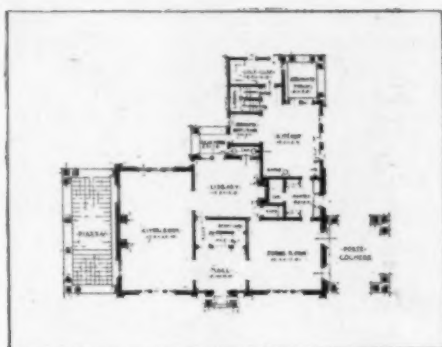
The bedrooms in the ell may be entirely isolated from the rest of the house, which is a matter of importance in case of sickness



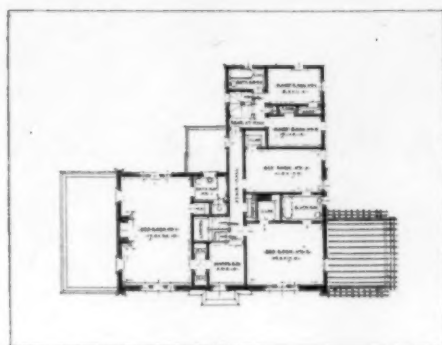
A simple flight of steps faces the door and runs to a broad landing lighted by a wide window. The lower hall has light from the pantry as well as the rear door



The dining-room fireplace is set in an alcove and flanked by two French doors which open upon the side porch, providing much more light than windows



A feature of Mr. Tarbell's house is the complete unification of the kitchen and service rooms and their excellent co-ordination

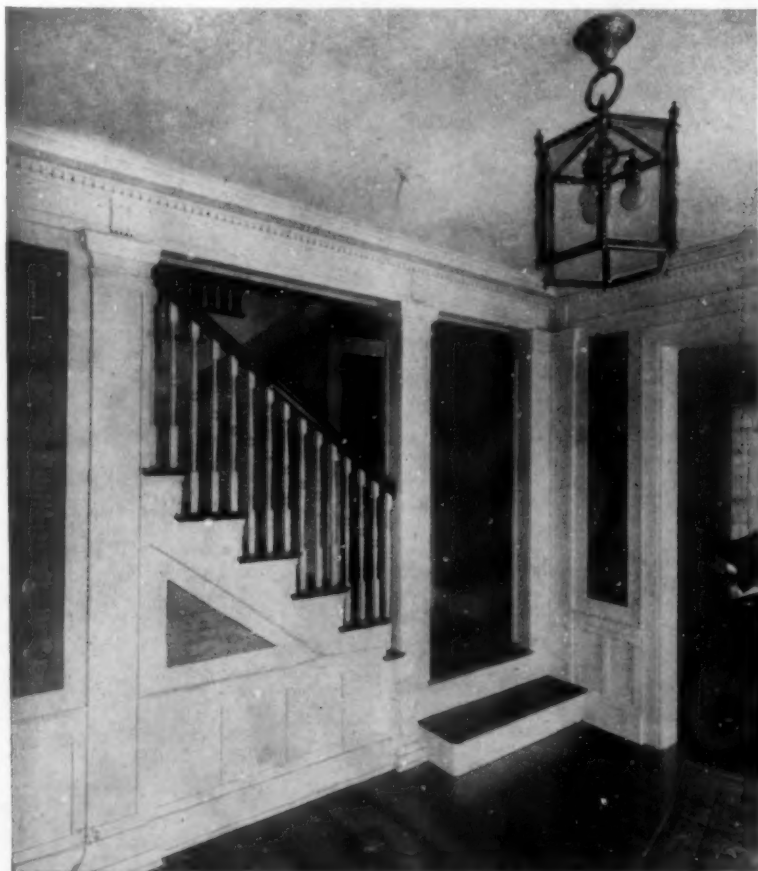


Two rooms and a bath have been provided for the servants, a consideration that should result in better service



The situation of this house demands a formal treatment which has been carried out in perfect balance. The use of white woodwork upon the brick façade is particularly well chosen, and is a suggestion of some of the possibilities of brick house treatment

THE HOME OF MR. GAGE TARBELL, GARDEN CITY, N. Y. *Aymar Embury, II, architect*



Upon entering the hallway one faces the stairs built entirely within the well. This is an economical arrangement, since the hall space is not cut up, and here is treated in a very pleasing architectural manner



The doorway of Mr. Tarbell's house is an interesting variation from the many Colonial peaked roofs. In pleasing combination with it is the simple Colonial detail placed beneath the eaves



Inside the House

Timely Suggestions and
Answers to Correspondents



The editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Some Good Window Plants

THERE are many plants that are available, but unfortunately not well known to those outside the trade, that are most suitable for window ornamentation. In the winter we need all the light that is possible to get in the house, so any plant arrangement at the window that shuts off the sunshine is a failure. The latter place is the usual one to keep plants during the cold season, yet in reality it is only a toleration and the object sought is really defeated. Plants that do not fit are worse than useless. Lanky skeletons with a fringe of leaves looking best from the outside are reflections on our sanity.

The old standbys are always good, but help them out with an occasional new thing, or make the old ones take on a new look by a new treatment; in short, give the matter a little thought and the effort will be well rewarded.

Let us work out the possibilities of some of these propositions. Sunny windows should be chosen. It is all right to talk about dark windows, but the best results will be had with the windows where the none too hot winter sun streams in part of the day. Keeping the idea of let-

ting in all the light possible, dress the window low in front, up the sides as high as you like and across the middle if you want to. Needless to say, small plants must be used for this, and a few auxiliaries in the line of receptacles, portable shelves, window boxes, etc.

The following are novel for window use and are all small: Mint, Lycopodium, Fittonia, Panicum, Peperomia, *Pteris Wilsoni*, Echeveria, Sedum. Others, larger growing and of which small plants must be chosen, are: Rubbers, Kentias, Grevelias, Cyperus, Dracenas, etc.

Now as to the auxiliaries spoken of. The suggestion of window boxes is very apt to dampen one's ardor, as it harks back to the summer and the only window boxes we are familiar with, and we realize the impossibility of such for house use. The contrivances hinted at here are small, portable affairs which for the want of a better name must be called window boxes, though some daintier title would be more fitting. Make the box as long as the window. It should be three to four inches wide and the same deep and lined with metal. Such a box is easily handled and small plants will live in it perfectly. A

very light brace will easily sustain it in place without any disfiguration of the woodwork. Another way is to have the box the same dimensions in the center, increasing the ends to six inches by curving the lines. The shelves, if needed, can be of equally light construction, and for the side of the window wire or light metal holders can be used.

Of the small plants spoken of nothing makes a more attractive arrangement than the mint—*Mentha pulegium Gibraltica*. It grows about two inches high in a compact mass of vivid green and gives out a most agreeable suggestion of mint. Once established in the box and supplied with plenty of sunlight it is decidedly ornamental. It resembles a miniature well-kept lawn plus the odor of mint. It is inexpensive and grows with surprising rapidity, so that from a very limited original supply an unlimited amount can be had in a short time. To start, separate the stock plants and put them in the soil about an inch apart; water regularly and put in the sun, shading for a few days until it takes hold.

The decorative possibilities in using this plant either in combination with others



Dracena Sanderi is a good small window plant



Cissus discolor should not have too much dry heat



Peperomia does well in windows that are sunny



Grevillea robusta is desirable when of this small size



A compact little combination pad and telephone list attached to the instrument itself

named, or alone, cannot be fully appreciated until it has been experimented with, when individual tastes will find ever increasing uses for it.

Fittonia is considered a hothouse plant, but it will do well in the box suggested. Small plants should of course be chosen and a combination of this with *Pandanus Veitchii* will be very attractive. It might be well to say that the plants that are usually tall growers should be very small; nothing larger than the thumb pots in which they have become somewhat pot-bound should be used. It would be advisable to put them in the box without turning out of the pot. Doing this will restrict their growth and keep them within bounds. Where the pots are plunged, the ground work, whether of mint, panicum, or lycopodium will cover them; but care in watering must be used to see that the pots get their share of water.

Peperomia is decidedly ornamental because of the peculiar marking of the leaves. Keep them low so that they may be looked down upon to get the best effect. A few at the ends of the window box might be suggested.

In cases where there is objection to the use of the window box, flat pans should be substituted. A pan such as this filled in the center with sedum and edged with mint, gives a somewhat stiff but attractive effect, while if the edging is made with panicum or lycopodium it will be more graceful.

Numberless details of the different plant possibilities might be given here without creating an atom of the impression that a little experimenting will effect; the object sought is therefore to inaugurate a better understanding in the matter of window decoration and to put it on a better standing by doing away with the all

too common supposition that anything is good enough for the window since it is sure to die in a short time. A good idea would be to go out to a greenhouse and look over the stock and buy a few small things for experiment.

Where there is no objection to deep boxes they could be placed flush with the window on brackets. While larger plants could be used here than in cases already mentioned, it would always be well to keep in mind the necessity of keeping the center low. Fill entirely with *Grevellia robusta* or *Grevellia* in the center and *Pandanus Veitchii* on the ends. Very small plants of Boston fern planted close will make a bank of green. The plants should be out of very small pots and well rooted. *Acalypha macafeana* small is good. A comparatively little used house plant is *Phanix rabelenii*. It is just as hardy as the kentia with the advantage of having a more graceful habit. It will do well in any location.

Where boxes or other such arrangements are objected to, side brackets can be used to hold plants. I do not mean the cumbersome things that have been nightmares for generations, but those of wire and nickel make that are serviceable and ornamental. At the side of the window with well chosen plants they add a decorative effect.

A Telephone Memorandum Pad

IT is not always convenient to keep the telephone receiver on a desk, and yet there is an almost constant necessity for pad and pencil in connection with one's telephone calls. A compact little combination pad and telephone list that may be attached directly to the instrument is one of the newest contrivances for the benefit of the busy person.

A thick foundation pad covered with



A good window arrangement. The vase in the center may contain growing or cut flowers



If the pot containing the plant is placed in another that is plugged at the bottom leakage is eliminated

leather has a spring holder at the top which slips around the receiver and holds the pad firmly in place. Attached to brass rings on the pad is a set of ruled cards with a thumb index arranged alphabetically for the list of telephone numbers, and on top of these, mounted on a silk covered board is a little memorandum pad containing nearly one hundred sheets, with a lead pencil in a little holder at the top. The pad may be had in either red, green or brown leather, and the memorandum sheets can be renewed whenever required, as the piece of cardboard at the back fits into a slit in the silk covering.

A New Hatbox Idea

THE idea, borrowed from France, of covering boxes for hats, waists and other articles of clothing with cretonne and fitting them into a wooden frame, thus making a serviceable piece of furniture, has proved wonderfully popular not only for summer cottages, but for luxurious bedrooms and boudoirs in city houses as well. The craze for cretonne showing bright-colored figures on a black background has extended to this class of furnishings, and a tall, cabinet-like arrangement recently seen had a frame of light wood enclosing a hatbox and a number of smaller boxes covered with black cretonne that was decorated with flowers and large birds of paradise in the gayest of colors. The hatbox was particularly effective, as the cretonne was put on so that there was a brilliant bird on each side.

If the work is carefully carried out there need be nothing about this space-saver that is not decorative as well as useful.



Garden Suggestions and Queries

The Flower Garden

CONDUCTED BY GRACE TABOR
Author of *The Landscape Gardening Book, The Garden Primer, Old-Fashioned Gardening, etc.*



The Winter Mulch

UP to the middle of this month, bulbs may be planted; but not a one should be above ground after the fifteenth, for they begin to "go back" by that date, and deteriorate very fast.

Until the ground freezes other garden material may be transplanted and shifted, excepting always those things which are not adapted to fall moving at all. All the stone fruits you will remember come under the ban; and generally speaking, the very latest flowering perennials are better for handling in the spring, although this is not a hard and fast rule.

Gather up all the fallen leaves and never burn a one! It is heartrending waste to the gardener to see the countless autumn leaf fires sending their smoke heavenward on every side, at this season; for autumn leaves are one of the most valuable assets the garden has. Burned, they may return a trifling amount of chemical to the soil; but disintegrating and mingling with the earth in their entirety they are of the greatest value, physically as well as chemically. They make the soil more friable, increase its moisture-retaining capacity and encourage the growth of fine feeding rootlets, thereby making it possible for plants to avail themselves of the foods already in the soil, as well as adding to these foods their own small proportions; yet we burn these up on every side—and wonder what ails the earth on lawn and garden plot.

If you have more than you can use as mulch above lilies, on the flower beds generally and among the rhododendrons, pile them up somewhere, throw a few shovelfuls of earth on to hold them down, and let them rot and form leaf mold. This is always needed in gardening operations, especially in indoor work, leaf mold being one of the most valuable ingredients of potting soil.

Leave the four-inch leaf mulch above the rhododendron roots in the spring, however; for this is their natural covering when they grow wild in woods. It should be given them wherever they are and however they may be planted—whether in naturalized masses or singly as specimens upon a lawn.

Winter Plant Protection

NUISANCE though it is, there is no doubt but that winter protection is a very wise precaution in the latitude of

New York. This is owing to our summery January days, following all too often right on the heels of a severe cold snap. The hardiest plants in the world cannot endure this sort of "temperamental" weather, for plants cannot so rapidly adjust themselves to different conditions.

Other Protective Measures

STRAW jackets are not needed, to be sure, on the general run of things, and we do not commonly plant anything in the way of a tree or shrub that cannot breast the winter unprotected; or we should not, anyway. But roses generally—that is, the garden roses classified as hybrid perpetuals and hybrid teas—must have some blanketing down if they are to survive the alternate heat and cold of northern gardens. Personally I prefer the appearance of the garden when the system of general covering is adopted in place of the individual jacketing which some practice; but general covering must be done



Mulch your rhododendrons with dead leaves held down by branches

at just the right time, and in just the right way, or field mice will become the unwelcome tenants of the cover, and eat up all the plants before the winter is over.

Rose bushes should be cut back to a fairly uniform height of from twenty-four to thirty inches; then the earth around them should be loosened slightly, and their canes bent down and covered with four

inches of additional earth. This holds them down and protects them at the same time. After they are thus buried, little tent-like structures made by nailing two light boards from eight to ten inches together in the form of the letter A, are set over each plant by some growers, to shed rain and snow. When these are used no mulch is required.

A simpler and less unsightly protection—to my taste—as well as a most certainly effective one, is made by enclosing the rose beds with little temporary fences of twelve-inch chicken wire and filling these box-like structures lightly, right up to their tops, with either oak or hard maple leaves. Corn stalks or some loose branches laid on top of these will hold them in place; and such a blanket will insure warmth and protection to the tenderest of plants, even in the North. Do not use leaves that will pack and hold moisture during the winter, however; be careful to get the loose-lying kind mentioned.

Not until about an inch of the ground has frozen should this protective covering be spread, for not until such locking up of their underground houses will field mice seek permanent winter quarters. And not until they have sought these, and found them and moved in for the winter, is it safe to put up anywhere such an alluring apartment as twelve inches of nice dry warm leaves make for him—least of all around the roses, whose tender bark will furnish the mice with most delicious winter repasts.

Caring for Plants Under Glass

AT this season careful attention must be given to plants and vegetables in the greenhouse or coldframes. We still occasionally get a bright hot day when the ventilation must be watched very closely in order that the temperature does not run up too high and things must be closed up early in the afternoon, as the houses or frames chill very rapidly as the sun gets away from the meridian. The amount of water required is now less than a month ago and more care must be taken to apply it only on bright mornings so that soil and foliage will be thoroughly dried before night. The cuttings which were made last month should be ready to pot up now, and for this purpose a good supply of soil with a little bone flour mixed through it should be prepared a week or two in advance.



Garden Suggestions and Queries

The Vegetable Garden

CONDUCTED BY F. F. ROCKWELL
Author of *Home Vegetable Gardening and Gardening
Indoors and Under Glass*



In the November Garden

DO you remember last spring and all the things you wanted to do, expected to do and failed to do because there was not time for everything? Then do not sit by complacently when you have gotten your crops safely harvested and your bulbs and other fall planting attended to. In the latter part of October and the first half of November there will be mellow, sunshiny days which are ideal for working out of doors. While they are yet to be enjoyed make the most of them.

You may have noticed that in these columns and elsewhere in this magazine I have had a good deal to say during the last six months about irrigation—the new method of overhead irrigation which is increasing the value of small gardens two or three hundred per cent. in seasons like this we have just gone through. If you have not yet put in irrigation, get busy while the lesson of this past season's drought is still fresh in your memory, and get an inch or an inch-and-a-quarter pipe laid to your garden this fall; then, with the water supply available, it will be the work of only a few hours to install your irrigation system next summer when the dry weather comes. If you put one in this past summer, be sure to get all the water out of all the pipes before freezing weather comes, as otherwise you will find yourself next spring with some scrap iron on your hands and new pipe to buy.

Your material for mulching—meadow hay, strawy manure or dead leaves—is or should be on hand, convenient for use, but do not be in a hurry to put it on; wait until the ground is frozen solid.

Be ready for the first real cold snap; almost every year some of us get caught with a bushel or so of some of the root crops, or fruit, which has been put under temporary cover under some shed or out-of-the-way place, and is overlooked until after it is touched by frost and spoiled. Get everything into the cellar or wherever you are going to keep it through the winter; and then, by getting a pair of small hinges, which will cost you about ten cents, and securing these to the upper edge of the window which furnishes ventilation, you can easily arrange it so that you can supply as much or as little air as desired, keeping the temperature down, but under control, so that you can close things up at a moment's notice some night when the thermometer begins to volplane towards the zero point.

This is about the last call for getting your frames into shape, so that they will be all ready to use next spring, if you don't intend to grow anything in them through the winter; but by all means you should have a few sash or double glass, so that you can have lettuce, radishes and so forth up until Christmas, or clear through until spring if you will take the trouble to make a good hot-bed late in the fall.

Some Garden Uses for Concrete

EVERY year we find more and more use for concrete for the making of short walks, stepping blocks, gutters, posts, troughs, a large sunken basin for the front lawn or garden (which the birds appreciate quite wonderfully), for hitching posts, solid benches in the greenhouse, coldframes and hotbeds, as well as for such larger structures as the root cellar, garage or other outbuildings. It is unequaled and comparatively inexpensive if

foundations and so forth a 1-3-6 mixture; the figures in each case represent the proportions of cement, sand, and gravel respectively. Mix the sand and cement together, dry thoroughly; then add the gravel, first wetting it, and mix all together, adding water gradually until the whole is of a slushy consistency and thoroughly mixed. Temporary forms made of boards or lumber are used to hold the mixture in position for from twenty-four to forty-eight hours, until it sets enough to be able to retain its shape without danger of falling. After it once sets it is impervious to frost, but while it is in a "green" state it should not be exposed to a freezing temperature.

For Next Year's Garden

ANOTHER job which, while not strictly a vegetable garden one, is very necessary and should be attended to before freezing weather, is the preparation of the rose garden for planting next year. Spring is the best time for planting most roses in latitudes north of Philadelphia, but the beds will certainly be in much better shape if prepared now, to say nothing of the advantage of having the work done and out of the way of the spring rush. The greatest half of the secret of success in rose culture is in having the bed properly made. Two things must be provided—absolutely thorough drainage, and a deep, rich, loam soil in which to plant. In many places good soil is to be found where the bed is made; a convenient way is to make the bed three to five feet wide and so situated that it can be reached from either side, which will help very much in cultivating and caring for the plants. Dig the bed out to a depth of two to three feet, being careful to keep all the good soil by itself and not mixing it with the subsoil. Fill in from a fourth to a third of the excavation with small stones, cinders or broken brick or plaster for drainage material, over this put a layer of the grassy sod which has been taken out, to prevent the fine earth from washing down among the stones, and then fill to within six to eight inches of the top with good earth into which a liberal proportion of well rotted manure has been mixed. If manure is not to be had use coarse bone meal. The top eight or ten inches of soil should be without manure, and the surface should be raised slightly to allow for settling.



Where a deep bed is wanted for next spring, it may well be dug out now and new soil put in

you can get the sand and gravel near by; possibly you have them on your own place for the trouble of digging and screening. All the materials you need are the cement and some clean, coarse sand, and gravel or clean, hard cinders. For work that should be extra strong use a 1-2-4 mixture; for walks, sewers, gutters or ordinary floors a 1-2½-5 mixture; and for thick walls,



EDITORIAL



THE EARNING POWER OF GOOD ROADS

THEORETICALLY the "good roads movement" is a grand thing. As a national political campaign platform it meets with universal approval. But the good roads movement is more than the government or State construction of an intricate network of great highways; one very important step in the working out of the idea must be carried on by town and village and even individual before anything like a complete system may be produced. It is at this point, where the individual pocket is touched, that there is lack of enthusiasm for good roads. Dissenters prefer a local moving-picture theatre or a new station to a complete renovation of the branch roads feeding the main highway. There is objection to the issue of road bonds, complaint against special improvement taxes or an objection to compulsory road labor. Some one has propounded the question, "Why should we stand the expense of new roads that are mainly enjoyed by the increasing fleets of automobiles from foreign districts? They fly by without stopping and contribute nothing to our welfare or the road's upkeep."

It is unnecessary to refute this attitude. It is not a careful judgment. But there is an important aspect of the question that should be well considered, as it affects intimately the small resident. It is the fact that good roads pay the community over and above the effort and expense placed upon them.

The condition of roads in the South has been notoriously bad, and this condition recently led to investigation by the Department of Agriculture. Beyond the recommendation and plans was the important discovery of the value of good roads as proved by several concrete examples.

In Lee County, Virginia, the Department states this case: A farmer offered for sale his farm of one hundred acres lying between Ben Hur and Jonesville. He asked eighteen hundred dollars, but found no bidders. In 1908 road improvement was suggested and urged, but the farmer strenuously objected to it. Shortly after the road was rebuilt, however, his attitude changed, for he has received offers of three thousand dollars for his property and refused to sell. That this appreciation in value was due to the road betterment is proved by similar examples along the same road. For instance, one tract of a hundred and eighty-eight acres sold for six thousand dollars, but the purchaser endeavored to repudiate his contract. While the matter was in abeyance, the construction work was undertaken and completed, and the would-be purchaser had to increase his original offer to nine thousand dollars. No other factors but the road improvement could be found to account for this rise in value. Nor was this state of affairs limited to Virginia. In Jackson County, Alabama, a road bond issue of two hundred and fifty thousand dollars was voted, and with the proceeds twenty-four per cent of the roads improved. Where the census of 1900 gives the value of all farm lands at four dollars and ninety cents per acre, the census of 1910, taken after the improvement, places the value at nine dollars and seventy-nine cents. The actual sales at the first census taken varied from six to fifteen dollars per acre; and at the later one, fifteen to twenty-five dollars. According to these data, the Department is justified in stating that "Where good roads replace the bad ones, the values of farm lands bordering on the roads increase to such an extent that the cost of road improvement is equalized, if not exceeded," and "The general land values, as well as farm values, show marked advances following the improvement of roads." The figures seem to indicate that good roads indirectly increase the demand for rural property and therefore give rise to higher prices.

When the individual realizes that the road is a factor in his farm operating expense and therefore bears directly on his profits,

when he becomes aware that the highway conditions have an influence on the *morale* of the neighborhood, the character of immigration and the prosperity of the people, he will consider it his personal business that better roads are made, no matter if it is expedient to defray the expense by contribution, assessment, or bond issue.

THE NEED OF CHANGE

THE stock story of the man who lived his whole life in the shadow of Washington Monument without once ascending it, is used as an example of extraordinary callosity. The man becomes characteristic of lack of imagination, smugness and plodding disinterest, but his is no unusual case. Thousands daily are guilty of just as dulled perceptions.

You who have smiled at the man so deep in a rut that he had never explored an object which people come from all parts of the world to visit, are you so sure that you are keenly alive to all the attractions in your immediate vicinity? Take a concrete example. Can you name all the pictures along the west wall of your living-room or give an inventory of the furniture it contains? The chances are that many cannot. We do not mean to suggest that it would be most desirable to gain one hundred per cent in this little self-examination. It is merely an indication that the average home owner is so concreted in his habits that he is oblivious of the articles that were chosen to give him esthetic pleasure, and that he notices what might be improved as little as the good; desirable and undesirable are alike in merit.

Habit plays such a large part in our lives and its influences are so strong that there is danger of our becoming machines, slaves to the evening newspapers, serfs to the after-dinner doze. There was a man who awakened from his lethargy and made a complete rearrangement of his library. He found himself a year after throwing papers in the corner where the waste-basket formerly stood.

It is to keep the influence of the artistic things in your possession active that you need change. The near at hand, the familiar, becomes commonplace. Habit makes gray and dull the best of color schemes. We need a new perspective to awaken our criticism. The faults in the rooms of others glare at us when we visit them for the first time. Probably ugliness leaps out to greet the guests who enters our home, and we have made it such a domestic pet that we cannot understand its repellant to others. But ugliness and poor taste have no pension of useful service to warrant their old age. Expediency brought them, routine glossed their faults and made them negative virtues.

And so we want change in our homes. Not revolution, but evolution. The trial of new arrangements gives opportunity to refresh the pleasing voices of old favorites, shows where judicious pruning may better and improve, and what chances there are of new purchases for the general perfection of the scheme. In truth it is a sorry thing to realize the utmost at one fell swoop in the beginning of our careers. There is nothing to look forward to, no high hopes and aspirations. With a growing mind, and a growing purse, home making becomes a perpetual development. Those adventures of acquiring just the particular object that is craved for a particular situation, subtler, more full of excitement than the pursuit of big game, are joys of home making far too important to be neglected. They not only make the home most attractive in itself, but they add a constant source of delight.

We need those occasional little upheavals of the old-fashioned house cleaning, those sudden attacks on the old order of things, to keep us from becoming "set in our ways" and make us aware of the *Schenswürdigkeiten* within our own doors.

THOMAS CHIPPENDALE inherited ability as a wood carver and cabinet maker, and possessed inspiration. Within little more than a quarter of a century he grew in popularity until his "shop" was a fashionable center in London, and therefore in Europe. Discriminatingly able, with a wonderful sense of value in design and execution, he touched nothing he did not better.

¶ If you have a genuine Chippendale piece you know what it is worth; you know the workmanship it called for, too. Our workmen, many of whom have been with us for more than forty years, make faithful studies of Chippendale's best efforts. We often say that they think the thoughts and work with the hands of the old masters in furniture. In their productions you secure the spirit of Chippendale.

¶ We will send you free our "Travelogue" on Chippendale, or for five two-cent stamps our entire series of "Travelogues in Furniture."

¶ Berkey & Gay furniture is sold in the better furniture stores throughout the United States. In addition to the display on their floors, our dealers are supplied with our complete portfolio of direct photogravures, showing our entire line of upwards of five thousand pieces of high-grade furniture.

¶ "Character in Furniture," our de luxe book on period studies, is mailed to you for fifteen two-cent stamps. It is very interesting.



This inscribed mark of honor identifies to you each Berkey & Gay piece



In writing to advertisers please mention HOUSE & GARDEN.



NATCO·HOLLOW·TILE

ALL the advantages that you associate with Hollow Tile construction are the achievements of the one brand, **Natco Hollow Tile**. The skyscrapers that have established the standard in fireproof construction are built of **Natco Hollow Tile**. The safety from fire that you may have seen demonstrated in other hollow tile homes or industrial structures is the safety contributed by **Natco Hollow Tile**.

There is no chance for you to go wrong in the selection of **Natco Hollow Tile**. We stamp each block "Natco". Each "Natco" block represents a perfection in Hollow Tile, which only an organization of our great dimension and years of persistent improvement could offer. The whole idea of Hollow Tile construction is to eliminate entirely the risk of fire and weather-deterioration, and such a risk is just what you take upon yourself when you accept a substitute for **Natco Hollow Tile**.

The advisability of **Natco Hollow Tile** construction is confined to no type or types of buildings. In its various designs, it makes a practical material for all buildings. Its use involves a little, but only a little, more expense. Partitions, floors and roofs need fireproof material as much as walls, and the specification of "**Natco Throughout**" is a precaution every builder should take.

Before defining your building plans, send for our 64-page handbook, "Fireproof Houses," fully describing, with illustrations, every detail and phase of **Natco** construction. Contains 80 photographs of **Natco** buildings. Mailed anywhere for 20 cents to cover postage. Write for it today.

NATIONAL FIRE-PROOFING COMPANY

Dept. Y.

PITTSBURGH, PENNSYLVANIA

Organized
1889



Offices
in all
Principal
Cities

Batik—Its Making and Its Use

(Continued from page 290)

is specially recommended. This is called the "ferrous sulphate," or the lime and copperas vat, because lime and copperas are used to bring the indigo in the solution.

Iron buff is a permanent and beautiful yellow dye, made of a mineral substance—salts of iron. This is a buffish, or sometimes called colonial yellow; iron gray is another oxide which may be developed by adding tannic acid to salts of iron.

There are two good browns—perman-ganate of potash, a mineral dye, and catechu, which can be classed as a vegetable dye, and which also gives an excellent and permanent color.

Among the artificial dyes are the artificial indigos. These are not very satisfactory, as they are rather difficult and expensive. Their own advantage is that they are the only series of dye products which produce a permanent red dye.

The most satisfactory of all the artificial dye products are known as the sulphur dyes. Of these, the blacks, grays and yellows are the most satisfactory. The blues and browns can be used, but are somewhat crude in tone. These artificial products can be procured at any of the large manufacturers of dye products and chemicals.

The methods for procuring more than one color on cotton and linen with Batik are limited, but the results interesting when obtained. With indigo, for instance, one may get a blue and white reserve. From this a green and yellow combination may be developed by greening over the indigo with the vegetable dye—quercitron. The wax must be entirely removed, the batik mordanted with the proper mordant and then boiled in the quercitron. Indigo, with the white reserve, may be successfully redyed in catechu, giving reserves of blue and brown, or with blue, white and brown. Blue with yellow, by first dyeing the white reserve, may be obtained with indigo and iron buff. The worker will discover many interesting combinations as soon as the work begins to progress.

By the method of floating in acid dyes on silk, any number of colors may be produced in one design. This is a practical method for making patterns on lampshades, scarfs and gowns. The chiffon scarf in the illustration is made by this method, and it has five colors—orange, red, blue, green and black. Begin this process by transferring the design on white or raw silk. Take a piece of rather thick window glass—14 by 20 is a convenient size—and rub slightly over the surface with a piece of hard soap. The soap will prevent the resist from sticking to the glass. Now lay the silk down on the glass and cover all the line of the design with the wax lime. If a stencil is used, its outline may be followed by keeping the tube of the *tjanting* close to the edges of the cuts. Do not fill up any portion of the design except the outline. Each design should be outlined



Residence of Joseph M. Dale,
Asbury Park, N. J.
W. C. & A. F. Cottrell, Architects.

HIGHEST STANDARD OF EXCELLENCE

PARKER, PRESTON
& CO.'S

Art in Shingle Stains

WATERPROOF AND ODORLESS

Beautify the Home, produce artistic high tone color effect by their rich and beautiful colors. Full of the manufacturers' pride, conscience and science. Everything entering into their make is the best that man can make or produce, and are Stains of the highest character and quality possible, because the makers intend them to be. Made from pure Linseed Oil and our own Waterproof Protective Liquid Combination that creates an impervious waterproof coating to shingles, preventing rotting and decay of shingles. Cost no more than other Stains to use. Write for Cabinet "H" of Artistic Colors, Free.

Parker's Floor Coating prevents Dust Evil. A color treatment on Cement, Concrete and all Interior and Exterior floors. Asbestos Shingle Coating, Adamant Cement, Brick and Plaster Coating, Weather-proof Coating, Waterproof Flat Brick Stains.

Parker, Preston & Co., Inc. Manufacturers of Paint Specialties
BRANCH, 501 FIFTH AVENUE, NEW YORK

In writing to advertisers please mention HOUSE & GARDEN.

first, so that when the glass is put in the larger masses cannot spread between the outlines. The cold wax of the outline holds in the hot wax and keeps it from running over the edges into the other spaces of the design.

After a design is outlined, fill in all the spaces of it with hot wax, using a small brush for this purpose. If the design is very fine the spaces may be filled in with the *tjanting*.

Dip the silk in the dye bath of the color required for the background of the design. After the background is dyed, clean off the wax resist with benzine and redraw the outline with the *tjanting* all around and between all the forms of the design. This reserves a white outline all around the spots of different color in the design, and also separates them from the background.

Wet the silk in warm water, and mix small amounts of dry acid dye with acetic acid. Float in each color in the spaces of the design where it has been planned to appear. Let the colors dry, and then remove the wax with benzine. After removing the wax, press the silk carefully, then wash in boiling water to remove any particle of wax or color which may remain. Then dip in a dye bath of boiling water with a small amount of acetic acid. This last bath sets the colors, and if all loose particles of dye have been removed before this final boiling, the colors in the design will keep their original tone. Boiling silk in acetic acid also renews the dressing, or, as it is technically called, "scoop."

The treatment for batik on leather much resembles the treatment on silk, though there may be far greater freedom in the treatment of the wax drawing. Acid dyes can be used, but another commercial dye product, called "basic" dye, is more practical, because more permanent.

Basic dyes can be floated in in the same manner as the acid dye, after being dissolved with water and acetic acid. All the particles of dry dye must be thoroughly dissolved, else they are apt to spot the leather. These dyes can be also obtained at commercial houses.

Another process of reserve printing by which one may get many interesting results is the "tied" method. With this method portions of cloth are wound around with cord or thread, and the pressure on the covered parts protects them from the dye. Sometimes even a pebble is tied up in a cloth, or just a pinch of cloth may be wound around with the thread. After the cloth is dyed the thread is removed, and the ring appears as a reserve in the color of the cloth before dyeing. Many attractive patterns may be carried out by this method. Small rings, if set closely together, will give the effect of lines, while larger rings may be used as spots of emphasis.

In old Colonial days, our great grandmothers made their shaded wool by this method. They wrapped their skeins of



MASTER KEYED CYLINDER

FRONT DOOR



BACK DOOR



SIDE ENTRANCE





THE ONE KEY
THAT FITS THEM ALL

OFFICE



GARAGE



STORE ROOM



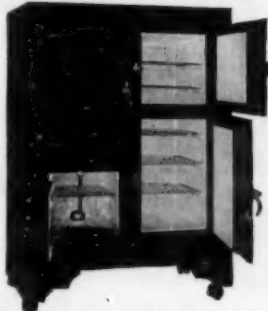
The Only Master-Keyed Cylinder Lock

With a separate and independent locking point for the master key, giving in effect two locks in a single shell and using the same key-way.

P. & F. CORBIN
The American Hardware Corporation, Successors

NEW BRITAIN NEW YORK CHICAGO PHILADELPHIA

TETTENBORN SOLID PORCELAIN REFRIGERATOR



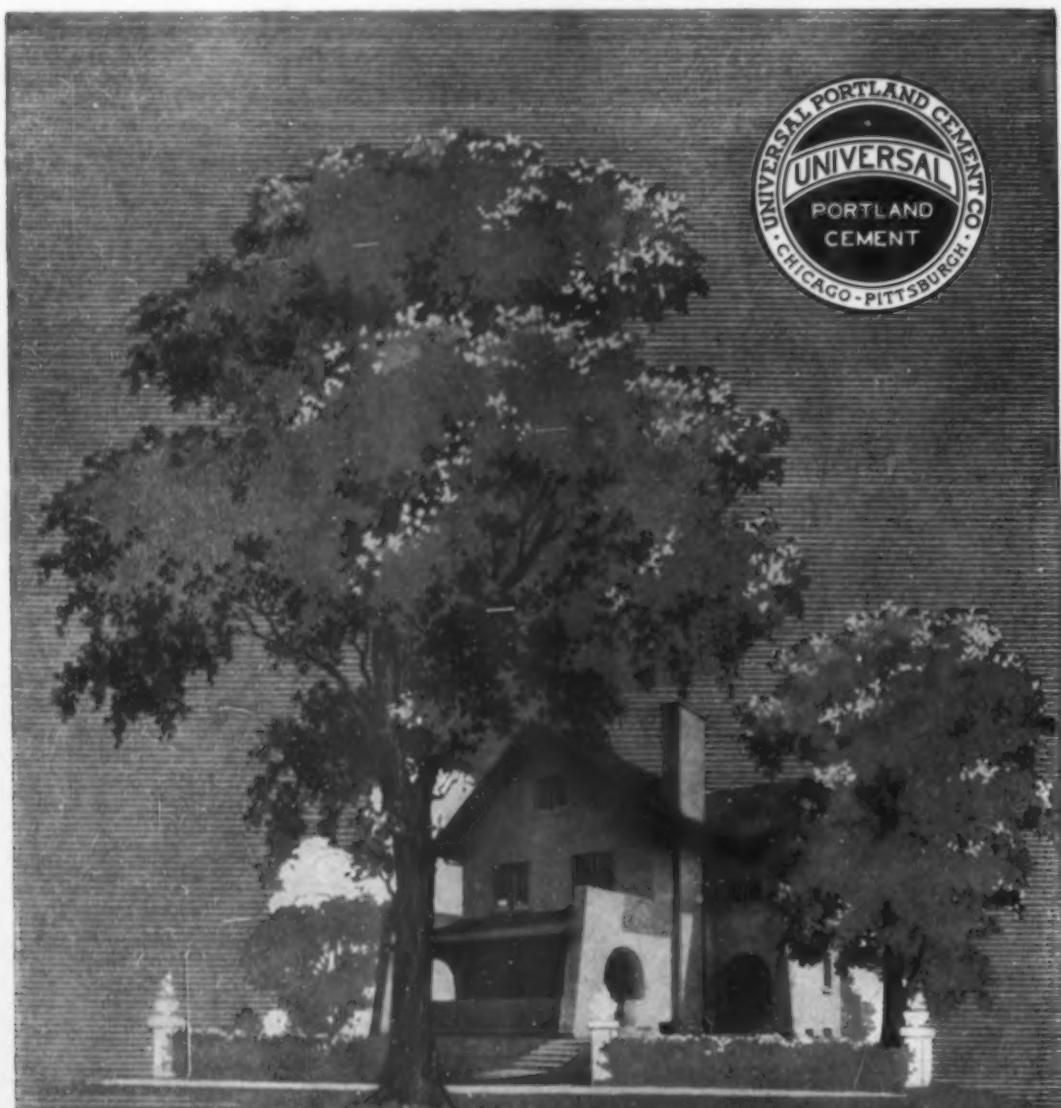
Has all food compartments of One Piece of Solid Porcelain (earthen) Ware an inch or more thick with rounded edges and corners; without Joints, Cracks or Sharp Corners. Fired at about 2500° of heat for ten days. Practically Unbreakable. Made just like the finest china dish. The Sanitary permanence of the pure white surface; the durability, the added insulation these afford in connection with our five inch thick walls the smooth solid oak case and other patented and exclusive features are why the Tettenborn Solid Porcelain Refrigerator is the only permanently sanitary the most economical and the one which will give a life time of most satisfactory service. Made in all sizes. Special ones to order.



SEND FOR CATALOGUE 113 TETTENBORN & CO. CINCINNATI

ESTABLISHED 1867

In writing to advertisers please mention HOUSE & GARDEN.



A House of Concrete

is attractive in appearance, fire resisting, sanitary, damp-proof, warm in winter, cool in summer and permanent.

Our book, **THE CONCRETE HOUSE AND ITS CONSTRUCTION**, for home owners, architects, contractors and builders, is full of valuable suggestions and information. It is bound in cloth—224 pages—159 illustrations, showing the best examples of all classes of concrete houses. The price of the book is \$1.00, delivery charges prepaid.

UNIVERSAL PORTLAND CEMENT CO.

CHICAGO

PITTSBURGH

MINNEAPOLIS

Plants at Chicago and Pittsburgh

Annual Output 12,000,000 Barrels

woolen thread with corn husks and wound these around tightly with cord to give the necessary pressure. The portions covered with the husks retained the original color of the wool, while those exposed became the color of the dye bath into which they were dipped. Hundreds of years before that the ancient Greeks used this same method to produce effects of undulating lines as borders on their garments. Sometimes they simply twisted and tied the cloth around itself, even knotted it, but did not always use the thread to protect it.

A novel bedspread can be made by this reserve process. The material needed for making it is two yards and three-quarters of coarse unbleached cotton sheeting, two yards wide. Either make a napkin hem or a rolled hem on the ends of the piece. Divide the whole piece into six-inch squares and mark off these squares with blue marking chalk. A simple way to do this is to mark off the side and ends of the cloth at the edges at intervals of six inches, and then draw lines across the cloth from side and end to end. A yardstick makes a convenient ruler for making straight lines, and can be slipped along as the line lengthens. After the cloth is all marked off, begin and tie up pebbles or marbles at every point where the lines of the squares intersect; also tie one pebble in the center of each six-inch square. After the pattern is all tied up it will look like a rather curious jumble.

Dip the spread before it is unwound into the dye bath, using, of course, only dyes that are suitable for dyeing cotton. Indigo is a serviceable color, but if one has no vat, then sulphur blue, which has been recommended, can be used. If the cloth has been tightly wound, even in protracted boiling, the dye will not penetrate the reserved portions. Therefore it is not absolutely necessary to use dyes which are set by oxidation.

In carrying out designs where line effect is needed, use birdshot for tying up in the cloth.

These resist processes and reserve processes are really practical for the ornamentation of scarfs, dresses, lampshades, cushions, or table covers. The method easily surpasses the stencil or the block print. First, because it is much more permanent; and, then, it has none of the pasty or painty texture which is so apt to come on the cloth as the result of using these other methods.

Of course, to be really successful, the craftsman must seriously take up the study of dyeing, which will richly repay any effort one may put into it.

Indian Woven Carpets

THE Indian carpet of America is now becoming more and more the vogue with certain types of decoration. Indeed, there is much to recommend it besides the honesty and long, painstaking process of

Meehans' Four-Fold Garden Service

Have you a new property to plant?

Do you want hardy shrubs, trees, evergreens and perennials of a higher grade?

Are you interested in unusual plants that will give any garden real individuality?

Puts your needs before

THOMAS MEEHAN & SONS, America's Pioneer Nurserymen
Box 40 : GERMANTOWN, PHILA.



For your home library, for your flower-loving friends, we publish the new, inspiring books of

ABRAM LINWOOD URBAN

"The Voice of the Garden" has been justly popular; "My Garden of Dreams," by the same author, is just off press. It is sure to appeal deeply to every flower lover.

Either Book \$1.30 prepaid

In writing to advertisers please mention HOUSE & GARDEN.

its manufacture, its durability and the rough beauty of its design; one factor worth mentioning is its romantic history.

The races which to-day carry on almost exclusively the manufacture of carpets are the Pueblos and Navajos. Their habitat extends through the northwest part of New Mexico, the northeast of Arizona and a small portion of southeast Utah, where practically their whole subsistence depends on small flocks of sheep or goats, the flesh of which provides them with food, while the wool is used to make carpets. In prehistoric times it is supposed that settlers from the highly cultured Aztec races wandered into this section and taught the art of weaving to the mound builders and rock dwellers, remains of whose civilization are still extant, and which are regarded as the oldest monuments of civilization found on the American continent. Among the relics found in these dwellings was a strip of colored cotton fabric of present-day checked design, about two by four feet in size, and somewhat in the style of present-day carpets. This specimen, probably the earliest type of American weaving, is on exhibition in the Museum of Natural History, New York. Within the last few generations it is supposed that the Navajos adopted this art of weaving from the Pueblos—the descendants of these ancient races.

Whatever the origin of these rugs may have been, it is at least certain that they bear legendary and significant designs relative to Indian history or beliefs. Herr Badermann, in the German magazine, *Der Innenausbau*, speaks of the weaver—invariably a woman of the tribe—as a simple child of nature. Symbols are an important and serious reality to her, and while her fancy may have a certain amount of freedom, she is fast bound to certain definite forms and plans of design. The facts of her daily life are shown, but in the conventional manner. Nature, first of all, finds pictorial representation. The mountains, at the foot of which she was born; the river, where she and her husband washed their hands as part of their bridal ceremony; storm, clouds, rain and lightning, and all the natural phenomena which formed a strong impression on the quiet, uneventful life of the weaver, are all shown in symbol. Each color, each stripe or square of zigzag line has its meaning. A markable feature of Indian weaving is that all the lines are straight.

The various symbols have been deciphered, and their meaning is of interest to the owner of such a rug. If an upright rectangle is found it indicates that portions of the family history are contained in the carpet. Wavy ornamentation represents the importance of water. The tassels at the rug corners—never lacking in the genuine article—are tokens of either the four seasons or the cardinal points of the compass. Straight lines with small crossbars represent storms, while zigzag lines stand for lightning. When such lines are interwoven they become the sign of the rattlesnake, which is sacred to the Navajos.



Economy of the Bell System

Consider this significant fact: While most of the necessities of life have gone up, the price of telephone service, which is one of the essential factors in our commercial and social life, has moved steadily downward.

Although a pound of these necessities still contains but sixteen ounces, the telephone user has been getting more and more service for less money.

On the average, the people of this country pay 49% more today for food, fuel and clothing than they did in 1895. Since then, the decrease in the average rates for telephone service has been more than one-half.

At the same time, the efficiency and value of the service to the subscriber has vastly increased. Today he can talk to an average of five times as many persons in each exchange as he could eighteen years ago.

This is the inevitable result of the comprehensive policy of the Bell System, which brings together the associated Bell companies and the communities they serve.

Through the very size and efficiency of their organization they accomplish improvements and effect economies which give the greatest service at the lowest rates.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service



Garage



Bungalow



Play House

**Hodgson
Portable
Houses**

Artistically designed and finished, made of the most durable materials and practical at any time of the year in any climate. Made for innumerable purposes. Erection of buildings extremely simple, and can be done by unskilled labor in a few hours' time. Send for illustrated catalogue.

E. F. HODGSON CO., 116 Washington St., Room 226, Boston, Massachusetts

In writing to advertisers please mention HOUSE & GARDEN.



WOLFF

THE owner of this beautiful residence at Elkhart, Indiana, enjoys his Bath Room as much as any room in the house. It, together with the Kitchen, Pantry and Laundry, is equipped with the most modern fixtures from the Wolff factories which harmonize perfectly with the architecture of the home. Get our booklet on Bath Room Suggestions.

L. Wolff Manufacturing Co.

Plumbing Goods Exclusively

MAIN OFFICES—601-627 W. LAKE STREET
SHOWROOMS—111 N. DEARBORN STREET
CHICAGO

BRANCHES: DENVER, OMAHA, MINNEAPOLIS,
DALLAS, ROCHESTER

POTTERY, TRENTON, N. J.

E. Hill Turnock - Architect



Figures which resemble a staircase mean mountains, while the rows of small squares are for the villages at their base. The complex border sometimes found typifies the hardships which must be borne before the young Indian is worthy to sit in council with the chiefs. One of the peculiar things is the appearance of the swastika, regarded as of East Indian origin. The cross is not unfrequently found, but this is supposed to be taken from the Spaniards. It is regarded with a peculiar veneration, probably inherited from their forefathers' superstition of the white man's Great Spirit.

The South American Indians, as well as those of our own land, are skilled in the manufacture of rugs, and their carpets are reputed to be far richer in coloring and more varied in design, the industry taking an important place in the domestic life of the mountain aborigines of Bolivia, Peru, Ecuador and to a less extent among the pampas dwellers of Argentina and the forest natives of Brazil. Owing to the better class of material at the disposal of the South American carpet weavers, greater durability is claimed for their products than characterizes those of their North American competitors. The latter can only use sheep's wool or cotton, while the former have the opportunity of employing the llama hair, the vicuña, the alpaca or the guanaco, all of the latter producing a solid and durable fabric. Moreover, they afford in their natural colors a variety of white, brown, gray and black material; while the indigenous plants, woods, minerals and barks make it possible for the various classes of wool to be dyed red and green. Cochineal is also found in abundance, and is largely used as a dye.

A point in common between Oriental and South American carpets is their durability, as both withstand centuries of wear. Such a property is only obtainable by hand weaving, being beyond the capacity of the power loom. In both instances, colorings are found which, taken separately, may not correspond with modern æsthetic taste, yet, in combination, produce a harmonious whole. Both classes are absolutely fast in their colors, which neither moisture nor glaring light can destroy. Fading is likewise equally unknown, while age only deepens the tints. The designs of the South American carpets are, moreover, said to be more striking and effective than those of the Oriental article.

Homes That Architects Have Built for Themselves

(Continued from page 295)

maximum amount of space into the rooms and closets. At the end over the kitchen, and away from the main part of the house, two rooms and a bath have been arranged *en suite* for a nurse and her patient in case

Landscape Gardening



A course for Homemakers and Gardeners taught by Prof. Beal of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250-page Catalog free.
Write to-day.

THE HOME CORRESPONDENCE SCHOOL
DEPT. 226. SPRINGFIELD, MASS.

GALLOWAY POTTERY



YOUR Garden and Home will have New Charm with Artistic Pottery selected from the Galloway Collection Strong and Durable Material at Reasonable Prices. Send for our Catalogue of Pots, Boxes, Vases, Sundials, Benches and other Terra Cotta Garden Furniture.

GALLOWAY TERRA COTTA CO.
3218 WALNUT ST. PHILADELPHIA, PA.

of sickness, a contagious disease making it desirable to be able to practice such segregation.

The third floor contains two servants' rooms and bath, besides a large studio—draughting, billiard, playroom—and may well have other titles as the years go by.

As for the architecture and decoration itself, if we may consider it aside from the plan, the house was inspired by the contemporary work as it is being done in England for those who have sought out the quiet mellowness of the little villages. It seemed to the owner that England is the pre-eminent land for country houses, and that their subtle instinct for hearth and home is our rightful heritage, and strikes a racial chord so deep as to elude analysis. It is, however, inevitable that we, with our new work, must miss the quality and mellowness that only ageing can give.

The subtle charm that permeates an old house is a quality beyond the skill of the architect to produce. Father Time alone can give this finishing touch. It is this craving for the dignity that belongs to age that leads many of us to surround ourselves with antiques, and in this particular house an effort has been made to go a step farther and build them in as part of the structure. A Sixteenth Century glass and gilt Italian door frame leads from the living-room to the hall. It was secured after the house was finished and the doorway cut to fit it. An old tapestry in the same room allows of doing away with at least ten feet of wall paper—smooth, flat and desiccated at best. The newel posts are capped by little carved and painted wooden figures of saints, probably from some long-forgotten piece of church furniture. A pair of Spanish carved and gilt rosettes are used as part of the design of the dining-room mantel. These things, slight in themselves, serve to impart a graciousness and charm to ordinary clean, sharp American woodwork that is entirely out of proportion to their real importance or value, and produces an effect of refinement and distinction that is exceedingly difficult by the usual methods.



The Modern Kitchen and Its Planning

(Continued from page 301)

instead of it, a large closet with adjustable shelves is provided. Both gas and coal ranges were installed. The circulating boiler is connected to the coal range in winter and to a gas water heater in summer. A large dresser, table-leaf closet, and refrigerator with outside icing door are provided in the pantry. A transom over the rear door gives an excellent means of ventilating the kitchen. In summer this may be left open all night, assuring a cool kitchen in the morning.



Tapestry Brick

Trade Mark Registered U. S. Patent Office and Canada

There is no need to sacrifice beauty for the sake of economy. You can have both.

"Tapestry" Brick gives effects in color and texture that are recognized everywhere as the most artistic and distinctive. Yet it is really cheaper than wood. Do you realize its low cost and economy? Get the facts. Send for these books; specify which.

The Cost of a House. A comparison in figures between brick, wood, cement, and hollow block construction. Free.

"Tapestry" Brickwork. Describing brick architecture of all ages, with new illustrations in seven colors. This book is constantly used for reference by leading architects. Free.

"Tapestry" Brick Fireplaces. Shows many new designs in the most economical and beautiful fireplace material in the world. Prices from \$15.00 up. Free.

A House of Brick for \$10,000. 41 house designs. 25 cents.

A House of Brick of Moderate Cost. 71 designs. 50 cents.

One Hundred Bungalows. 100 designs. 50 cents.

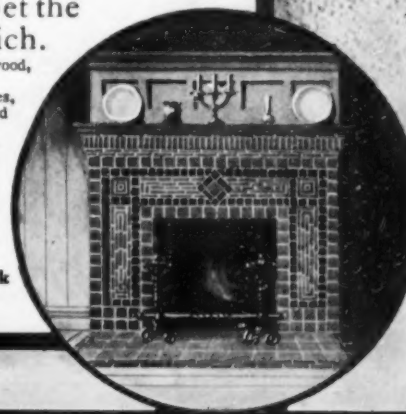
All these designs are from leading architects' offices, and include prize designs from nation-wide competitions.

FISKE & COMPANY, Inc., 1872 Arena Building, New York

The only manufacturers of "Tapestry" Brick

If it isn't FISKE, it isn't "Tapestry"

Copyright, 1913, Fiske & Co., Inc.



For durable painting of all kinds use
National Lead Company's Pure White Lead.
(Dutch Boy Painter trade mark.)
Ask for Helps No. 18. Sent free on request.
National Lead Company, 111 Broadway, New York

Made-to-order
rugs for porch,
bungalow or
Summer
home

"You
choose
the
colors, we'll
make the rug"



Exclusive fabrics
of soft, selected
camel's hair woven
in undyed natu-
ral color. Also
pure wool, dyed in
any color or com-
bination of colors.
Any length. Any
width—seamless up to
16 feet. The finishing
touch of individuality.
Made on short notice.
Write for color card. Order
through your furnisher.

Thread & Thrum Workshop, Auburn, N. Y.

SYRACUSE CHINA

Where luxury and necessity are
combined in table service. Write
ONONDAGA POTTERY COMPANY, SYRACUSE, N. Y.

RATS KILLED BY SCIENCE

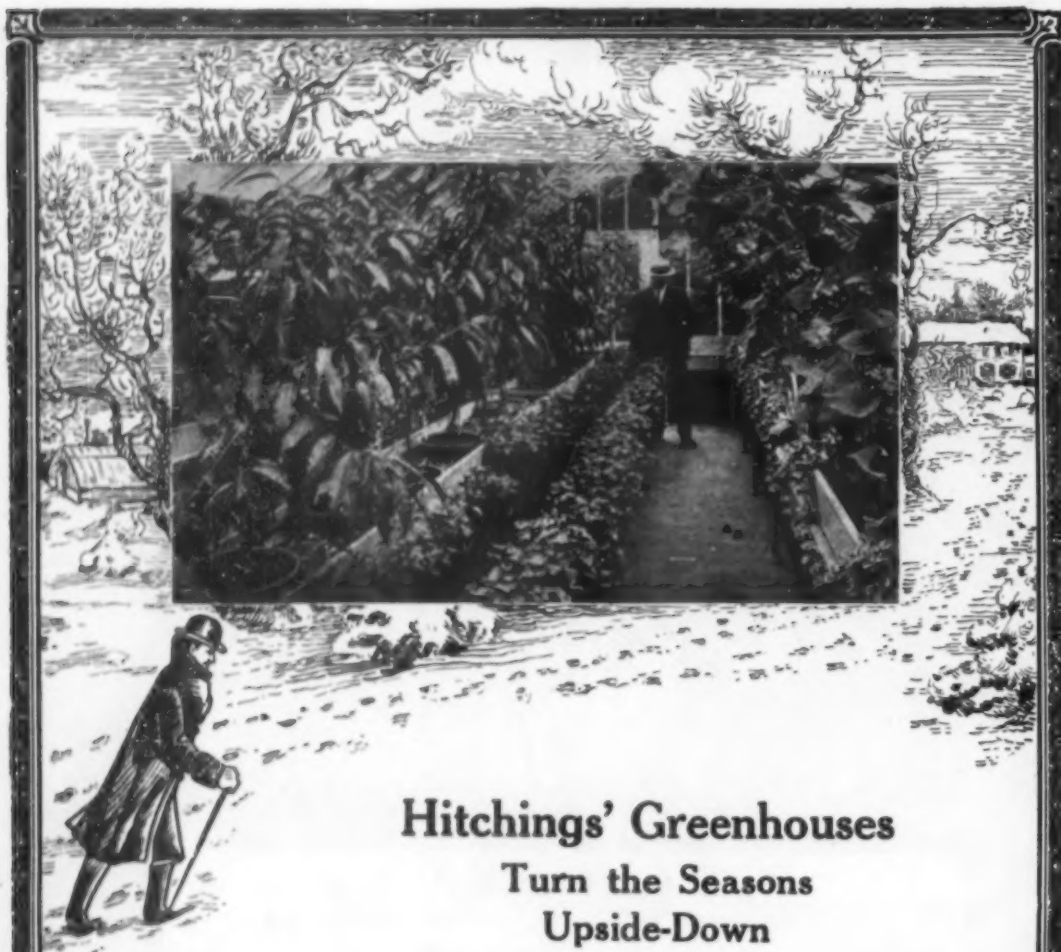
By the wonderful bacteriological preparation, discovered and prepared by Dr. Danysz, of Pasteur Institute, Paris. Used with striking success for years in the United States, England, France and Russia.

DANYSZ VIRUS

contains the germs of a disease peculiar to rats and mice only and is absolutely harmless to birds, human beings and other animals. The rodents always die in the open, because of feverish condition. The disease is also contagious to them. Easily prepared and applied.

How much to use.—A small house, one tube. Ordinary dwelling, three tubes (if rats are numerous not less than 6 tubes). One or two dozen for large stable with hay loft and yard or 5,000 sq. ft. floor space in buildings. Price: One tube, 75c.; 3 tubes, \$1.75; 6 tubes, \$3.25; one dozen, \$6. DANYSZ VIRUS, Limited, 72 Front Street, New York.

In writing to advertisers please mention HOUSE & GARDEN.



Hitchings' Greenhouses Turn the Seasons Upside-Down

NO matter if you do have to tramp home in the snow and the howling wind; when you get there, you can go down to your greenhouse and wear your straw hat and pick some ripe peaches, or luscious melons. The roses will be in bloom and the sweet-peas just showing bud. Those old-fashioned flowers, the seeds of which you planted on one of the side benches, will bring back

those of your boyhood's memory.

Reluctantly you will leave, but not before you have picked some carnations to take along with the peaches and melons. The chances are you will refuse to wait till breakfast to try the melons.

If you have a Hitchings' Greenhouse, you can have Summer-time all the time.

Let us send you our catalog.

Hitchings and Company

New York City
1170 Broadway

Philadelphia, Pa.
Pennsylvania Bldg., 15th and Chestnut Sts.
Factory, Elizabeth, N. J.

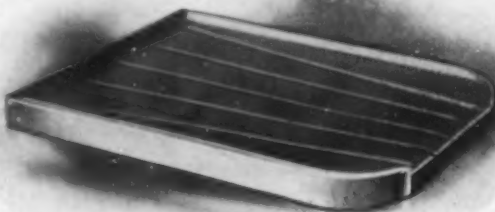
WHITE METAL Manhattan Drainboards

Covered With White Metal Like Sterling Silver (Not Plated) All Sizes and Shapes.

The seams and cracks in a wood drainboard harbor enemies to health which are not always visible but are ever present.

There is no plumbing fixture that comes in closer contact with dishes and tableware.

JOHN TRAGESER STEAM
COPPER WORKS
447-457 W. 26th ST., NEW YORK



Last and least is the Allen kitchen. Every requirement has been met, and not a bit of waste space exists. The kitchen contains a sink, two dressers, a closet, a gas range, hot-water boiler, gas water heater, and a table with a radiator under it. It is seldom possible to design a kitchen so that it is equally convenient to the dining-room, living room, cellar and back door. The laundry is of the smallest possible dimensions, but contains a two-part wash tray, with a closet above, and a refrigerator. The rear door and porch are protected with a hood. The dining-room has an ample china closet. A door from the kitchen to the living-room is a great convenience in a small house like this.

When planning a kitchen, the following suggestions may be helpful. Always provide a double-acting door between the pantry and dining-room, but not between the pantry and kitchen; for if the latter is done then every time one door is pushed open the air pressure forces open the other door and allows the odors to go straight through. If a single swing door is used from the kitchen to the pantry this trouble will be obviated.

Iron bars should be furnished for the pantry window, so that it may be left open at night.

The kitchen walls and ceilings should never have the dirt-catching sand finish, but should have a smooth white coat finish for painting, or, better still, a washable paper which may be renewed at slight expense.

Use very little molded woodwork; plain boards are easier to keep clean. Do not use wood wainscoting, for it is impossible to make the boards fit perfectly tight. Advocates of tiled walls and floors forget that the dirt-catching joints cannot be glazed and are hard to keep clean. I prefer painted walls. Linoleum makes an excellent floor covering; it is quiet, and its flexibility makes it as easy to the feet as carpet.

Here is an excellent means of forming a ventilating flue for the kitchen. Connect the smoke flue to an eight-inch cast-iron pipe, which should be run up in a brick flue about 12 inches by 18 inches in size. place a register in the bottom of this flue above the range. The heat in the smoke pipe will draw the fumes and smoke from cooking up the flue.

Do not make the kitchen any larger than is actually required to contain the necessary conveniences. A big kitchen may necessitate having an extra maid to keep it clean and in order.

To Destroy the Locust Borer

ACCORDING to information received from the Department of Agriculture, the cutting of the locust tree for all purposes, including thinning operations and for private commercial use, should be done between the first of October and the last of March. To destroy the locust

borers before they enter the wood, the removal of the bark from all desirable portions of the trunks of the trees felled is important and necessary. Tops and thinnings should be burned.

The yellow-striped, long-horned, winged beetle that produces the devastating borer is found from August to October on trees and the flowers of the goldenrod. During this period, eggs are deposited in the crevices of the bark of growing trees, and the young borers, after being hatched, pass the winter there and in the spring bore through the bark into the heart of the tree.

The injury to the trees consists of wounds in the bark and sapwood, which, if sufficiently severe and repeated year after year, result in a worthless growth or the death of the timber affected. The numerous wormholes in the wood also reduce its commercial value.

The presence of the insects in injurious numbers is indicated at this season of the year by the frequency of the adults on the goldenrod flowers and on the trees. So extensive has the damage of this pest been in some sections of the Eastern States and the Middle West that it is now considered unprofitable to grow the tree for either shade or timber. One important reason for holding this borer in check is to prevent its extension into the Far West and other sections which are at present free from it.

Experiments have demonstrated that the grubs may be killed by spraying the trees and branches with a strong solution of kerosene emulsion. This should be done not earlier than November, and not later than March, because this spraying, when the trees are in leaf, will destroy the foliage and check growth. This emulsion may be prepared as follows: Kerosene emulsion (soap formula): kerosene, 2 gallons; whale-oil soap (or 1 quart soft soap), ½ pound; water, 1 gallon.

The soap, first finely divided, is dissolved in the water by boiling and immediately adding boiling hot, away from the fire, to the kerosene. The whole mixture is then agitated violently while hot by being pumped back upon itself with a force pump and direct-discharge nozzle throwing a strong stream, preferably one-eighth inch in diameter. After from three to five minutes' pumping the emulsion should be perfect, and the mixture will have increased from one-third to one-half in bulk and assumed the consistency of cream. Well made, the emulsion will keep indefinitely, and should be diluted only as wanted for use.

The use of whale-oil soap, especially if the emulsion is to be kept for any length of time, is strongly recommended not only because the soap possesses considerable insecticide value itself, but because the emulsion made with it is more permanent, does not lose its creamy consistency, and is always easily diluted, whereas with most of the other common soaps the mixture becomes cheesy after a few days and needs reheating to mix with water. Soft soap



**"You may serve
breakfast in ten
minutes, Mary."**

A telephone from upstairs to the kitchen—think what a saving of time, energy and strength it means for you. Climbing up and down stairs—so dreaded by the housewife—almost entirely done away with. The maid always within summons without the alternative of your calling down the stairs or going down to the kitchen.

Western Electric Inter-phones

will do all this for you. You can have one placed anywhere in the room. You do not even have to hang it up when you are through talking. Lay it down—on the table or any other convenient place. It is always ready for use. It carries your message perfectly.

These handy little telephones, with the necessary wire and everything complete for installation, can usually be bought of your dealer. If, however, you cannot get it in your town, we will send it direct. The outfit costs only \$15—a mere trifle compared with the help it gives you.

Perhaps you are not yet convinced that you need Inter-phones in your home. Perhaps you don't realize in how many ways they will save steps for you. Then, by all means, get a copy of the little book we have prepared. This booklet, No. 28-A, "The Way of Convenience," will certainly throw a new light on the problem of housekeeping. It will show you where to begin to apply scientific management in your home. Get a copy, free, for the asking.

WESTERN ELECTRIC COMPANY

Manufacturers of the 7,500,000 "Bell" Telephones

Main Office: 463 West St., New York City

Branch Offices: All Principal Cities of the United States and Canada
Agents Everywhere



Tindale Music Cabinets

The Ideal Way to Keep Your Music in Order

Easy of Access

Ornamental

Systematic

"A Place for Every Piece, Every Piece in its Place."

Various styles and sizes suitable for home, studio or church; mahogany or oak, beautifully finished. Prices from \$15. upward, direct from our factory or your own dealer. If desired, you may enjoy your cabinet while paying for it.

Write Today for Folio of Designs No. 6.

TINDALE CABINET CO., One West 34th Street, New York

Style E.
Oak, \$25.
Mahogany, \$29.
Capacity,
700 Pieces.



There is one name by which you can identify **QUALITY** in every kind and style of the most desirable material for outside walls. It is

Hy-tex Brick

You want a brick you can identify—the maker's name makes him directly responsible to you. And Hy-tex is the only name which stands for universal quality in brick—and for that only. All other brick trade-marks mean some one color or some one texture. The Hy-tex trade-mark means simply best brick. And there's a Hy-tex Brick in every color and every texture.

You surely want brick for your home—you want it even if you think you can't have it. Too expensive? No, the most economical!

Write today for the most valuable book ever printed for home-builders. It is called "Genuine Economy in Home Building." Sixty-four pages. Forty beautiful four-color reproductions of Hy-tex homes. Sent for ten cents.

"Suggestions for Small Hy-tex Homes" is a helpful book of plans. Sent for four cents. Write for both these books today. Address

HYDRAULIC-PRESS BRICK COMPANY

Dept. G 11 ST. LOUIS, MO.

BRANCH OFFICES: Baltimore, Md.; Chicago, Ill.; Cincinnati, O.; Cleveland, O.; Davenport, Iowa; Indianapolis, Ind.; Kansas City, Mo.; Minneapolis, Minn.; New York City; Omaha, Neb.; Philadelphia, Pa.; Toledo, O.; Washington, D. C.

The background of this advertisement illustrates the Flemish Bond, in which the Hy-tex Brick of this residence are laid.



Smoky Fireplaces

Made to Draw

Cooking Odors Carried out of the House

Payment Conditional on Success

FREDERIC N. WHITLEY, Engineer and Contractor

210 Fulton St., Brooklyn, N. Y.

Heating

Ventilating

Air Filtration

Peonies and Other Hardy Plants Can be Set in November

Send your order now and I will ship promptly. Not too late to plant peonies now, or even a little later, but don't wait too long. Send for my book "Hardy Plant Specialties," which tells about varieties and when to plant.

BERTRAND H. FARR, Wyomissing Nurseries
106 Garfield Avenue Wyomissing, Pa.



Before
Installing.

THE JONES & HAMMOND

Underground Garbage Receiver

Solves Your Garbage Troubles

The Receiver Without a Fault.

CONSTRUCTED ON SCIENTIFIC
PRINCIPLES

For sale by leading hardware
dealers, or write to manufacturers
for circulars and prices.

JONES & HAMMOND

75-79 Newburn Ave., Medford, Mass.

answers very well, and 1 quart of it may be taken in lieu of the hard soaps.

In limestone regions, or where the water is very hard, some of the soap will combine with the lime or magnesia in the water, and more or less of the oil will be freed, especially when the emulsion is diluted. Before use, such water should be broken with lye, or rain water employed.

For use on locust trees, dilute 1 gallon of emulsion with 2 gallons of soft water.

Pure kerosene and pure petroleum will effectually kill the insects, but may do some damage to the bark of the trees.

Experiments with carbolic emulsion indicate that this preparation is of no value to kill the young grubs.

According to Dr. Howard, Chief of the Bureau of Entomology, the brown and apparently dying condition of the yellow or black locust trees in the States of Virginia, Maryland, Pennsylvania, West Virginia and Ohio is caused by the insect known as the locust leaf beetle. Nearly every summer the brownish appearance of these trees attracts attention and causes considerable inquiry and some alarm. However, with a few exceptions, the trees recover and come out fresh and green the following spring.

A more complete description of the locust borer and methods for its control may be obtained from Circular No. 83 of the Bureau of Entomology, which is written by A. D. Hopkins, in charge of Forest Insect Investigations. The bulletin contains photographs of the borer.



Old Clocks and Their Makers

(Continued from page 304)

scruple by the clock-makers of the neighborhood, and a group of clocks, all made by other makers than Terry, are shown on the first page of this article. The two which flank the tall one in the center are clocks with stamped brass works, by Seth Thomas and Chauncey Jerome. The size of the clocks had begun to shrink, you see, for these clocks are later than the wood-works clocks. All these clocks are owned by one collector in Kinsman, Ohio.

Two tall clocks, also owned in Kinsman, are shown in the lower left-hand cut on page 304, both thirty-hour wood cut works, the one at the right made by Riley Whiting, of Winchester and Winstead, Conn., a maker who was at work till 1835, and the other by A. Merrell, a name which I have not met before. The home-made cases are interesting and are still in good condition.

Chauncey Jerome has also a large claim to consideration for his inventions in clock works, since he it was who first considered the idea of making a one-day clock with brass works. This was about 1837. In

1844 the business became so large that Jerome moved it to New Haven, where he carried it on successfully for years. That he died poor and discouraged in old age was due to his too great faith in human nature. The record of his life, written by himself, is pathetic.

The style of clock in which Jerome took the greatest pride was what he called the "bronze looking-glass clock," made in the days when his fortune was rising towards flood. It was six inches taller than the Terry clock, could be made for one dollar less, and sold for two dollars more. A regular Yankee bargain, you see, but a stately clock all the same, and, though with wood works, a good timekeeper. One is shown in the left-hand corner of page 303. This clock has a clock paper, with the firm name of Jerome & Darrow, and was made shortly after 1824, when Jerome took into partnership his brother Nobles and Elijah Darrow.

The making of dials was carried on by men who did nothing else, and who supplied them to the clock factories which did not employ dial makers of their own. Besides the moon phases, which are a feature of some clocks, there were often to be found Masonic emblems, arranged more or less artistically. A long case clock in a case of whitewood, stained, is given in the right-hand photograph at the top of page 302. In addition to this feature, the clock is unusual in having a separate circle for the minute hand. This clock is still in going order and a good timekeeper; especially noteworthy is the beauty of the pewter hands.

The New Hampshire makers are less well known than they should be, when the character of their work is taken into account. I am glad to be able to show on page 303 a clock by Abel Hutchins, of Concord, New Hampshire, made about 1808. It is a noble instrument, still in going order and owned by a grandson of the maker. Abel Hutchins and his brother Levi learned their trade from Simon Willard, and in 1788 Abel and Levi Hutchins went into partnership and opened a shop in Concord, New Hampshire, and were in business together twenty-one years. Both of these men lived to be more than ninety years old. In Nashua, N. H., there is a collector of clocks who began to gather them thirty years ago. He has given many away, but still has twenty, and he says: "My twenty or more clocks are all in going order, or were a year ago, when we moved to a small house, and I have no room to set them up. Yet we have fifteen running, two, three and four in a room." This collector has given me the name of Abijah Gould, Jr., of Hollis, N. H., as a clock-maker who worked there from 1800-1821, when he moved to Rochester, N. Y. He made wood works clocks with metal bushings, and generally brass wheels. David Dutton, of Mount Vernon, N. H., was another maker of wood clocks, thirty-hour, and in veneered mahogany cases. Harvey Ball of Nashua, N. H., was an-



The Colgate Clock is the Largest in the World.

Faces the giant office buildings of down-town New York. Its dial is 38 feet in diameter, and can be read easily at a distance of three miles. Weighs approximately six tons. The minute hand, 20 feet long, travels at its point 23 inches every minute.

COLGATE & COMPANY

Established 1806
LONDON NEW YORK PARIS
Makers of Cashmere Bouquet Soap—
luxurious, lasting, refined.

MOTT'S PLUMBING



DO you realize the possibilities for comfort and luxury to be had in the modern bathroom?

For instance, here is a new shower which utilizes an odd bathroom corner. When the shower is in use the water is kept within bounds by a plate glass door, and the temperature of the water is quickly tested by an entirely new device.

Hundreds of other bathroom comforts and utilities are made by us.

To show you what can be done, read our 80-page book, "Modern Plumbing," before committing yourself on bathroom equipment. Sent on receipt of 4c. to cover postage.

Our special shower bath catalog will be sent free on request.

THE J. L. MOTT IRON WORKS

1828 EIGHTY-FIVE YEARS OF SUPREMACY 1913
Fifth Avenue & 17th Street, New York Works at Trenton, N. J.

BRANCHES:
Boston Chicago Philadelphia Detroit Denver San Francisco Indianapolis
Pittsburgh Minneapolis Cleveland Atlanta Washington St. Louis Kansas City
Seattle Portland (Ore.) Salt Lake City
CANADA: Mott Company, Limited, 134 Bleury Street, Montreal, Que.



Villa D'Este, Tivoli, Italy.

This splendid garden of the Old World shows admirably what delightful effects can be secured by a proper selection and arrangement of garden ornament. You, too, can enjoy the exquisite pleasure of just such a garden furnished with exact reproductions of masterpieces of sculpture or original designs in Pompeian Stone.

Our collection of over 1,500 models of vases, fountains, sun dials, statuary, benches and other garden furniture presents unlimited possibilities in the decoration of your estate. Mantels and Hall Ornaments for interior use.

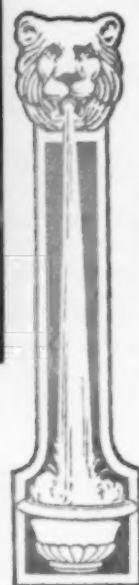
Our handsome illustrated catalogue is sent free on request.

Factory
Astoria, L. I.

THE ERKINS STUDIOS

226 Lexington Ave.
New York

THE LARGEST MANUFACTURERS OF ORNAMENTAL STONE



WHAT IS ORIENTAL RUG QUALITY?

Thickness, durability, lustrous silky bloom due to natural oil in young lambs' wool softened by age in the rug; rich, glowing unfading colors not bleached nor stained; perfect condition; artistic design. Such are collectors' rugs, nearly extinct, existing at rate of one per thousand. The other 999 are made to sell, will not enhance, are bleached and ironed for temporary gloss, or are raw bright and will fade to dull tones. I do not handle them. Good rugs harmonize like paintings. I have none at most attractive prices. Any other quality is sheer extravagance regardless of price.

Selections sent on approval. I pay express both ways.

Interesting Monograph on request.

L. B. LAWTON, MAJOR U. S. A., Retired
181 CAYUGA STREET, SENECA FALLS, NEW YORK



EUGENE LUGGHESE
748 Lexington Ave.
and 131 E. 59th St.
NEW YORK
Est. 26 years

Garden and Hall Furniture

Guaranteed to stand any climate;
Marbles, Terra Cotta, Stones, etc., Vases, Benches, Sun Dial Terminals, Tables, Fountains, Flower Boxes, Mantels, Statues, Reliefs, etc.
Send 25c for illustrated catalog of 295 pages. The best copies of the best originals.

SUN DIALS

A Beautiful, Illustrated Booklet, "SUN DIALS" sent upon request. Estimates furnished. Any Latitude. Ask for Booklet No. 4.

E. B. MEYROWITZ, Inc., 237 Fifth Avenue, New York
Branches: New York, Minneapolis, St. Paul, London, Paris

other well-known maker of high-class, eight-day, brass works clocks, which he sold for \$125 to \$300. There was also a clock-maker named Wood, of Hollis, N. H., who made good clocks in that town.

John Hunt, of Farmington, Conn., was at work probably about 1820, for he made wood-shelf clocks and spelled Conn. with one n. Pond, of Portsmouth, N. H., was at work about 1810, for to him Simon Willard, Jr., was apprenticed. David Blasdel and his son, of the same name, were settled in Amesbury, Mass., the former in 1733, the latter in 1753.

The Rhode Island makers seem generally to have combined their trade with that of silversmithing, and I have discussed them pretty thoroughly elsewhere.



Housing the Horse and Cow

It occasionally happens that the architect is called upon to design a building for a horse and a cow, or latterly an automobile and a cow, the owner wishing to provide against the possibilities of impure milk by securing it fresh from his own animal. Generally, the cheapest and best method for such a person to pursue in his quest for clean milk is to buy it. If he can purchase milk which has been certified, it will be cleaner and better than any he will be likely to produce for himself. If he lives where such milk is not obtainable, or wants the fun of creating his own milk supply, that is another matter, and one which we will now take up briefly.

The disadvantage of keeping the single cow has not to do with that patient animal itself, but with the care which it is necessary to take in keeping her clean and in milking her properly in sanitary surroundings. Such an establishment is usually taken care of by "the man," who works in the garden, tends the horse, and is as likely as not to clean out the horse stable just before he seats himself to milk. To teach such an individual, and to hope that he will retain the most rudimentary knowledge of what is necessary for clean milk, seems too much to expect. A good housekeeper would hardly call upon the stableman to come directly from his work and help the cook prepare the dinner, and yet it is quite usual to have him proceed under those conditions to prepare the milk, which is eaten raw, and is a much more delicate substance and more liable to infection than any cooked food prepared in the home. Consequently, the substitution of a dairy maid for the milking at least is greatly to be desired. If this is an impractical suggestion, and perhaps the carrying out of it might cause a revolution in some households, then the only thing is to urge "the man" to be as clean as possible and try and remember to wash his hands before he milks, and to give up the habit of chewing tobacco during the operation. The cow's

"Gaumer lighting everywhere follows the evening glow."

There is a Tag attached to every one of the genuine indoor

GAUMER

Hand Wrought
Lighting Fixtures

that guarantees the lasting quality of the *FINISH* whether it be Bronze, Antique Brass or Copper, Old Silver or Hammered Swedish Iron.

That Guarantee Tag is your insurance against unnecessary expense of refinishing later on. Your Dealer will attach the guarantee tag if you insist on it—it's yours by right.

JOHN L. GAUMER CO., Dept. A
22d and Wood Sts., Philadelphia, U.S.A.

No. 08750

LIGHTING FIXTURES



—are far cheaper in the end than any other shades you can buy. They outlast several ordinary shades, because they are made without that "filling" of chalk and clay which in the ordinary shades so soon causes unsightly streaks and "pinholes." Sun won't fade a Brenlin Unfilled Shade, nor water spot it. It always hangs straight and smooth and really shades.

Write for the Brenlin Book today

It shows actual samples in all the beautiful colors and tints, and gives many helpful window decoration suggestions. With it we will send you the name of the Brenlin dealer in your town, or tell you how to order direct. Write today. CHAS. W. BRENNEMAN & Co. 2085 Reading Road, Cincinnati, Ohio.

For sale by dealers everywhere

Genuine Brenlin Unfilled Shades have this mark—**BRENLIN**—perforated along the edge. Look closely for it. For windows 1 yard wide by 2 yards long, 75c. (except in the Far West). Special sizes and Brenlin Duplex—light one side, dark the other—made to order at proportionate prices.

For temporary uses and for windows of little importance, there are two cheaper grades of Brenlin—Brenlin Filled and Brenlin Machine Made, at 55c. and 30c. respectively (except in the Far West), for windows 1 yard wide by 2 yards long.

STAINED "CREO-DIPT" SHINGLES

Come in bundles ready to lay. Save time, labor and muss of staining on the job.

Send for Art Catalog.

Special information about shingles stained and sawed to give that wavy, thatched effect.

Standard Stained Shingle Co.

85 Oliver Street North Tonawanda, N. Y.



IF you are going to paint or decorate wood, concrete, stucco, cement or metal, or do any tinkering, you should have the paint books telling all about the BAY STATE LINE and the BAY STATER'S work. Address for booklet B.

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers and Lead Corroders
82-84 Washington St., Boston, Mass.
New York Office, 101 Park Ave., at 40th St.

hair on her flanks and udder should be clipped and not allowed to grow long. This is important. If the cook finds cow's hair and dandruff on the foam in the milk, then "James" should be spoken to about it. All the milk things should be boiled every day, and the milk, as soon as milked, should be put in bottles and kept in the refrigerator. A cooler is quite unnecessary for the one-cow problem. A clean apron, fresh at least twice a week, should be used at milking, and it must not be kept in the stable. It is probably better to milk the cow at her tether than in the average stable, though this is bad practice for the serious problem; milk drawn in the field always shows, on analysis, the presence of bacteria.

A separate milking shed, with concrete floor, would not be expensive and would be an excellent idea. Here a wash-basin could be provided and a place prepared for the storage of milk utensils; in fact, a combination milking barn and dairy. Real cleanliness is the thing required, but seems never to have been thought necessary for the care of milk. The proprietor of the place we are discussing should have his wife read carefully the preceding notes and carry them out as far as possible. A housekeeper's common sense directed toward such a milk supply will be all that is necessary, and if she will but keep her cow and stable as clean as she does her kitchen, where other food is prepared, she will not need the advice of specialists on milk production.

With regard to the plan of the building, there are few things of importance after having entirely separated the cow from the horse and arranged proper ventilation for both their compartments. The cow stall should be reached through outside air only, and should never be directly connected with the horse stable. The manure pit is best eliminated and the manure put into covered galvanized iron cans. These cans can be emptied on a compost heap in the garden, and must at all times be kept clean.

The storage of feed is usually had above the stable, but it adds to the appearance, as well as the convenience of the building, to arrange a small feed room on the first floor, between the cow and the horse.

Each animal is best kept in a box stall, which—for the horse—may be divided temporarily for two animals by a movable partition already referred to.

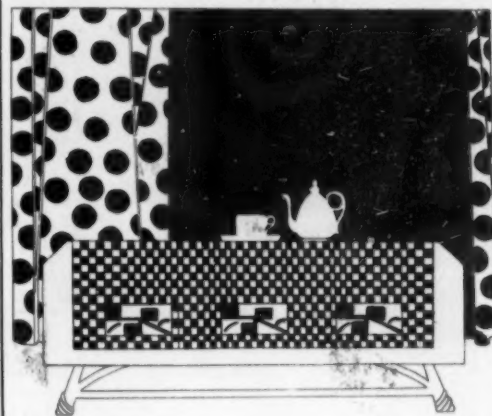
The interior of the stable is best carried out in plaster in preference to wood.

C. E. H.

**Christmas Garlands Gathered
in the Fall**

(Continued from page 291)

Carefully dried, the blossoms are fairy-like—as much so as the feather, clematis. Stand them upright and uncrowded in wide mouthed jars, and be sure to cut stalks as long as possible.



THE present vogue is for furnishings in the Futurist style. There is a certain individuality and strength to these things, which it is not possible to obtain in any other style. Our new importations appeal to those who would have the most up-to-date things, as used by Poiret and Groot, of Paris, and the foremost Viennese architects.

The Weiner Werkstaette collection of silks and linens is very broadly represented in the wonderful show which we have of these fabrics now.

Even a single sofa pillow used in the proper way conveys a certain unmistakable touch to an interior. If nothing else, at least have one of the modern hat boxes. It will make a great spot of good color.

The collection is so interesting that you certainly should not miss seeing it whether you contemplate refurnishing or not.

Joseph P. McHugh & Son

9 West 42d Street, New York

Samson Spot Clothes Line



SOLID BRAIDED COTTON
Strong, Durable, Flexible

Will not kink, stretch, ravel, nor stain the clothes. Guaranteed to last at least five years, even when permanently exposed to the weather. Can be distinguished at a glance by our trademark. **The Spots on the Cord.**

Send for Sample. Carried by all dealers or write to us
SAMSON CORDAGE WORKS BOSTON, MASS.



Beautify your floors with
SHERWIN-WILLIAMS

MAR-NOT
FLOOR VARNISH

the perfect wear-proof, water-proof floor varnish

A good floor varnish is a rare find. Mar-not is more than mere surface shine. It goes into the wood and becomes a protecting surface, resisting wear to an unusual degree.

The real Brighten-Up Paint Store in your town is the Sherwin-Williams agent. He has Mar-not.

For the great or small improvement of your home you need our

Portfolio of Suggestions for Painting and Decorating

It tells you all about Mar-not and other Sherwin-Williams Paints and Varnishes. A host of color illustrations are contained in this booklet, as well as ideas and suggestions that are as practical as they are artistic.

SHERWIN-WILLIAMS
PAINTS & VARNISHES



Address all inquiries to
The Sherwin-Williams Co.
627 Canal Road, N. W.
Cleveland, O.

If grasses are wanted, dry them in June—then they may be cured a golden yellow. Fall drying gives hay-color—besides the stalks are so stiff they are seldom graceful. A few sprays of Everlasting are advisable—but only a few—it has a rank odor. Autumn boughs, small and well chosen, can be packed like ferns and kept in fair condition to Thanksgiving, sometimes to Christmas. Paraffine and hot irons make them so stiff and artificial looking, better use instead of them paper ones—crepe paper cut to shape, and splashed with water colors.

Many roses are worth lifting for winter bloom. Prepare them by cutting around them a foot at least from the root, in September, with a sharp-edged spade thrust as deep as possible. The roots it cuts will callous and be ready to make new feeding roots after the lifting. Take up with care, after watering very freely, keep the ball of earth intact, set in a tub or pot somewhat larger, and fill in with the very richest fine earth—a mixture of leaf mould, rotted manure, and rotted sandy turf is ideal. Set in shade a day or so after potting, watering freely. If there is a pit with a glass top, or a greenhouse, set the pot there until the first of December. By that time the new roots will be fully established, and the rose can be encouraged to bloom, by warmth and liquid manure. Remove all but the most perfect buds, and spray freely against dust and red spider. Thus treated there should be much winter bloom, and the plant be ready to thrive when returned next spring to the open border.

Pot bulbs for Christmas flowering early in August, in rich soil and well drained. Set them a little more than their own depth under the surface, and keep dark for almost a month so roots may form properly. Then set in light, water, and after growth begins fertilize with liquid manure. Use it sparingly at first—once a fortnight, say. As bloom stalks appear, give it once a week, but take care it does not touch the buds. Spray well with clean tepid water after fertilizing—and in between several times a week. Crocuses, paper-white narcissi, single jonquils, and early single hyacinths are most easily and surely brought to bloom, but with healthy bulbs, love and knowledge, the list may be infinitely extended.

Almost the showiest of bulbs, and among the easiest of culture, are the several sorts of Amaryllis. Once a habit of Christmas blooming is established they stick to it, so long as they are fed and given root room. Plant dry bulbs in June at the latest, give them unlimited sunshine after growth begins, liquid manure once a week, with a top-dressing occasionally of rotten manure, water freely and spray well. Keep outdoors until the very edge of frost, then move inside, and set where it is warm and sunny. If bloom stalks appear too early, check development by setting the plant in a cool room, and withholding fertilizer, watering rather spar-



*Feel this
surface*

It is scratchless—marless
—noiseless

“FELTOID”
Casters and Tips

save floors and rugs. No dents and digs when your furniture is fitted with “Feltoids”. They work none of the damage so common to metal, wood, fibre and rubber casters.

“Feltoids” are made of a specially treated material which is very firm and durable yet having a tread as resilient as a kitten’s paw.

Genuine “Feltoids” have the name stamped on each wheel. Sold at furniture and hardware stores. Write for booklet No. 12.

The Burns & Bassick Company
Dept. X Bridgeport, Conn.

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write to-day for our Loose Leaf Catalog, and state briefly your requirements.

AMERICAN FENCE CONSTRUCTION CO.
100 Church St., New York

Boddington's Bulb Blooms.

Fall Garden Guide now ready. It's free. Send in your name and address.

ARTHUR T. BODDINGTON,
334 West 14th Street New York City



SILVER LAKE A Sash Cord

(Name stamped indelibly on every foot)

The man who builds a house without asking about the sash-cord to be used is laying up trouble for himself. Insist that the specifications mention SILVER LAKE A. Its smooth surface offers nothing on which the pulley can catch. Guaranteed for twenty years.

Write for Free Booklet.
SILVER LAKE COMPANY
37 Chauncy St., Boston, Mass.
Makers of SILVER LAKE solid braided clothes lines.

ingly. It takes a week in a warm room, from the time the spathe bursts to bring the buds inside into blow.

Large, sound bulbs thus treated should give royal stalks bearing four to six, even eight blooms. A bulb can usually be counted on, so conditioned, for two stalks. If left undisturbed except for shifting to a bigger pot, and well fed, it will in a few years make you a clump of greenery starred with many rich crimson flowers. Each year there are offsets that soon come to be blooming bulbs. Occasionally a bulb divides its bloom, sending up one stalk in midwinter, the other in June. Pots wintered in a cellar, or with very low heat, are apt to bloom only in summer—from June forward to August. They are tender north of thirty-three degrees and die of a hard freeze anywhere.



Tree Wounds and Their Treatment

(Continued from page 298)

in practice be just as good as another.

All this discussion of wound dressing has been necessary in order to make intelligible the brief and definite general rules for the treatment of wounds which can now be laid down.

Prune and make incisions, whenever possible, in late summer, fall and early winter. Small wounds on fast-growing wood dress with paint or tar. If in a year they show season checks give them a second coat. Moist wounds saturate with a non-filling disinfectant. After checking has taken place and the wound is dry, put on a thorough coat of a heavy dressing. Large wounds, in which the exposed wood is seasoned, paint with creosote, then cover with a heavy protective dressing. If necessary, reinforce the dressing, or cover the wound with metal. It is extremely desirable that all wounds be inspected yearly, and that all injuries to the coverings be repaired promptly.

We come now to the different kinds of wounds trees receive, and the way to treat each of them.

Trees receive mechanical injuries in a thousand different ways. It would be impossible to enumerate them; nor is it necessary, for the measures of prevention and repair are much the same. It will be necessary only to pick out a number of typical injuries and describe the correct treatment of each.

The commonest kind of mechanical injury to the trunks of trees is the bark wound. Animals gnaw at the trees, vehicles run against them, gardeners bark them with lawnmowers, falling trees crush against them, farmers use them for fence-posts, carpenters drive nails into them, lovers cut hearts on them, and small boys try their little hatchets on their tender bark. For every kind of bark wound, no

Winter Cruises

The MEDITERRANEAN RIVIERA - ITALY EGYPT

Largest Steamers in the Trade

WHITE STAR LINE

"ADRIATIC" 24,541 Tons

"CELTIC" 20,904 Tons

Sailing from New York

NOVEMBER 29

Jan. 10 Jan. 24 Feb. 21

March 7

BOSTON—MEDITERRANEAN—ITALY

CANOPIC Nov. 27 CRETIC Dec. 11

Ask for Complete Itineraries and Illustrated Booklets

RED
STAR
LINE

WHITE
STAR
LINE

The PANAMA CANAL WEST INDIES and SOUTH AMERICA

Splendid Cruising Steamers

RED STAR LINE

"LAPLAND" 18,694 Tons

WHITE STAR LINE

"LAURENTIC" 14,892 Tons

"MEGANTIC" 14,878 Tons

Sailing from New York

JANUARY 7

Jan. 17 Jan. 24 Jan. 31 Feb. 11

Feb. 25 Mar. 4 Mar. 14 Apl. 4

Duration 16 to 28 Days. \$145 to \$175 and upwards.

CRUISE DEPARTMENT WHITE STAR LINE RED STAR LINE 9 BROADWAY NEW YORK CITY



The Stephenson System of Underground Refuse Disposal

Saves the battering of your car
and scattering of garbage from
pounding out frozen contents.

Thousands in use



Underground Garbage and Refuse Receivers

A fireproof and sanitary disposal of ashes and refuse in
front of your heater.

Our Underground Earth Closet
means freedom from frozen cesspool
connections, a necessity without sewers.

10 years on the market. It pays to
look us up.

Sold direct. Send for circulars.

C. H. STEPHENSON, Mfr.
20 Farrar St., Lynn, Mass.



For Draperies—
For Coverings—
Here are fabrics of artistic
quality suited to every
home use, yet inexpensive.

Orinoka
Guaranteed
Sunfast
Fabrics

Get Our Free Book
Ask your dealer for our
book "Draping the Home,"
or write to us for it.
The Orinoka Mills, Phila.
New York, Chicago, San Fran.

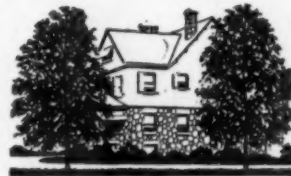
Look for
the name
YALE on
locks and
hardware.

BOOKLET FREE—"Modern Bathrooms of Character."
The Trenton Potteries Co.
The Largest Manufacturers of Sanitary Pottery in the U. S. A.
Trenton, New Jersey

A Few Dollars Will Preserve Your Trees

A FEW dollars spent in the care
and repair of your trees
extends their life and pre-
serves their beauty for years to
come.

It's rather a paradoxical thing
that people willingly spend many
dollars on their lawns, the trim-
ming of hedges and care of shrub-
bery; but when a nominal expen-
diture is suggested for their trees, they hesitate.
Lawns, hedges and shrubbery are the result of a
few years, but a tree's growth is slow—a fine old



Send for our
Booklet—"Trees—The Care They
Should Have."

tree, full of character, is a pos-
session worth skilled care.

Just such a care, our trained
men are equipped to do.

Let us suggest your sending for
one of our Inspectors to come and
look over your trees carefully, and
advise the attention they need.

Such inspections obligate you
in no way, to have us do the work.

Munson-Whitaker Co.

Forest Engineers

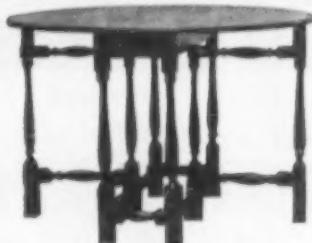
NEW YORK
473 Fourth Av. Bldg.

BOSTON
623 Tremont Bldg.

PITTSBURGH
903 Arnot Bldg.

CHICAGO
513 Com. Bank Bldg.

LEAVENS FURNITURE



DEXTER TABLE

Ransack all New England and you will not find better examples of the fine old, distinctly New England, furniture than the models made by us. * * *



WINDSOR

PLYMOUTH
DUXBURY
STANDISH
BREWSTER
WINDSOR
BRADFORD
* * * and * * *
WESTCOTT
CHAIRS

Straight & Rocking

All built as honestly as their prototypes, all faithful reproductions of the finest examples in existence, all offered in the natural wood, for you to select your finish.

A WELL-SELECTED PIECE HERE AND THERE WILL ADD TO THE ATTRACTIVENESS OF THE HOME.

Get the best furniture at the least expense, we are manufacturers. Our warehouses are at all times open to the public.

You have an unlimited stock to select from and the choice of any finish.

Send for full set No. 4, of over 200 illustrations and color chart showing Leavens' Standard Stains.

WILLIAM LEAVENS & CO

• 32 CANAL ST. •
BOSTON • MASS

GO TO HEADQUARTERS FOR

Roses--Peonies

GEORGE H. PETERSON

Box 30

Fair Lawn, N. J.

Private Water Supply Plants



matter what its cause, the prescription is "Clean up, disinfect, and seal." Yet even here circumstances alter cases, and the way the prescription is carried out must be adapted to the special cases. The differences depend mostly upon the length of time intervening between the making of the injury and its treatment. It is extremely desirable that wounds be treated immediately after they occur. This is not, as might be inferred from the analogy of wounds in animals, to prevent infection, for infection takes place rather slowly, as a rule. Promptness is desirable because by immediate attention the size of the wound can often be greatly diminished, and its healing can be correspondingly facilitated. This is by virtue of the fact that when bark is torn from a tree it is the mucilaginous cambium layer which lets go. Some of the cambium cells come off with the bark and some remain on the surface of the wood. If a sufficient number remain on the wood, and if they do not dry out, they have the power of growing and of developing new bark-producing cells, which rapidly replace the detached bark. It is obviously desirable to take advantage of this recuperative power of the cambium. When a tree is barked the wound must be protected from the sun and wind without a moment's delay, by replacing the torn bark or otherwise covering it. A dressing for the wound must next be secured. For fresh wounds nothing is better than soft or liquid grafting wax. A mixture of clay and cow-dung is the second choice, with shellac and paint to choose from if neither of the preceding materials is at hand. Tar should not be used, as it frequently kills the cambium it is supposed to protect.

In preparing the wound for the dressing all detached bark must be cut away with a sharp knife, care being taken to cut into the wood as little as possible. The dressing should be flowed on with a soft brush, or smeared on in such a way as to disturb the moist surface of the wood as little as possible. In two or three weeks it will be easy to see whether the operation has been successful. The surface will have grown outward perhaps an eighth of an inch, and scratching will disclose a pulpy greenish layer spread over it. It will not of course be present where the wood itself has been scraped or bruised. The cambium can be saved in this way with most uniform success in the growing season.

If the bark wound has not been attended to at once it should first be inspected to see whether any part of the cambium has escaped drying out and has started growing a new bark. Such areas should of course be preserved, unless they are detached tongues of the kind which has been described as being too remote from the line of sap flow. In that case they had better be removed, for they retard healing more than they help it. The first thing to do with an old bark wound is to clean it up thoroughly. Clear away all dead and shredded bark. Sound the exposed wood

Two Alluring Winter Blooms

The Byzantine Wonder Lily



Blooms without soil or water. Needs only a warm spot or sunshine to unfold rosy fairy flowers with golden stamens. 12-20 to the bulb.

1 3 12
Large Bulbs \$20.50 1.75
Monster Bulbs .30 .80 2.75
Jumbo - - each 40 cts.

Lily of Valley in Bloom

20 days from planting



Use any jar, bowl or jardiniere, not metal and without drainage, plant pips in our prepared Moss-fiber to have them in flower as shown in picture.

6 pipe and moss \$.35
12 pipe and moss .60
25 pipe and moss 1.00
Delivery is included in all prices.

We send directions how to plant with every order.

Send for our Bulb Book, It is free.

H. H. BERGER & CO., 70 Warren St., N. Y.

REPUBLIC STAGGARD TREAD TIRES

will not skid, give more service and are safer than any other kind. Our book "The Tire Perfect" free on request.

THE REPUBLIC RUBBER CO., Youngstown, O., U.S.A.
Branches and Agencies in the Principal Cities.



Antique Brass Knockers

Reproductions of rare old designs in artistic door knockers of all periods. An extensive selection and worthy of the visit of a connoisseur.

Art Metal Goods—Chafing Dishes, Coffee Percolators, Tea Sets, etc., in Brass, Copper, Aluminum and Nickel Plated Ware. Everything for the household.

A visit to our store will enable you to appreciate our splendid stock.

LEWIS & CONGER

45th Street and 6th Ave., New York

Now or Never!!

All spring-flowering bulbs should be planted before the close of November. Don't delay if you want your garden gay next spring. We have the best of everything in spring-flowering bulbs:

Hyacinths, Tulips, Narcissus, Jonquils, Snowdrops, Crocus, Lily-of-the-Valley, Squills, Lilies, Iris, etc. Also the best and most complete line of Old-fashioned Hardy Plants—Hardy Climbers, Hardy Shrubs and other plants that should be planted in the Autumn. All are fully described in our Autumn Catalogue.

Sent free on application.

HENRY A. DREER
PHILADELPHIA

VIRGINIA

BY ELLEN GLASGOW

¶ The book that has been the storm-center of discussion for four months.

¶ A story of the women question in its broadest bearing on wife, husband and children.

AT EVERY BOOK SHOP

MAKE-COUNTRY LIFE PAY.



ASK FOR AN OUTING HANDBOOK ON ANY OUTDOOR SUBJECT.

INTENSIVE FARMING—L. C. Corbett.

A new Outing Handbook that will show you how to raise two crops where you have raised only one before.

PIGEON RAISING—Alice MacLeod.

Makes a very profitable business for the farmer as well as the amateur.

APPLE GROWING—M. C. Burritt.

Will increase the yield of your orchard or make the one you are planning successful.

THE HORSE—His Breeding, Care and Use.—David Buffum.

Keeps that valuable part of the country place in its best working condition.

Price \$0.70 net each—Postage 5c. extra. At all booksellers or direct. Send for complete catalogue.

OUTING PUB. CO. 141 W. 36 ST. N. Y.

with a chisel or by boring into it, if necessary. A depth of decay of only an inch or two, however, or perhaps three or four inches, if it is a large wound, needs only to be cleared entirely away. If the resulting excavation extends under the sound callus at any point, the callus must be cut back correspondingly or the hole must be filled. However, a healthy callus will bridge or fill up quite a deep wound, provided it be so thoroughly painted or tarred that no decay or boring insects can get at the wood.

In the case of very large bark wounds, where, perhaps, the wood is checked and here and there invaded by borers, and it is evident that the tree cannot heal over the wound in many years, it should either receive repeated coats of a very heavy dressing, reinforced, perhaps, with cotton padding, or it should be covered with zinc. If the last course is decided on, after the wound is cleaned and trimmed up the zinc is cut to fit it, a paper pattern usually being made first. The zinc should preferably come up rather close to the edge of the wound, but should in no case overlap in the least the cambium or the bark. Having the zinc ready, paint the wound thoroughly, the back of the zinc likewise, and nail the zinc in place with shingle nails an inch or two apart. Its outer surface must then be painted, an especially heavy coat being flowed over the edges to make sure that they are watertight. Thin sheet copper also does very well for this kind of work. The use of sheet metal cannot be fully described in this article.

A slightly different class of wounds are caused by the tree's growing against objects which do not give way before it, with the result that the bark is killed locally, or at least fails to make any growth. Such wounds are made by the plank seats which are frequently seen pried in between two trees. Both trees are sure to be injured sooner or later if the plank is not taken out every few years and cut down a little. In such cases if the compressed bark is dead it must be removed. If not, it should be cleaned off, so as to be free to grow. The tree which has had wires wound around it, or at least stapled to one side, is another frequent patient of the arboriculturist. The danger in such cases is that the wire will girdle or partially girdle the tree. All wire must be pulled out if the bark has not actually closed and joined over it. Of similar character is the tree which has outgrown its wire guard. If parts of the guard have become imbedded in the trunk, they need not be removed if such a course would require cutting the calluses closing over them. The bark of the meeting calluses should be pared down and perhaps slit in places, to encourage their growth. If the tree is vigorous and the calluses are scraped occasionally, they will ultimately grow together organically and permit the free flow of the sap down the cambium.

Another kind of bark wound is caused



Roofed with fire-proof Asbestos "Century" Shingles—Never require painting—Last forever.

THIS is the residence of Wilson Marks, Architect, of Port Washington, N. Y.

It was designed by Mr. Marks himself—and is roofed with Asbestos "Century" Shingles.

Mr. Marks' choice of these Shingles for his own home is a significant fact that should interest every property owner with a building to be roofed.

Write for the names of roofers who can supply Asbestos "Century" Shingles—men who know how to lay a good roof as it ought to be laid. We will also send you our Booklet: "Roofing: a Practical Talk."

KEASBEY & MATTISON CO., Factors
Dept. C, Ambler, Penna.

Branch Offices in Principal Cities of the United States

Thorburn's Seeds

THORBURN'S SEED CATALOG will be issued earlier than usual this coming season. And it will be found even more interesting than last year's—many new hints on cultivation are included. Here's a point to remember also—all descriptions are absolutely dependable.

If your name is not on our mailing list send it in today—it isn't a bit too early.

J. M. THORBURN & CO.

Established 1802. 111 years ago.

53 E Barclay Street New York

Leads in Tone Quality in America

The EVERETT PIANO

One of the three great Pianos of the World

Prices - Regular Styles \$550 to \$1500

The John Church Company
Cincinnati New York Chicago

Owners of
The Everett Piano Co., Boston

Kelsey Heat And Constant Heat Ventilation In One

SIMPLY because of lack of giving the matter a moment's thought, most people seem to feel that they need less fresh air in the winter than summer.

Go into nine-tenths of the hot water or steam-heated homes and you find many of them seemingly overheated, when in fact they are in most cases under ventilated.

When it is hot in the summer, you let all the outdoors in you can, but in the winter you keep it out all you can.

No one really disputes the necessity of fresh air but most of us dread to let enough of it in our houses in the winter, because we are afraid of draughts and colds and the burning of too much coal.

Now suppose it were possible to take the fresh air from outside, heat it to a moderate agreeable temperature, mix it with just enough moisture and then have it coming out into your rooms in large quantities so that you had plenty of heat without that heaviness in the air; and ample ventilation without draughts. If this could be accomplished by burning from a third to a half

less coal than with steam or hot water, and without the use of unsightly radiators in the rooms, it would seem that such a heat would be the ideal heat.

Just such a heat is the Kelsey heat that is produced by the Kelsey Warm Air Generator. To the casual observer the Generator from the outside may look quite like the ordinary furnace,

but its interior construction is radically different and the results can in no way be compared.

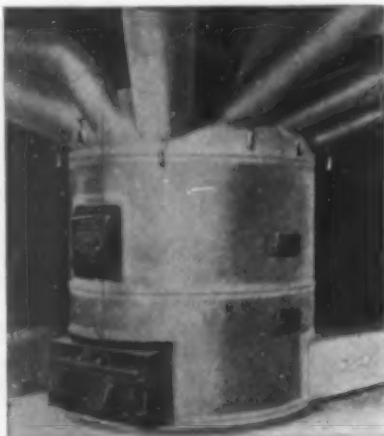
No gas or dust comes up the Kelsey wall or floor registers—nothing but pure air heated to an agreeable healthy temperature.

No matter what way or how hard the wind blows, the Kelsey delivers the heat to any room in your house.

This is accomplished by what we call a "Positive Cap Attachment" which leads the heat direct from one or more of the zig-zag tubes, so centering all its velocity in the one heat conveying duct.

You can buy the Kelsey of your local dealer.

Send to us for catalog and further facts.



237 James
Street
Syracuse

THE KELSEY
WARM AIR GENERATOR

154 K Fifth
Avenue
New York

by the rubbing together of two limbs. Something more than mere local treatment is required in such cases. The best way is to cut off one of the limbs. If that cannot be done they must be braced apart in one of the ways suggested in the chapter on bracing. In addition, the worn places require thorough wound treatment.

The breaking off of branches is another frequent cause of wounds. When proper pruning and bracing have been neglected, large limbs of red and silver maples, linden, and such soft-wooded trees, are often fairly torn out by the roots. The thing to do in such a case is to clear away completely all splintered wood and torn bark. The essential thing is to prevent the possibility of any cracks remaining in which water can stand and decay begin. The smoothed surface must receive an especially heavy dressing. If it is large and at all cracked, cover it with sheet metal.

This last type of injury comes, so to speak, in all sizes, up to the huge wounds one so often sees, made by the tearing apart of a forked maple or elm. These are very serious affairs and require painstaking treatment in order to prevent the entrance of decay. The part of the wound requiring the greatest care is the lower part, the stub, it might be called, of the broken half of the tree. If the bark and wood of the stub have been split from the rest of the trunk, they will almost certainly die and permit the entrance of fungi and borers, no matter how effectively these may have been excluded from the upper part. The detached wood must be chopped or sawed away, so as to make a good watershed, and so as to make it certain that there is healthy bark, in connection with the rest of the bark of the trunk, around every part of the wound, ready to start a callus over it. Of course it is not to be supposed that so large a surface will be grown over, at least for a very long period of years. The covering given the exposed surface should therefore be a thorough one, of metal or reinforced asphalt. Large surfaces of metal on bending trees have a tendency to tear out at the nails, a tendency however, which can be partly remedied by putting the metal on in vertical strips overlapping each other.

Frost cracks and the effects of lightning will also be included in this discussion of mechanical injuries, for they are like the truly mechanical ones in result if not in cause. Frost cracks are fairly common, but their origin is not generally understood. The cracks first come to the notice as long but very narrow openings lengthwise of the trunk or main branches. After one or two seasons they usually develop long, narrow, light-colored projecting lip-like calluses on each side of the crack. These calluses grow and project farther and farther from the trunk as the years pass, unless a series of mild years permits them to grow together. The cracks are caused by sudden cold snaps which very suddenly freeze the outer layers of the sapwood while the heartwood

Heisey's Glassware

has that crystal-like freshness and purity of design that recalls the Thanksgiving feasts of days of yore. It will make your Thanksgiving table long remembered for its distinctiveness and charm. It is so beautiful it is worthy to be used on formal occasions, yet so inexpensive you can enjoy it every day. Our Book "Table Glass and How To Use It" contains many beautiful suggestions. Write for it

Dept. 52 A. H. HEISEY & CO. Newark, Ohio

In writing to advertisers please mention HOUSE & GARDEN.

Your Decorating and Furnishing? Problems :: ::

SO many inquiries have been received by HOUSE & GARDEN seeking hints and advice for the decorating and furnishing of houses that some time ago we made the experiment of organizing this work into a special department.

We invite you to solicit our services regarding the perplexities of furniture arrangement and style; the proper treatment of walls, woodwork, floor coverings, lighting fixtures, and hangings appropriate to your need. We also wish to assist those living far away from the great shopping centers to get ideas of the new and interesting things that are constantly appearing in the beautiful shops of this city.

We hope in this way to give auxiliary information to that contained in the magazine — and to help practically those whom we have directed through our columns.

Requests for any information should be accompanied by return postage. The case should be stated as clearly and tersely as possible, giving enough data to make the requirements of the situation evident.

HOUSE & GARDEN DECORATIVE DEPT.

McBride, Nast & Co.

31 East 17th St., New York City

is still comparatively warm on account, frequently, of its connection with the lower and warmer parts of the soil through the taproot of the tree. Freezing a wood cell draws all the water out of the cell wall and collects it in a crystal in the center of the cell. When this happens the cell wall has to contract. If, in a cold snap, the periphery of the trunk contracts suddenly, before the inner part has time to cool and contract proportionately, something has to give way, and a frost crack is the result. After the crack is once formed sap flows into it, and, freezing, enlarges and perpetuates the opening. Bark pressure being removed from the contiguous cambium, it is stimulated to greater than ordinary growth and soon develops "lips." Frost cracks should be attended to promptly, for they are frequent sources of infection. If the injury is discovered soon after it occurs, the crack should be painted with liquid grafting wax, and if possible filled with grafting wax or cotton batting dipped in hot tar or asphalt. When calluses form their union should be facilitated by lightly scraping their approaching surfaces in spring. In extreme cases, if unsightly lips have been formed which offer no hope of ever growing together, the entire ridge can be sawed off and the wood covered with a strip of sheet iron. In most instances it will be enough if a dressing (but not an unsightly one) is kept over the crack in order to keep out fungus spores. The cracks open in very cold weather, and that is the best time to put in fillings or to apply dressings. Scraping the bark increases the liability of a tree to suffer from frost cracks.

Lightning and other electrical phenomena affect the trees in many different ways. Lightning often smashes a tree all to pieces. Usually, however, it breaks a few branches out of the top and then passes down the trunk to the ground. As the moisture parts of the tree are the best conductors, the electricity almost invariably takes its course down the cambium and the sapwood just below it. The course is usually rather narrow, oftenest three or four inches wide, though sometimes there are two or more such courses down the trunk. The wood offers sufficient resistance to the electricity to produce a high degree of heat. This heat instantly vaporizes the sap and it is the pressure of the steam thus produced which rips the long ribbons of bark and splinters of wood out of the trunk. The only thing to do with these long scars in the tree is to clean them of frayed and isolated and loosened wood and to paint them.

There is no certainty, after all, that this treatment will end the story, for lightning affects trees in strange ways. In some cases physiological injuries accompany the physical ones and cause immediate or gradual death. Again, a tree will be killed by lightning without the infliction of any physical injury. In still other cases, trees standing near a tree will succumb with it, although apparently unhurt.



Just a
Quarter-turn

The Remedy for Faucet Troubles

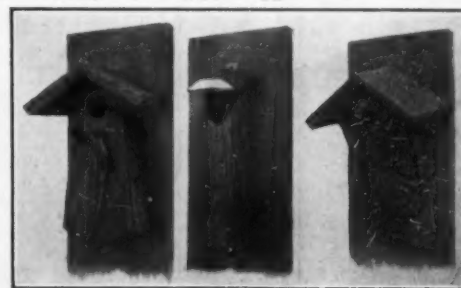
IF you hear a "buzz-uzz-ump!" in the water-pipes, don't blame the plumber, blame the old-fashioned noisy faucets. It's their fault, not his.

Install Quick-pressure and you'll never hear any such noises. What's more you'll have faucets that are extremely beautiful in appearance; that open and close with only a quarter-turn of the handle; and that last as long as the house.

Send for free, interesting booklet, "Faucet Facts," and ask your plumber to show you the faucets. Always look for the name "Quick-pressure" and the guaranty tag.

The Central Brass Mfg. Co. of Cleveland
Originators and Sole Manufacturers of
Quick-pressure Faucets
6119 Cedar Ave., S. E., Cleveland, Ohio

QUICK-PRESSION
TRADE MARK
FAUCETS
PATENTED



No. 21, Blue Bird No. 22, Woodpecker No. 23, Wren
ARTISTIC BIRD HOUSES
by Parcel Post prepaid. Your choice for \$1.25, three for \$3.50.
Made in a proper way of the sweet smelling Jersey Cedar.
Autumn is conceded to be the proper time to put up these
houses. Send 6c. in stamps for new Booklet describing our bird
goods, and giving lots of useful information.
The Crescent Co., "Birdville," Toms River, N. J.

Stanley's
Ball Bearing
BUTTS

INSURE
PERFECTLY HUNG DOORS

Friction is eliminated by the steel bearings, and the door swings smoothly and softly without creaking or binding. These butts have

NON-RISING PINS
which will not work out of the joint.
Write for artistic and instructive booklet "Properly Hung Doors."

THE STANLEY WORKS
Department "H" New Britain, Conn.

SHADOW KO-NA CLOTH

The latest thing in artistic wall coverings is Shadow Ko-Na. Used in homes of culture to give that elegance of restrained richness. Effective as a background for hand or stencil decoration. Easily put on. Keeps clean. Doesn't crack or fade. In a wide assortment of harmonious tints and shades.

Fab-Rik-O-Na
Woven Wall Coverings

include Art, Kraft and Kord Ko-Na, Dyed Burlaps and other fabric hangings. Write for samples of Shadow Ko-Na and our booklet, "Art and Utility in Decoration."

H. B. WIGGIN'S SONS CO.,
218 Arch St., Bloomfield, N. J.

Sunlight Double Glass Sash
Always pay

Whether used on cold frames, hot-beds or on the inexpensive 11 x 12 ft. Sunlight Double-Glazed Greenhouse. They eliminate the need to use mats and shutters, thus saving half the cost of equipment and labor. They give the plants all the light and save the stored heat overnight thus making them grow steadily without forcing.

The inexpensive double-glazed 11 x 12 ft. greenhouse is covered with the Sunlight Sash which are removable for repairs or to use on hot-beds or cold frames in their season. The house, though double-glazed, is always kept bright and tight.

You owe it to your interest to get our literature. The free catalog with net prices and all necessary information. And Prof. Marney's booklet on how to make and use hot-beds, cold frames and a small greenhouse. For the booklet send 4 cents in stamps.

SUNLIGHT DOUBLE GLASS SASH CO.
944 E. Broadway, Louisville, Ky.

Made of Double Glass

EVERYTHING for the HOME GROUNDS

Ornamental, Deciduous, Shade and Weeping Trees, Flowering Shrubs, Barberry, Privet, Evergreens, Conifers, Hardy Trailing Vines, Climbers, Fruit Trees, Berry Bushes, Hardy Garden Plants, etc.

The finest selection for lawn and garden planting in America. More than 600 acres of choicest nursery produce. We will make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation, and give you the exact cost of planting and proper time to plant. Send for Catalog D.

The Stephen Hoyt's Sons Company
Established 1848 New Canaan, Conn. Incorporated 1903

A WORD TO THE HOUSEKEEPER

Last year you had to take the second-best in your improvements because the best was beyond the reach of your designers, and there were no experts in your locality.

HOUSE AND GARDEN is the advisor you need if you contemplate improvements of any kind about the house or garden. It covers the field of decoration, furnishing and gardening with authority, artistic taste and precision, and its purpose is to make the home more beautiful and more livable. The beauty of the magazine and its illustrations will be a pleasure for you, even if you do not plan any changes or improvements just now. Let your subscriptions start with October 1st, and include this helpful expert among your regular visitors.

\$3.00 a year; 25 cents a copy.

McBRIDE, NAST & CO., Union Square, N. Y.

DO YOU LOVE BIRDS? HELP SAVE THEM!



Dodson
Auto-
matic
Sheltered
Feeding Table

The Dodson Feeding Table, or the Dodson Sheltered Food House or the Dodson Feeding Car will save the lives of native birds—and will keep many birds living near you even during the cold months. Thousands of birds starve every winter. Will you help save them?

The Dodson Sheltered Feeding Table is arranged on the weather vane principle—swings in the wind so that resting and feeding place of birds is always sheltered. Built of clear white pine. Size 24x22x12 inches. Price with eight-foot turned pole, \$6.00, f.o.b. Chicago; with copper roof, \$7.50. Mr. Dodson sells a Bird Sheltered Food House, \$3.00; a Feeding Car, \$5.00; a Feeding Shelf at \$1.50.

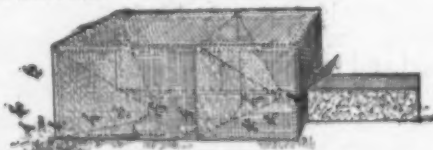
Don't complete your Christmas Gift list until you've seen Dodson's Book about Bird Houses. If you are interested in native birds write to Mr. Dodson, "The Man the Birds Love." Ask for illustrated folders about Bird Houses, Shelters, Food Houses, Feeding Car, Sparrow Trap, etc.

JOSEPH H. DODSON, 1201 Association Building, Chicago, Ill.

(Mr. Dodson is a Director of the Illinois Audubon Society.)

BANISH THE SPARROW

Here's the Dodson Sparrow Trap. It is catching sparrows all over the country—and sparrows are the worst enemies of our dear native birds.



The Dodson Sparrow Trap works automatically. Catches as many as 75 to 100 sparrows a day. Made of tinned wire. Size 37x18x12 inches. Price, including receiving box, \$5.00, f.o.b. Chicago.

In writing to advertisers please mention HOUSE & GARDEN.

Preparing the Garden for Winter

(Continued from page 309)

done, bulbs will rot or freeze and heave out, and the roots of perennials or shrubs, if not actually killed, will be at least very greatly injured, to say nothing of the fact that under such conditions they will not make a satisfactory growth. The hardy lilies are the most subject to injury in this respect, and unless your ground has a sandy or gravelly sub-soil it will be best to plant them only in a bed raised six or eight inches above the surrounding surface, containing, if the soil is at all heavy, a sub-surface of small stones, broken brick or something of the sort. Provision should be made to drain off the surface water as well, so that melted snows and winter rains will not stay upon the surface and freeze when the soil is frozen below them. This is easily arranged for by making the bed slightly elevated in the middle, rounded over like a well-built road, so that the water will drain off from either side. The various spring flowering bulbs are put from two to six inches deep and from four to ten or twelve inches apart, according to sort and size. Good catalogues usually give directions for the various types.

Bulbs should be planted now. The shrubs and the hardy perennials can wait until a little later, but all preparations should be made at once in order that you may not find yourself behindhand with an extra early winter preventing your plans from being carried out. If you leave it to your nurseryman he will see to it that the shrubs are shipped along at the proper time, but you should make ready for them before they arrive so that you can get them into the ground the same day that they reach you. Carefully mark with stakes the places where they are to go, and have your man spade up good sized holes and work into the soil thoroughly some well-rotted manure or a few handfuls of bone dust—both, if you have them. Set the shrubs into the ground about as deep as the earthmarks show they were growing in the nursery, plant them firmly, using your feet as well as your hands, and have the earth drawn up slightly around them at the center, so that the water will be drained away at the circumference of the hole, with no possibility of forming a puddle and freezing about the stalks. Spring is the best time to set out roses, but now is the time to make the beds, if you expect to plant next year.

As to the hardy perennials, most of them, I have learned from experience, will do better with spring planting if you live near the latitude of Boston. But a good many of them do well with fall planting, especially those that are hardy and vigorous in growth, such as peonies, phloxes and irises, or those that flower in the spring and which sometimes lose a season's bloom as the result of spring planting.

As to varieties, that is too wide a sub-

ject for discussion to take up here. In selecting, the best way wherever possible is to visit a nursery or some large estate where the new varieties may be seen in flower, and judge accordingly. Such beautiful new things as the King Alfred daffodil, a wonderful new stonecrop like *Sedum spectabilis*, a crimson spirea like Walluf, a weigela like Eva Rathke, or some of the splendid new phloxes or hardy asters, are well worth all the trouble one may take to obtain them.

I think that the most fascinating work in connection with flowers and plants is that of propagating. Of course, technically speaking, raising plants from seed comes under this classification, but I refer to the making and rooting of cuttings, the division of roots and bulbs, and so forth. Many people seem to take it for granted that there is some sort of mystery about this business which places it beyond their list of accomplishments. It is quite true that some things are propagated with difficulty, but that is not the general rule. Most of the garden plants which can be carried over through the winter, such as geraniums, heliotrope, snap-dragons, some of the hardy shrubs, most of the hardy perennials, and many of the bulbous plants, may be increased with little trouble if one takes the pains to learn how to do it.

In the case of the cutting of tender plants, all the apparatus you require is a shallow box full of clean, gritty sand and a place in which this can be kept in the light and watered, without having the temperature go below forty-five or so at night. The cuttings are taken from the terminal shoots of the plants; that is, new growth which has not been touched by frost and is firm enough to make a clean break when you bend it, instead of doubling up. The cut should be made clean and firm with no bruised edges, and may be either straight across or on a slant, and for most soft-wooded plants taken either at a joint or below it. The cuttings are from two to four inches long and the leaves should be cut off clean from the lower half. Insert them in the moist sand to half their length, and shelter them from bright sunshine for three or four days. In two or three weeks they should begin to show roots at the bottom, and they should then be put in small pots of good soil. Cuttings of hardy shrubs such as privet, which are generally wanted in large numbers, are usually tied in small bundles of twenty-five or so, for convenience in handling. These cuttings are usually made about six inches long, and should be from new wood, but only that which has ripened enough to be firm and hard. Hydrangeas, forsythias, weigelas and a number of others may be handled in the same way. The cuttings may be kept in moist sand or moss over winter, or if made early in the fall put directly into the soil. These cuttings are planted outdoors, but must be put in a place where drainage is perfect, and either mulched or shaded so that they will not be heaved out of position

Reasons for Planting Hicks Fifteen Year Old Maples Now



A MAPLE that is 6 inches in diameter takes 15 years to grow. Hicks has hundreds of such Norway Maples that will save you 10 years of waiting. Considering the immediate effect and actual value in dollars such trees at once give to your property, our price for such trees you will find surprisingly reasonable.

Fall is an ideal time to plant them. Done now, the ground gets firmly settled around the roots; holding the tree firmly and giving the roots a hold on the soil so that abundant food can be at once supplied to the leaves and branches next Spring. The foliage will be fuller and stronger the first Summer.

Shrubs and Hardy Plants can be planted now,

to their great advantage. Our customers tell us that our values in these are unusual in size and quality.

November is the time to arrange for moving large evergreens in winter. Are there Pines, Cedars, Spruce, Hemlock, Fir, six to twenty-five feet high you want to have on your grounds? We have them in our nursery. Are there some in your vicinity to move? We can send competent men and apparatus. Mulch now to keep out frost, and economical work can be done all Winter.

There's a satisfaction in coming to the Nursery and picking out such trees, shrubs, and plants as you may want; but if you can't come—send for our literature.

**Isaac Hicks and Son,
Westbury, L. I.**

The Greatest of all Improvements

in piano construction is represented in the invention of the oval soundboard of the

Melodigrand



**"The Piano with the Unequaled
and Unchanging Tone"**

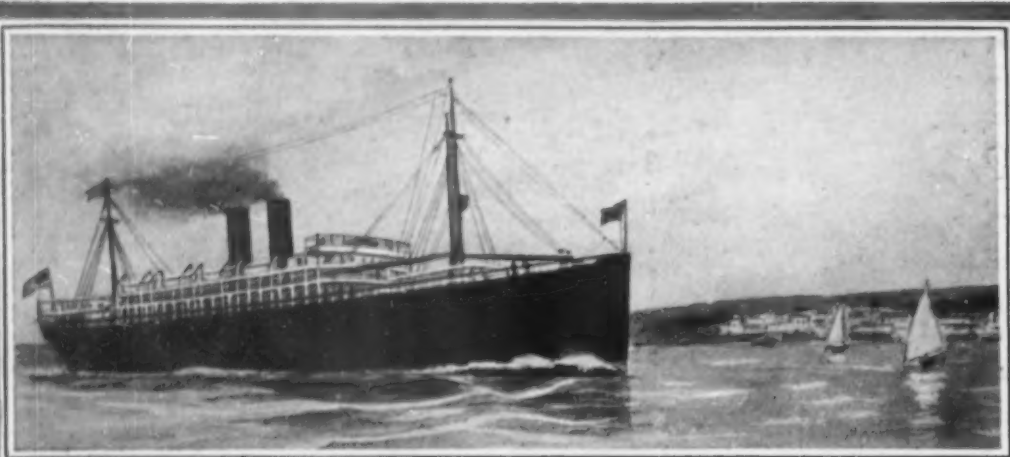
Unequaled in tone purity—richness—and all the sympathetic qualities that appeal to the true artist.

Unchanging because by a special combination of laminated rims and pressure posts the arch or crown of the soundboard is permanently maintained, thus preserving for all time the beautiful Melodigrand tone in all its original purity.

LITTLE GRANDS—PLAYERS—UPRIGHTS

Art catalog mailed on request

**HENRY & S.G. LINDEMAN, 5th Ave. & 142d
St., New York**



Where Winter is Only a Name

Take one of the AGWI Steamship Lines and slip southward over smooth, summer seas to the lands where winter is only a name, to—

Florida—Cuba—Porto Rico—Mexico Texas—Bahamas—Santo Domingo

THE RIVIERA OF AMERICA

Florida, land of Eternal Flowers, is best reached by the luxurious steamers of the Clyde Line, sailing four times weekly from New York direct to Jacksonville—calling at Charleston—without change; Key West, Tampa, St. Petersburg and the West Coast by the splendid steamers of the Mallory Line—direct without change. Write for rates, reservations, etc.

Clyde Steamship Company
Pier 36, North River, New York

CUBA—MEXICO—BAHAMAS

Reached by the superb steamers of the Ward Line. The most delightful way to visit Nassau, seat of the British Colonial Government; Havana, the "Little Paris" with its ideal climate, excellent hotels and delightful social diversions; and Mexico with its ancient monuments and historic ruins. For interesting booklets, rates, etc., write

New York & Cuba Mail S. S. Co., (Ward Line)
Pier 14, East River, New York

THE COMING COUNTRY

Texas, land of opportunity! You owe it to yourself to see it. Visit Galveston, Atlantic City of the Southwest; San Antonio, Aransas Pass, Corpus Christi and other celebrated resorts. The Mallory Line is the only direct route to Texas without change; best way to California and Pacific Coast. For interesting descriptive matter, rates, etc., write

Mallory Steamship Company
Pier 45, North River, New York

THE ISLAND OF ENCHANTMENT

Porto Rico, rightly named "Rich Port," is rich in traditions, interest and products. You can reach it in four and one half days and remain on board during delightful cruise around the island. Weekly sailings from New York; big, 10,000 ton steamers; luxurious accommodations; fare one way, \$45 and up. Write for booklet and all information.

The New York & Porto Rico S. S. Co.
11 Broadway, New York

DISTRICT PASSENGER OFFICES

BOSTON—192 Washington St. CHICAGO—444 Com'l Nat'l Bank Bldg.
PHILADELPHIA—701 Chestnut St. WASHINGTON—1306 F St., N. W.
NEW YORK—290 Broadway

by the frosts. They are covered to a depth of four inches or so, but care must be taken to leave the top buds or bud above ground.

Choice specimens of your hardy perennials of which you would like extra plants for your own use or to give away, may in most instances be easily obtained by dividing the clumps which have been undisturbed for two or three years, and this usually will not only give you extra plants but better flowers; for most roots of this class become so dense after a few years' growth that they crowd each other unduly, and the size and the quantity of the flowers are injured. As soon as they have become well ripened, that is as soon as the summer's foliage has died down and they seem to be ready for their winter's rest, you can take them up and divide them either by pulling them apart carefully or by using a knife, and replant the several sections of the crown. And while you are about it, put some bone dust or fine manure into the soil before replanting. This should be done as soon as active summer's growth has stopped, because, while no new leaf growth will be made during the remainder of the season, the roots will continue to grow and the plants thus become established and ready to do business next season.

As I have already said, I try to make use of everything which the garden has produced. This I find means giving personal attention to harvesting and storing the various crops, fruits, vegetables and bulbs. For this purpose we use three different rooms: a cellar, a cold north room on the ground floor, and a big box-like structure built around the chimney in the attic. In the first we keep all those cold-blooded things such as the root crops, celery, onions, cabbage and so forth, that require a temperature as near thirty-two as possible without freezing; in the second, where the air is drier and the temperature can be kept from going much below forty at night, we keep a temporary supply of vegetables and our several barrels of apples and other winter fruits; upstairs, where it is dry and warm next the chimney, are stored our bulbs of caladium, and our sweet potatoes—which we grow with success even in this northern climate. The other bulbs, such as dahlias, cannas and gladioli, are all stored under a bench in the greenhouse. But the root cellar is my particular pride; the floor is cemented and is as smooth as a table, the walls faced up with cement so that there is no possible place for a mouse or rat to get in. The walls and roof are whitewashed every fall before our winter supply is put in, and ample ventilation is furnished and controlled by a little chain arrangement so that I can regulate it according to the thermometer without having to go down into the cellar. Instead of using cumbersome and insanitary bins, our vegetables are stored in boxes; slatted crates for onions, potatoes and so forth, and large-sized cracker boxes to which short, strong

THE LATEST WORD ON A VITAL SUBJECT *Perfect Health for Women and Children* By ELIZABETH SLOAN CHESSE

Authority states that one-fifth of the babies die of preventable diseases before they reach the age of five years. In this book the way to perfect health is shown to women, both for themselves and their children. The book is one that must command attention from every thoughtful person. \$1.35 net; postage, 12c.

McBRIDE, NAST & CO., Publishers, Union Square, New York City

A NEW AND EASY METHOD A RATIONAL SYSTEM OF HOME EXERCISE

By PERCIVAL G. MASTERS

Describes exercises for health rather than for mere strength. It shows the part the spine and its nerves play in the health of the body, and the exercises are without apparatus and occupy but a few minutes daily. Illustrated. 12mo. \$1.00 net; postage, 8c.

handles have been fastened, for carrots, oyster plant, beets and so forth, which to be kept in the best of condition should be packed in sand.

Mulching and pruning can be left until the last. The winter mulch should not be put on until after the ground freezes, as it is to keep out sunshine, not frost, and to some extent cold winds, from the crowns of plants. For material, rough strawy manure, leaves raked up from the lawns or roads, or bog hay, are all excellent; perhaps the last is the best and the most convenient to use, but the leaves do finely if you can get a few pine boughs or boards to hold them in place, or run a narrow wire border around the bed to hold them neatly in place and to keep them from blowing. The half-hardy, such as azaleas, the rose garden, the hardy border, the strawberry beds, rows of spinach or onions if you are keeping any over winter, the newly planted bulb garden—all these will need mulching after the cold weather sets in in earnest. Some roses and semi-hardy shrubs will need jackets of rye straw made for them and tied about them securely enough so that there is no danger of their blowing away, but these delicate plants are good things not to bother with in a climate like this. The mulch should be from three to five inches deep and put on when both the ground and the mulch are dry.

There are comfortably warm days in November, and even into December, when, during the middle part of the day, you can find a lot of enjoyment in pruning the place into shape. In the fruit garden, go over the berry vines and cut out all the old dead canes and any new ones that are broken or seem imperfect; examine the currants and gooseberries carefully for signs of borers and cut out broken or rubbing branches; prune the grape vines back more or less severely according to the system of growing you use—there is little danger of overdoing it. Roses should get their important pruning early in the spring, but mine are exposed to whipping winter winds, and I head in the tops of the tall new canes enough so that they will not get broken or break others. Such shrubs as have bloomed in late summer or fall may be trimmed up into shape, but the others you will do better to leave until after they are through blooming next season.

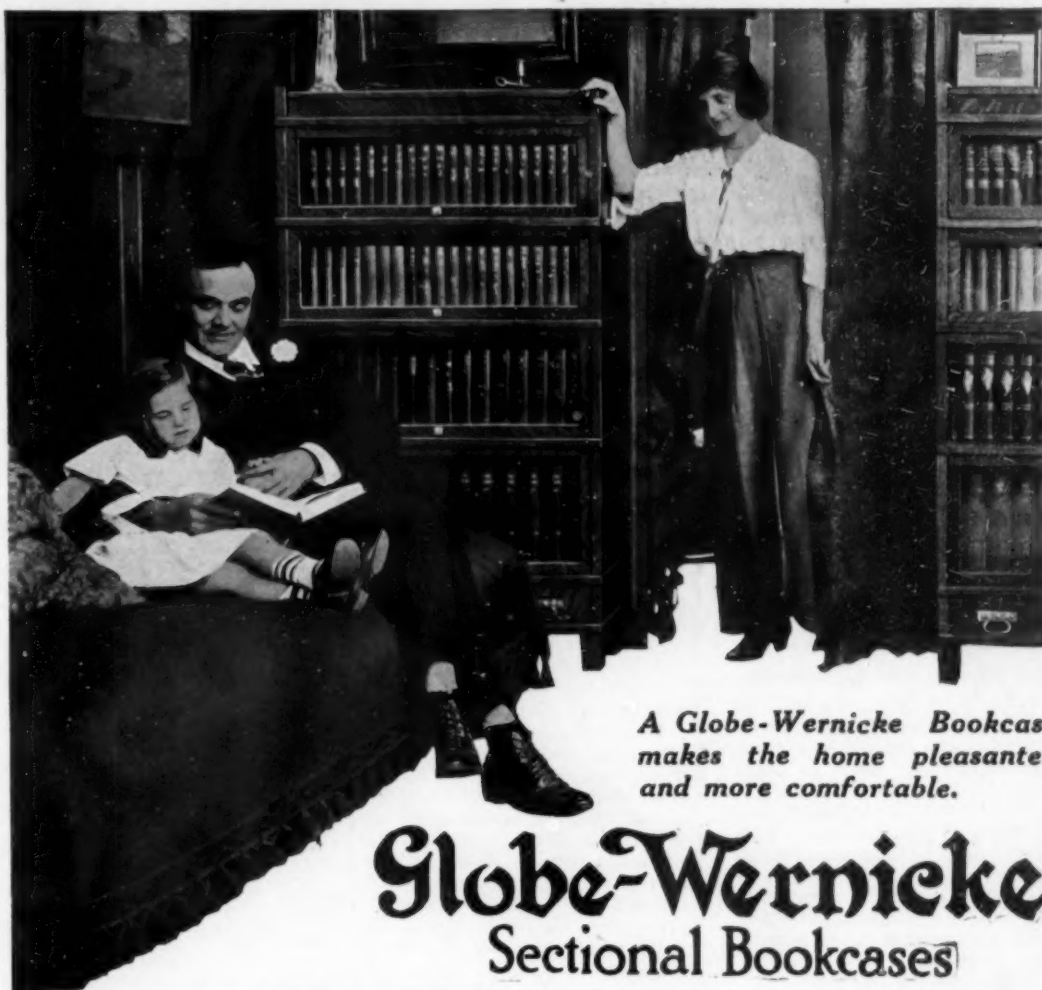


The Motor Emigrants

(Continued from page 288)

money saving that the electric made by releasing Good Fairy.

"In fact," as Mrs. Spence explained to a friend, "John has two kinds of accounts—in one he figures up money, expenses and profit and savings, in the other he figures savings and profits of health and strength and happiness. He says it's an unbusinesslike way of figuring, but I no-



A Globe-Wernicke Bookcase makes the home pleasanter and more comfortable.

Globe-Wernicke Sectional Bookcases

YOU will find a Globe-Wernicke Bookcase a very satisfactory piece of furniture. Being beautifully finished and gracefully proportioned, a Globe-Wernicke Bookcase makes the home pleasanter and more inviting. Being sectionally constructed, a Globe-Wernicke Bookcase grows with your library and suits it to spaces of nearly all shapes and sizes.

AND you can select a Globe-Wernicke Bookcase in a style and finish to harmonize perfectly with the furnishing of nearly any room in your home. But if you want to know the all-around satisfaction of a Globe-Wernicke Bookcase, write for Catalog No. 393. Local representation nearly everywhere. Where not represented, goods shipped, freight prepaid.

The Globe-Wernicke Co.

Cincinnati

Mfrs. Of Sectional Bookcases And Filing Cabinets

BRANCH STORES:

New York, Chicago, Philadelphia, Boston, Cincinnati, Washington, D. C.

BRUNSWICK

Household Refrigerating and Ice Making Plants are designed especially for country homes.
Brunswick Refrigerating Co., New Brunswick, N. J.

McCray Refrigerators

Active cold air circulation—Sanitary linings.

Send for catalogue.

McCray Refrigerator Company,
593 Lake Street, Kendallville, Ind.

"SCALECIDE"

TRADE MARK REG. U. S. PAT. OFFICE

DON'T NEGLECT FALL SPRAYING. GET READY NOW.

Many trees can be saved that would die before Spring if unsprayed. "SCALECIDE" will positively destroy San Jose and Cottony Maple Scale, Pear Psylla, etc., without injury to the trees.

Many of the finest orchards in the country have been sprayed with "SCALECIDE" for the past eight years, producing record crops and prize winning fruit. It costs less to spray with "SCALECIDE" than Lime-Sulfur, and does better work. We stake our reputation on this assertion. Write today for our booklet, "Scalecide, the Tree Saver." Sent free on request. Our Service Department furnishes everything for the orchard at money-saving prices. Tell us your needs.

B. G. PRATT CO., Dept. 2, 50 Church St., New York City.

In writing to advertisers please mention HOUSE & GARDEN.



The Desired Woman

By Will N. Harben

In the pages of Mr. Harben's newest and best book one encounters life in Georgia of to-day in all its intensity. It is the Georgia of great mills and big enterprises, of heavy speculation and the sophistications of people in great cities, as well as of simple mountain folk and their homely ways. Its keynote is the inevitable triumph of love and tolerance, the far-spreading influence of good impulses.

Frontispiece. \$1.30 net.

Partners

By Margaret Deland

Once again in this perfect little story has Mrs. Deland portrayed the romance which lies, so often unsuspected, in the humblest surroundings. Humor, pathos, and loyalty to ideals make this story fragrant as an old-fashioned garden, and there is a near approach to tragedy—for tragedy lies in wait wherever hearts can suffer, if only in a little country post office, as here.

Illustrated. Crown 8vo, Cloth, \$1.00 net.



tice he always gets more satisfaction when he reads off some of his absurd items, like, 'Sparkle in eyes, \$200,' or 'Brown tan on Larry's face, \$1.89,' than he does from any mere statements of actual cash in the bank."

But the cash in the bank statement brought joy to them all when the accounts were cast up for the second year of the three acres garden.

"It's over forty percent better in the main, and a general average of twenty-five percent better all over," said Mr. Spence to Dorry, "and Larry has made almost two hundred dollars alone with his chickens. I'm not so sure but what the boy hasn't found a profession before he has finished school. I could sell ten gross of his eggs a day if he had them—Banner, in the market, offered to take them from me yesterday."

"Well, he can't have them," said Larry, decidedly. "In the first place, I haven't got them. In the second, I can't supply the customers right around here. And while it might be easier to sell in a bunch, wholesale, I'd rather take care of the customers who have stood by me!" and Larry looked so serious and so important that his father gave a shout of laughter and picked his son up by the elbows, only to set him down with a grave face and a: "That's right, son—that's the way to do good business—look after the people who have looked after you."

It was at the end of the second year of the big garden, three years after they had moved in, that Mr. Spence brought a business friend, Mr. Demarest, home to dinner and to spend Sunday. Demarest was pale, nervous, irritable.

"And I'm going to show you the cure," Spence told him. "I was very much as you are three or four years ago. I tried city life—and found I couldn't stand it. I tried suburban life, and found it not much better. Then I took the plunge and bought out in Castleton."

"Well, it may be a cure for you, but it would never do for me," said Mr. Demarest. "I couldn't live so far from the center of things. I'd suffocate for lack of inspiration. I can't see, for the life of me, why a man like you, with your ability and your push, will live out in the country, where you haven't any conveniences."

Mr. Spence smiled, amused. He made no defense, preferring to let "The Gardens," as they had named their home, speak for itself. And it was with some pleasure, if a little grimly, that he noted Mr. Demarest's perplexed expression when Mrs. Spence, fresh and pretty and cheerful in a red striped gown, met them in "The Wizard." Many times that evening he had a duplicate of that grim smile. The electric lights, the warm house, the modern conveniences everywhere, the spick and span appearance of his home, had by now become matters of course to the Spences. To Demarest, expecting a country house such as he had read of: draughty, cold, lighted with oil lamps, with

The Golden Rule Dollivers

By Margaret Cameron

This story is pure fun. Two incorrigible optimists, when they become owners of a touring motor car, tried to share their pleasure with others.

Their kindness led them into all kinds of predicaments. This novel has a laughter-compelling quality about it that is irresistible, and adds greatly to the reputation the author has made as an inventor of humorous situations.

Illustrated. \$1.00 net.

Prayer—What It Is And What It Does

By Dr. Samuel McComb

The writer, who is an assistant director of the Emmanuel Church Movement in Boston, points out in this book the new interest in prayer which is apparent everywhere. Scientifically-minded men no longer scoff at this wonderful force, he shows, but are endeavoring to understand something of its nature and its results. The aim of prayer, the effect of prayer, the practicability of prayer are all emphasized.

Cloth, 60 cents net; Leather, \$1.00 net.

Thirty Pieces of Silver

By Clarence Budington Kelland

One of the pieces, part of the price of the great Betrayal, slips from the greedy palm of Judas down through the ages. A brilliant orator, delivering atheistic lectures for a price, muses as he holds the coin. A vision shows him what he is—the accomplice of Judas! The story is dramatic as a play, with the spiritual appeal of a poetic allegory. A rare Christmas book.

Illustrated. Cloth, 50 cents net; Leather, in four shades, \$1.00 net.

Finding His Soul

By Norman Duncan

A big-hearted, merry man, a hustler, is one of the best traveling salesmen in his line. His little boy dies, and the cruel blow unhinges his reason. He visits the Holy Land. The reality of the land which gave religion to the Western World arouses him. On Christmas Eve, among the hills of Bethlehem, he has a wonderful experience; finds his soul.

Illustrated. Cloth, 60 cents net; Leather, in four shades, \$1.00 net.

"Peanut"

By Albert Bigelow Paine

The sympathy, the insight, the rare power to portray the innermost springs of action, that make Mr. Paine's Biography of Mark Twain one of the best lives ever written in the English tongue, are here devoted to the exposition of a little boy's heart. He is a very poor little boy; but he is loyal in his friendship even to the memory of the desperado who was good to him, and about whom he will believe no ill.

Illustrated. 16mo, Cloth, 50 cents net; Leather, in four shades, \$1.00 net.



HARPER & BROTHERS

Stop Using Antiquated Lighting Methods The LIGHTING BOOK

By F. LAURENT GODINEZ

TELLS how to light your home artistically and with a view to saving eye-strain. The book shows not only how to plan for the lighting of a new house, but gives detailed and understandable directions for adapting these plans to houses already built. There are many illustrations from diagrams and photographs.

\$1.35 net; postage 8 cents



Send for Catalogue.

McBRIDE, NAST & CO., Publishers, Union Sq., New York City

the total absence of city conveniences, plumbing and appurtenances, "The Gardens" was one long succession of surprises.

And after the children had gone to bed, and Mrs. Spence had said "Good night," leaving them to their cigars before an open fire roaring up the chimney, he capitulated; and Spence's explanation of how the thing had been done left Demarest an enthusiastic convert.

(To be concluded.)

Who Visits Your Garden?

(Continued from page 285)

fatten themselves on the leaves of the tree. In the evening they return, gorged and heavy, to the shelter of their encampment.

Every man who raises fruit trees dreads and abhors the tent caterpillars. Not so the cuckoo. It regards them as among the choicest of earthly pleasures, and, alighting in the tree, will eat its fill with a deliberation of manner that well becomes its dignified and somber life. I once saw a cuckoo eat nineteen of them in five minutes. The feast, so auspiciously begun, was, however, brought to a sudden termination by the arrival of an untimely storm, which sent the cuckoo flying in haste to some good sheltered spot it knew deep in the thicket. I have little doubt, however, that it returned later in the day and completed the destruction of this army of pests.

There are other birds, too, that you may see here in the course of a long summer's day. There is the house wren, which never seems to get enough to eat, although it is engaged in this pleasurable occupation most of the time, unless disturbed by the too-near approach of some alarming intruder. It is a voracious eater of insects and seizes them with such remarkable energy that Prof. Beal, of the United States Department of Agriculture, tells us the birds continually swallow pieces of vegetation which they tear away when seizing their prey from the leaves of plants or the blades of grass.

The beloved robin, which enjoys worms better if judiciously seasoned with the pulp of ripening cherries, is seldom very far away. Warblers of many kinds, tanagers and orioles come and go at will, while high above all the swifts and swallows course through the sky, gleaning from the air the insect life whose vaunted flight carries them above the tops of the highest trees.

But when the cool nights of autumn arrive, there comes a great change in the bird life of the garden at Montclair. Most of the summer visitors are gone; only the jay and a few others remain to greet the newcomers from the north. Away and away to the south they have flown to a land less hospitable, to wild birds at least, than that which they have known during the days of song and nesting; for in the Southern States the friendly, understanding eyes that greet them are but few.

The robin's nature seems to change entirely once it has reached its winter home. There it does not often come on the lawns



Country Life
Press, Garden
City, N. Y.



Where Country
Life in America
is made



There's Adventure in Country Life in America And Information too

It tells of the joys of living in the country whether in the open or on a large estate and it tells besides just how to get the most out of such living. It is a very beautiful magazine, but always practical.

Here's Romance

Julian A. Dimock was in the Canadian Northwest wilderness last year. He froze his face, the oil on the shutter of his camera froze, it was 50 degrees below zero, but he got some great stories and no end of wonderful pictures. His first article is in the November issue.

When You've Read Your Books

Where do you put them? Too little attention is paid in planning houses, to the style, placing, height, adequacy, and convenience of book cases. In "A Place for Books" Jared Stuyvesant goes carefully into the whole question and also discusses the possibilities of portable and built-in cases.

Regulating the Climate of the House

A normal amount of moisture in the atmosphere of your room is necessary for health, comfort and economy in heating. There's a very instructive and helpful article by Phil M. Riley that tells you just how to keep your atmosphere wet or dry enough.

Some Other Features

Leonard Barron, editor of *The Garden Magazine*, tells "The Romance of the Chrysanthemum, the Golden Flower of the East."

"That Farm" is brought to a conclusion. E. L. D. Seymour in *The Fruitful Land* writes on "Reclaiming that Neglected Orchard." "What the Neighbors Did" and "Inside the House that Jack Built" are continued. *Better Stock Dogs, Poultry. From a Country Window* discusses "The Country Fair," "Horse Show Standards," "Money in Silver Foxes."

Tom Masson of "Life" Finds Your Funny Bone

For you in "What Kind of a Dog?" He can do it, too. It is an account of a suburbanite's attempt to get and keep a dog that suits the neighbors. The most rollicking sort of good-humored fun, illustrated with clever drawings.

Golf + Trapshooting = Claybird Golf

This new game was explained for clubs in September. Now Edward Cave, the inventor, explains how to modify it so that you can enjoy it at the smallest possible expense and in the most convenient way.

A Word to You

Many people consider this the most glorious time of the year for the country. If you are there *Country Life in America* will easily double your pleasure. Use the attached coupon. You'll get this fine November number, the great Christmas Annual that bubbles over with cheer, the Automobile number, the February issue and finally the annual Spring Gardening issue in March. We offer you all five for the regular price of two because we believe that once you know the magazine you will never be without it.

DOUBLEDAY, PAGE & CO.
Garden City, New York. Value \$2.05

THIS COUPON SAVES YOU \$1.05

H.A.G.
11-13

Dear Sirs:
I enclose one dollar for which please send me *Country Life in America* for five months beginning with the November issue.



Red-Letter Days of Samuel Pepys

Introduction by H. B. WHATLEY

Edited by EDWARD FRANK ALLEN

The best characteristic passages from the celebrated diary, arranged under topical headings, for those who have not the time to read the complete work. The most amusing and astonishing self-revelations in literature, combined with an accurate picture of 17th Century London. Colored frontispiece and other illustrations in black and white.

"The present editor has cleverly chosen many of the most readable entries."

—*The Independent*.

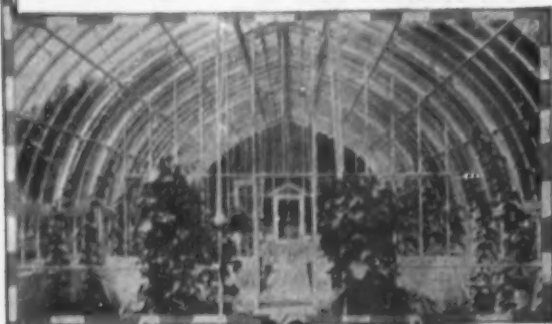
"If you lack a Pepys, Friendly Reader, this 'Red-Letter' edition will do. Yes, decidedly, it will do."—*Denver News*.

\$1.50 net; postage 10 cents

McBRIDE, NAST & CO., Publishers, New York

In writing to advertisers please mention HOUSE & GARDEN.

King Channel Bar Greenhouses



are so warm, bright and sunny that things just have to grow.

No matter whether you want a Greenhouse for pleasure or profit,—whether you want a cozy little house or a sumptuous home for growing things, there is a King Channel Bar House which is bound to give you the best satisfaction.

Free From Heavy Shadow Casting Supports

This type of sturdy construction captures every ray of sunlight all day, and at the same time lends itself to the sweeping graceful lines that harmonize with beautiful surroundings.

WRITE today for Bulletin No. 43 and let us put you in touch with King Owners who will tell you that their houses are triumphs in productiveness, economical upkeep and beauty.

KING CONSTRUCTION CO., 242 Kings Road, N. Tonawanda, N.Y.
All the Sunlight All-Day Houses.



IMPORTANT to Those Who Expect to Build

WHEN PLANNING TO BUILD, get the ideas of leading architects, regarding best design, proper interior arrangement and most appropriate furnishings. This will aid in deciding about *your own* plans, when you consult your architect, and can be obtained from the *several hundred* designs beautifully illustrated in six numbers of the

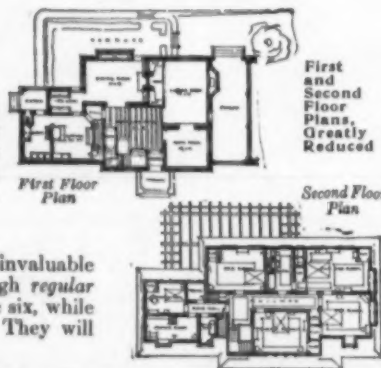
Architectural Record

The National Magazine for Architects, Owners and Builders with the largest professional circulation in the field.

In the advertising pages of these six numbers are also illustrated and described numerous building specialties that add much to the comfort, convenience and value of the modern home, without materially increasing initial cost; this information may mean *saving* of many dollars to you.

Our Special Offer

We have a limited supply of these sets of six numbers, invaluable to those who expect to build or make alterations. Although regular price is \$1.50, we make you a special offer of \$1.00 for the six, while the sets last, if you mention **HOUSE AND GARDEN**. They will soon be sold. Order today, tomorrow may be too late.



This \$1.00 Should Save You Hundreds

THE ARCHITECTURAL RECORD

301 Lewisham Building, New York
Enclosed is \$1.00. Mail six numbers (including the October 1913 COUNTRY HOUSE NUMBER), according to special offer in **HOUSE AND GARDEN**.

Name _____

Address _____

In writing to advertisers please mention **HOUSE & GARDEN**.

to look for worms or refresh itself at a drinking pan on the lawn. It becomes a shy bird, and in companies of dozens or hundreds it feeds on the ground in the pine woods, or gathers in the dense forests to partake of the fruit of the cabbage palmetto or the berries of the black gum trees in the swamps. It does not sing in this region and people generally regard it as a game bird. In numerous places these birds are shot in great numbers. Long strings of robins appear in the markets of many an unpaved town; and negro children play with feathers from the red-breast, while the little birds' bodies are cooking in the steaming and toothsome pot-pie.

One cold winter day I went out to see my friend who lived in the pine grove at the edge of the village. A raw wind was blowing from the north and patches of snow lay in every sheltered nook where the gales had driven it.

"No, indeed, you are not my only guest," said the staunch bird lover. "Some of my friends in feathers are also here. Come and I will show you." He led the way to the old orchard and in a few minutes we discovered a downy woodpecker clinging to the side of an ancient apple tree. This is a bird to be found in every old apple orchard. It is the true guardian of the apple tree.

Tucked away in crevices of the bark are many capsules of insects' eggs, which are hidden there until the warm days of spring shall come and hatch them out into ravenous larvæ which will prey upon the leaves above. The downy woodpecker hunts for these. Sometimes it will find, buried beneath the trunk, the eggs or larvæ of the coddling moth. As it hops around or descends the trunk by a series of backward jumps, it strikes the bark repeatedly with its bill. The sound given back by these inquiring taps advises the bird when it has found a spot where an insect has deposited its eggs. Then the little chips fly as the bill rapidly chisels an opening which will enable its sharp-barbed tongue to bring forth its prey.

But the birds which perhaps are of greatest service to the gardener and farmer during the winter months are those which feed on the seeds of grass and weeds. Chief among these are our native sparrows—the field, white-throated, fox and tree sparrows being common representatives in the neighborhood of New York. Go out into the brown fields any day in the fall and winter when the ground is not actually covered with snow and you may start flocks of these little birds from many a grassy slope and weed thicket.

Birds digest their food very rapidly, a fact which may be observed by anyone who has ever kept a canary or other bird in captivity. The amount of food necessary to sustain their little bodies, the temperature of which is over 100 degrees and whose heart beats more than twice as fast as the human heart, is indeed considerable. When we take into consideration the fact that the individuals of each species of

common sparrow run into the thousands or even millions, over a given space of country, we can begin to realize what an enormous force they are as weed seed destroyers. The average farmer thinks he has enough to contend with as it is, in keeping down the grass and weeds which threaten to choke his crops, but it is possible that his labors might be much greater were it not for the activities of the little sparrows.

Prof. Beal of Washington, who is universally recognized as the greatest expert on the relationship of birds to agriculture in this country, published an article in the *New York Tribune* in 1881 in which he estimated the amount of weed seed annually destroyed by the tree sparrow in the State of Iowa. Upon the basis of one-quarter of an ounce of seed eaten daily by each bird, which was certainly a conservative estimate, and supposing that the birds averaged ten to each square mile and that they remained on their winter range two hundred days, he computed that the tree sparrows of that State destroyed eight hundred and seventy-five tons of weed seeds in a single season. These figures fall far short of the reality, for many individual square miles may easily be found to contain ten thousand tree sparrows, instead of ten.

We found several of them on the ground near the tree where the downy woodpecker was feeding. At our approach, they took wing and alighted in a small cedar nearby from which they regarded our movements with interest while they voiced their contentment with many happy chirps.

Just then a blue jay shouted out in front of the house, and as we went in quest of him we suddenly came upon a flock of crossbills—rare visitors from Canada, feeding on the seeds in the pine cones. "The mischievous red squirrels tried to destroy these cones in the autumn," said my guide, "and I was continually forced to chase them off—otherwise the crossbills would not have come."

Few people realize the damage done to the grain and small fruit trees by the various species of field mice and other forms of rodents. In the summer most house mice go outdoors and add their destructive effects to the normal population of the woods and fields.

All wild creatures have their enemies, planned as if by Nature to prevent their becoming too numerous. It is to hawks, and particularly to owls, that we look for protection from the various little rodents which we so seldom see afield, but whose depredations are so very much in evidence in every garden and on every farm in the land. The number of rats and mice which they destroy is simply beyond computation.

Many States in the Union have shown a tardy interest in protecting the wild bird life, but now the United States Government has taken a hand and, by the new Federal Migratory Bird Law which went into effect October 1, 1913, our insectivorous birds will in future be far better guarded than ever before.



The Countryside Magazine SUBURBAN LIFE

THE call of the countryside was never stronger than today. From the city to the country is the present trend of population, as our cities become more and more impossible for family life. For nine years SUBURBAN LIFE, The Countryside Magazine, has filled an important place in magazine literature in that it has provided a periodical devoted to the needs of those who love the country for the country's sake, and who recognize that a home means more than a house with a 25-foot front lot.

It is quite generally conceded to be the best printed magazine in America, and its illustrations and color work are the finest obtainable.

Half-Price Trial Offer

The price of SUBURBAN LIFE, The Countryside Magazine, is 25 cents a copy and \$3.00 a year, but in order to introduce it to the readers of this magazine, many of whom have never seen it, we will enter your order for

Four Months for 50 Cents

This offer is made with the understanding that it may be withdrawn any time at our pleasure after 30 days, so if you desire to obtain a four-months' subscription to this beautiful magazine at one-half price, representing only about the cost of the paper and postage, it would be well for you to fill out this coupon and send it to us by return mail.

THE SUBURBAN PRESS

Circulation Department, 334 Fourth Avenue, New York, N. Y.

The
Suburban
Press
334 Fourth Ave.
New York City
For the enclosed 50
cents, please send
SUBURBAN LIFE for four
months to the following
address:

NAME _____

ADDRESS _____

Cut this out and mail today with 50 cents

CONSULT A DOCTOR IF IT IS NECESSARY
but in any event read

Perfect Health for Women and Children

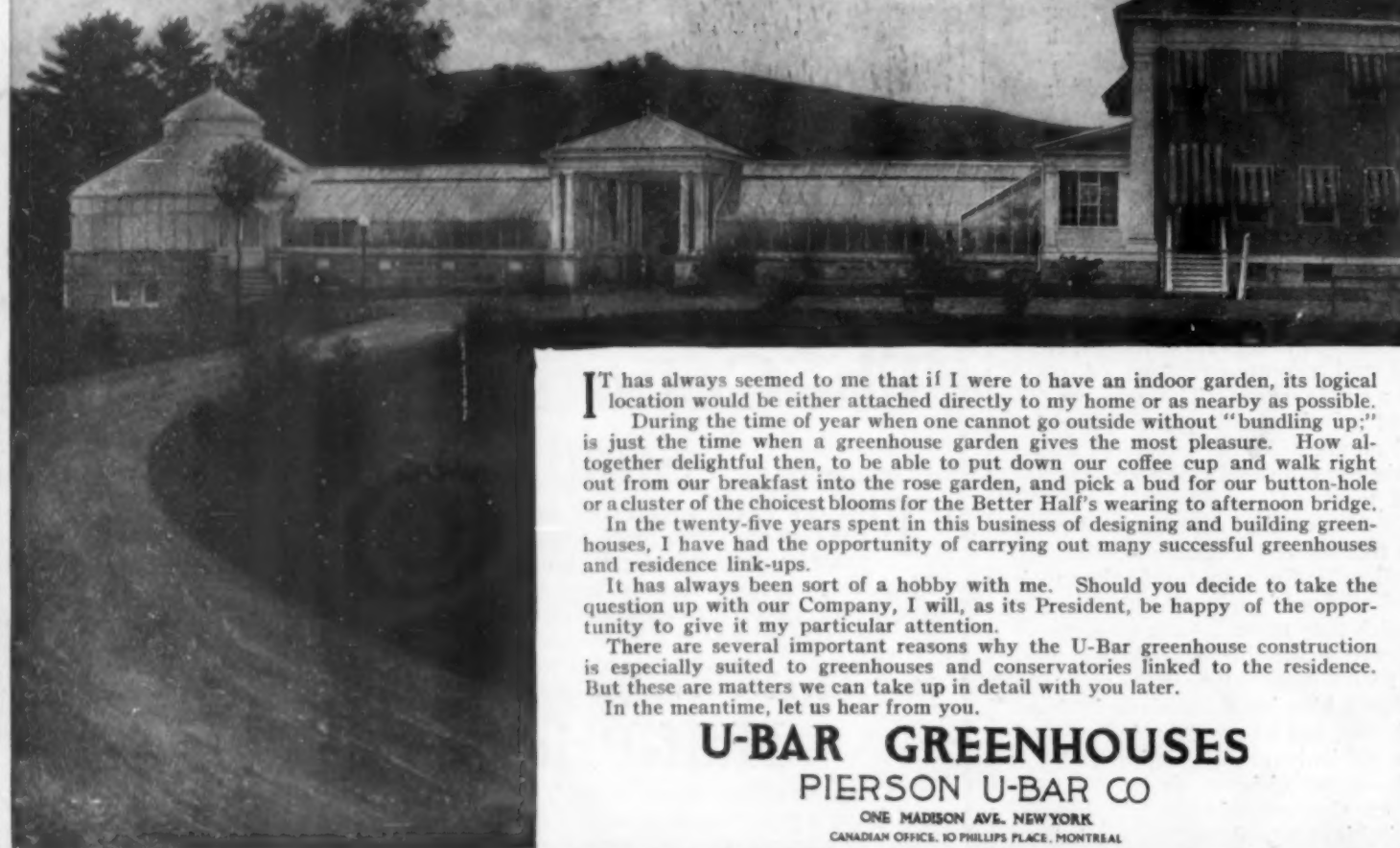
By ELIZABETH SLOAN CHESSE

Authority states that one-fifth of the babies die of preventable diseases before they reach the age of five years. In this book the way to perfect health is shown to women, both for themselves and their children. The book is one that must command attention from every thoughtful person.

\$1.35 net; postage 12c.

McBRIDE, NAST & CO., Publishers, Union Square, New York City

Linking the Residence and Greenhouse



IT has always seemed to me that if I were to have an indoor garden, its logical location would be either attached directly to my home or as nearby as possible.

During the time of year when one cannot go outside without "bundling up," is just the time when a greenhouse garden gives the most pleasure. How altogether delightful then, to be able to put down our coffee cup and walk right out from our breakfast into the rose garden, and pick a bud for our button-hole or a cluster of the choicest blooms for the Better Half's wearing to afternoon bridge.

In the twenty-five years spent in this business of designing and building greenhouses, I have had the opportunity of carrying out many successful greenhouses and residence link-ups.

It has always been sort of a hobby with me. Should you decide to take the question up with our Company, I will, as its President, be happy of the opportunity to give it my particular attention.

There are several important reasons why the U-Bar greenhouse construction is especially suited to greenhouses and conservatories linked to the residence. But these are matters we can take up in detail with you later.

In the meantime, let us hear from you.

U-BAR GREENHOUSES

PIERSON U-BAR CO

ONE MADISON AVE. NEW YORK

CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

Staffordshire Pottery and Its History

By JOSIAH C. WEDGWOOD



EVERYONE knows that the name of Wedgwood stands for the best in English pottery. In this book the grandson of the "Prince of Potters" tells the real story of Staffordshire ware, tracing its history from the earliest references to the present day, and telling both of the potteries, with their development, and of the master potters and their methods. An important book for the connoisseur. :: :: :: Illustrated.

\$3.25 net; postage 16c.

McBRIDE, NAST & CO., Publishers, New York

THROUGH SIBERIA

An Empire in the Making

By Richardson L. Wright and Bassett Digby

The authors of this book crossed the breadth of Siberia with only one passport between them. They traveled by rail on the Trans-Siberian, by sledge across the frozen steppes, and by boat down the ice-choked Shilka and Amur Rivers to the Manchurian border.

"The volume is so replete with human interest and thrilling personal incidents that the facts and statistics become immensely readable. The pictures are vivid and startling indeed."—*New York Times*.

"Abounds in adventure and incident."—*Boston Transcript*.

"The text is dependable for accuracy."—*Buffalo News*.

Illustrated. \$2.00 net; postage 16c.

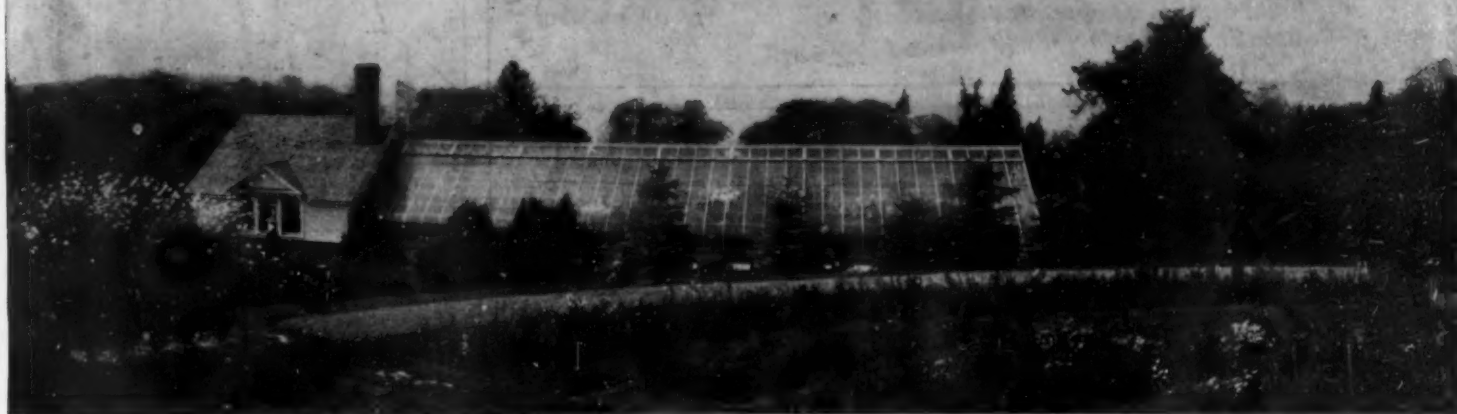
McBRIDE, NAST & CO., Publishers

Union Square

New York City



"U-Bar Greenhouse Practicalness"



If people would only buy their greenhouses with the same care and searching investigation they do with their motor boats or automobiles, many of their disappointments would be avoided.

By way of an investigation suggestion: Take any of the leading greenhouse concerns and compare their constructions and you will find them all constructed on practically the same principle. They differ principally in quality of materials and workmanship.

The U-Bar house, however, is radically different in its entire construction.

For one thing, it has a *complete steel frame*; not a steel skeleton with wood combination, but an *all steel frame*.

Every roof bar is a galvanized steel U-Bar.

The strength of the U-Bar admits of doing away with numerous heavy supporting members, making the house both more attractive and decidedly lighter.

The lighter your house is, the more and better your blooms will be, and the more economically you can grow them.

Two distinct things then, the U-Bar construction accomplishes—it gives you a house possessing ideal growing conditions and one unmatched in durability.

It costs somewhat more than the other constructions. It's worth what it costs.

Send for catalog. Or send for us. Or both.

U-BAR GREENHOUSES

PIERSON U-BAR CO

ONE MADISON AVE. NEW YORK

CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

FARR'S HARDY PLANTS FOR EARLY SPRING PLANTING

If you send for my book now and make your selection during the winter, I can ship the plants the first warm days in spring. The book tells all about hardy plants, and a copy will be sent free if you tell me about your garden.

BERTRAND H. FARR, Wyomissing Nurseries,
106 Garfield Ave. — Wyomissing Pa.



Add Charm to Garden and Home with a few pieces of Galloway Pottery
Our Collection includes Replicas of Antique Art as well as chaste original work executed in Terra Cotta. The Results are Artistic the Material Durable and the Prices Reasonable

Send for catalogue of Flower Pots, Boxes, Vases, Sundials, Fountains, Benches and other Garden Furniture

GALLOWAY TERRA COTTA CO.
3218 WALNUT ST. PHILADELPHIA, PA.

"On my door," said a friend, "is the key to individuality,
It's a knocker of brass,
And it surely shows class,
It's a "Limerick" knocker, you see."



Brasses for Xmas Gifts or Your Own Use

Andirons, Fenders, \$8.00 to \$50.00
Candlesticks, 75 cents to \$5.00
Large Door Knockers for front doors, \$1.50 to \$5.00
Guest-Room Knockers for bed-room doors, \$1.50
Snoozers and Trays, \$2.00 to \$5.00
Brass Stands for tables, \$1.50
Log Poles, \$8.00
Trivets and Hearth Stands, \$5.00 to \$20.00

All prepaid and in beautiful wrought brass of antique design. Send for photographs.

The J. ARTHUR LIMERICK CO.,
Baltimore, Md.

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write to-day for our Loose Leaf Catalog, and state briefly your requirements.

AMERICAN FENCE CONSTRUCTION CO.
100 Church St., New York

WIPE YOUR FEET

Help keep the house clean—don't track mud, snow, dust, dirt through the house—get a

Grab's Foot Scraper

AUTOMATICALLY ADJUSTABLE
Fastens to doorstep or any place outside. Handsomely enameled—looks neat—can be rotated and swept under. The only device made which cleans bottoms and sides of shoe in one operation. Automatically adjusts itself to any size shoe—has 10 parallel plates for scraping soles and 2 stiff bristle brushes which clean sides of shoe—a little marvel—no home should be without it. Price \$1. Be sure to get Grab's Genuine Automatic Foot Scraper—take no substitute. Send for Free Booklet. Agents Wanted.

Over One Million In Use
Victor M. Grab & Co., Ashland Block Dept. F-60 Chicago

In writing to advertisers please mention HOUSE & GARDEN.

Real Estate

This department aims to acquaint its readers with real estate offerings, either in the shape of homes for sale or new developments in suburban communities. It offers its readers a splendid medium through which to buy, sell or exchange property. The real estate agent operating in the better class of residential property will find here an unusual opportunity of interesting a large buying clientele.



FOR SALE

A beautiful place covering almost an acre, located at Fountain Hill, South Bethlehem, in the most refined residential section. The property consists of a colonial brick dwelling with 22 rooms—all large with high ceilings, hardwood oak floors, mahogany doors, gas and electric light. Private water supply, brick driveway laid in concrete, wide cement sidewalk with curb and gutter. There is a frame stable with living quarters for caretaker of place, having 7 rooms. Space for two horses and carriage. Stone garage, 16x32 ft. There are splendid fruit trees, ornamental shrubbery and flower beds, and many beautiful shade trees.

South Bethlehem is located two and one half hours from New York and one and one-half hours from Philadelphia, and can be reached by L. V. R. R., C. R. R., P. & R. and the L. & N. E. R. R.

Owner is living on the place at the present time, but as business takes him away from here would be willing to sell the entire property at very low price. For photographs and further information write to

H. SELTMANN, So. Bethlehem, Pa.



"Edgemont Estate" At Scarsdale Station

Out-of-town homes in country surroundings. Wooded hills, majestic trees and beautiful lawns. The convenience and accessibility of the city. 35 minutes from Grand Central Station.

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale, N. Y.
503 Fifth Ave.
New York City.



RAYMOND B. THOMPSON
OF CHESTER MONTGOMERY
Select Country Places
and Superb Waterfronts
At Greenwich, Conn.
Tel. 866 Greenwich Smith Building

ONE OF THE FINEST HIGH ALTITUDE RESIDENCE sites in Westchester County; 40 acres; beautifully landscaped; no finer residence site. Address Treeholme Chappaqua, Westchester County, N. Y.

MODERN STUCCO RESIDENCE, JUST FINISHED, with 3 to 70 acres; 600 feet altitude; magnificent water supply; wonderful natural scenery. Address Spring Cottage, Chappaqua, Westchester County, N. Y.

A WONDERFUL RESIDENCE SITE, 20 TO 30 ACRES, in the high altitude (640 feet) pure air belt of Chappaqua; magnificent scenery and roads. Address Brevoort Hill Chappaqua, Westchester County, N. Y.

RESIDENCE PLOTS, 3 TO 30 ACRES, SPLENDID roads; wonderful views; 500 to over 600 feet altitude; high class residences only. Address Perry Heights, Chappaqua Westchester County, N. Y.

Are You Looking for a COUNTRY PLACE?

Have You a Place For Sale?

If you are seeking for, or wish to dispose of, any particular kind of a place—an inexpensive rural property within reasonable distance of a city, a suburban house and plot, a summer house in the mountains or at the seashore, or a farm adapted to the raising of any special product—the Real Estate Bureau will help you without any charge for its services.

In writing state in as much detail as possible just what is required, or just what you have, and address the

Manager of the

Real Estate Bureau

HOUSE & GARDEN

Union Square, New York

Indian Runner Ducks

INDIAN runner ducks have greatly increased in popularity during the past five years, which goes to show that they have peculiar merit, else they would never stand the test of criticism which invariably results from a boom in any variety of poultry.

One great advantage of these ducks over others is that they can be raised without swimming water, as they are land fowl. It is necessary for the larger varieties of ducks to have swimming water, else the fertility of the eggs in the hatching season would be seriously impaired. Furthermore, where waterfowl have access to a pond, a good many eggs are lost in the water, which chills them and prevents the birds from laying.

There are three varieties of Indian runner ducks, all of which are well worthy of recognition: the fawn, penciled and white. The fawn, however, is the only one in the American standard at the present time, although the Waterfowl Club appointed a committee recommending that the other varieties should be admitted in the new standard for 1915.



An excellent specimen of Indian runner duck that shows the characteristic shape

The standard weight for Indian runners is four pounds, and for drakes four and a half. Being thus comparatively light, they have the activity, which is essential to keeping ducks as well as other poultry healthy. They are also good foragers and will pick up a considerable amount of feed if allowed to roam.

Taking up now the table advantages of these birds, we find that they are fine in flavor, have small bones, and less fat than the larger varieties. Undisputed are the quality and quantity of their eggs. They average 200 eggs a year, which are mild in flavor and greatly in demand.

As Indian runner ducks are non-sitters, it is advisable to hatch the eggs under hens. They take twenty-eight days to hatch, and there are times when some eggs take longer. For this reason it is best to take out of the nest the ducklings which have hatched on the twenty-eighth

In writing to advertisers please mention HOUSE & GARDEN.



day, and allow the hen to remain sitting for another day, thus protecting the young first hatched from being trodden upon by their foster mother. Duck eggs must be tested during incubation, and the unfertile ones taken out. Fertility can be easily determined by holding the egg between the eye and a strong light in such a way that the shell appears semi-transparent and the developing germ becomes visible.

Do not feed the ducklings for the first thirty-six hours. Bread crumbs moistened with milk and squeezed dry are all that is necessary for the next three days; then add a little bran and white middlings or shorts, making a sticky mash. When the young ducks are a week old, gradually eliminate the bread and add corn meal, a little fine beef scrap and a small amount of sand. When three weeks old, use the following formula:

1	measure of alfalfa
1/4	" " sharp sand
1	" " beef scrap
1	" " corn meal
1	" " white middlings

Always keep charcoal, grit, shell and drinking water before them. The drinking vessel must be deep enough so that the birds can immerse their heads; thus they blow through their nostrils, which become clogged with food. Never allow the duckling to get into the water bodily, as rheumatism will result, the birds lose the use of their legs and death is inevitable. Ducks also need plenty of shade, for they are subject to sunstroke. Prevention is the only remedy for both these diseases.

Vermin do not attack Indian runner ducks; and for this reason they are preferable to chickens. Roup is also unknown in the duck family, which is a big point in their favor.

These birds will lay eggs all winter if the following mixture is fed them three times a day:

1	measure wheat bran
1	" " corn meal
1 1/2	" " beef scrap
1	" " middlings
1	" " alfalfa

If you are keeping ducks for the purpose of selling hatching eggs in the spring, it must be understood that a duck that is forced for eggs continually during the winter will never hatch strong ducklings in the spring. These ducks are machines; they will lay when they are desired to do so, and can be stopped by giving light food. Beef scrap is the strongest forcing food, and should be given according to the desire of the owner.

E. A. G.

An American Garden on Japanese Lines

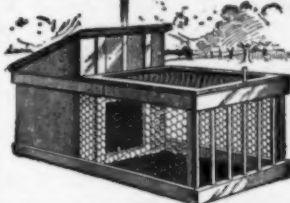
THE title "Japanese garden," as applied in all good faith by the ordinary garden owner, as well as by many landscape architects, is so misleading as to contain scarcely enough element of truth to warrant its use. Of gardens to which this title might truthfully be given, this country boasts but three or four, and these

POULTRY DEPARTMENT

Hodgson Portable Poultry Houses

WIGWARM Setting and Brood Coop

For a hen and her chicks and while she is sitting. Gives protection from rats, skunks, hawks, and other enemies. Insures larger hatches—has proved its success for 22 years. Shipped knocked down—size, 2x4 ft., 2 ft. high.



\$3.00

No. 0 Colony Laying House—

for 12 hens Fitted complete with nests, fountain and feed trough. Sanitary—easily cleaned. One man can easily care for several hundred birds. Nicely painted—set up in fifteen minutes. A comfortable year-round house. In stormy weather the run may be covered, giving a protected scratching room. Size, 10x4 ft., 5 ft. high.



\$20.00

WIGWARM Brooder

Hot-water and hot-air heating combined gives perfect ventilation—no danger of overheating—maintains even temperature regardless of cold outside. Used and endorsed by poultry experts and by experiment stations and such men as Dr. A. A. Brigham, Dr. N. W. Sanborn, Dr. P. T. Woods and Mr. A. F. Hunter. Size, 3x5 feet.



\$15.00

Five-Section Poultry House—10x50 ft.

Sanitary, durable, up-to-date—made of red cedar, clapboarded outside, interior sheathed. Made in 10-ft. sections, each fitted with roosts, nests and fountain. Open fronts, with canvas-covered frames. You can add sections at any time. Easily erected. First section, \$75.00; additional sections, \$60.00 each.



Catalog Free

E. F. HODGSON CO., Room 326, 116 Washington St., Boston Mass.

G. D. TILLEY, Naturalist

"Everything in the Bird line from a Canary to an Ostrich"

For Christmas Gifts



G. D. TILLEY

Singing
Canaries
Piping
Bullfinches
Talking
Parrots

DARIEN, CONN.

SHADOW KO-NA CLOTH

Cover your walls with Shadow Ko-Na. A woven fabric, the newest offering in FAB-RIK-O-NA WOVEN WALL COVERINGS. Highly artistic. Sanitary. Easily cleaned. Fade and crack-proof. Many rich tints and colors to choose from. Write for samples. R. B. WIGGIN'S SONS CO., 215 Arch St., Bloomfield, N. J.



IF you are going to paint or decorate wood, concrete, stucco, cement or metal, or do any tinkering, you should have the paint books telling all about the BAY STATE LINE and the BAY STATER'S work. Address for booklet B.

WADSWORTH, HOWLAND & CO., Inc. Paint and Varnish Makers and Lead Corroders 82-84 Washington St., Boston, Mass. New York Office, 101 Park Ave., at 40th St.



Bob White Quail, Partridges and Pheasants

Capercaillies, Black Game, Wild Turkeys, Quails, Rabbits, Deer, etc., for stocking purposes. Fancy Pheasants, Peafowl, Swans, Cranes, Storks, Ornamental Geese and Ducks, Foxes, Squirrels, Ferrets, etc., and all kinds of birds and animals.

WILLIAM J. MACKENSEN, Naturalist
Dept. Y. Pheasantry and Game Park YARDLEY, PA.



Made to order—to exactly match the color scheme of any room

"You select the color—we'll make the rug." Any width—seamless up to 10 feet. Any length. Any color tone—soft and subdued, or bright and striking. Original, individual, artistic, dignified. Pure wool or camel's hair, expertly woven at short notice. Write for color card. Order through your furnisher.

Thread & Thrum Workshop
Auburn, New York

BILTMORE NURSERY publishes helpful books describing trees, flowering shrubs, hardy garden flowers, Irises and Roses. Tell us about your intended plantings, so that we may send you the proper literature. Write today. BILTMORE NURSERY, Box 1725, Biltmore, N. C.

KENNEL DEPARTMENT

A WHITE SCOTCH COLLIE FOR CHRISTMAS

Will please anyone. Especially it will delight the children. White Collies are very rare and exceptionally beautiful. A Collie is so sympathetic, affectionate and lovable that he soon becomes one of the family. Our White Collies are raised on an island, great, sturdy dogs they are, active, tireless, brave, intelligent and faithful—splendid watch dogs—unsurpassed shepherds—comrades for the boys—protectors of the girls and companions to adults. You will be proud indeed to own one of our White Collies.

Ours are the only Kennels in the world where an unrelated pair of White Collies can be bought. A pair will raise \$200.00 worth of puppies a year. Write for list of young dogs (we have no old ones for sale). We will have a litter ready to ship for Christmas.

ISLAND WHITE KENNELS : Oshkosh, Wisconsin

Easy to Buy and Keep.



A Child's Delight

A SHETLAND PONY

is an unceasing source of pleasure. A safe and ideal playmate. Makes the child strong and of robust health. Highest type—complete outfit—here. Inexpensive. Satisfaction guaranteed. Write for illustrated catalog.

BELLE MEADE FARM
Box 3, Markham, Va.



A FLUFFY KITTEN

makes a joyous Christmas Gift. Write for beautifully illustrated catalogue and sales lists.

ALL COLORS AND AGES. Well bred "Domestic" and rare foreign varieties.

Ideal Summer and Winter for Cats, Dogs and Birds.

BLACK SHORT HAired CATTER
Oradell, N. J.
N. Y. Office, 112 Carnegie Hall.

In writing to advertisers please mention HOUSE & GARDEN.



THE NEWEST BOOKS

The Way Home

By the Author of "The Inner Shrine."
(Basil King)

The book for the man or the woman who loves honesty is this new novel by the author of "The Inner Shrine." For that is what the very human hero of this story is—honest in his hatred of pretense, honest in his wilfulness, honest at last with himself when he finds that he has gone astray. He believed he had "gained the whole world" only to find that he had "lost his own soul."

Illustrated. Post 8vo. Cloth, \$1.35 net.

The Coryston Family

By MRS. HUMPHRY WARD

A love story, with a heroine who will rank as Mrs. Ward's most charming portrayal of young womanhood of to-day, and a dramatic representation of the struggle between the radical and aristocratic elements of English society. As a rich sombre background against which the youthful love episodes stand out, the author has painted the character of a forceful woman, desperately seeking to retain the almost unlimited power that was hers.

Illustrated. Post 8vo. Cloth, \$1.35 net.

The Passionate Friends

By H. G. WELLS

The story of the turbulent lives of one man and one woman—separated by the barrier of the law, yet attached by something stronger than law—stronger than themselves. A story with a background of high idealism and prophecy of the future. "The heroine who 'wanted herself' and lost her freedom in providing that self with luxury is depicted with consummate art, while Stephen's wife is one of the most delightful of the Wells's gallery of female portraits."—London Literary Guide.

Frontispiece. Post 8vo. Cloth, \$1.35 net.

A Changed Man

By THOMAS HARDY

A new Hardy book! One to arouse the keen interest of every Hardy lover. This new volume has all the wealth of his genius, for the tales in it were written when he was at the height of his career. They are more like condensed novels. "A Changed Man" takes the reader at once to Casterbridge and tells the romance of a captain of cavalry. All the stories are rich in atmosphere and character, and several are almost mediaeval in their power and mystery.

Frontispiece and map. 8vo. Cloth, \$1.35 net.

The Judgment House

By SIR GILBERT PARKER

"Never has Sir Gilbert written a novel more filled with keen and poignant sense of life than in this story, woven of London and the veld, of England and her policies, South Africa and her struggles during the Boer War. . . . A thrilling, majestically moving story."—New York Times. "The work displays a high degree of literary craftsmanship, and, in the more powerful situations, a restraint of which only the true artist knows the strength."—Montreal Star. "'The Judgment House' is the season's greatest novel, a psychological study of life in which men and women play many parts."—Grand Rapids Herald.

Illustrated. Post 8vo. Cloth, \$1.35 net.

Familiar Spanish Travels

By WILLIAM DEAN HOWELLS

In this new book of travels Mr. Howells relates the incidents and impressions of his trip through Spain. Like a glorified kinemacolor film, he passes in review Spanish scenery, the architecture of cathedrals and palaces; theatres and hotels; picturesque street scenes; Moorish remains; the King and Queen; beggars and guides; gypsies and donkeys.

32 illustrations. Crown 8vo. Cloth, \$2.00 net.

Miracles of Science

By HENRY SMITH WILLIAMS

The story of the modern miracles of the laboratory and observatory told in popular language free from technicalities, so that the least scientific reader will understand and enjoy it.

Illustrated. Crown 8vo. Cloth, \$2.00 net.

Social and Economic Forces in American History

From the "American Nation"—A History

Consecutive views of American life, manners, and customs from the early days of the first colonies are here described by the distinguished scholars who have contributed to the twenty-seven volumes of the "American Nation."

Crown 8vo. Cloth, \$1.50 net.

The American Civil War A Short History

By JAMES KENDAL HOSMER

This two-volume history of our great conflict, from 1861 to 1865, provides a work at once brief, compact, and impartial.

With frontispiece and maps. Crown 8vo. Per set, \$3.00 net.

HARPER & BROTHERS

SAMSON SPOT CORD



For Sash Cord. Will outwear common roughly braided cord or metallic devices many times over. The smooth, even braid minimizes abrasion and prolongs wear.

For Clothes Line. Will not kink, stretch or ravel, or stain the clothes, and is guaranteed to last at least five years even when permanently exposed to the weather. Look for our trade-mark, the Spots on the Cord.

Send for Samples. Carried by all leading dealers.
SAMSON CORDAGE WORKS BOSTON, MASS.

Landscape Gardening



A course for Homemakers and Gardeners taught by Prof. Beal of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250-page Catalog free.

Write to-day.

THE HOME CORRESPONDENCE SCHOOL

PT. 226.

SPRINGFIELD, MASS.

In writing to advertisers please mention HOUSE & GARDEN.

were mostly designed and executed by Japanese architects, at appalling expense to the aspiring owners.

But of gardens, large or small, worked out along Japanese lines, whose expense may be elastically telescoped to fit the purse of the ordinary garden lover, there are legion, and it is of this latter class this article intends to treat.

The true Japanese garden is impractical for the ordinary garden owner, first on account of its expense; secondly by reason of its comparative lack of bloom; and lastly for the minute and careful attention paid to infinitesimal detail and sentimental value.

That the second item in this list will be read askance by many who have cherished visions of Japanese iris-gardens filled with bloom, I am well aware. But the statement is nevertheless true. The rightful Japanese garden is not primarily a garden of flowers. A single flowering plum or cherry tree for blossom in the spring; a few choice peonies, iris, and great single roses; and in the fall a clump of lily-spikes, or blazing chrysanthemums—these are the chief dependents of a true garden of Japan. Nowhere is there that uncomfortable profusion of varied flower-faces, detracting from the beauty of each individual specimen, which is so often the case in American gardens; nowhere is there the haphazard grouping of conflicting tints which too often offends the eye in our gardens.

For the rest, their charm lies chiefly in the placing of boulders, the harmonious grouping of reeds and grasses, the artistic value of teahouse and torii, stone lanterns and rustic bridges. A Japanese architect will spend a week in judging the particular location for a certain boulder, destined to become a keynote of the garden, and will perhaps spend many weeks in the selection of the boulder itself; it must be of a certain shape, tint, and fitness for the landscape. In fact, Japanese garden-making in its true sense is really a religion, in which sentiment, beauty-cult, and even ancestor-worship play a prominent part. Their gardens are more than beautiful pictures; they are expressions of personal sentiment, and finally completed only after generations of painstaking detail.

In designing a garden on Japanese lines in this country, an approximate attention to detail must be paid, if the Japanese atmosphere is to be retained, even in part. The architect must depart from all formerly accepted rules of garden-making. Where he has been taught to deal broadly in landscape effects, he must now turn finicky; where ordinarily he has placed long, broad walks, leading directly to the garden's focal points, he must now turn his attention to narrow paths, that wind in snake-like curves and devious approaches to these points of interest; and where he has dealt in groups and masses, he must learn to use single well-placed specimens. The arrangement of paths is the main point of success or failure in



imitating Japanese effects. The curves must be graceful, affording, as vistas, the most artistic views in the garden. Another important detail is the placing of the garden's water-feature. For no matter how miniature the garden, some sort of water-feature it must have—even if only a sunken half-barrel, fit for the growing of a single lotus. The pool should be the most important focal-point in the garden, not excepting the almost equally indispensable tea-house. Wherever possible, the combining of these two features with a rustic bridge is one of the most successful methods.

In building the rustic work of tea-house and bridge, a Japanese architect should be consulted, or a detailed photograph carefully studied, and a minute working-drawing made, especially if the contract is to be given over to the mercies of the local carpenter. Spruce poles, with the bark left on, is our nearest approach to bamboo for serviceability and graceful effect. Cedar is not so good, as its bark is liable to strip badly in high winds, while white birch is too glaring, and not so easily subordinated to the whole.

The material used in planting such a garden should, of course, be chosen from Japanese importations. It is surprising how many of our shrubs, trees and hardy plants have originally come from Japan. But, in planting, do not try to have too great a variety. One plant feature to furnish bloom for each season is far better than heterogeneous beds. Plants with too heavy or massive bloom should also be avoided, always remembering that where a plant possesses both single and double varieties a Japanese will invariably select the former, as being the more artistic. The following is a suggested list for the amateur: Iris in variety, poppies, reeds, grasses, bamboos, flowering trees and shrubs, vines, roses, peonies and chrysanthemums, together with water-lilies and lotus for the pool, will be found sufficient. A few lily bulbs of different varieties may also be added, if desired.

Under ordinary circumstances, the Japanese type of gardening is best avoided by the amateur. It is too easily made only a travesty of the real thing. Inartistic rustic work, ungraceful paths, crowded planting, and inharmonious colors, are such omnipresent stone-walls against which to bump over-aspiring, horticultural heads. And, possessed of a fair amount of space, for the ordinary American garden lover, there are so many other types of garden, any one of which will give him more pleasure, more wealth of bloom and fragrance, besides harmonizing more surely with the probable architecture of his dwelling.—MARTHA HASKELL CLARK.

A CORRECTION.

In the November HOUSE & GARDEN, the article entitled "The Modern Kitchen and Its Planning," was erroneously attributed to Mr. C. E. Schermerhorn. The author was Mr. Watson K. Philipps, Mr. Schermerhorn's associate in business.



Country Life
Press, Garden
City, N. Y.



Where Country
Life in America
is made



The Christmas Annual of Country Life in America

Is full of color and beauty, alive with holiday spirit and fun. This luxuriant annual will be as good as Country Life in America's best. In England the great annuals fill a definite place in the holiday celebration; no other publication comes so near to meeting the same need on this side of the water.

Among the contents are the following:

WALTER PRICHARD EATON'S exquisite new serial, "The Idyl of Twin Fires" is commenced.

JULIAN A. DIMOCK writes of "The Dog Teams of the Northern Woods" and shows remarkable photographs.

LUCIUS C. PARDEE in "The Story of Nyctea, the Great White Owl" has written a brand new sort of a nature story. Exquisite color illustrations by Charles Livingston Bull.

ELLA M. BOULT tells the story of "The Nativity, a Miracle Play in New England;" with striking color illustrations.

HENRY W. LANIER has caught the true spirit of winter sport in his charming paper "Snow Fun in Maine."

LUKE VINCENT LOCKWOOD, the great authority, begins his unique series on "Old American Silver" with an article on "Spoons."

We would call your attention to the coupon on this page. It entitles you to this issue and the next four for a dollar bill. The regular price of the Christmas Annual alone is fifty cents. January will be the Motor Number and it and succeeding issues will contain these serials and series: "The Idyl of Twin Fires," "Country Life Goes West," "True Stories of the Northern Frontier," "What the Neighbors Did," "Old American Silverware," "Little Stories of Big Farmers," these departments—"Dogs," "Better Stock," "Poultry," "The Automobile," "From a Country Window," "Experiment Station News." And there will always be new articles, including many on house building and gardening with numerous illustrations.

PERSONAL SERVICE FOR EVERY READER

Our Reader's Service answers thousands of inquiries about every phase and problem of country life, about houses and furnishings, dogs and chickens, gardens and flowers. What are your problems? COUNTRY LIFE IN AMERICA will gladly help solve them. There is no charge to any subscriber. This is a coupon of service; clip it today.

THIS COUPON SAVES YOU \$1.05

H&G
12-13

Dear Sirs:
I enclose one dollar for which please send me Country Life in America for five months beginning with the December issue.

DOUBLEDAY, PAGE & CO.
Garden City New York

EVERYTHING for the HOME GROUNDS

Ornamental, Deciduous, Shade and Weeping Trees, Flowering Shrubs, Barberry, Privet, Evergreens, Conifers, Hardy Trailing Vines, Climbers, Fruit Trees, Berry Bushes, Hardy Garden Plants, etc.

The finest selection for lawn and garden planting in America. More than 600 acres of choicest nursery produce. We will make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation, and give you the exact cost of planting and proper time to plant. Send for Catalog D.

The Stephen Hoyt's Sons Company
Established 1848 New Canaan, Conn. Incorporated 1903

Boddington's Quality Seeds
Don't fail to get on our list for the 1914
Spring Catalog. 182 pages.
READY IN JANUARY

Arthur T. Boddington, 334 W. 14th St., New York

Sketch of the Fireplace
designed and erected by
us in the Studio of J. C.
Leyendecker, Esq., New
York.

We have a splendid collection of Fireplaces modeled in Pompeian Stone. Original designs promptly and carefully followed. Our large illustrated Catalogue, full of home and garden ornament suggestions sent free.

The Erkins Studios
The Largest Manufacturers of
Ornamental Stone.

226 Lexington Ave., New York
Factory, Astoria, L. I.



In writing to advertisers please mention HOUSE & GARDEN.

BOOKS FOR CHRISTMAS

SUMPTUOUS AND FASCINATING BOOKS OF TRAVEL

As It Is In England

By ALBERT B. OSBORNE

Author of "Picture Towns of Europe," "Finding the Worth-While in Europe," etc.

The strands of present-day and medieval England woven together in one charming pattern. A book that presents a descriptive and interpretative study of the country such as has never before been written. To the largest cities the author has given little attention, presenting instead that which stands for the traveler's England—the countryside with its hedge-rows, its thatched cottages, its rivers and lakes, its abbeys and cathedrals, its quaint inns, and always its people. Illustrated. Boxed. \$3.00 net; postage 15 cents.

Personality of American Cities

By EDWARD HUNGERFORD

Author of "The Modern Railroad," "Little Corky," "Gertrude," etc.

Those to whom it has occurred that a city is something more than a mere collection of streets and stores and houses, will delight in Mr. Hungerford's characterizations. A partial list of the cities discussed is Boston, New York, Philadelphia, Baltimore, Washington, Richmond, Charleston, Pittsburgh, Syracuse, Rochester, Buffalo, Cleveland, Chicago, St. Louis, New Orleans, Minneapolis, St. Paul, San Antonio, Denver, Seattle, Tacoma, Portland, San Francisco, Montreal and Quebec. To read this book is to realize that American cities have their separate distinctions and charms no less than those of the old world.

Illustrated with photographs. \$2.00 net; postage 16 cents.

Along France's River of Romance—the Loire

By DOUGLAS GOLDRING

The Loire runs through the heart of France. From Le Puy, with its curious formations, Orleans, with memories of Jeanne D'Arc, Angers, home of the Plantagenets, and the wonderful chateau country—from its source to its mouth it speaks romance. And the author translates for us the present as well as the past.

Illustrated in color and half-tone.

\$2.75 net; postage \$5 cents.

Along Spain's River of Romance—the Guadalquivir

By PAUL GWYNNE

The author of this book follows the Guadalquivir from its source to its mouth, journeying close to the soil and seeing the country and its people through the eyes of a Gili Blas.

"A delightful journey made in the right way. . . . It is a delightful personal narrative."—*New York Sun*.

"Is full of absorbing historical information and romantic associations."—*Literary Digest*.

"In many ways a novel contribution to the annals of Spain."—*Boston Evening Transcript*.

Illustrated in color. \$3.00 net; postage \$5 cents.

Syria, the Land of Lebanon

By LEWIS GASTON LEARY

Author of "The Real Palestine of To-Day," "The Christmas City," etc.

A land of contrasts, with a history full of thrilling and picturesque events, Syria offers a most fascinating field for the travel writer. When so experienced an author as Dr. Leary turns his attention to its portrayal, the result is a book of extraordinary interest and value. He pictures it and its people as they are to-day. He shows ruins of the cities of yesterday—peopled by long-gone civilizations. The book is entertainingly written and beautifully made. Illustrated. Boxed. \$3.00 net; postage 15 cents.

The Christmas City

By LEWIS GASTON LEARY

Bethlehem, the city of the Nativity, is here made to live as the background of the sweetest story in the history of Man. It is a beautiful and reverent book, and its binding, typography and illustrations are thoroughly in accord with its character as a Christmas Gift. Colored frontispiece and illustrations in half-tone. \$1.25 net; postage 12 cents.



Reduced copy of colored frontispiece to "The Man Who Found Christmas," by Walter Prichard Eaton. (See top of opposite page.)

Picture Towns of Europe

By ALBERT B. OSBORNE

Author of "As It Is In England," etc.

Mr. Osborne leads us back through the pages of history to the hoary medieval towns of Germany, Italy, Spain, France, Portugal, Belgium, Holland, and England. He shows these romantic places as "picture towns" both in their architecture—their moated walls, their towers and battlements—and in the customs that remain to-day. To read this book is to tread "the road to yesterday." Illustrated. \$2.00 net; postage 16 cents.

London—An Intimate Picture

By HENRY JAMES FORMAN

Author of "The Ideal Italian Tour," etc.

It has been said that men admire Paris, but they love London. There is a quality—a personality—in the clean thoroughfares, the old landmarks, the orderliness, even in the yellow fog, that stands alone among the great cities of the world. Mr. Forman, a well-known American writer who has lived in London for several years, is peculiarly well fitted to transmit this elusive personality into the printed word, and the sumptuous format of this gift edition is in keeping with the charm of the text. Illustrated. Boxed. \$2.50 net; postage 16 cents.

Through Our Unknown Southwest

By AGNES C. LAUT

(Second Edition)

Tells of the remains of one of the world's oldest civilizations, antedating perhaps that of ancient Egypt; of the Cliff Dwellings, the Pueblos, the Navajo and Hopi Indians, and the National Forests—all within the borders of the United States.

"Pungent, picturesque, compelling . . . thrilling with human interest."—*New York Times*.

"This book will prove a revelation to those who think they are well informed in regard to their own country."—*Albany Argus*.

"Undoubtedly the best book on this subject that has appeared."—*Buffalo News*.

"Excellent in every respect."—*Rochester Democrat*.

Illustrated. \$2.00 net; postage 16 cents.

Along Germany's River of Romance—the Moselle

By CHARLES TOWER

The romance of the Rhine is somewhat worn off by the tourist traffic, but the Moselle retains its charm. The book opens up the river's attractive secrets and graphically pictures its wild crags, ancient castles, marvelous scenery, and interesting folk.

Illustrated in color and half-tone.

\$2.75 net; postage \$5 cents.

Under the Sky in California

By CHARLES FRANCIS SAUNDERS

(Second Edition)

This book is a striking presentation of the unsung, unadvertised charms of the real California, and it tells just how the visitor may see things for himself. In no other book are the same phases of California life covered. "Of that land of Delight, in truth the real California, we know little. It is into this that Mr. Saunders guides us."—*Boston Transcript*.

"Touches a high mark in the literature of travel."—*Seattle Post-Intelligencer*.

Illustrated. \$2.00 net; postage 16 cents.

GIFT BOOKS THAT PERTAIN TO THE HOME

Dishes and Beverages of the Old South

By MARTHA McCULLOCH-WILLIAMS

"Southern Cooking" has in itself an appetizing sound—an odor of sanctity, so to speak—and no one capable of conveying it to the printed page knows more about the subject than Mrs. Williams. This is more than a cook-book; it tells how to make Southern dishes and brews for all occasions, but it also holds a charming atmosphere of things Southern. Illustrated. \$1.35 net; postage 10 cents.

Old-Fashioned Gardening

By GRACE TABOR

Miss Tabor has given us a notable work in this beautiful book—a work that was well worth the doing and one that has been done so well that it is the authority. It tells of the gardens of the English Cavalier gentleman of Virginia, of the prim New England dooryards, of the Dutch housewives' gardens of New Amsterdam, of Spanish influences in the semi-tropical Southwest, and finally, it tells how to make gardens to-day that will be in keeping with houses that have come down to us from the past. Illustrated. \$2.00 net; postage 16 cents.

Furnishing the House of Good Taste

By LUCY ABBOT THROOP

A fascinating and authoritative book on the tasteful furnishing of your home, written by a well-known interior decorator. The author, after a survey of the period styles of decoration, takes up in detail the home of to-day and shows how period styles or other modern adaptations may be consistently carried out. Beautifully illustrated. \$2.00 net; postage 20 cents.

Send for Christmas Catalogue

McBRIDE, NAST & CO., Publishers, Union Square, New York City

In writing to advertisers please mention HOUSE & GARDEN.



THREE CHARMING LITTLE GIFT BOOKS

The Man Who Found Christmas

By WALTER PRICHARD EATON

A New York newspaper man, to whom "the Christmas spirit" was merely a subject of cynical jest, whimsically enters upon a search for the real thing of his youth. He finds it and considerably more. Frontispiece in color by Walter King Stone. 50 cents net; postage 5 cents.

In the Heart of the Christmas Pines

By LEONA DALRYMPLE

Author of "Uncle Noah's Christmas Inspiration," etc. A story telling of a misunderstanding between a man and a maid and how the usual events of a Yuletide straightened the course of a great love. Those to whom "Uncle Noah" brought delight shouldn't miss this new story. Frontispiece in color. 50 cents net; postage 5 cents.

Uncle Noah's Christmas Inspiration

By LEONA DALRYMPLE

For sheer heartwarming optimism, this story of the South at Yuletide is to be recommended without reserve. The devotion of Uncle Noah to his master and mistress, and his inspiration for a Christmas celebration are the chief elements of the story. Frontispiece in color by F. C. Yohn. 50 cents net; postage 5 cents.

THE SEASON'S BEST FICTION

The Heart of Sally Temple

By RUPERT SARGENT HOLLAND

Author of "The Count of Harvard," "The Man in the Tower," etc. The impersonation of Lady Pamela Vaclain by a pretty actress of Drury Lane furnishes the basis of this piquant and humorous novel of 18th century London. Sally is an audacious heroine, but her audacity only intensifies the essential sweetness of her character, and she carries the reader with her from the first chapter to the last. And the author pictures the life of the times no less successfully than he does the heart of Sally Temple. \$1.25 net; postage 12 cents.

Princess Mary's Locked Book

ANONYMOUS

For ten days Princess Mary of Thule visits her governess in London as Miss Mary Smith. Tired of the restrictions imposed upon her as a princess, she makes the most of her opportunities for adventure, and each evening tells her "locked book" what has happened. She meets the man in a quite unconventional way, and the resulting romance is one of great charm. The book is the work of a well-known and popular author. Frontispiece by Max Cowper. \$1.00 net; postage 8 cents.

The Insidious Dr. Fu-Manchu

By SAX ROHMER

A succession of thrilling incidents in which Nayland Smith, detective, runs down and brings to bay the crafty Fu-Manchu, super-criminal. Its pages pulse with excitement that carries the reader irresistibly along. A striking revelation of detective methods in dealing with the strangest criminal system ever devised, and the most dramatic mystery story of the decade.

"Nayland Smith... an improved Sherlock Holmes. He is fully the peer of his predecessor."—*Salt Lake Tribune*.

\$1.25 net; postage 12 cents.

The Happy-Ship

By STEPHEN FRENCH WHITMAN

Author of "Predestined," "The Isle of Life," etc.

Mr. Whitman has Kiplingized the American Navy in these rollicking stories of Shorty and Patrick with their own versions of many exploits and adventures afloat and ashore in many lands. Here is a new and distinct brand of humor with a universal appeal. You'll laugh. You'll chuckle. You'll roar! Illustrated by F. C. Yohn. "Positively convulsing."—*Albany Argus*.

"Makes the reader shout with merriment."—*Springfield Republican*.

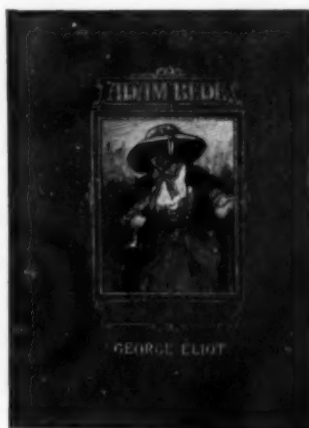
\$1.25 net; postage 8 cents.

The House of Spies

By WARWICK DEEPING

Author of "The Strong Hand," "Uther and Igraine," etc.

With the downlands of Sussex as the setting, the author gives us in this story of love and adventure a charming romance of the days when Napoleon's threatened invasion of England was stirring all Britain to fear and activity. It is a story that throbs with interest, narrated with that skill of literary style and diction so characteristic of Mr. Deeping's work. Frontispiece in color. \$1.25 net; postage 12 cents.



NEW HOLIDAY EDITION OF Adam Bede

By GEORGE ELIOT

A sumptuous, beautifully illustrated holiday edition of this stirring classic. An appropriate gift for your best friend. Pictures in color by Gordon Browne. Large octavo, bound in heavy art linen stamped in gold, with color inlay. \$4.00 net; postage 35 cents.

Gertrude

By EDWARD HUNGERFORD

Gertrude is a real American girl, the kind of a girl who is to-day achieving the big things of life, and her story is told with rare insight, humor and realism. Colored frontispiece by George Brehm. \$1.25 net; postage 12 cents.

Cleek, the Man of the Forty Faces

By T. E. HANSHEW

Cleek begins as a criminal and, luckily for society, turns detective. His marvelous cunning, combined with the power of facial disguise, makes him irresistible both as a minion of the law and as a provider of fascinating material for novel readers. His adventures are thrilling and absorbing, and the book ranks high in the realm of detective fiction. \$1.25 net; postage 12 cents.

The Adventures of Napoleon Prince

By MAY EDGINTON

As a fascinating type of "gentleman criminal," Napoleon Prince is the peer of the whole crew of evening dress cracksmen; but add to this the fact that he is a paralytic as well, and you have one of the most remarkable characters in the realm of fiction. His adventures as a master of polite burglary are full of action and zest, and are stirringly chronicled. Colored frontispiece. \$1.25 net; postage 12 cents.

In Midsummer Days

By AUGUST STRINDBERG

A collection of charming fantasies by a writer who seldom shows in his work the naive side of his personality. The stories are widely differing in subject, ranging from fairy tales to fables, but they are alike in their good humor and keen philosophy. 12mo. \$1.25 net; postage 12 cents.

GIFT BOOKS OF A WIDE APPEAL

George Du Maurier

By T. MARTIN WOOD

By many people Du Maurier is best remembered as the author of "Trilby." He was, however, the pre-eminent satirist of the Victorian period—in our eyes one of the most curious and unnatural of past eras. The author familiarizes us with Du Maurier's satirical works and his little-known illustrative work for the wood engravers. Illustrated. \$2.50 net; postage 20 cents.

Staffordshire Pottery and Its History

By JOSIAH C. WEDGWOOD

Everyone knows that the name of Wedgwood stands for the best English pottery. In this book the grandson of the "Prince of Potteries" tells the real story of Staffordshire ware, tracing its history from the earliest references to the present day, and telling both of the potteries, with their development, and of the master potters and their methods. An important book for the connoisseur. Illustrated. \$3.25 net; postage 16 cents.

Mozart's Operas

By EDWARD J. DENT

Written to present Mozart's operas as still living works to modern audiences, and to draw from them illustrations for the consideration of music in general and opera in particular. Each opera is discussed as to libretto, music and presentation. Illustrated with reproductions of portraits and with musical quotations. \$3.50 net; postage 20 cents.

From your bookseller or sent on receipt of price

McBRIDE, NAST & CO., Publishers, Union Square, New York City

In writing to advertisers please mention HOUSE & GARDEN.



Vogue for December

Stop worrying about this year's Christmas Gifts. You don't have to worry. Vogue has a new way to find them and to buy them for you. The longer your list and the more people you have to provide for the more you need the two great December Numbers of Vogue.

Christmas Gifts Number

A budget of novel Christmas Gifts, chosen specially for you by Vogue in the best shops, and indexed for quick reference. Among them are furs and jewels fit for an Empress (if there is an Empress on your list). Also we are including a great many inexpensive gifts that nevertheless have a surprising *chic*; and there are more than fifty appropriate

gifts for men. Last but not least, there will be several things which the woman who has seen seventy Christmases will really appreciate.

Gather *your* copy while you may; the Christmas Gifts Number is now on sale, and the supply is by no means equal to the demand.

Ready Now

Christmas Number

First aid to the last-minute Christmas shopper—a necessary supplement to the first December number, and also a singularly attractive review of the holiday inspirations in dress and all fashionable entertainments of mid-winter. Both these

numbers will contain a wonderfully complete selection of advertisements from the very best shops; to read these pages is to make a leisurely shopping tour through the smartest shops of New York, Boston and Philadelphia.

Ready Dec. 8th

Both December Numbers also contain Vogue's famous offer to do its readers' Christmas Shopping. Vogue will lift the whole burden off your shoulders—for full details, see the Christmas Gifts Number, now ready.

V O G U E

443 Fourth Ave., New York
Condé Nast - - Publisher

25 cents a number
Twice a month

4 dollars a year
Twenty-four numbers

In writing to advertisers please mention HOUSE & GARDEN.



The love of Music, Nature's priceless gift to mankind, finds most triumphant expression in

Kranich & Bach

Upright, Grand and Player Pianos

The matchless gift that both giver and recipient will always enjoy

Just a little of your Christmas money for a first payment secures one of these beautiful instruments

KRANICH & BACH

237 EAST 23rd STREET - - - NEW YORK CITY



*Your Grandfather Read It,
Your Father Read It,
Are YOU Reading It?*



Buying the Farm

"What would you consider these places adjoining yours worth?"
 "About \$30 an acre."
 "That is, if you, as a local man, went to buy them you could get them at \$30 an acre?"
 "That's it."
 "But if I, as an outsider, went to buy them——"
 "They'd probably size you up as from town, and ask you \$80 to \$100. I've known two or three places on this road where sales have been spoiled that way."
 "Meanwhile they have been in the hands of tenants for thirty years and have gone back in value from \$150 and \$200 to \$20 and \$30."
 "Yes, it's that dog-in-the-manger policy that has hurt us."

Here is land lying in one of the most beautiful and fertile valleys of the section between the Hudson and Connecticut—a valley that used to be the seat of an old colonial aristocracy, where most of the buildings could not be replaced now for less than \$20,000 or \$30,000.

If you have the least desire to own a bit of land of your own and think a farm beyond the dreams of avarice, you should read the series of six articles by A. C. Laut, telling about the bargains in old farms, on good roads, within a hundred miles of New York City, that can be picked up at from \$10 to \$50 an acre. *A thousand dollars, actual cash, can finance a 25-acre unimproved farm purchase.*

A Living From the Farm

Then, having the farm, if you want to know how to live and to make a living out of it, read **Back to the Farm—Net**, a five-part story of city dwellers who took a chance and made good in the country.

The *Net* is what they got out of it—what you can get out of it: Instruction, health, comfort, contentment and a heritage of health for the children.

The money end of it? The author paints no iridescent rainbow, but concludes that a good many will succeed along a modest line of hard work, close personal attention, planning one thing at a time and going ahead slowly, being on the job all the year round. *A better living than you get in town and a job worth while.*

Dividends From the Farm

For several years the Department of Agriculture, through its field agents, has been experimenting with various farms, with the owners' coöperation, along the lines of system and efficiency.

We are able to publish the results in a series of four articles, under the title **Old Farms Made New**. They tell how to replan a farm for economy in time and labor, as efficiency experts plan a factory.

The difference is the difference between a deficit and dividends.

If you actually become your own boss and work at getting a living out of the land, there's no paper in the world you need so much as

The COUNTRY GENTLEMAN

Five Cents the Copy, of all Newsdealers. \$1.50 the Year, by Mail

THE CURTIS PUBLISHING COMPANY, Independence Square, Philadelphia, Pa.