

CONTENTS—MARCH, 1913

VOL. XXIII

No. 3

CONTENTS DESIGN : PHOTOGRAPH BY MARY H. NORTHEAD.....	167
FRONTISPIECE : PHOTOGRAPH BY JULIAN A. DIMOCK.....	168
THE VITAL FUNCTIONS OF LIGHT IN THE HOME.....	169
<i>By F. Laurent Godinez</i>	
THE HUNDRED PER CENT GARDEN.....	172
<i>By F. F. Rockwell</i>	
FURTHER ADVENTURES OF JOHN ANTHONY.....	174
<i>By John Anthony</i>	
ORNAMENTAL TUB PLANTS.....	177
<i>By Ida D. Bennett</i>	
THE HOSPITABLE GUEST ROOM.....	179
<i>By Abbot McClure and Harold Donaldson Eberlein</i>	
THE PROPER USE OF DWARF AND STANDARD FRUIT TREES.....	182
<i>By F. F. Rockwell</i>	
EQUIPPING THE KITCHEN.....	185
<i>By Louise Shrimpton</i>	
THE EPICURE IN THE GARDEN.....	188
<i>By Lucy H. Yates</i>	
WHEN THE SPRING RUN STARTS IN THE SUGAR BUSH.....	190
<i>By William A. Vollmer</i>	
THE DESHLER RESIDENCE.....	194
<i>Arthur Ware, Architect</i>	
INSIDE THE HOUSE.....	196
<i>A Hanging Frame for the Jardinière</i>	
<i>Built-in Furniture</i>	
<i>Some New Chintzes</i>	
<i>Schemes for Hanging Baskets</i>	
GARDEN SUGGESTIONS AND QUERIES.....	198
<i>The Big Task for March</i>	
<i>Get Ready for Outdoor Planting</i>	
<i>Good Things for the Flower Garden</i>	
<i>Proper Drainage and Irrigation</i>	
EDITORIAL.....	200
MARCH ACTIVITIES IN SOUTHERN GARDENS.....	216
<i>By Julia Lester Dillon</i>	



McBRIDE, NAST & COMPANY,

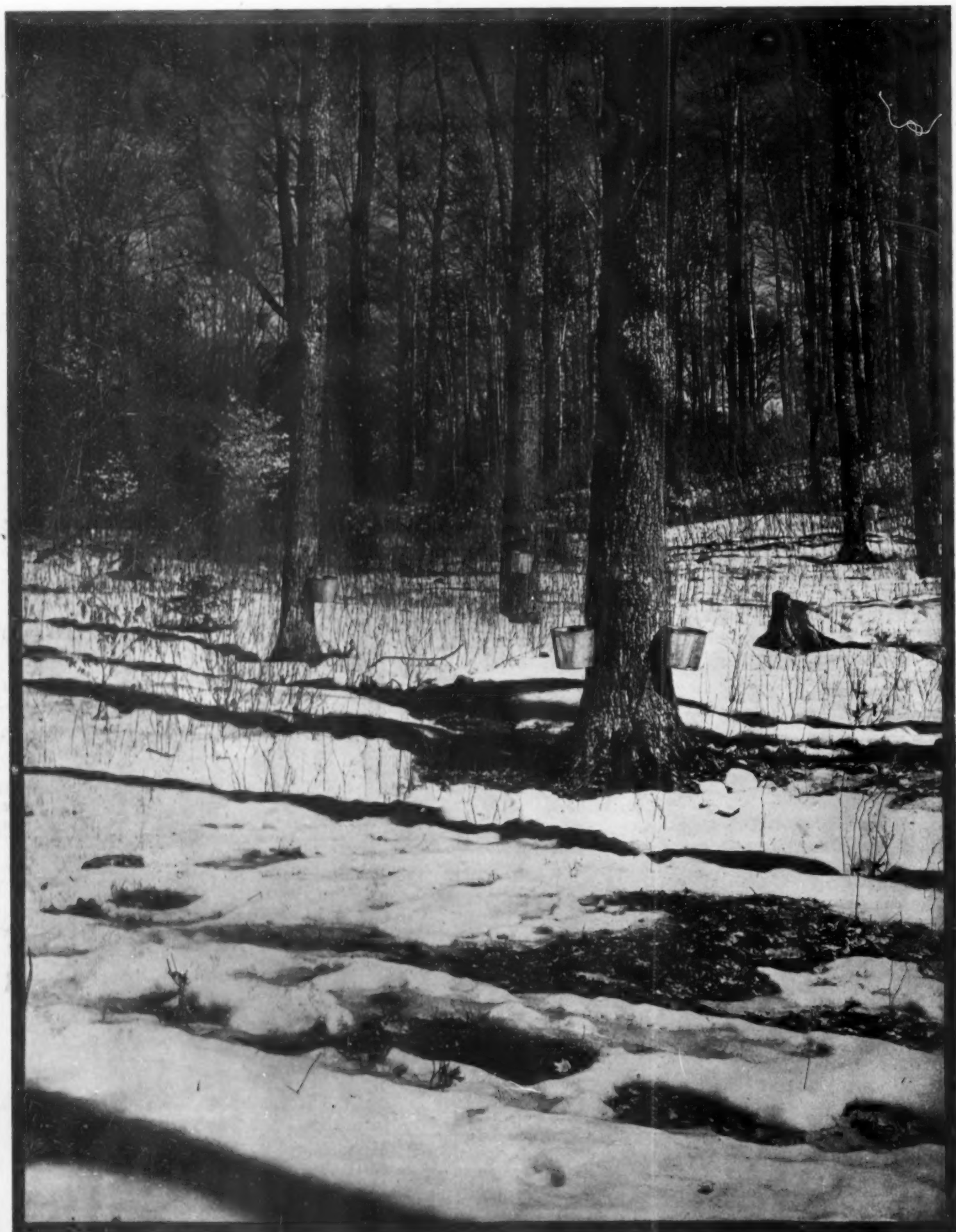
Union Square North, New York

Robert M. McBride, President; Condé Nast, Vice-President; Henry H. Saylor, 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.

HENRY H. SAYLOR
Editor

WILLIAM A. VOLLMER
Managing Editor

Copyright, 1913, by McBride, Nast & Co.



The ideal sap bush has a thick cover of leaves and overgrowth of small seedlings. Those who find such natural opportunity may well take up the occupation of sirup making, both for its delights and its profits. What is more, it comes at a time when there is little else to do in the country



The Vital Functions of Light in the Home

BY F. LAURENT GODINEZ

EDITOR'S NOTE: This is the third paper by Mr. Godinez in which he gives the results of experimental research in the subject of home lighting. Previous articles dealt with the subject of eye-strain and the avoidance of glare. This article illustrates types of satisfactory lighting, and gives practical demonstrations of what may be done to make light a factor in decoration. The next and last article will explain by diagram ways of reproducing the suggestions given this month.

IN selecting lighting glassware for the home apply the acid test of logic in practical form. Satisfy yourself as to the physiological value of your purchase. Is the glaring source subdued? Can one regard the lighted globe without ocular discomfort? Then, from the esthetic viewpoint, is it commonplace and ugly, or unusual and attractive? As a part of your decorative treatment, does it express harmony? In reply, the circumstantial evidence of the glass-maker will enable you, the judge, to make your decision. And when you make it, bear in mind that in the days of the oil lamp, eye-strain from artificial light was not so serious as it is to-day. Eliminate the evil by restoring those agreeable conditions. Make your lighting glassware assist, and select it with care and discretion.

The globe which has the property, by diffusion, of concealing the glaring tungsten lamp and of suggesting the mellow, restful tones of the oil lamp, by color density, is the one to use. Have no fear as to its placement, or its effect on visual functions. Even on lighting fixtures hung so low that their globes are constantly in the visual field, it may be used to correct injurious conditions.

Do not feel that light is wasted in using dense globes which decrease source brilliancy and modify it as to color. The thing which the illuminant manufacturer has done most satisfactorily is the production of illuminants which quantitatively are economical, but it remains for the user to make some of them safe and adaptable to individual requirements.

It is most interesting to note that the globe which really meets esthetic requirements can never



The lower rim of the lamp shade protects the reader's eyes, but the light falls full on the page

be productive of glare, since the glaring splotch of light so offensively distortive of detail is a vulgarity opposed to artistic expression in any form. Hence in judging globes, relatively, as a part of a decorative whole, that which satisfies the esthetic demand is quite likely to satisfy the physiological. In regard to the latter, Dr. Ellice M. Alger, a well-known ophthalmologist, states, in characterizing modern lighting: "Most of our buildings, both public and private, are glaring examples of extravagant and inefficient lighting,—extravagant and inefficient because they are not comfortable even to sit in."

There is one other form of light-source modification accomplished not by substituting new glassware for old or by the prescribed treatment of colored gelatine film, but it is available only where gas is used. There has been in this industry more progress in realizing and meeting the demand for a "home" light, which by its amber color suggests the comfort of the oil lamp, and makes the atmosphere of the home at least expressive of repose. It is therefore unnecessary for users of gas to apply gelatine film as a light source modifier unless they desire to do so, since the amber-light incandescent gas-mantle, available wherever standard manufacturers' products are sold, gives a delightfully soft and restful effect, most soothing to that neglected and abused human organ—the eye. In creating "atmosphere," however, by combining lighting and decoration, either with gas or electric illuminants, gelatine film, available in all colors, affords a medium productive of irresistibly charming effects.



The side wall is a desirable locale for decorative lighting

Having previously alluded to the significance of the side wall as a desirable locale for the art lamp, it is of interest to take up the infinite variety of decorative effects made possible by the inexpensive mode of color modification by gelatine film.

Oftentimes the pink silk candle-shade which one buys under daylight conditions because of its desirable color-contrast for a certain background, when placed in position over its miniature lamp and viewed by transmitted rays of artificial light, with chameleon-like perversity turns white! This little silk shade, which by day blends so charmingly and inconspicuously with its decorative surroundings, becomes offensively predominant and detracts from their beauty by night. To correct this condition it is only necessary to cut a strip of pink gelatine film and insert it in conical form beneath the offending shade. Its own elasticity will hold it in place, and any desired color intensity may be obtained. A delicate pink, for example, can be changed to old rose simply by superimposing several layers of the film, gaining with each layer a deeper color intensity.

Nor is the application of this willing medium restricted to candle shades—for wherever there is a source of light, be it a miniature electric bulb or a "junior" gas mantle, concealed in a decorative urn, or behind a transparency, the gelatine film may be used to produce wonderful effects, creating atmosphere and doing away with every trace of garishness. These decorative touches of light in the home, if well done, are never tiresome, but of great inspiration, turning the subconscious mind from material annoyances to pleasant reveries.

Perhaps the best way to convey some impression of the esthetic possibilities of artificial light will be to transport the reader to

a studio equipped by the writer for the conducting of experiments with the view of improving lighting conditions in the average home. The work in this house experiment station has as its fundamental object the presentation of lighting suggestions in practical form, which will enable the average individual to enjoy some of the great benefits and happiness which artificial light can bestow.

The photograph on this page depicts an interior representing

in size the average living-room. The lighting fixture shown does not represent any particular manufacturer's product, being of entirely original design, but is typical of a successful method of concealing the light source and at the same time getting a soft diffused light throughout the room. Such fixtures may be adapted to gas or electricity.

Within the art glass bowl of dense Etruscan opal a metal reflector is placed, so as to direct most of the light rays emitted by the source to the ceiling, at such an angle that when re-directed downward by the diffusive action of the ceiling, their direction is such that ocular comfort prevails at every point in the room.

The exterior of this bowl is richly expressive of a Florentine motive, in well-rendered *bas relief*. An amber tint lends to the interior a light which,

while of sufficient intensity for all utilitarian purposes, does not emphasize every wrinkle and facial blemish, like the unmodified "white" source, but instead makes the hostess and her guests appear mutually to best advantage.

In reality this interior appears much brighter than is indicated by the photograph, due to the extremely difficult conditions under which it was taken, but it serves admirably to illustrate a method of utilizing a center-ceiling light in a manner entirely



A ceiling fixture of this sort accomplishes a general illumination of the room that both brings out details in decoration and is pleasing to the eye. Light is reflected from the ceiling and is diffused through the glassware, but is bright enough to permit reading in any part of the room

agreeable to one's physiological and esthetic sensibilities. One can read with comfort anywhere in the room, and the source itself can be regarded fixedly without the least squinting, brow-puckering or annoyance. Furthermore, the color of the light from the decorator's standpoint is ideal—suggesting the warmth of the candle, so aptly termed "the sunshine of night." It is a light which in revealing detail in decoration does so gracefully. The harsh gold high lights of picture-frames or braziers are softened, and the cloisonné vase is imbued with an exquisite surface "depth" enhancing its charm to a very great degree.

But even a lighting unit so versatile in its function does not alone meet all the requirements of the living-room. One's imagination is stimulated by variety in any form. Unquestionably lighting which nightly discloses the same placement of pictures and decoration, very much as they appear under well-modulated daylight conditions, weakens in its appeal as does anything which savors of monotony. Quite frequently the light may duplicate the attractions of the open fireplace—

"Where glowing embers through the room

Teach light to counterfeit a gloom."

For such lighting, rich in that depth of shadow, so essential to the pictorial value of an artistic interior, the individual

table lamp, as shown in the illustration above, is most appropriate. Bearing in mind that the photograph representing the general lighting of the interior should really appear much brighter, the different effect of table lamp and ceiling light is quite typical.

In looking rapidly from left to right, some idea of the changed appearance of the room may be gained. What actually transpires when one turns out the upper and lights the lower lamp is first, an apparent increase in space relation, and of distance in the room.

The brightness of the side wall fades, and is replaced by a mysterious veil of shadow beneath which the walls recede, giving to the illusion a semblance of perspective which is decidedly attractive. Old familiar objects are not quite so recognizable; their subdued aspect adds a new charm, and everything in the room is conducive to repose—if the light is right.

The table lamp shown is one of many types. By virtue of its high pedestal it distributes the light over a wide area. If a longer

exposure had been made, the floor would appear as bright as the table top, even to the doorway, and in choosing table lamps it is well to remember this point—the higher the pedestal the wider the area of distributed light. The limitation of pedestal height is indicated by the upper photograph on page 169, showing how the lower portion of the art-glass-rim cuts off the light, so that the reader's eyes are in shadow while the page is adequately lighted.

Some portable lamps are so faulty in construction that the lamps themselves are a constant factor of annoyance to those seated about the table. In such cases it is best to cover the bottom of the large art glass shade with fine linen, stretched by lacing on a wire hoop, which in turn is secured within the shade rim by small wires placed at infrequent intervals. This diffusing

screen entirely hides the ugly unfinished mechanism of the lamp and enables a layer of amber film to be placed atop it, obtaining thereby the visual comfort of the oil lamp. Perhaps it may then be necessary to use larger bulbs, consuming a bit more energy, but in such extreme cases it is generally found more economical to pay the difference to the lighting company than to the oculist. And the cost of the extra light is not apt to be great.

(Continued on page 219)



On turning out the center light the brightness of the side wall fades, giving an atmosphere of repose and a consequent apparent increase in space. The contrasting effects of the two systems may be obtained by comparing this and the opposite illustration



THE HUNDRED PER CENT GARDEN



THE SECOND TWENTY PER CENT.—SOLVING THE PLANT FOOD PROBLEM—
NATURAL AND ARTIFICIAL MANURES—MOISTURE SAVED BY CULTIVATION

BY F. F. ROCKWELL

NOTE: Heretofore the home garden has been looked upon by many people as more or less of a hobby, and deserving only as much attention as one usually gives to the pursuit of recreation. That it deserves to be taken up seriously, studied in all its details, and developed to the limit of efficiency, is a new presentation of the subject. How to have the very best garden possible, on a business basis, is the theme of the present articles, which take up carefully and practically one detail after another in natural succession, to the completion of the hundred per cent. garden. The first twenty per cent. dealt with sowing seeds indoors and appeared in February. The third twenty per cent. will deal with the sowing and planting of hardy vegetables.

FERTILITY of the soil is the secret of success with the crops. This is not to say that a well fertilized garden will necessarily mean that your vegetables and flowers are bound to do well in it; for your neighbor over the fence who may have been able to afford only half the amount of manure or fertilizer which you use, but who has taken more thorough care of his crops, may be able to outdo you when the results come to be counted. It does mean, however, that if you have put only enough plant food into your soil to produce a fifty per cent. crop no amount of care can make it yield a hundred or even a seventy-five per cent. crop. So the second step to be taken in the direction of that one hundred per cent. garden which we have decided to aim at is to provide an adequately rich and thoroughly prepared soil.

The plant food problem, however, is by no means as simple as it appears at first glance. Science put on its spectacles and after many years of painstaking and careful research, discovered that the growing bean, potato or peanut plant, in order to develop unchecked, and bring its crop to maturity, must derive from the soil a certain fractional part of a pound of this, that and the other chemical elements and compounds. Why not then simply dump enough of these things into the soil to produce a maximum crop and think no more about it. The answer is not so simple as the question, but unless one is willing to give at least a little time and thought to it, he will not be proceeding upon the right track to get the most out of his garden—and as we have already indicated, in these days of the high cost of food-stuffs, the efficient garden is not a matter of pleasure or sentiment alone, but of dollars and cents.

There are three plant foods, or nutritive elements which must be furnished in definitely fixed proportions, if the plants are to



The availability of plant foods depends on careful cultivation

attain their maximum possible development. There are several of minor importance, but as these are usually already contained in the soil, in sufficient amount, we need not consider them here. The three nutritive "elements" are nitrogen, phosphoric acid and potash. All soils capable of supporting plant life contain these, but in varying degrees. And that these are what plant life feeds upon is proved by the facts that chemical analysis always finds them in plant growth, and that plants, even trees, have been grown for several generations in water with these plant foods in it.

The first distinction we have to make in plant foods, is that between available and unavailable, that is between foods which contain the elements in such form that the plant may immediately make use of them; and foods which must undergo a change of some sort before the elements in them can be taken up by the plant, assimilated and turned into a healthy growth of foliage, fruit or roots. It is just as possible for plants to starve in a soil abounding in plant food if that food is not in available forms, as it would be for you to go unnourished in the midst of soups and meats, if the latter were packed up in cans which you had no means of opening.

Plants must take up all their nourishment in the form of solutions, and very weak solutions. Their food must be taken through innumerable and microscopic feeding rootlets, or pores, which possess the power of absorbing moisture. Plant food to be available at all must first of all be soluble, and second, the elements in it must be in such forms chemically that the plant can utilize them. Experiments have proved, for instance, that they refuse to take nitrogen in some forms, while in others they accept it readily.

The number and the quality of the meals you will get from

your garden depends on the amount of moisture in the soil.

As all plant foods must be in a soluble form in order to be available for plant use, there must be plenty of water to dissolve the food and carry it up into the plant. Without sufficient moisture in the soil, even though it is crammed full of plant food, and even though this plant food is in the most available forms, the crops will prove a partial or a total failure. This is a fact the importance of which all agriculturists have not yet fully realized. They have insisted upon the necessity of maintaining the "soil mulch," in order to "conserve" the moisture in the soil, thus preventing crop failures. But they have not recognized the still more vital problem of supplying water to the soil by artificial means, when, as is very generally the case, the season's rain-fall is insufficient to produce one hundred per cent. crops. It is often impossible to get good results without irrigation, and this matter, in which such great improvements have been made in the last few years, is of such importance, that it will be taken up more fully in a succeeding article, for it ought to be understood by every gardener.

Many people still believe that all one has to do to become a prosperous, up-to-date and scientific farmer, is to go out with a few hundred dollars and buy a run-down New England hillside, send a few shoe-box-fulls of surface soil to the nearest State Experiment Station, to analyze it and tell exactly what it contains, purchase the necessary number of pounds of various agricultural chemicals to make up what the soil is found to lack—and then grow as big crops as can be grown anywhere. This theory was the result of the first scientific investigations of the chemists in the field of agriculture, when it was held that the soil contains within itself some available plant food; that crop chemical analysis would determine the exact amount of the nitrogen, phosphoric acid and potash necessary. Then we should add to the available plant foods already in the soil, just enough more to make the resulting amount equal to the quantities of the various elements used by the crop. Or, in other words, available plant food elements in the soil—plus—available chemical food elements supplied in fertilizers are equivalent to the amounts of food elements found in matured crops.

The discoverers of this pretty theory imagined that agriculture would be revolutionized—reduced to an exact science; and that all former theories of husbandry and tillage would be thrown by the heels together on the scrap heap. They imagined that science had solved at one fell swoop all the world-old problems of agriculture. There was only one thing the matter with this theory—

it did not work! The unwelcome but obdurate fact remained that a certain number of pounds of nitrogen, phosphoric acid and potash—about thirty-three in a ton of good manure—would grow bigger crops than would the same number of pounds of the same elements in a bag or two of chemical fertilizers. But while this theory failed as the basis of an exact agricultural science, it was a very big step in the right direction.

As a solution of the problem, however, it was too simple. It did not take all of the facts in the case into account. It was found, for instance, that adding lime or land-plaster—materials that had practically no plant food in them at all—to certain crops, would produce vastly in-

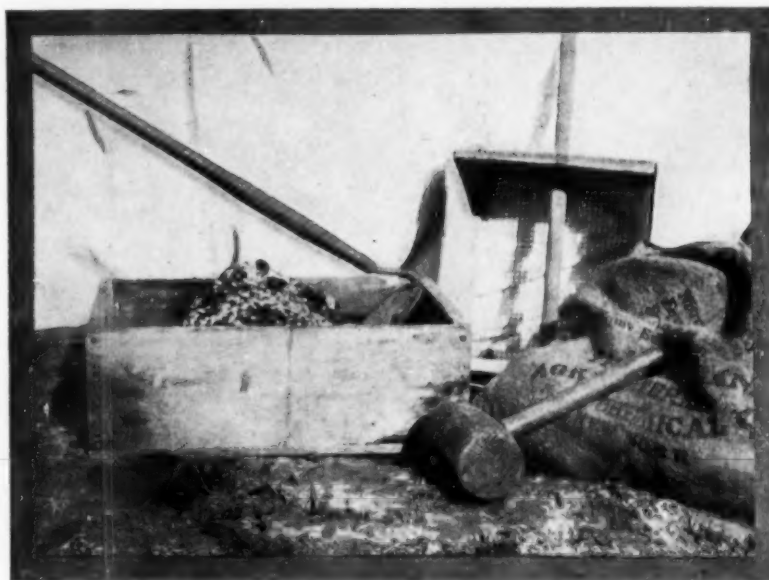
creased yields. This was found to be due to the fact that while such materials as lime did not add any actual plant food to the soil, they did serve the purpose of converting plant food already

in the soil, but in unavailable form, into forms that the plant could make use of—to open the cans of food which had been present, but sealed chemically, in such forms that the plant rootlets could not acquire it.

Furthermore it was found that these things had a decided effect upon the *physical* condition of the soil: that they had the paradoxical property of loosening up heavy soils so that water could drain through them more readily; and of binding together light, sandy soils, making them more amenable to cultivation. The physical condition of the soil, in fact, affects the growth of crops very materially, in several ways.

In the first place, while plants must have water, too much is just as harmful as too little. The soil should be in such a condition, therefore, that any surplus of water will drain through it readily. In the second place, the leading root systems of plants must have air, but not too much; without it they will actually smother, and with too much the

(Continued on page 222)

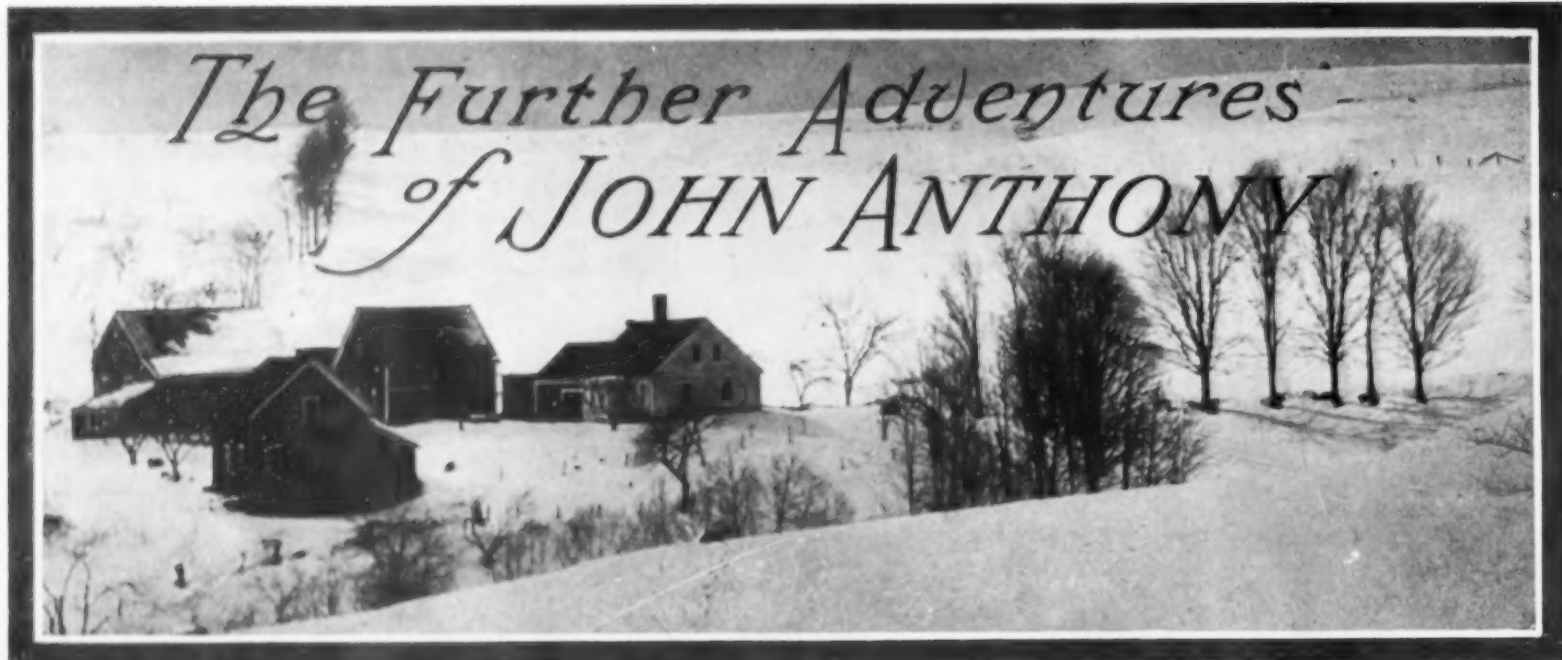


Good results are won by mixing your own fertilizer. Break the chemicals with a mallet and mix thoroughly



Here is a soil worked up correctly for absorbing moisture. See how light footprints are sunk in its flaky softness

The Further Adventures of JOHN ANTHONY



HOW THE ADVENTURER AT ORCHARDING FOUGHT A BAD APPLE YEAR BY HARD WORK AND A PERFECTED SYSTEM OF MANAGEMENT—THE ADVANTAGE OF IDEALS AND OPTIMISM—TRIUMPH OF MODERN METHODS

BY JOHN ANTHONY

Author of "Adventures with an Apple Orchard"

EDITOR'S NOTE.—Subscribers to HOUSE & GARDEN will recollect the account given last year by Mr. Anthony of how he acquired an apple orchard and the success of his first year's efforts. Another season has gone by and again he has conquered further difficulties. The story of this second year takes up new problems of vital interest to HOUSE & GARDEN readers.

FORTY-SEVEN years and one day after they had driven up the hill together, Hiram West and his wife departed with all their belongings. I was left behind in complete possession, but with such a sense of loneliness as I hope I may never feel again. My foreman and myself, strangers in a strange land, were left to work out our own salvation.

And now as I look back on the season's work, remembering the physical toil and the nervous tension of fighting adverse weather conditions for weeks at a stretch, I am impelled to repeat the warning given last year:

"The country offers opportunity to the man who wants to work and work hard; who wants to get up in the morning with the birds and go to bed long after they are at rest; who is ready to fill every minute of the many hours with work and thought and plans. This life is for the man who doesn't like the city because it thwarts him in his wish to work, because it does not give him the chance to develop, to use his energy."

I was busy eighteen hours a day and worried for twenty-four. But from a semi-invalid I have become a strong man and know what it means to live; from a nervous wreck the farm has developed a mentally sound individual. I am happy in the certainty of success and—I am my own boss! And then there is Mrs. John who

came into my life at the same time that faith and hope came back.

But the year was a queer mix-up of success and failure, of certainty for the future and uncertainty for the present. The weather hindered us in spraying, in picking, in shipping. It badly injured the crop in quality and shortened the quantity. And when this fruit, inferior to our usual standard, was sent to market it ran foul of the low prices set by a country-wide bumper crop!

And yet, from the vantage point of these months of perspective, I know that every item of the season's events was for my future good. The weather that only injured my fruit, destroyed that in the uncared for orchards in the neighborhood, thus opening wide a market hitherto unthought of. For a portion of my crop this local outlet is the most profitable possible, as there is no commission, freight or package charge against it. The lack of sunshine taught me more about pruning than a dozen years of favorable conditions could have done, while even the shortened crop was of advantage, for it gave me a light season to get my organization into smooth run-



When winter came on with a chance to look back upon the work, John Anthony felt that his adventures had left him nearer success than ever

ning order in the anticipation of heavier ones. Last year I had the apples but not the system. This year I had the system but not the apples. Such apples as we had were handled to the queen's taste, no mangling and bruising as in the former times.

Another season we will have both apples and system, and when that time comes—be it one, two, or three years away—we will come into our own.

With the departure of the Wests, David and I were left alone on the place. There was work in the orchard for four men, but we did it without help and kept house besides. I wish that I could give some idea of the fun of that season of long hours. We lived literally on the fat of the land, and however long and hard were the hours of work out of doors, we did not let them interfere with the culinary department. The Jersey cow gave the best of milk and we had an abundance of the richest cream that I have ever seen. Cream, butter and cheese, fresh eggs, potatoes, apples and winter vegetables from the farm, cereals and breads from the store gave us a table that would lure an epicure away from the creations of a chef. Both David and I could cook and cook well. We had the food of the country with

the seasoning and service of the city, for from a certain standard we never lapsed. Our housekeeping was famed abroad. The occasional visitor from the city we expected to impress, but it came as a surprise to have the country folk become enthusiastic. Men went home and asked their wives to come to us to learn how to make corn bread and cream cheese, to bake puffs and molasses cake. It was not alone that these things were good, the real joy came because we were doing it all ourselves. The food was almost entirely from the farm itself, and we old campers

knew how to do the preparing. We were as independent as man may be in this day of organization. We were happy and contented, and in some subtle way this feeling spread to every creature on the place. The cow, from a wild-eyed animal, began to follow us around like a pet poodle until it became difficult to drive her into the stable yard so unafraid was she. The chickens tamed down until one could hardly walk on their premises, while Jericho was more an affectionate friend than a beast of burden. Later, even the pigs learned to let the small child ride on their backs.

Pruning was the first big job, and in many ways the hardest, for it would take a tree so many years to outgrow a serious error in that work. Much of it we had done the fall before as soon as the apples had all been shipped, but a good many days' work remained for David and me. When at last we were through, the orchard was well-nigh impassable, for brush covered the ground three feet deep. Tall trees had been lowered from one to three

yards, thick-topped ones had been opened out to light and air and interlacing limbs had been removed. Neighbors called us crazy and said we had ruined the orchard, but the apple expert of the Department of Agriculture spoke such words of praise as make me feel a glow of pride to-day, and after watching the trees for the year, I know that we could have carried the thinning process a little further with good results. In general my idea is to do the heavy trimming on alternate seasons before the off-bearing year, and the light thinning out of interlacing small branches the years of fruiting. This will interfere less with the crop producing of the trees, and in three or four years will put them in shape. Also, it gives me an opportunity to watch the result of the work during the year of bearing and to judge how to pursue the pruning. Much of the credit for this work belongs to Mann, for his ideas controlled. These ideas he got from books, a little practice and a winter's course at Hope Agricultural College.

His work received such commendation from high authority that evidently he tackled the job from the right angle. Each individual apple must receive light and air, and to reach this condition trees must be pruned, not forgetting that too radical work will upset the balance between root and top. But finishing the work on the trees was only half the contract. Every scrap of the brush had to be hauled away and burned. It was a seemingly endless piece of work. Day after day we toiled at it. Section by section the orchard became passable, but men and



My idea was to do the heavy trimming on alternate seasons before the off bearing year, and light thinning of the interlacing branches during the years of fruiting

horse were tired of the thought of brush before the last piece was in ashes.

The spraying of the orchard was without one redeeming feature of fun save the pleasure of thinking of a necessary piece of work well done. The radical mistake that I made was in thinking the old-fashioned pump of Hiram's regime was of the slightest use for modern spraying. We did the work with it, but there is a row of gravestones up on the hilltop to mark the number of men who died at the job. It was a grueling contest, and only David and I lasted out the season at it. Mann, at first scornful of our progress, retired after two days, forgetting his scorn and thinking only of blistered hands and aching back. The pump was intended for the old-time pressure of fifty pounds or so, but we had a gauge staring us in the face and we kept the pointer between one and two hundred pounds! The toil was incredible, but the success of the work was qualified only by an exceptional season. We routed the bugs and the fungus until

they were a negligible factor, but we covered ourselves and our clothes with the lime-sulphur solution. The lime ate into the flesh and made ragged wounds of small cuts, the sulphur clung to our hands until we darkened the table utensils, and the house-keeper kept silver hidden and made us eat with iron forks and knives. There were days when the rain washed the solution off the trees as fast as we could put it on, but time was pressing and we sprayed rain or shine. Hiram had tied his barrel of spray on a wagon and hauled it through the orchard with momentary chance of upsetting the whole outfit on a hillside. He had filled the barrel from the horse trough with a pail. I put a hogshhead on a platform six feet high and led the pipe from the spring into it. From the bottom of the hogshhead a big hose could be led to the spray barrel and that filled in a moment by force of gravity. The truck for mounting it was made by the local genius of the town, to whom I described my needs. He took two old mowing machine wheels and lengthened the axle until the

tread was five feet wide. He made a stout framework of wood in the form of an isosceles triangle, with sides five feet long. One of these sides was bolted on top of the mowing machine axle, while the opposite apex was fitted with an iron through which the king bolt of the farm wagon could go, thus allowing the use of the forward wheels of the wagon in connection with the mowing machine wheels. Iron straps from the triangle supported a platform a foot beneath it on which the barrel rested. An iron rod on each

side was hooked over the top of the barrel and secured to the triangle with a nut. This held it immovably in place while the center of gravity was so low that it could safely be taken on the steepest hillside of the orchard.

Day after day Jericho hauled this apparatus around the orchard. day after day we toiled at the pump until every blossom and every leaf of every tree had been drenched with the spray. We scarcely finished one round before it was time to begin the next one, for with two leads of hose it took us ten days to go over all the trees. But it was this thorough work that saved the crop, for the bugs and fungus destroyed that of every other orchard in the county.

The story of the year is one of driving, hard work for long hours; of plans arranged to utilize every minute of time whatever the weather; and of records broken for results. The new orchard of young trees is the best exhibit of this care and hard work. We set out 498 young trees, and at the end of the season

496 were alive and well. A local laborer was hired to dig holes for the planting. Fifty holes the first day finished him and he went home at night "sick." David and I tackled the job. Working together, we dug one hundred in four hours. When the trees arrived the holes were ready for them. In this locality young trees are never sprayed. Every other morning, before breakfast, I patrolled the long lines of young hopefuls, caught the caterpillars before they had done any damage and called the spray wagon into action. Again the caterpillars (of another variety) were repelled soon enough to prevent damage. A third time the spray wagon went over the trees to stop the attack of the aphids. Deer were frightened off, after a raid or two, by an ounce of sulphur sprinkled about each tree. The ground was cultivated, the weeds kept down, and the bugs kept off by this sort of eternal vigilance. We took no chances, allowed no precedents to lure us to a sense of safety, but watched those trees day by day. On another hilltop, not far away, other trees from

the same nursery were planted at the same time. The owner of them knows more about apple tree culture than I do, but he likes to sleep late in the morning and to drive down for the mail behind a fast horse. The weeds, the bugs and the deer got up as early on his hilltop as they did on mine and—they had a better time. His trees were devoured by pests and hidden by the weeds; mine out-grew all expectations and are one of the wonders of the country side.

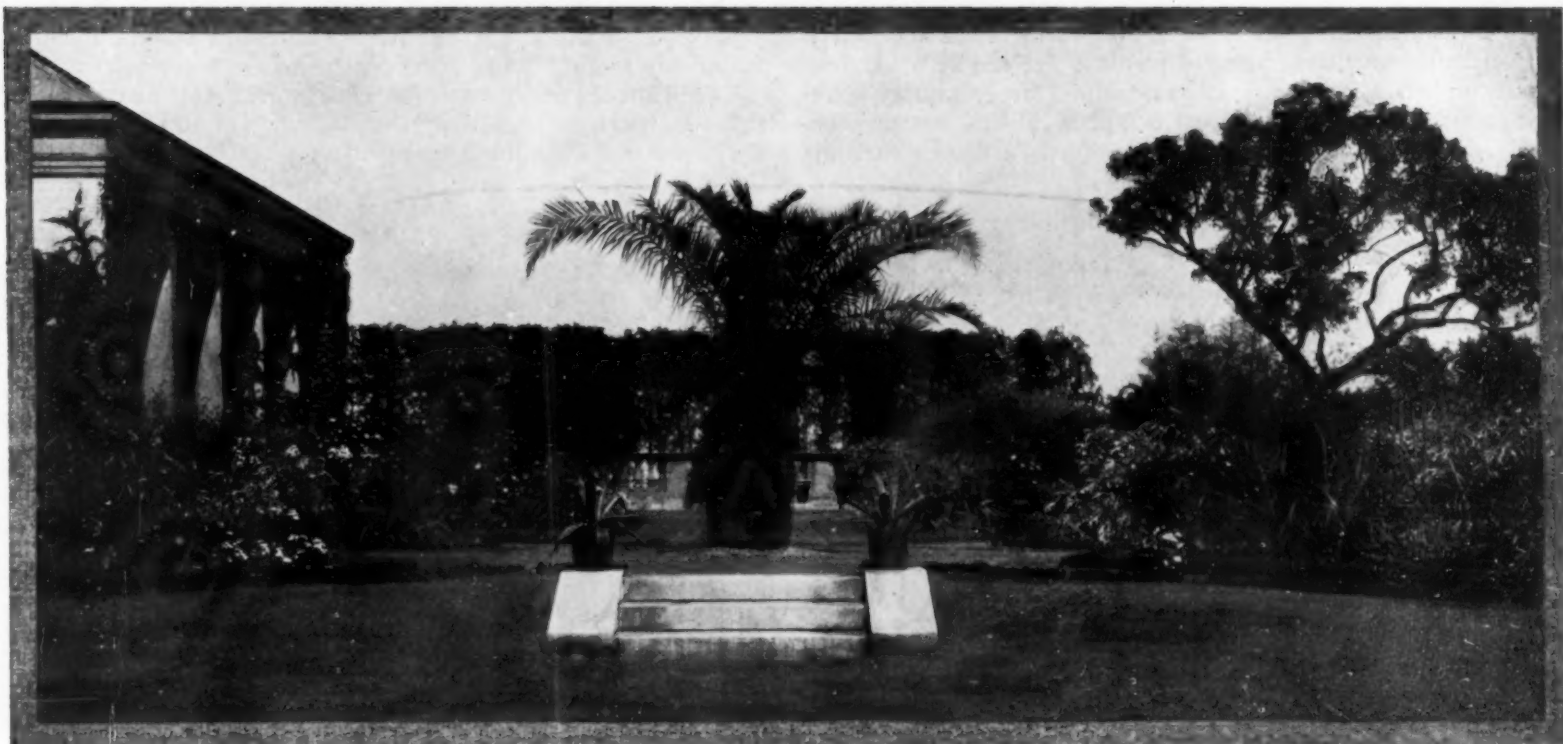
The harvest season was one long time of doubt and trial.

Last year, with Hiram at the helm, every condition had been ideal, and it had seemed like a simple proposition, but now, left by myself, nothing went right. Lack of sunshine had prevented the apples from attaining their usual size and color. It was impossible to pick them uncolored, and it daily became impossible to leave them longer on the trees for fear of a freeze. Hiram had picked the red apples first last year, leaving the green varieties until the last. I knew no better and waited in the hope of sunshine and color, leaving all the fruit on the trees. I was near despair and had about determined to pick, color or no color, when, one day, Mr. West came driving up the hill! Then he suggested the obvious thing—that which has already occurred to you—to pick the green varieties at once, risking the red ones on the chance of the long overdue sunshine. We had had intermittent rain for a month or more, but Hiram assured me that I could definitely count on clear weather throughout October for picking. They "always

(Continued on page 202)



From the vantage point of these months of perspective I know that the orchard is better prepared to produce another year than any of those carelessly tended ones in the neighborhood



Often a commonplace spot can be rendered unusually distinctive by the artistic placing of the tub plant. This illustration shows in a marked degree how a single palm has added dignity to the grounds

Ornamental Tub Plants

THEIR GROWING POPULARITY FOR DECORATIVE PURPOSES—FORMAL AND INFORMAL EFFECTS AND HOW TO ATTAIN THEM—VARIOUS ATTRACTIVE FLOWERING PLANTS AND WHERE THEY SHOULD BE GROWN

BY IDA D. BENNETT

THE use of ornamental tub plants for terraces, porches and like places is steadily growing in favor, and one sees them in almost every position where the ornamental plant is feasible. To mark the end of a walk, the intersection of garden paths, the opening in a fence or hedge or a house entrance, a plant which is ornamental in foliage or flower is always desirable. Often a commonplace front door is dignified and made attractive by potted plants at the ends of the steps; but in selecting plants for such positions a certain reserve should be shown and anything fussy or untidy in appearance avoided. I have seen entrances quite spoiled by ineffective plants in fancy pots or jardinières. As a rule the more simple the receptacle in which plants for ornamental purposes are grown, the better. For such large plants as boxwood and bay trees the ordinary cedar tubs are best, and for many smaller sorts the large, red pots—not the ordinary florists' pots but the terracotta ware in plain surface but graceful form, is excellent. Some of the

Mexican pottery does very well if care is taken to select as inconspicuous a design as possible, for it is the plant, not the pot, that is the motive of the decoration.

For gardens and houses of formal character the box and bay are usually selected, and where these are prohibitive in price a very good substitute is found in some of the small, neat-growing evergreens like the Japan cypress. The junipers may also be used and some of the cedars, which are both dignified and ornamental.

For less formal effects where only good foliage is sought, some of the bamboos are desirable. *Bambusa Metake* is one of the most useful forms for potting, being dwarf in habit and rarely exceeding six feet in height. As it bears the largest leaves of all the bamboos, it makes a very attractive and effective plant. It needs considerable water and rich soil always to be at its best, but is not as exacting as palms, and makes an excellent plant for indoor decoration in winter. *B. viridiflora* is another attractive bamboo requiring the same gener-



The *clivia* produces exquisite umbels of bright flowers



Callistemon lanceolatus likewise has beautiful color

al conditions as *B. Metake*. Both are worth the care required.

For positions where a plant of medium size can be used, there is nothing better than the aspidistra, with its large, leathery leaves that remain in perfection for years. The aspidistra has one peculiarity, however, which should be observed—a dislike to being moved around. As far as possible, it should occupy the same position from day to day. A little shade during the hottest part of the day is necessary, as too hot a sun will discolor the leaves; the plant seldom needs repotting, but the loose earth about the top of the pot should be shaken out in the spring and fresh earth supplied, to which a little bone meal has been added.

There are many places, however, where a formal green plant is not sufficient, where one desires color as well as form and where blooming plants are more satisfactory. Fortunately the supply of such suitable plants is large, and one may gratify his predilection for almost any color or tint. One of the really fine things where a blooming shrub is desired, is the Chinese hibiscus, which comes in varying shades of pink, red, and yellow. The foliage is exceedingly handsome, being large, waxy and of a fine gloss. *H. Miniatus semi-plenus* is to my mind the finest form, the flowers being a brilliant vermillion four to five inches in diameter and semi-double. They never fail to attract attention, and when used for corsage wear—for which purpose they are excellent—it is no unusual thing to be stopped on the streets by utter strangers, who ask you what that beautiful flower is.

The peachblossom variety is also very good, being, as its name indicates, a delicate peachblossom pink, which is stronger and better in full sunshine than in partial shade. There is also

a pure double salmon flower and some orange shades, together with many single flowers of immense size.

The plants are easily cared for, but require plenty of root room, rich soil, which may be partly marsh earth, and an abundant supply of water during the growing season. They do rather better

in pots than when grown in the open ground, as there they are inclined to go too much to foliage. The flower of the hibiscus lasts but a single day, but as flower succeeds flower in rapid succession, this fact is scarcely apparent except to the gardener. The hibiscus may be wintered in a frost-proof cellar, but a cold, damp one is likely to prove fatal to it. It may also be kept growing and blooming in a warm conservatory or greenhouse if desired.

The various oleanders are not as much cultivated in the north as they should be, as they are fine in

every way, abundant in foliage, attractive in growth and exceedingly beautiful in flower. Almost everyone is familiar with the old, double form of the oleander, but the dark reds, whites and single pinks are less widely known. The oleanders are of easy culture, and the plants last for years. As they increase in size and beauty from year to year, they should receive more attention than is given to them.

The various pot hydrangeas are more in evidence, and well deserve the popularity accorded them. *Empress Eugenie*—the old favorite with its pale pink flowers, is the best known of the sorts. *Otakusa*—another pink form, and *Thomas Hogg*, a pure white type, are the principal varieties, but to this list may be added a blue form by the simple trick of adding certain chemicals to the soil in which the plants are grown, a

(Continued on page 209)



The *Agave Victoriae-Reginae* is stemless and sometimes has 200 leaves



The pyramidal box, like the bay tree, is suited to formal gardens



The flesh-colored *justicia carnea* needs rich soil for development



The *punica granatum* pomegranate blooms winter and summer when in the conservatory



The *Ismene* is attractive and is extensively cultivated

The Hospitable Guest-Room

SUGGESTIONS FOR FURNISHING ONE ROOM SET APART FOR THE ENTERTAINMENT OF GUESTS—HINTS THAT LEND COMFORT AND CONVENIENCE—SOME AUXILIARIES NOT TO BE NEGLECTED

BY ABBOT McCLURE AND HAROLD DONALDSON EBERLEIN

Photographs by P. B. Wallace

"AND yours, my friend!" Such are the simple words of welcome carved above the house-door of a small country seat near a certain village in a certain county in England—the precise location counts not. What does count a very great deal is that the master of the house has voiced with few words and genuine sincerity the chief principle of true hospitality to all that chance to share the shelter of his roof—the house and all its resources are at his visitors' disposal to make them comfortable and happy during their stay.

To live up consistently to this principle of seeking the guest's comfort and happiness it is obviously of the first importance that the appointment of the guest-chamber, where he or she may be quartered, should be a matter of thoughtful care. It is astonishing how many guest-chambers fall far short of the mark and that too, in houses otherwise well furnished. They are painfully unattractive, and at a glance it is evident that little if any attention has been paid the thousand and one little things that aid in making a visitor's stay most agreeable.

Proper equipment of the guest-chamber need not be a matter of great expense, but it must be a matter of careful consideration. After all it is the provision of little accessories that will count most, just as it is the little acts of courtesy and thoughtfulness habitually occurring that go to make the charm of a well bred person's manner. So then, since the good hostess in furnishing a guest-chamber will in every way try to promote the guest's comfort and convenience as an earnest of his welcome—if he be not welcome the disposal of his quarters must depend upon the conscience, manners and diplomacy of the hostess—let us view the question first on the score of material requisites, and secondly with regard to such arrangement as will most conduce to attractiveness and cheer.

At the outset it should really go without saying that the guest-chamber or chambers ought to be so placed in relation to the other bedrooms that guests in their goings and comings may be as far as possible independent of the movements of the family. It will be much pleasanter for all concerned and save some awkward positions. Likewise in settling the location of guest-chambers it should be carefully seen to that they are out of sight, sound and smell of the service end of the house. It is not considerate nor in good taste to afflict the eyes or ears of one's visitors with selected glimpses and strains from the domestic workings of the establishment, neither is it desirable to advertise several hours beforehand what's a-cooking for dinner.

Nothing can be more important in fixing the position of guest-

chambers than convenient access to a bathroom quite separate from those in constant use by members of the family. It is always extremely uncomfortable for guests to be obliged to use family bathrooms. When they go for their bath in the morning they have the annoying feeling that they may be encroaching upon the master's or mistress's accustomed time of bathing or else from their bedroom door they must maintain a circumspect lookout to see when the coast is clear. On the other hand it is unpleasant for the family to feel all during their ablutions that perhaps they are keeping their guests waiting. In all well arranged houses, therefore, separate bathrooms will be provided for guest-chambers. In cases where this may be impossible, however, the guest-chamber should be so placed that the unfortunate guest will not have to run a perfect gauntlet of doors before reaching the particular one he seeks. In houses where much entertaining is done it is almost indispensable to have a maid's room adjoining the guest-chamber.

As to the furniture contents of the guest-chamber, while observing a rule of simplicity as far as practicable, there are certain considerations that are absolutely imperative. In the first place it is well to have two single beds or, if there is only one let it be of full size. Single beds, however, are preferable, and as the taste of many persons varies in the matter of sleeping arrangements, the mattresses should be neither extremely hard nor soft, striking

a medium between the two that will adapt itself to the needs of the average visitor. Between the heads of the beds there should be a small table for candles, pitcher and telephone. It is well for this table to have a shelf or shelves beneath. It is often desirable, especially where there is only one bed, to have two tables, one on each side. There is then plenty of room for candles, tumbler and pitcher, or better still, a thermos bottle on one side and telephone with directory and pads on the other. It is thoughtful to provide a list, if in the city, of the principal shops, theaters and so on, including also the family physician's number. By the bedside there should be nice, warm, soft rugs, and the comforters ought to be of silk and light in weight.

If the house is equipped with electricity there ought to be a light with a cord of adjustable length over the middle of the bed head for reading in bed. While speaking of lighting, hints about several appliances seem necessary from the general lack of attention in several respects. For one thing, there ought to be a drop light over the dresser or bureau and it ought to be adjustable and have a shade to throw the light down. There ought also to be adjustable lights at the side. With the light, or rather lack of



The guest-room should be adaptable to more purposes than sleeping. This sitting-room corner with its desk is a desirable feature



There are many conveniences worth while in this attractive bedroom with its twin beds. The table between the bedsteads supports a telephone and a reading lamp, and space for books. The switch for the light may be reached from the bed

light, sometimes found it is hard enough for men to brush their hair, and much more difficult for women to do their own. In addition light for shaving should also be provided either in the bedroom or bathroom, preferably the latter.

In this connection it is well to add that all mirrors should be so placed or hung that one can get a good light in them. The writers know of one handsomely furnished apartment where all the mirrors are so unfortunately placed that it is impossible to get sufficient light in any of them, and anyone who attempts to shave by their aid is very apt to look afterwards as though he had been through a German students' duel. A dresser with a mirror in three parts is desirable, the two end sections being hinged and adjustable. Then, too, there ought to be a pier or cheval glass, and it is an excellent idea to have a full length mirror set on the inside of the closet door. In fact such a mirror may take the place of a cheval glass, although one ought to be provided if possible.

A good variety of dresser or dressing table is somewhat concave in front, so that anyone seated before it may have the various drawers and compartments readily accessible on either hand. Presuming that the guest-chamber is to be used sometimes

for women and sometimes for men, it is necessary to have a bureau or chiffonier as well as a ladies' dresser. Besides these there should be an ample chest of drawers so that there may be an abundance of room for the bestowal of clothing. In bureau, chest and dresser the hostess should look to it that the drawers run easily and do not stick. It is a good plan to have glass plates to put on the tops of both bureau and dresser. In the first place they are clean and easily kept so, and in the second, as far as the guest is concerned, he or she doesn't like to feel that a bottle of alcohol or cologne or what not may be spilled or leave a mark on a cover or on the woodwork.

It is an excellent idea to have the inside of the drawers in the ladies' dresser painted white and enameled. This gives a wholesome appearance and aids in the removal of any dust that may col-

lect there. The paint should be laid on carefully, however, and the enamel surface be perfectly smooth, with no tendency to stickiness, or the work will be worse than useless. Somewhere, in bureau, chest, closet or table there ought without fail to be a handy drawer containing needles, thread, buttons, mucilage, stickers, string, wrapping paper and a thousand and one other



The four-poster is suggestive of comfort. The two chairs at its foot serve in lieu of a lounge



The comfortable armchair before the fireplace and the well equipped dressing table with its good form of mirror will be appreciated by guests. There is an interesting treatment of the radiator that suggests a successful way of hiding this ugly feature

odds and ends that anyone is apt to want at any time but will very often do without altogether rather than put a hostess to the bother of getting for them.

Another piece of furniture that should always be included in the equipment of a guest-chamber is a table desk provided with stationery both marked and plain and all the necessary writing paraphernalia. A reasonable supply of postage stamps ought not to be forgotten. It is well to include telegram blanks in the list of things desirable, for a man while visiting has often to attend to important business concerns at the same time and greatly appreciates all such facilities. A wastebasket is also necessary. Details in the preparation of the guest-room are not of the greatest importance, but scrupulous care in even the smallest trifles will add to the welcome of the visitor and show him that some thought has been taken in his behalf. And there are many occasions when such trifles become of the highest importance. No omission is excusable that may cause the guest a moment's annoyance.

Either on one end of the table desk, if it is large enough, or better still, on a separate table, there should be a reasonable number of books—novels of the day, classics, semi-classics—to suit

all tastes and needs. It is well, likewise, to have some magazines—not a year old—in the same place. A comfortable reading

lamp will, of course, accompany this outfit. The appropriate reading lamp leads one on to a reminder about easy chairs, of which there should be more than one. On the reading table or on the table desk it is a graceful attention, if the guest be a lady, to have a bowl of flowers. They breathe a welcome in a way that nothing else can. Your men guests will always be pleased to find a box of cigarettes on desk or table, and forget not at the same time to have ash-trays. Ash-trays of glass or some washable material are preferable to metal or substance that will either tarnish or stain.

There ought either to be a hat and boot cabinet of some kind or else some special provision should be made for them in the closet. A

lounge or reclining couch is also a desirable adjunct to the furniture of a guest-room, and can often very fittingly be placed at the foot of the bed. When it is not placed there it is a good idea to have a slatted trunk rack or stand set there for the arriving guest's trunk so that it may be easily unpacked without uncom-

(Continued on page 203)



A very simple bedroom, but one planned with various guest-room conveniences

The Proper Use of Dwarf and Standard Fruit Trees

THE MOST FITTING SITUATION FOR EACH SORT—ESPALIER FRUITS AND HOW TO TRAIN THEM—COMPLETE INSTRUCTIONS FOR STARTING A FRUIT GARDEN

BY F. F. ROCKWELL

WITHOUT enthusiasts the world would never have progressed; and in no line of work is this more true than in horticulture. Nevertheless, it is a fact that the enthusiast is likely to look upon things from one side only, and some of the dwarf fruit enthusiasts have been no exception to this rule. While I believe that the dwarf fruit has come to stay—has, in fact, been the result of an actual economic demand—still I think that in a few instances people have been misled as to the result they would obtain from it, not intentionally on the part of their informers, but because, hearing only one side of the case, they have failed to take all the necessary precautions, and have met indifferent success, or even failure as a result. It is my purpose in this article to present both sides of the subject, and I hold no brief for either. I do not believe, on the one hand, that dwarf fruit trees are going to supplant the standard kinds with which most of us are familiar, nor, on the other, that they are but a hobby, doomed to oblivion after a few years' experimenting on the part of the general public.

First of all we had better get a few definitions straightened out so as to know exactly what we are speaking about. What is a dwarf fruit tree? Our definition has to be largely a matter of comparison. When you recollect those rugged, shaggy-barked old patriarchs of the apple orchards of your childhood, spreading their twisted limbs almost fifteen feet upward and outward, the neat rows of trimmed, compact low-headed trees of the modern commercial orchard seem in comparison quite dwarf indeed. You can actually pick some of the fruit from the ground. But when some enthusiastic suburbanite friend takes you into his fifteen by twenty foot fruit farm at the back of the house and shows you apples and pear trees the topmost fruit of which you can pick without standing on tip-toe, then you realize that your definition of "dwarf fruit" has to be readjusted, for the actual fruits on these miniature specimens of apple and pear trees are fully equal in size, coloring and flavor to those grown upon the full-sized standards with which you are more familiar. As a

matter of fact they are the same apples and pears which you already know, the difference being that now they are growing on another tree: that is, slips of the standard varieties are grafted upon a dwarf, slow-growing stock, and the result is that you can have dwarf fruit trees without dwarf fruits. This achievement, from the point of view of the horticulturist, is not nearly so wonderful as it probably will seem to you when you behold for the first time one of these specimens of the skill of the nurseryman.

In fact, for any definite discussion of the subject, we should have a more extended classification. For instance, *standards*, *low-headed standards*, *semi-dwarfs*, and *dwarfs* would enable us to be more accurate in describing the various types that are adapted for various purposes. The difference between standards and low-headed standards is a matter of training. That is, the main branch is cut back sooner than was formerly the practice, thus inducing the growth of the spreading side limbs at a point a great deal lower down on the trunk of the tree. Some varieties are naturally much smaller than others. In fact, it is simply by taking advantage of extreme cases of this characteristic that the dwarf trees have been made possible. The semi-dwarf trees are made by grafting the standard varieties upon what is called a "Doucin stock," that is simply a variety of apple which normally attains a height of eighteen feet or so. For dwarf trees, standard varieties which have been found suitable for the purpose, are graft-



Standard trees surpass the dwarf varieties where there is plenty of orchard space for branching and room for the proper development of the roots

ed upon Paradise stock, which is a wild, small, fruited English variety. In addition to this the method and thoroughness used in training and pruning will affect to a considerable extent the shape and size of the tree produced.

The dwarf fruit trees are not, except in the opinion of a few enthusiasts, considered as substitutes for the standard types. They can, however, be used where the others can not, and therefore it depends upon the circumstances in each particular case, whether or no their use will prove profitable. I do not use "profitable" in the commercial sense, but to indicate whether the

results will prove satisfactory to the person who plants the dwarf trees, considering the amount of time and care which has been expended.

The greatest advantage of dwarf fruit trees is the fact that they can be grown where there would not be room for standard types. Standard trees, for instance, are set thirty-five to forty feet apart. Doucin stock apples can be set within fifteen to twenty feet of each other, and Paradise stock apples as close as ten or even eight feet. Not only can three to five small trees be set where one or two standards would occupy the same amount of room, but they can, if conditions require it, be trained to a trellis along the boundary of the grounds, so that their growth is almost entirely lateral. It often happens, too, that while there might be enough ground room for a standard tree, the height would be objectionable. And here again, of course, the dwarf trees furnish a practical solution to the problem.

Another point in their favor which is of almost equal importance to the man who desires to grow his own fruit on a small scale, is the fact that these small trees are so easily cared for and so efficiently attended to in the matter of spraying, pruning, thinning the fruit, etc. With no power except his two arms, he can care for his dwarf trees quite as thoroughly as the commercial orchardist can tend his acres, with a power spray-pump and all the other requisite apparatus.

Still another very decided advantage of dwarf trees is that as both branches and root-system are so restricted in the area they cover, other things may be grown between the dwarf trees much more successfully than between standard trees, whose dense shade and root systems spread even beyond the limit of their far-reaching branches. This is a very important point, especially where the situation in the plot of ground is such that it becomes desirable to set some fruit trees along the southern or eastern boundaries, as anyone who has had to choose between cutting down a good tree or being satisfied with the indifferent results obtained from vegetables struggling along in its shade and fighting against the encroachment of its robber roots, will fully appreciate. Here the dwarf wins.

Still again there is perhaps that less important but nevertheless extremely alluring fact that with dwarf fruit trees at least a fruit or two may be expected even the first year after planting—while with the standards a most patient, trying period of five or six years must be put up with before the result of one's long continued labor may be finally had in hand and actually tasted. This prospect of almost immediate returns certainly is a very powerful incentive to the planting and care of fruit trees as far as the amateur is concerned.

And then there is the beauty of the dwarf trees in bloom!

That alone, to anyone who loves flowers, is worth the extra care they may require. It may be because the flowers are nearer, and on a level with the eye; it may be because the effect is unexpected and novel, but a dwarf pear or apple in bloom is even more beautiful than one of standard size.

While none of these claims in favor of the dwarf tree is exaggerated, it would, nevertheless, give a somewhat one-sided view of the value of dwarf fruits if no mention were made of their several serious faults. In the first place their yield is very small, being, even after they are in

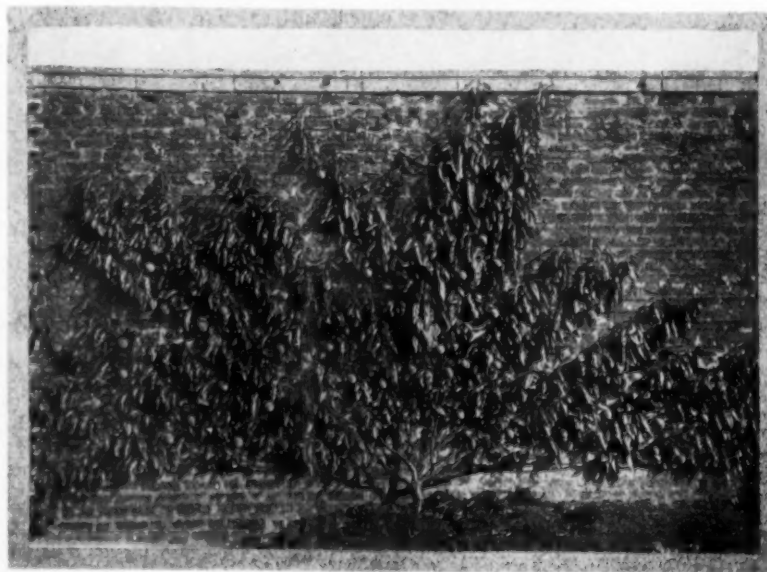
full bearing, only from a quarter of a bushel to a bushel, to an average-sized tree. An average standard tree will easily bear four or five times this amount—and therefore, one of the apparent benefits of the saving of space effected by the dwarf trees is found in reality to be deceiving.

Then there is the question of culture. As a general rule, the more artificial the products of the nurseryman or the plant grower the more careful is the cultural attention demanded. And these dwarf fruits, growing on alien roots, are no exception to the rule. Not only must the ground in which they are planted be in excellent condition, but the after care and cultivation must

be constant and the best, or the experiment will be certain to prove more or less of a failure—probably more! The trunk and root system do not become as firmly fixed in the soil as do those of standard type and are therefore more subject to injury from external sources. In fact, a standard tree will live and make a fairly satisfactory growth—provided it is kept clean by spray-



A good example of how space has been saved and the entire garden made attractive by training dwarf fruits symmetrically on the garden fence



The dwarf peach tree does well on the brick wall if properly trained on wires to direct its growth

ing—under conditions which would be likely to prove fatal to a dwarf form of the same variety. Last, but not least, there is the question of cost—and this is not limited to the original cost, which at present is from five to twenty-five times more than that of standard stock. Also, as far as present indications go, most of the standard varieties would outlive two or three plantings of the dwarf stock, at least in our hot, dry climate. Abroad where rainy, cloudy weather is much more frequently encountered than here, there may not be so much difference. It is abroad that the dwarf fruits have been developed and are still much more widely used than here.

So there are at least two sides of the question for anyone contemplating the planting of fruit trees, and he will do well carefully to consider the conditions which surround his own particular problem, before making up his mind that either dwarfs or standards are to be unconditionally declared the better, even for private use.

The fact is that the dwarf fruit tree offers a solution, and a very advantageous solution, to those who would otherwise go without fruit of their own at all. Its stronghold will be the suburban garden and the grounds of the small place. There the amateur and the enthusiast will be glad to give the careful attention which they require, in return for apples, pears and peaches in variety, and of the first quality, which they will begin to yield him, not only after several years of "fruitless" labor, but almost immediately. It should not be forgotten,

however, that as far as quantity of production is concerned, the larger trees will probably give far better satisfaction. The superior quality of fruit from dwarf trees which one frequently reads or hears about is, I believe, largely fictitious; that is, it is due not to the fact that it was grown on dwarf trees, but that the trees themselves were given better care than standard trees ordinarily receive from the hands of the average fruit grower.

There is another point to which I have never seen attention called in discussions of dwarf fruits, and that is the possibility of having several varieties of apples or pears upon one standard tree. We have an old but still very medium sized Pearmain tree in our orchard, which bears more summer apples than we can ever use, a good number of Hubbards for autumn use, and Rhode Island Greenings for winter. Why should not some enterprising nurseryman make a point of supplying several varieties of apples grafted on a suitable stock to afford dessert fruit at least through the season in gardens where there is not

room for more than two or three fair-sized trees? Of course such stock would have to be larger and older than the usual sizes sent out, and it also would be much more expensive, but it seems to me that there would be many people who would be willing to pay a very good price for the combination tree of this sort. There is also, of course, the possibility of having a combination of the larger size and the dwarf trees, using, perhaps two or three of the former for
(Continued on page 205)



Training the dwarf fruit on the wooden fence is almost as easy as training the rambler rose



One upright and two lateral shoots should be trained along each wire as the tree grows



The dwarf plum tree on the lawn rivals the flowering shrub in its beauty



Small space brings large results by training dwarf trees to the wall as is shown here



A shallow alcove designed for the range and lined with tile or brick saves space in the small kitchen and does away with smoke and cooking odors

HOW TO PLAN AND BUILD—STRUCTURAL INNOVATIONS—ADJOINING ROOMS AND THE LOCATION OF FIXTURES—UTENSILS, SANITATION, LIGHTING AND EFFICIENCY

BY LOUISE SHRIMPTON

Photographs by George Doust

TO use the kitchen simply as a cook room and scullery, a place where food is prepared and pots and kettles are scoured, is the modern aim. All tramping through the room by service men or family is avoided. If possible a rear hallway provides a line of travel for the household. A cool room opening from a rear entry contains the refrigerator and a place for depositing groceries. The laundry tubs, once placed in the small house kitchen, are now on the cellar floor, where a well-lighted laundry often includes provision for ironing as well as washing. On the cellar floor of the well-appointed house is also a preserve room, with double walls containing an air space, and a similarly built vegetable room.

In the kitchen itself modern ideas as to efficiency are receiving due attention. The careful home-builder contrives a plan that shall eliminate futile effort in walking and unnecessary gymnastics in gathering utensils and materials together for cooking.

Kitchens of a few years ago were notoriously dark and unsanitary. Today the kitchen is well ventilated and



This cupboard with open racks for hanging saucepans gives easier access than rows of shelves

furnished with windows upon two sides. Groups of two or three high windows, giving abundant light, are often seen. Southern exposures are reserved for the living-rooms of a house, while the kitchen has the northern aspect that gives the steady light desirable in a workroom where much precise measuring and careful cleansing must be done. This cool, northern location is chosen also as best adapted to a room that often becomes too hot for comfort.

These desirable features of location and well-contrived arrangement do not, however, come of themselves. As in other rooms in a house, home-builders must have clearly-defined ideals and a capacity for insisting on their fulfilment. The placing of structural features needs particularly careful planning. The location of lighting fixtures must be considered at an early date. The wall treatment, selection of floor coverings, range, furniture and kitchen ware, are all matters requiring prompt but thoughtful decisions.

In planning kitchen equipment, rough drawings are found to be a help. The size of the kitchen deter-



A small serving-room between kitchen and dining-room eliminates noise and odors and provides convenient space for china and linen



The built-in cabinet gives opportunity to carry out individual ideas. It should have shelves of varying height and bins for flour

mined upon—and small kitchens are now the rule even in large houses—it is a good idea for the home-builder to draw to scale, upon the roughly-sketched plan, the built-in fitments and the furniture necessary for the room. Through following this method everything is clearly understood from the beginning. The home-builder does not suddenly find, for instance, that the kitchen sink is too near a corner to permit space for a drain-board; the actual measurements of a completed cupboard do not disappoint the housemistress. To aid in filling out a plan, rough elevations might be made of the sides of the room, showing cupboards and fixtures. And not only a scale should be used, but a six-foot rule, so that actual trial measurements of existing cupboards and fitments may give to the amateur, as they often do to the professional, a clear idea as to how the paper dimensions will turn out. Even when the architect has a special talent for designing convenient fitments, as often happens, the formulation of the ideas of home-builders gives results of individuality, helping greatly to produce distinctive equipment.

In planning the kitchen, it may be divided for practical purposes into the cooking side and what the French call the *côté de la batterie*, the side where the kitchen ammunition, the household pots and pans, stand ready for action. The other walls, being as a rule largely given over to entrances, are usually negligible in this connection.

The chimney location determines that of the range, usually on an inner wall. Whether to place the sink on this, the cooking side of the kitchen, or elsewhere, is the next point to settle. Where cost is not a first consideration, a vegetable sink is placed next the range, so that vegetables may be cleaned and the kettles filled with the least possible walking. A vegetable sink of solid porcelain with integral divisions for rinsing, etc., costs about sixty

dollars in a thirty by twenty-two inch size. A sixteen by twenty-four inch sink, porcelain-enameled, is quoted at much less, about eighteen dollars.

In the small house-kitchen, where there is but the one sink and dishes must be washed in it, their convenient stacking and draining are necessities. The sink requires good lighting and sufficient space on each side for drain boards and ledges. Placing it at about the center of the "ammunition wall," with a group of high windows above, on one side a drain board, on the other a ledge for unwashed dishes, is found a good solution of the small kitchen problem. A sink five feet long, of porcelain, with integral drain shelf, costs complete in "B" quality ("A" quality is a rarity, fabulous in price), about one hundred dollars, and is a beautiful and luxurious-looking affair. A porcelain-enameled sink twenty by thirty inches, costs about fifty-eight dollars with porcelain-enameled legs. A rubber drain mat, necessary to prevent breakage, comes at about two dollars. A roll rim sink and back with brackets, enameled, costs eighteen dollars and fifty-eight cents. If preferred, a "pantry" sink of copper or German silver, instead of the porcelain variety, may be set into a ledge beneath the window. The cocks are out of the way, a convenient feature. Two of these sinks, one for washing, the other for rinsing, with movable faucets, form an admirable outfit. It is desirable to cover the ledge with sheet copper fastened to the edge with large-headed tacks. Any special size desired is furnished to order by the manufacturers of these sinks, but, like the porcelain ones, they come in great variety of sizes and quality. A good quality should be specified.

On either side of the sink are often built-in cabinets, one providing space for saucepans, spoons and cooking dishes, the other for cooking materials. In planning the saucepan cupboard an

inventory should be taken of pots and pans, and space adequate for them provided, neither too much nor too little. It should have one good-sized compartment, fitted with hooks for hanging saucepans and spoons, easier of access in this arrangement than if put on shelves. The compartment should be above the center ledge, not below it; or the upper part of this cabinet may consist of an open rack on which hang the ladles and saucepans in everyday use, each having its own hook, like a tool on a tool rack, so that no time is lost in looking for the right utensil. For kettle covers narrow shelves are built, with grooves and a protecting rail. The French method of fastening to a wall against wood strips a long metal or wooden rod, fitted with movable hangers from which depend the saucepans, might well be adopted in the American kitchen. Compartments with shelves are planned for bowls and tins. Shelves only a few inches apart are found convenient for cake tins and platters, which then need not be placed one on top of the other. One or two narrow shelves, half way between ordinary ones, are a space-saving feature, used for cups.

The cooking material cupboard is sometimes supplemented by one of the kitchen cabinets on the market. One of the new cabinets, with removable flour bin, sliding nickel-plated table top and glass sugar bin sells at about twenty-eight dollars. If one of these cabinets is used, it should, if possible, be procured unfinished and stained or painted to match the other woodwork. If the built-in cabinet alone is planned, it should contain bins for flour, usually zinc-lined boxes beneath a ledge, hinged on the bottom, so that they can be tilted forward by a drawer pull at the top. Another variety, perhaps preferable, is above the table ledge that the cabinet always has, allowing the flour to be sifted through an opening in the bottom. There should be two receptacles for different kinds of flour. A niche is provided for the bread board, which pulls out, forming a shelf. If a large sheet of plate glass is kept on the ledge, it makes an excellent pastry board. Receptacles for sugar, spices, etc., are furnished. In a cupboard recently fashioned is a compartment fitted with graduated steps in pyramid form, used for holding little jars of dried herbs and spices. The inside of a door is sometimes utilized for holding small boxes with good results.

In planning structural features on the cooking side of the kitchen, a shallow alcove is designed for the range, lined with tile or brick. A hood, projecting above, is of metal or covered with sheets of asbestos. In selecting a range, a combination coal and gas range is considered the most satisfactory for all-year use, although a gas stove alone is frequently used in the city or suburban home, supplemented by a fireless cooker. The electric stove

is still too expensive for general use. The combination range shown in our illustration costs ninety-five dollars.

Lights are planned above cupboards and sink, range and ironing fixtures. A special connection is made for the electric flatiron, if one is used, so that an electric light is not put out of commission when ironing is done.

Wall treatment in the kitchen is strictly hygienic. Walls are often tiled to a height of three or four feet, while the plaster above is painted in oil colors in a light tone. If tile is found too expensive the dado is given a coat of cement, marked off into squares, and then given several coats of white enamel paint, eight in a recent instance.

Floors are covered with linoleum cemented at the joints, or more rarely with tile. In the latter case rubber mats are desirable, as tile floors are very hard on the feet of kitchen workers. Floors of unfinished wood are less often put in than formerly, since while attractive in appearance, they require so much time and labor to scrub that they are not really a paying investment.

Woodwork is sometimes stained and given a paraffine finish, cleaned by rubbing occasionally with the paraffine oil. Pine and cypress are attractive in this finish, although pains must be taken not to allow a careless maid to spot the wood with water. An oil rubbing on the unfinished wood gives a light, pretty effect. Highly varnished wood is not so popular as it once was, since there is a sentiment in favor of pretty finish for woods, even in kitchens. Perhaps the most cleanly and attractive treatment is to paint the woodwork, in this case usually whitewood, white with an enamel finish.

Kitchen color schemes are simple and positive. subtle values being reserved for other rooms of a house. White and buff, gray and white, blue and white, pale yellow and gray, are most often

(Continued on page 224)



Neat cases lining the walls are much better for preserves than the old fashioned hanging shelf



A model kitchen. The sink requires good lighting and space on each side for drain boards and ledges. Placing it below a group of high windows gives excellent results

The Epicure in the Garden

HOW THE GARDENER AND THE COOK COLLABORATED TO SUPPLY THE TABLE WITH TASTY DISHES—A VEGETABLE GARDEN PLANNED TO PLEASE THE APPETITE AND KEEP THE TABLE SUPPLIED ALL YEAR

SOME considerable portion of the term of existence to which I am entitled has been spent in trying to bring the mind of Charlemagne (*alias* Charles Mann), the gardener, into agreement with my own, and that of Charlotte, the cook, into unison with both. The following account is witness to the measure of my success in this undertaking.

Necessity for peace, a quiet life, and simple diet, the physician's prescription, had led the Better Half and me into choosing a home in the country. Eventually we met with a house and garden suited to our requirements. It was an old house, much out of repair, and inconveniently planned, but it had an exceptionally well-situated kitchen

garden, and this decided us in its favor. Its previous owner had been a better gardener than architect, and if only for that reason we have had cause to be grateful to him. A good kitchen-garden has generally to be made.

This kitchen-garden was a piece of land of nearly two acres, innocent of all trees save those which grew by the walls and a few espaliers down the middle paths. It was sheltered, open to the south and sloping.

I explained to Charlemagne that it was our intention to live principally upon vegetables and fruit; that simple diet, with very little meat, was essential to our health; that Charlotte, the cook, was an importation from France, and would require many things to be grown for her to which she had been accustomed in her native country, and finally that I myself had a firmly-rooted conviction that it was quite possible to have, all the year round in perpetual supply, every vegetable which mortal man might desire to eat, providing that sufficient energy and enterprise were brought to bear on their production. I hinted at a forcing-house and frames, and a cool cellar, and I saw his eyes brighten. His imagination was touched, and this was well; the main thing, all the same, was to get vegetables.

After that we came to questions of detail. We have, I think, always been occupied with questions of detail. Sometimes I am exasperated with Charlemagne's attention to detail as I watch him slip and cut, and stipple over his work; sometimes he breaks out into open rebellion at my insistence that every letter of my plans shall be accurately followed. I am winning Charlemagne over, and inspiring him with an enthusiasm for intensive cultivation.

Therein lies the secret of such success as we have achieved. With intensive cultivation you may do wonders with quite a small plot of land; without it, the finest acreage will yield but little.

Our ground is oblong in shape, with its longest diameter from east to west. This gives a good stretch of both warm and cool borders. The bush fruits grow together in squads instead of being planted promiscuously here and there, and if they had not

already been so placed, we should soon have brought them together. Bigger fruit trees, such as apple and plum, are found in the small orchard, and the only good pear tree that we possess fills the whole west side of the house wall.

The kitchen-garden has been, figuratively speaking, the cockpit of strife, where our battles have been waged and a few triumphs won, for now that we have brought it to the point where it yields for us not only a

never-failing supply of roots and *légumes*, but also a continuance of the rarer dainties, we have good reason to triumph. It has all been a matter of management, of careful rotation of crops, of frequent sowings, and

prompt clearings, helped by the use of movable frames and a little forcing.

I have been insistent about having only small sowings made at a time, but of having these kept up at regular intervals, so that as fast as one row had furnished its crop, it should be cleared to make way for another. Nothing has been left to run to seed, nor have we saved for our own seed. This may seem to some an extravagance, but we have found that it pays best to buy fresh seed grown elsewhere. By liberal trenching and a little manuring of the soil we secure quick growth, and the rule is to gather everything when it is somewhat under rather than over its prime. Quality, rather than size and quantity, is the best aim where consumption is small, but were I growing for sale, I should still prefer to sell the well-flavored small bean or marrow to the mammoths without taste—things which have to be cooked in pieces because they are too big to be cooked whole—it must have been these which a French satirist had in mind when he talked of *légumes à l'eau*!

A dozen strong young plants, properly set out and attended to, amply suffice for our requirements at one time. We do not wish to be condemned to eat cauliflowers day after day simply because it is their season, and they are clamoring for consumption, or to fatten on beans when we would prefer to have a salad, or to be surfeited with salads when we desire a mess of pottage. But we are never without the material for a salad at any time of the year. We have peas from April to August; we have beans practically always on hand; young carrots and turnips ready for pulling in May; crisp radishes and cress in the late summer. The mushroom house supplies us with early seakale and rhubarb and chicory, as well as with edible fungi, while our first tomatoes and cucumbers come from the warm brick pits.

Experience has shown us that it is not needful to grow so many different kinds of vegetables, even though you are desirous of having a perpetual supply, as it is to keep up the regular succession of the crops. What is most important is to have facilities for growing winter crops, and for some forcing, so as to be independent of weather and season. This we have managed by careful use of a small hot-house, a larger cool-house, and frames.



BY LUCY H. YATES

At first Charlemagne showed himself imbued with the usual ideas as to the laying-out of the land, marking out the plots for rows of cabbages and patches of potatoes after the ordinary fashion. Very quickly I placed a veto on any such proposals. No part of our valuable space was to spare for such things as could be bought for a few pennies from any green-grocer or market gardener. Cabbages, I was careful to explain, took too much out of the soil and gave back too little in actual value; cauliflowers, it is true, were of a similar nature, but as the cauliflower was adapted to so many uses in the kitchen, it could not be dispensed with. Potatoes, except for a few rows of earlies, which, when eaten directly after lifting, possess a flavor comparable to none, we could not spare land for, except where they might prepare the soil for a better crop later on. Carrots and turnips grow best on soil which has been previously occupied by potatoes or celery rather than on freshly manured ground. This matter of the wise rotation of crops was one about which I read much, and after making many trials we have at last arrived at a systematic plan, to which we now adhere.

Our early turnips we sow in frames, but the second crop is sown between rows of peas and thinned out freely. Lettuces are pricked out between rows of celery, and the finest grow on the ridges after the celery has been earthed for the autumn. Spinach we set between peas and beans, sowing a fresh row every fortnight, and thus keep ourselves supplied all the summer.

Our first dishes of spring greens are compounded from cuttings of sorrel, spinach, turnip-tops, young nettles, and mercury—for we grow "Good King Henry" as respectfully as any other herb. With this variety, Charlotte is able to ring the changes without being at a loss for a *purée* at any time it is asked for.

We have cucumbers ready for cutting with the beginning of May, and they last throughout the summer by keeping the glass open. Tomatoes (under glass) we cut early in June, and those grown out of doors begin to produce in July, and the two lots keep us supplied right up to Christmas. Some variety of lettuce or endive we find it possible to have all the year round, and the salad bowl is in almost daily use. Soup vegetables are also required every day, and Charlotte makes a voracious demand for good roots and onions for her savory stews, wherein, as she says, it is the meat that flavors the vegetables, not they the meat. I fear me she would consider her skill but half appreciated if we failed to supply her with such things as salsify and celeriac, aubergines and chicory, as well as the more ordinary roots, or if there were not a few *potirons* hanging up in the storeroom with onions and shallots galore. From beets she makes most delicious little dishes as well as salads. And, of course, there has to be material supplied for the making of those various conserves which fill the larder shelves and adorn our table in winter days.

It may seem ambitious to have attempted the growing of

melons, yet the home-grown melon is one of the choicest of our dessert fruits, and its growing offers no insuperable obstacle; moreover, it was like offering a sop to Cerberus to suggest its cultivation to Charlemagne. He went up in his own estimation by several degrees!

Together we discussed the requirements of the melon tribe; we decided that a frame covering a brick pit, with a six-inch hot-water pipe going round it, with a bed of leaf mold (chiefly oak and beech), would give the necessary heat. Our authority told us that these leaves were better than the richest manure. We had to buy a sackful from a nurseryman, sufficient not being otherwise obtainable. The seeds we sowed first in small pots in a mixture of leaf mold and loam, embedding each seed in a little silver sand, then set the pots in the bed with a bottom heat of between 70 and 80 degrees. When they grew big enough to shift into larger pots, a stronger compost was used, and finally they were planted out on ridges in the frame itself, and as the fruit began to form, the young plants were watered with liquid

manure. When a sufficient number of flowers had opened we fertilized them by hand, using a camel's-hair brush, and kept the lights open. As soon as the fruits came we picked off any that were ill-shaped, and gave the plants a little support from time to time. While they were making fast growth, plenty of air was admitted into the frame, and the foliage was syringed daily. If any sign of red spider appeared a little sulphur was put into the syringe. The syringing was discontinued after the fruits began to ripen, and we gave less moisture with more heat, and when we could scent the aroma we knew the time had arrived for cutting. Blessed time!

In a favorable season we have had a fair supply of peaches and apricots

from the trees that grow on the south wall, but a cold or wet year is fatal to these. Grapes we have not yet attempted. But a veritable triumph it has been when we could set a dish of fully-grown, well-ripened strawberries before the Better Half for his delectation, late in May or early in June. These are not pot-grown, oh, dear no! We allow the plants to make their ordinary growth out of doors until the crowns are fully developed, then in April we lift them with a spade, with a good quantity of soil, and lay them on the bench on the south side of the cool-house. Here they quickly come into flower, and as the windows are opened wide during the day the bees are able to do their work. After the fruit has set we raise the bench to bring it nearer the glass, and keep the roots well supplied with moisture. It swells rapidly, and soon ripens with this slight protection, being carefully shielded from the cold at night. These strawberries are as fleshy and full of flavor as when grown out of doors in the ordinary course, and in this way we prolong our enjoyment of this delicious fruit by at least a month.

(Continued on page 209)



The kitchen-garden was a piece of land of nearly two acres, sheltered, open to the south and sloping

When the Spring Run Starts in the Sugar Bush

THE OPERATION OF MAKING MAPLE SIRUP AND SUGAR—A SIMPLE PLANT, REASONABLE CARE, WORK AT A SLACK TIME OF THE YEAR AND PLEASURE ILLIMITABLE—A PROCESS THAT HAS DELIGHTS AND PROFITS COMBINED

BY

WILLIAM A. VOLLMER

Photographs by Julian A. Dimock



The Receiving Tank



RAY looked up at the gray, scudding clouds and seemed to sniff the air.

"We're due for sap weather pretty soon," was his diagnosis.

For a farm hand he certainly was uncommonly gifted, I thought. Perhaps his association with nature had preserved an elemental keenness of the senses that we lose in the cities. I had noted that he appeared to have a certain divination of seasons and times; an instinct seemed to tell him when fruits were ripe or potatoes ready to be dug. It was different from the accuracy of the cook at which I once had

wondered, for she had straw auguries or made experimental probes with a fork, but he just knew, sphinx-like.

I ceased wondering at his weather wiseness, with the image of maple sirup growing in mind. This prophecy, if true, would give me the secret of the delectable liquid that had made endurable a bitter cold, snow-bound winter by adding relish to the breakfast cakes which I believe were one form of fortification against many forty-below mornings. And the jug was running low! I shivered at the thought as I crossed the dirty barnyard snow, and prayed that the prediction might be true.

And the next morning saw a change. It was clear and sunshiny and what little breeze there was came from the southwest. I met Ray coming home from the cow barn, rumbling an approximation of melody from somewhere within him.

"Bess give us a spotted heifer this morning. It's a good sign! Put on your felts and come on up to the sap bush. Looks like we could start getting them pails out and the trees plugged."

Sugar from the cane, maple sugar from maple trees—but sap bush sounded suspiciously like sassafras tea. The process was still to be learned.

The sap brush was a stand of big straight maple on a hill back of the place. Most of the trees stood on the south slope, but the

growth was thick up to the ridge and ran over upon the north declivity. In summer it was a shady forest, thick with leaf-mold under foot and a dense undergrowth of seedling trees and wood plants, spotted with occasional splashes of sunlight. A cool and quiet retreat that bore a look of studied wildness as though its condition were man regulated. And it was.

The straight tree trunks, now bare of twigs beneath their branching crowns, were like squads of wood warriors at parade inspection, each detachment separated by a lane of snow. As we got into the woods I found this due to a regular system of roads and crossroads, not particularly noticeable in summer, but now the highways leading to a broad shack set close against the hillside. One roadway ran straight by the back of this cabin almost level with its roof, and all the intersecting branches seemed to converge upon it, for here, I learned, the sap boiling was done.

"Guess you've got to help open camp," was Ray's order as he fumbled with a rusty lock; and I was enrolled for the season.

Within the boiling house I was introduced to the evaporator, really a great pan four by sixteen feet in dimensions, fixed above a furnace or fire-pot of brick and masonry, the pan bridging over the two side walls which connected with a tall chimney at one end. There was a door equipped with a damper closing the front. The evaporator pan itself had a corrugated bottom and was divided into a number of similar connecting compartments by a sequence of partitions. If you soldered together half a dozen tin boxes such as wafers come in, you would have an approximation of what it looked like. Everywhere about the room were tin pails stacked in tall columns or stowed on shelves.

From a closed box Ray unearthed a quantity of what he called "spouts"—metal cylinders about two and a half inches long, but of very small bore. Each had a little metal drip at one end and a little projection on the upper surface about an inch from the other end that was to hold the pail. The ordinary pipe stem if notched—to keep the pail from slipping—near the end driven into the tree would make a working but not advisable model. We spent much of the day cleaning out the pails, boiling the spouts and then set out to "plug" the trees.

Ray carried a brace and bit, an ax, and a load of spouts; I as many of the pails as possible. Going to the crest of the ridge Ray started work on a tree on the outside of the sap bush, and gently smoothed the bark off with his ax at a point a little above waist high, taking care not to chip it. He tilted the auger upward at a slight angle and bored a hole about two inches deep, carefully removed any shavings or chips and hammered in a spout, so that it just penetrated the outside bark. The hole that he had made was a trifle under a half inch in diameter and as the tree was a large one, I judged it merely penetrated the wood next the bark.

"It's better to bore on the south or east side of a tree because you get a better flow," he explained. "Guess the sun has something to do with it. If I let you do any of the tapping, don't you go so deep on a young tree. An inch to an inch and a half is enough."

So we worked as rapidly as possible. Sometimes I noticed that he hung two buckets and occasionally three where the trees were especially large. Usually true to this belief about sun influence, he selected a spot unshaded by other growth. Since he saw that I was curious at the procedure, he volunteered:

"Some says that two buckets kills a tree, but where the stock is full grown first growth I never see the tree done harm by two, and I use three on the big fellers, but they don't want to be close together or one above another."

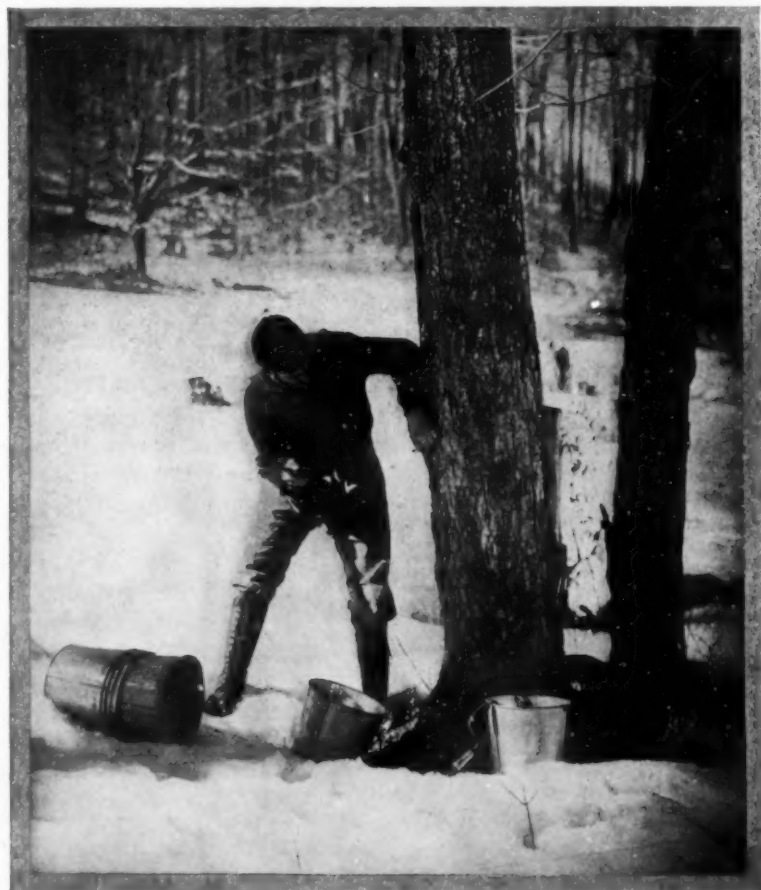
The buckets were hung by slipping the spout through a hole near the upper rim. The little ridge on the spout held them from sliding off. They were of light tin plate, soldered on the outside and of about ten quarts capacity, and as the slope of the sides was but little from the perpendicular they hung close against the tree and in this way took much of the strain from the spout.

After a hard day's work I had the satisfaction of seeing all the good trees fitted with sap buckets and nothing else to do but

wait for a slight thaw to start the sap running. We were none too forehanded about our preparations, for the next day found the temperature much moderated, and on excitedly visiting the bush we were delighted to find the sap issuing drop by drop from the little metal spigots. When I returned from a reconnoitering expedition I found that Ray and a gang of helpers were busy by the boiling house in fastening a big tank upon a sled that looked like a stone boat set on broad runners. A supply of gathering buckets—tin pails fitted with handles, but broader at the bottom than the top and of greater capacity than the tree buckets—was being distributed. The omniscient Ray informed me that this peculiarity of shape made the pails more stable in carrying; that they didn't slop over easily and were not apt to tip when the edge of the receiving bucket was rested upon them in pouring out the sap.

It was a bright balmy morning toward the last of February as we started work. The snow melted rapidly beneath a warm sun and everywhere the ground covering of leaves appeared. Some suggestions of spring's awakening seemed to get in the blood as we worked and we felt atune to Nature's throbbing back to life. You have seen a dog stretch; well, some of that animal ecstasy filled us. It was as though we ourselves were part of nature and the sap a new blood coursing through our veins. Muscles seemed to long for the strain of emptying the buckets and carrying the heavy pails. We all worked actively. My throat grew dry and thirsty, and I seemed to crave the clear, icy liquid in the pails. It tasted like sugared water with just a tang present, but was apparently as thin as water. It is a sort of superstition among the workers that the sap is a sort of potent, heady beverage, and whether due to unwonted exercise or not, when evening came I found my temples throbbing and my head light and buzzing.

As the work progressed the necessity of the network of paths became apparent. The sled with its receiving tank passed along



After the bark was smoothed and a small hole bored, Ray carefully drove in the spout



The tin receiving bucket he slipped over the metal spout, and a little ridge kept it from sliding off



Working from tree to tree the receiving buckets were emptied into peculiar carrying pails broader at the bottom than at the top



One morning ice was found in the pails. This was thrown away, but what sap remained unfrozen was retained

the roadway and was in touch with every section, and since we worked downward from the crest of the ridge it was driven below us, and we had but a few steps to carry the full buckets. Even the horses seemed to be alive to spring's approach and worked well, but when the sled was stopped, greedily reached for every green twig that rose through the snow. In some places where the sled had to go the snow had completely melted, but the broad runners slid easily over the slippery leaves and wet ground. When the tank was full it was driven down to the back of the boiling house and its outlet connected with a pipe leading to a great storage tank within the camp and the contents allowed to flow down. By evening the buckets had all been emptied, and those that had been seen to first, had been emptied a second time, but in the early afternoon the run had been sufficient to start boiling, and I changed my occupation by going into the sap house and helping at the evaporator.

Between the walls of the fire compartment logs had been stacked and a roaring fire was heating the pan. The sap ran from the storage tank trickling a zigzag course from one compartment to another, but its flow was controlled so that in each section there was a little more than an inch depth of sap. The whole pan seemed to

be aboil and steaming, and the compartments showed very different colors. Where the sap entered it was clear, but by the time it had reached the last section it was dark and sirupy. One man with what looked like a dust pan with a perforated bottom skimmed off a brownish froth that gathered.

Ray looked in the last compartment shortly after the pan had been boiling and seemed to be critically testing the bubbles as they rose to the surface. In a little while he remarked, "Guess she's about done;" and pulling beneath the spigot a large milk can fitted with a wide funnel top over which was stretched a piece of felt as a strainer, let the sirup drain off.

So the process continued. A constant supply of sap found its way into the evaporator, worked its way left-right down the pan, getting thicker and heavier as it progressed, until at regular intervals it was drawn off as sirup. I wondered again at the knowledge that could tell the finished sap, for I knew that it must be of standard weight and density.

"Some tells one way, some another,"

said Ray. "The feller from the Experiment Station told us to get this little glass thing to test it." He showed me what was familiar at once, a Baumé hydrometer. "You draw off some sap into a tall jar, fill it full to the brim and put this thing in and see



At nightfall the boiling still went on in the glowing cabin

how high she floats. He supplied me with a table of figgers to make corrections, for he said the blamed thing rides higher as the sap is hotter. So when you are through with readin' a thermometer and figurin' and one thing and another, the sap is right if this reads somewhere around 35.6. But I am willing to bet any of them fellers that I can tell by the bubbles when the sap is right oftener than I could with this thing."

And even though I would ordinarily prefer the laboratory method and the useful hydrometer, I felt that where there were such men as Ray the process might better go without them.

"You've got to get this pretty near right," continued Ray, "for if you can the stuff too thin, she'll go sour, and if its too thick in a few days your can may be full of rock candy."

The boiling did not stop at suppertime for there had been a heavy run of sap, and as it grew dark the house still was wrapped in steam and shot strange beams of light from crevice and window. Ray started a fire outside between two great stones. When the logs had burned down to a glowing bed of coals, he swung a great iron kettle between the stones so that it might be easily tipped when necessary, and filled it with sap. The fire was kept hot but not allowed to flame up or smoke.

"We used to have to do it all this way before the boss got that pan in there. I'll admit the other works faster and it may give you better sirup and sugar, but I hate to give up the outside boiling. Somehow the sap season don't seem real without it."

The sap was soon boiling, and as it browned into the proper sugar color, he added a little fresh sap every now and then "to keep it clear."

We sat around the fire eating a frugal meal, but with great relish. Ray added eggs that he boiled in the sap and a kind of candy white and sticky that he called "jackwax." He filled a pan with snow and with a ladle poured a little of the boiling

mixture over it. It congealed almost at once, and Ray turning it on the tines of an old iron fork, handed it to me.

"I guess this jackwax ought to beat any store stuff you must have been getting," he remarked. And it surely did.

The boiling was continued, as Ray wished to try the first "sugaring-off." Since the sap seemed to grow still thicker, Ray took a great spoon and began stirring vigorously. More foam appeared to gather than in the evaporator, and it was skimmed off from time to time. Once he added a little sweet lard and the

surface seemed to be less disturbed. He tested the liquid occasionally on the snow, and examined it critically. At last he said conclusively, "She's done," and poured the contents into some pans that he had brought and set us each to stirring them rapidly. The material was quite thick as he poured, and I saw that in the pan I was stirring the liquid turned rapidly, sugaring almost to the consistency of pulled taffy. I was advised to keep on stirring, and finally when the pan had been set in the snow I found that it had changed into creamy maple sugar.

"Most of this we do in the kitchen after the sirup is boiling, but this sort of helps to find out what kind of sugar we're goin' to get.

Sometimes it's good and white and other times sort of mushy in the center. But it looks good this year. Some folks can all their supply in sirup and some cake it all in sugar. That you have been using all winter was in cakes. It takes less room to store it and you can melt it up easily when you want the sirup."

When we had finished the operation of "sugaring-off" I noticed that with nightfall it had grown much colder. Indeed, it was again freezing weather, for the steaming drops from the roof of the camp had frozen into little icicles.

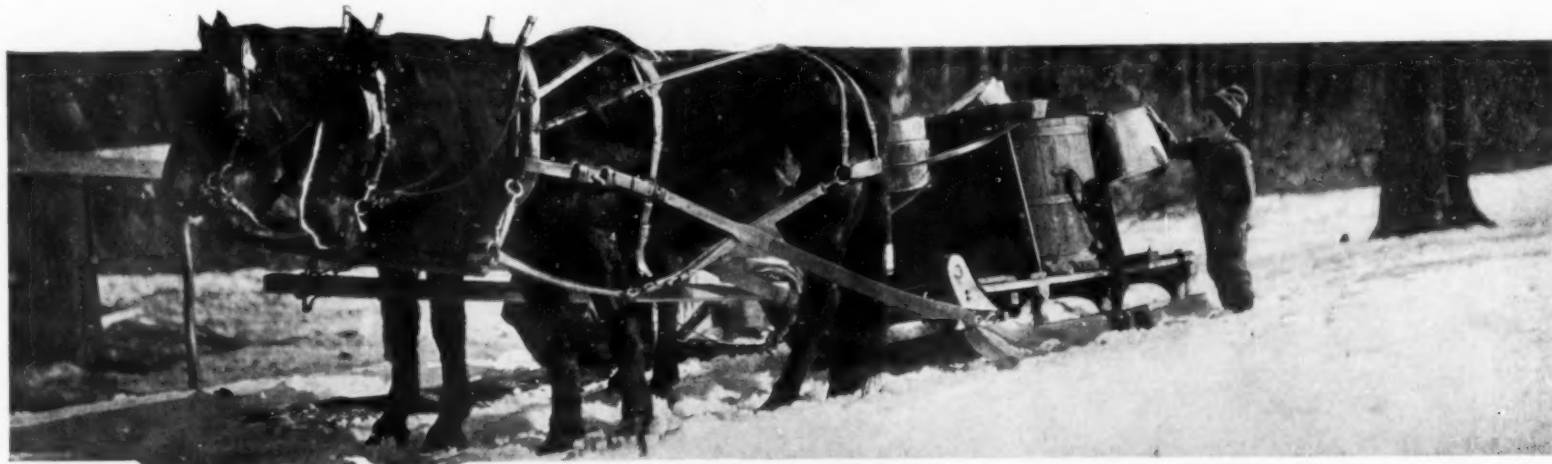
I disappointedly remarked, "I suppose this ends the "sugaring-off."

"Not on your life it don't," was Ray's enthusiastic reply. "It

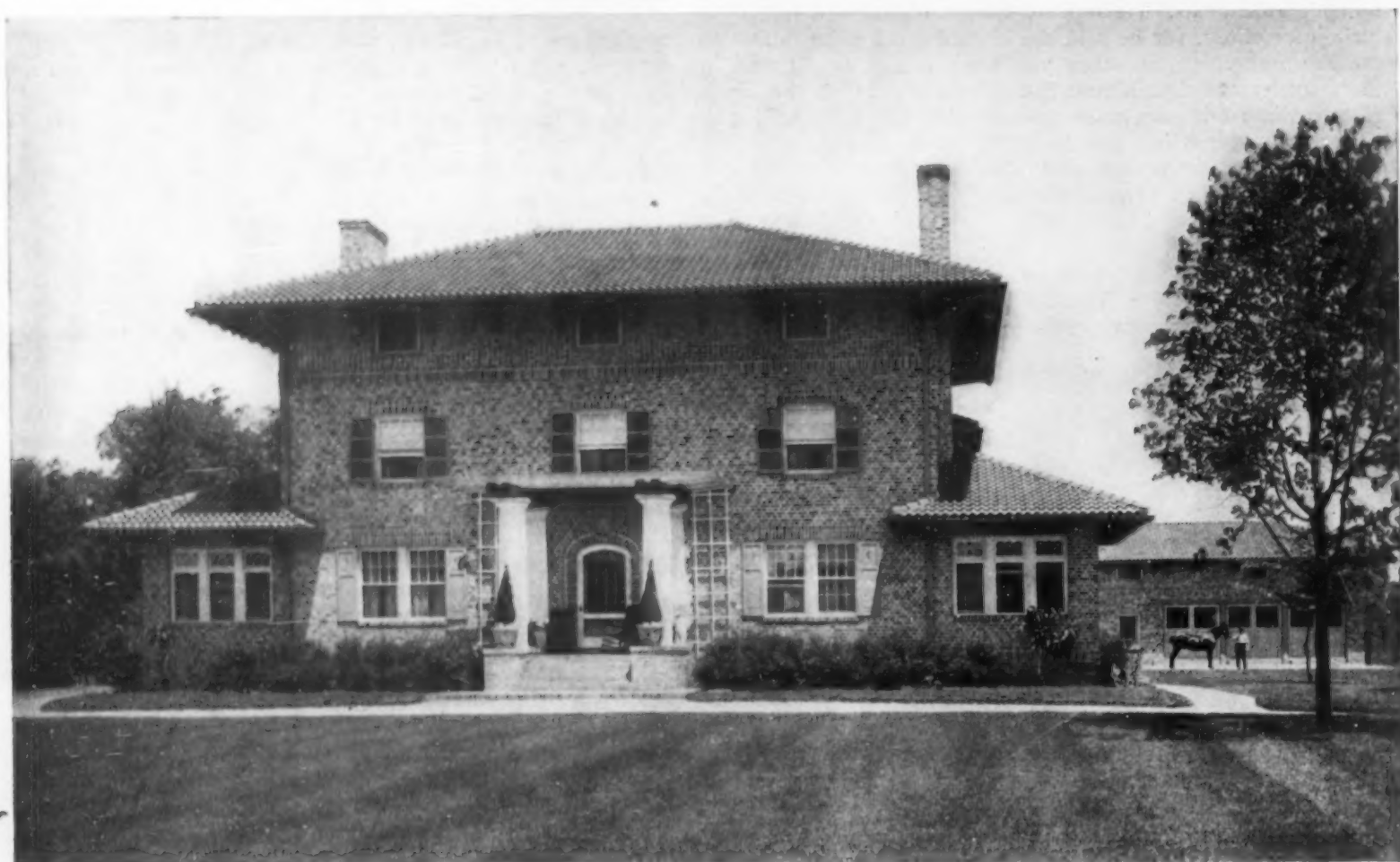
(Continued on page 230)



The sled, driven over a network of roads, saved distance in carrying the sap

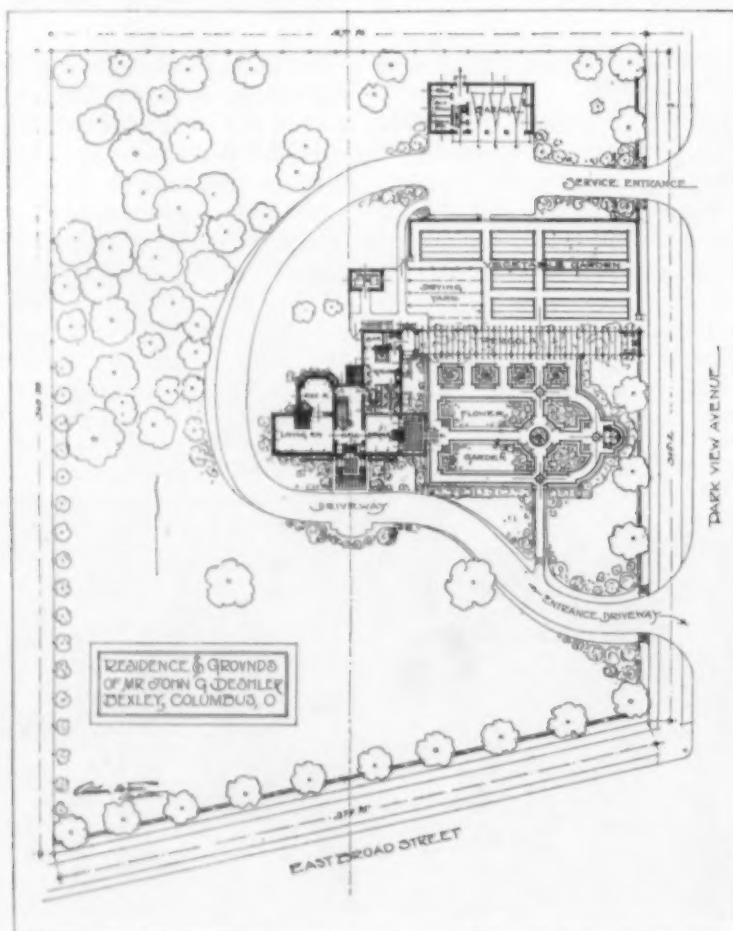


The receiving tank was fastened on a broad-runner sled, and fitted with a funnel-like opening with a strainer to keep out twigs and leaves



Even the photograph of Mr. Deshler's house shows how well the brickwork is used, not only to give color effect, but texture as well. The difference in the various units produces the appearance of a fabric. Above the course of upright stretchers the bricks are laid with just the headers showing, and some are laid in an interesting design as shown between the windows.

*A House of
Distinctive Brickwork*



From the front the house appears perfectly symmetrical, but the plan shows a variety in the rear where the reception room with its bay window looks out upon the wooded part of the grounds and the kitchen is extended toward the service yard and vegetable garden. All the space is made to tell, but beauty is not sacrificed in this economy and there is diversity of surface.

*Designed by
Arthur Ware, architect*

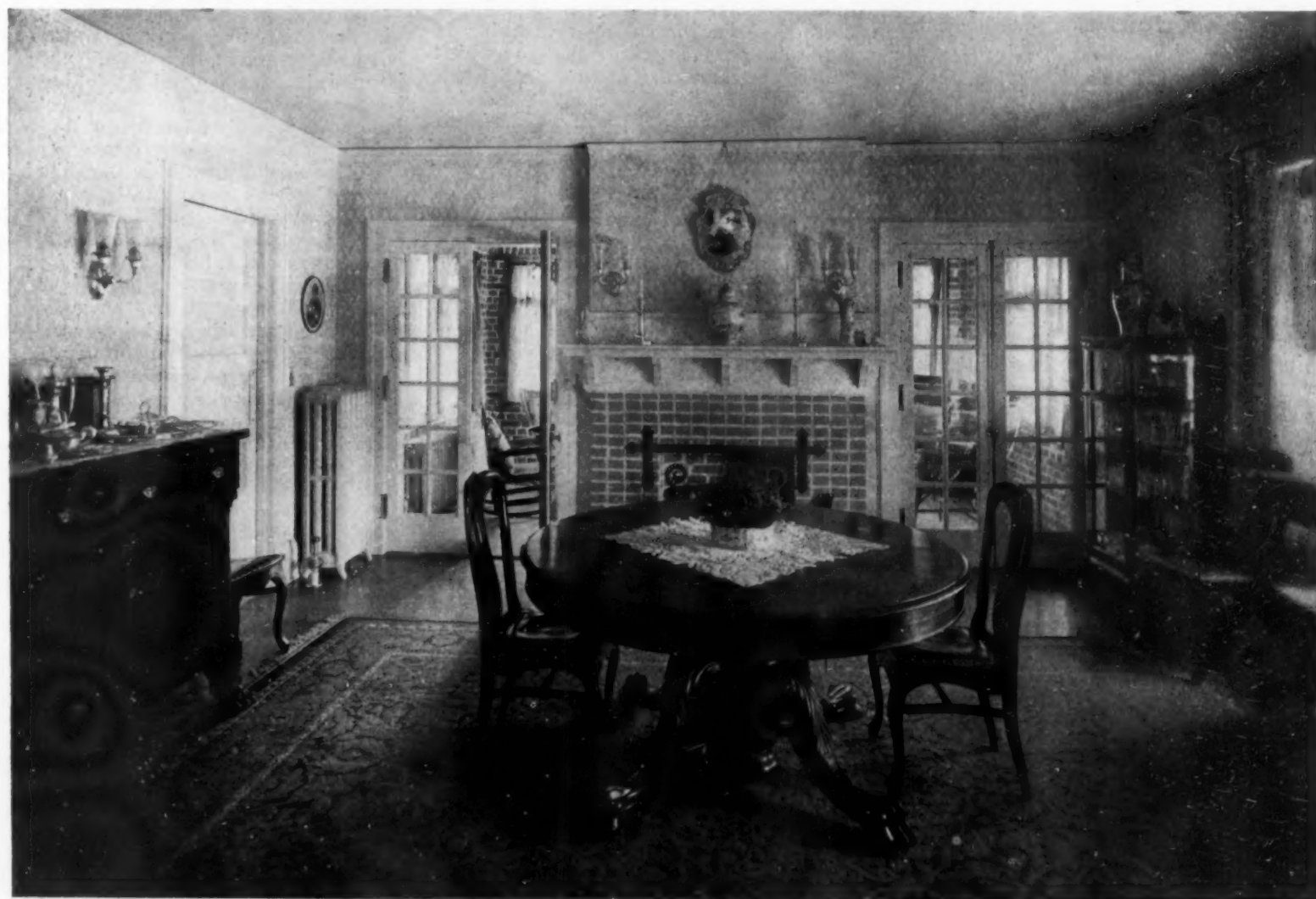
THE RESIDENCE OF Mr. JOHN G. DESHLER, COLUMBUS, OHIO



An interesting stairway treatment is shown here where the treads are enameled in white. A warm color is given in the stair carpet



When the entertaining possibilities of the living-room are overtaxed, there is a reception room of generous size available opening from it



The dining-room shows an effective use of simple details used in harmonious balance. The French doors open onto the sun room paved in tile. This provides an entrance way into the garden



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 New Chintzes

A NEW line of chintzes, put on the market recently, consists of reprints from the original handmade blocks a century old. A special feature of those chintzes is that some of them are glazed, like the "copper-plate" used by our great-grandparents as bedhangings and for other purposes. The glazed ones have the advantage of not needing to be laundered, for a considerable time at least, and used as window curtains and cushion covers, the material adds to the old-time effect desired in a modern Colonial bed-chamber. The old blocks, considerably left stored away by our English cousins of a hundred years ago, are constructed by the insertion of very small pieces of shaped copper ribbon driven into their faces, the interstices filled with felt or rabbit's hair. They are said to represent the high-water mark of hand engraving and to be practically impossible of duplication today. Those of us who possess pieces of the genuine old "copper-plate" are interested in this revival. It is suggested that a similar reincarnation of the printed scrims now in vogue would be acceptable. For attractive all-over patterns, scrim would make charming and inexpensive window curtains for the country home sleeping rooms.

Two Schemes for Hanging Baskets

THE task of taking down my hanging baskets for their nightly immersion in a tub of water, was irksome because of the strength necessary to lift the heavy baskets. I have now devised a pulley system which does the work with ease. The hooks which supported the baskets were set into the porch cornice about a foot below the ceiling; I screwed a small pulley into the ceiling above each basket, and fastened a strong cord to the handle of each basket, which was then passed up over the pulley, hanging down to the floor. A steady pull on the cord lifts the basket from the hook, when it may be gently and steadily lowered to the floor; another pull on the cord restores it to its former position on the hook.

Wishing to start some wire hanging baskets for the porch I found it impossible to obtain moss with which to line them.

Someone advised using fine screen wire, painted green. This held earth and plants securely and was not unsightly, yet had the appearance of moss-filled baskets. Others I filled with small sods, with the green outside: by keeping the grass carefully clipped I have good looking hanging baskets without moss.

Re-gluing Furniture

IF you have never been successful in re-gluing furniture so that it will stay glued, you may be in future by adding a coat of shellac or colorless varnish. It is the dampness attacking the glue which undoes the most careful work, and when this is protected by a coat of varnish (after the glue is dry) you will have no further trouble.

Marbleized Steps and Floors

PAINTERS say that the fashion of marbleizing front steps is coming back and that it may even extend to kitchen floors as was the case a generation or less ago. Young people of to-day do not know what a marbleized floor looks like, but

their fathers and mothers will remember the time when it was common for kitchen floors to be treated in this manner and when it was not unusual to find the floors in dining-rooms of attractive houses so decorated.

This is not a plea for the style, but only a statement of fact. That many people like it is shown by the report of the painting fraternity that more steps have been marbleized the past season than for years previously and the interest in this method of treatment seems to be growing.

Some painters do not know how to begin the work, but veterans at the trade have not forgotten. First the body color is applied, a strong yellow. When that has become dry, the painter takes a shingle in one hand and a brush full of white paint in the other and creeps across the floor, striking the brush on the shingle so as to distribute the paint in patches of widely varying size. When the white paint has dried, the performance is repeated, except that black paint is used. If the painter is expert, the result is quite a good imitation of marble.

When steps which are being marbleized are short enough so that the painter can reach all over them from one position, he does not wait for the paint to dry, but applies one coat after the other. First, however, he pins papers on any side wood work which may be exposed, for there is considerable spattering of paint.

A really new fashion in floors calls for stencil borders and is finding favor among many people. The stenciling is done in the usual way and if harmonious colors are used, the effect is good.

Cleaning Brassware

BRASS teakettles, or, in fact, any article of brass with the exception of Benares ware, can easily be cleaned in the following way:

First wash the brass well in suds made of equal parts of ammonia and water and soap. This will remove all dirt from the article, leave it free from grease and give it a semi-polish. Then an extra polish may be put on with a good brass polish. If the brass looks hopelessly tarnished, any good powder that is used for cleaning silver or brass, if moistened with vinegar



One of the glazed chintzes which are now being reprinted

and applied vigorously, will remove the tarnish and leave a shiny surface. This treatment does not apply to lacquered brass, which never needs cleaning.

Lamp Wick Hints

TO keep the wicks of oil lamps in good condition remove them from the burners once a week, put them in water containing enough washing powder to make a good suds, and boil them for half an hour or more. This will remove the oil and leave them bright and clean. Do not cut the wick to secure a better light, but turn it just above the tube and rub off the charred portion with a match.

Built-in Furniture

ALTHOUGH designed primarily for the purpose of saving space and expense in bungalows and small cottages, built-in furniture may often be employed with good effect in houses of a much more pretentious character.

In the Eastern States furnishings of this sort have heretofore been limited almost entirely to window-seats and book-cases, but in the West, notably in Southern California, where the bungalow is omnipresent, buffets, china closets, writing desks and even beds are as much a part of the woodwork as are the door jambs and window casings. In one sense it has been rather overdone and worked to death, particularly in California, the idea being to put up houses that require as little furniture as possible, so that the man of small means who wants to own his own home, or the winter transients who desire to go to housekeeping at small expense, may be accommodated.

At the same time, however, out of the mass of good, bad and indifferent furniture of this sort designed by bungalow experts there are excellent ideas that may be adapted to the house that is not necessarily of the bungalow type. This is particularly true of dining-room fittings. In a living-



A heavy willow jardinière frame of wide adaptation

room, with the exception of built-in book-cases, movable pieces of furniture seem rather more appropriate, but the dining-room lends itself admirably to the scheme for stationary furniture.

Primarily there is the china closet. China must be kept somewhere, but with the exception of the old three-cornered Colonial piece, the average china closet is an eyesore and a thing to be banished from a well-arranged dining-room. The built-in closet affords much greater space, is less conspicuous, and if properly planned adds not a little to the ornamental effect of the woodwork, for it can be made artistic.

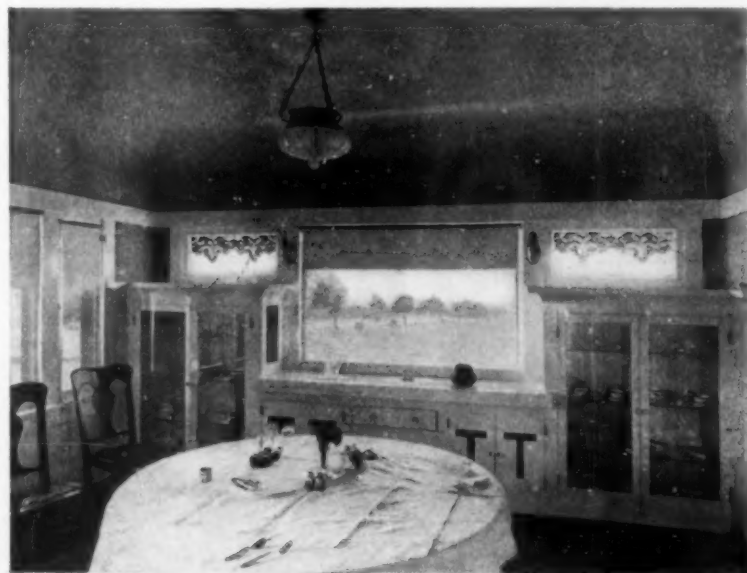
Of course a handsome sideboard of mahogany or oak is preferred to the built-in variety, but if there are limitations in floor space as well as in purse a buffet may be designed and built in connection with the china closet. It is not only satisfactory in appearance, but provides space for commodious drawers for silver and table linen, a feature not always to be found in sideboards, even those of massive construction.

China closets built on either side of the chimney piece make an attractive addition to a dining-room if a built-in buffet is not needed, and in many cases a corner cupboard matching the woodwork of the room, with leaded glass doors and shelves for holding china is a decided convenience even when the dining-room is well furnished with separate pieces.

A Hanging Frame for the Jardinière

ONE of the newer additions to the long list of things that help to make the outdoor living-room attractive is a substantial hanging frame for a jardinière of large size. It is a rather crude looking affair of heavy willow strips plaited and wrapped until they are capable of sustaining a very considerable weight, such as a jardinière filled with earth must of necessity be. In appearance the frame is thoroughly in keeping with its outdoor surroundings, however, is of course unharmed by wind and weather, and is suitable for jardinières of every description, whether brass, pottery or crockery.

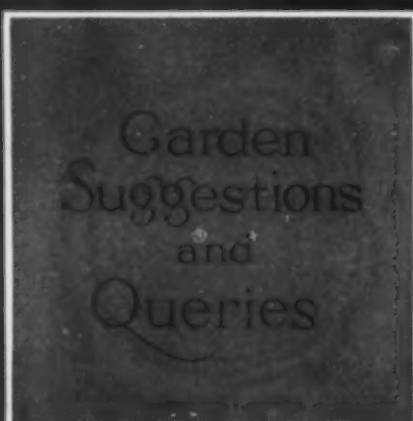
The willow is in the natural color but can easily be stained to match the color of the piazza if desired. The frame is about four feet high and can be placed on the floor and used as a stand for a jardinière that is to occupy a corner of the piazza, although it is primarily intended for a hanging plant. On account of its substantial construction vines growing in the jardinière may be trained over the large side handles as well as over the different sections of the main one with good effect.



A particularly good effect is given by the position and design of the built-in china closets in this well-lighted dining-room



Simplicity and usefulness are well combined in these cupboards and drawers, which are in harmony with the rest of the woodwork



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscribers' queries pertaining to individual problems connected with the gardens and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

MARCH, for the gardener, is about the most deceptive month in the whole calendar. It is deceptive in that, during such rough and uncomfortable weather, there seems to be absolutely nothing that one can do as far as gardening is concerned. The ground is still frozen hard or the mud is still deep, so that one does not feel like going out to remove the bean and tomato poles which were not pulled up last fall, as they should have been. Even when the blustering winds have dried the soil enough so that it will bear up a man's weight, one is apt to find that Jack Frost still has firm hold of anything that sticks down in the ground more than eight inches and the discouraged enthusiast returns to the shelter of the house with the feeling that this year spring never will come back.

The Big Task for March

MARCH, however, is but the calm before the storm. That may seem like putting the metaphor the wrong end to, but in reality it is not, for April is sure to bring a sudden flood of things insistent for immediate attention which annually swamps an army of unprepared gardeners.

First of all March is the month to get quick results, both actual and potential, out of your coldframe. Do not let yourself off with the statement that you have not the time to build or can not afford to buy coldframes and sashes. You cannot afford to be without them! Here for instance is an outfit which would cost you from ten to fifteen dollars, including the lumber for the frames, if you are willing to contribute personally the work of making the frames about which, when you once get it started, you will become more interested than Tom Sawyer's friends with his whitewashed fence. And I haven't a doubt that some enthusiastic neighbor will be dropping in to offer to help you with it, or at the very least show you how it should be done, before you get the first row of posts into the ground. What you would require for this standard outfit is one "double-light" sash, two sash, and three light frames which you can cover yourself with "protecting cloth," which can be had from reliable feed houses at

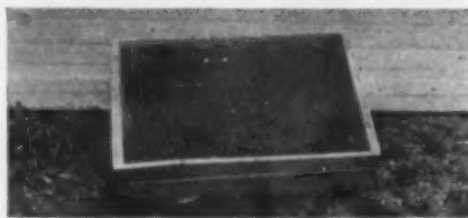
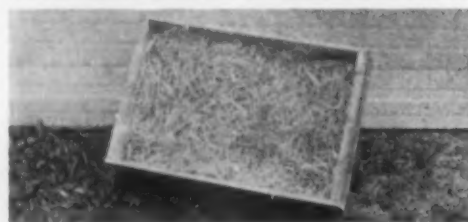
from nine to twelve cents a yard, according to the grade that you get. All these sashes are 3 x 6 feet in size. The frame, consequently, will be 18 feet 5 inches long, inside measurements, allowing one inch for the elbow on the cross bar between each two sashes. The frame should be about twelve inches high in front and six inches in the back; correspondingly deeper, of course, if you expect to add soil or manure to the inside surface of the soil. There should be a light board partition, such as you could make out of packing or cracker boxes, between the three different kinds of sashes. To support the frames, simply drive down two-by-four posts firmly at each corner, and about every five feet of the length of the frame. To cover all cracks between the boards, you can tack a layer of old newspapers over the outside—you can get a large bundle of these for five cents from your news-dealer—and bank earth up against this at back and front and both ends. Of course, the sooner you can get the frame

made and the sashes in place, the sooner the frame will be ready to use; but the returns from this little 6 x 8 piece of ground which can be used for a great variety of purposes, should be at least from eighteen to thirty dollars through the spring and early summer months; and that remember, is for one season only, and both frames and sashes will last for a great many years if you take care of them. One of the main uses for it, of course, is to take care of the overflow of seedling plants started earlier either in the house or hotbed, and that are now ready to transplant. Cabbage, lettuce, cauliflower and beet plants will be safe under the protecting cloth frames in an ordinary season, after the first of March. Extra early crops of lettuce, radishes, beets and carrots may be brought forward under the single glass sash and those covered with protecting cloth, while the glass is used elsewhere over more tender vegetables. The single glass sash may be utilized as a hotbed at this season for such tender things as tomatoes, peppers and egg-plants started therein. Seedlings and the cuttings of tender things for the flower garden should not be overlooked and the biennials and the perennials which may be treated as annuals should be included in the early plantings.

Prepare for Outdoor Planting

IF your seed order has not already been made out and forwarded, be sure to order at once the seeds of such vegetables as beets, turnips, radishes, extra early peas, and anything else that you will want to put in at the first planting, which is now not far distant.

It is surprising what a great number of potatoes may be had from even a few short rows in the garden where they are given very good care in the way of cultivation and spraying for bugs and blights. The latter job is a very easy one if you happen to possess one of the small compressed air tank sprayers which have become so popular during recent years. To have the earliest and biggest crop of potatoes possible, it is necessary to start the tubers before planting. To do this procure a number of ordinary flats, made out



Old boxes may readily be converted into inexpensive but serviceable flats

of boxes, and fill them about half full of medium coarse sand. Each box will hold enough for at least a hundred hills, as the potatoes are cut up into pieces containing one or at the most two eyes each, before they are placed in the sand. These pieces are made narrower and longer than when cutting for planting in the regular way. The lower half may be inserted in the sand and the upper half left above. They are packed in as tight as they will go without touching each other, a little additional sand is sifted over them, and they are watered thoroughly, and the boxes placed where they can receive plenty of light, preferably direct sunlight, and a minimum temperature of forty degrees at night. Within a few weeks the plants will be ready to set out and will be found to have made a remarkably large root growth and comparatively little top growth. If a sprout here and there seems to be getting too ambitious it may be pinched off when four or five inches high. When the sprouts are ready to plant, open the furrows three or four inches deep and place them in the bottom about thirteen inches apart with the roots turned down, covering tops and all where the latter are very short. In fact, if they are set out before all danger of frost is over, it is better to have the tops covered in this manner so that they will not be cut back in case Jack Frost happens to take a last look around before leaving for the season. For garden culture, where a horse will not be used, the ordinary varieties of potatoes may be planted as close as twenty-eight or even twenty-four inches apart between the rows with advantage, the more densely the vines may cover the ground and still have room to mature properly, the better it will be, as the ensuing shade saves soil moisture. In case of a severe and long-continued drought in June, it will be necessary to furnish some water to potatoes started in this way, as otherwise the little tubers which have set will not be enabled to develop.

Good Things for the Flower Garden

THERE are a number of very fine flowers which have not yet come into as universal use as they deserve, although they have been growing more popular every

year; chief among these, perhaps, are the new forms of tuberous begonias. One thing which has kept many people from trying these beautiful and very valuable flowers is that the bulbs cost anywhere from seventy-five cents to \$1.50 a dozen, and the growing plants about twice that amount. It should be remembered, however, that each bulb without any further expense and very little trouble, will live for a great many years, giving a handsomer showing each succeeding season. They should be started indoors as early in



A small but efficient hotbed for starting early plants

the spring as possible, in a warm place, putting each bulb by itself in a small pot, filled with a very light, rich compost. Water sparingly at first until growth starts, the concave side of the bulb being placed uppermost. As soon as the pot becomes filled with roots, change the plant to a larger pot, and continue to do this as often as the plant needs shifting. During the summer, plants need to be either kept in the pots or set out in the ground; in either case, they make a truly magnificent display.

Salpiglossis, which until the last few years has remained undeveloped, is another flower whose new forms are beginning to create quite a sensation as they become more widely known. This plant is very easily grown, is a free and continuous bloomer and the flowers are remarkable both for their wonderful velvety texture and the strikingly unique coloring and veinings. The seedlings, which are very easily grown, should be started indoors or in a hotbed early in the spring in order to get results early in the summer. They can, however, be started outdoors along with the main lot of the garden flowers in late April or May. However, if you can, get a package now, and sow a row or two in one of your seed boxes. Pot off the

little plants when they are large enough and keep them in a frame until about the middle of May, when they can go outdoors.

One still frequently sees a gladioli bed in which there appear nothing but the solid colored, small-flowered types which represented this genus of flowers twenty-five or thirty years ago. Still worse there are many gardens from which their tall, graceful flowers are missing altogether. This means a great mistake on the part of the gardeners, because even a single bulb of the wonderful new sorts which have been introduced so freely during the past years will make quite a gorgeous showing, and from that one bulb in the course of two or three years you can get a fairly large supply, as they propagate very readily indeed, and quite automatically.

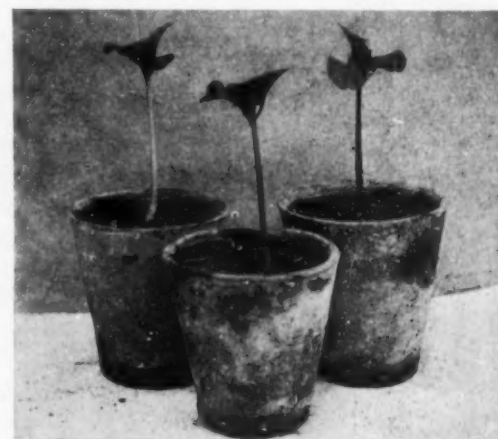
Proper Drainage and Irrigation

THERE are two kinds of garden insurance which many people neglect altogether, although they pay as big dividends as any investment which you can possibly make. The first of these is drainage; the second, irrigation. The water supply is an extremely important factor in the control of plant life of all kinds and the remarkable thing about it is that too much is every bit as bad as too little. Now the ordinary home garden, and the flower garden, and the lawn too for that matter, where the soil happens to be too heavy, could readily and cheaply be drained in most cases where the place does not happen to be situated in a hollow, and even then there is usually some lowest point to which the water could be conducted without much trouble.

Under ordinary conditions, a half-acre garden could be under-drained for from twenty-five to fifty dollars—probably nearer the first figure. The drains—round drain tiles with collars—should be placed at least three feet deep, and if they can be put four, it will be much better. The lines should be for the former depth, twenty to thirty feet apart, according to the character of the soil; if four feet deep, they will accomplish as much if put thirty to fifty feet apart—so it pays to put them in deep. Drainers may prove of the greatest benefit.



When started in pots, peas are arranged thus before covering



Cucumber plants may be started indoors in the early spring



EDITORIAL



HYPERBOLE ON FARMS

FORMERLY when one doubted the authenticity of a tale one made veiled allusions to its connection with the fish business—amateur let it be understood—and felt that a telling blow had been delivered against it. So the term has become a classification. We would urge a rival epithet with just a shade of difference in meaning—the back-to-nature yarn. We do not wish to imply that all the glowing stories of the return to the farm are fabrications—far from it—but we do wish to show that important considerations are neglected which by their omission completely change the color of the narration. The rosy portrayal of reaping a fat livelihood from five acres is misleading because it neglects the personal element, or the scale element, or banking on ideal conditions, fails to discount contingencies such as blight, bad season, or inclement weather.

There was a tale that stirred the imaginations of many by telling how a farm was made to pay. It described a city-bred individual who without previous experience went to the country and cultivated his land until it yielded a rich return. The plantings and their dates were given, there were specific details of varieties and care. All this was beyond dispute—for experiment station methods. But the profits were figured in the terms of a small patch less than an acre, and the inference was that were the same plans carried out on a sizable truck farm the returns would be merely a matter of multiplication. In the first place, the scrupulous care that netted extraordinary results could not be given to any but a very limited area without a great increase in the cost of production necessitated by extra labor and farm machinery. Next, the products had not been actually sold, but were reckoned in terms of their market value at a point quite distant from where they were grown. Middleman's charges, marketing expenses, and transportation were forgotten. Such discrepancies altered the story, and if any deluded individuals followed the sanguine instructions they were doomed to dismal failure. The plan was out of scale.

So run the other will-o'-the-wisp stories. They tell of results, under ideal conditions, and the one who follows their directions finds that he is thwarted by insurmountable obstacles. Rain, drought, freezing weather, an off-season for his crop, make infinite changes in the return. These things should be figured in by the man who looks hopefully to the country. What is more, the ever-present menace of a blight may change the credit balance to a heavy debit. This is not a pessimistic view of farming, but it is a caution to the one who rushes into it for a livelihood without a full knowledge of the extent of his undertaking. The farm stories are misleading also in their neglect of the personal element. They fail to make note of the fact that the novice farmer in the story is apparently as strong as a mule and has a capacity for fourteen hours of labor a day, and a bulldog tenacity of keeping at his work fair weather or foul.

All these are considerations that we think are necessary where a man changes his occupation and takes up farming as a *business*. If a farm is bought simply as an investment in happiness, they do not weigh so heavily, but when livelihood and income are dependent upon the land, such warnings are vital.

It is to clear away the mist of misapprehension in regard to farming as an occupation that we publish John Anthony's story. The Eldorado seeker is still enticed to disappointment as he was in '49. To-day the golden hope is a sinecure of broad lands sowed by scattering seeds to the wind and harvested with as little exertion as Lamb's roast pig was eaten. But it was no such luxuriant garden waiting to be harvested that made so many Western fruit growers successful. It was persistent work, well and intelligently and vigorously applied.

We think John's actual experience as interesting as the imaginary farm tales, besides being a real test. The first year he had good luck and scientific methods told well. This last year was the so-called "off year" for apples, and it required resourcefulness to turn failure into success. He glosses over no hardships and shows what work had to be done. He spent time in learning essentials at the summer school of an Agricultural College. To get results it meant long hours and constant exertion. Such a story will be inspirational to the man who honestly wants to become a twentieth century pioneer, to emigrate back to the land, but it will shy off the dilettante farmer, the seeker for easy and large returns, and in so doing save many a disappointment and loss.

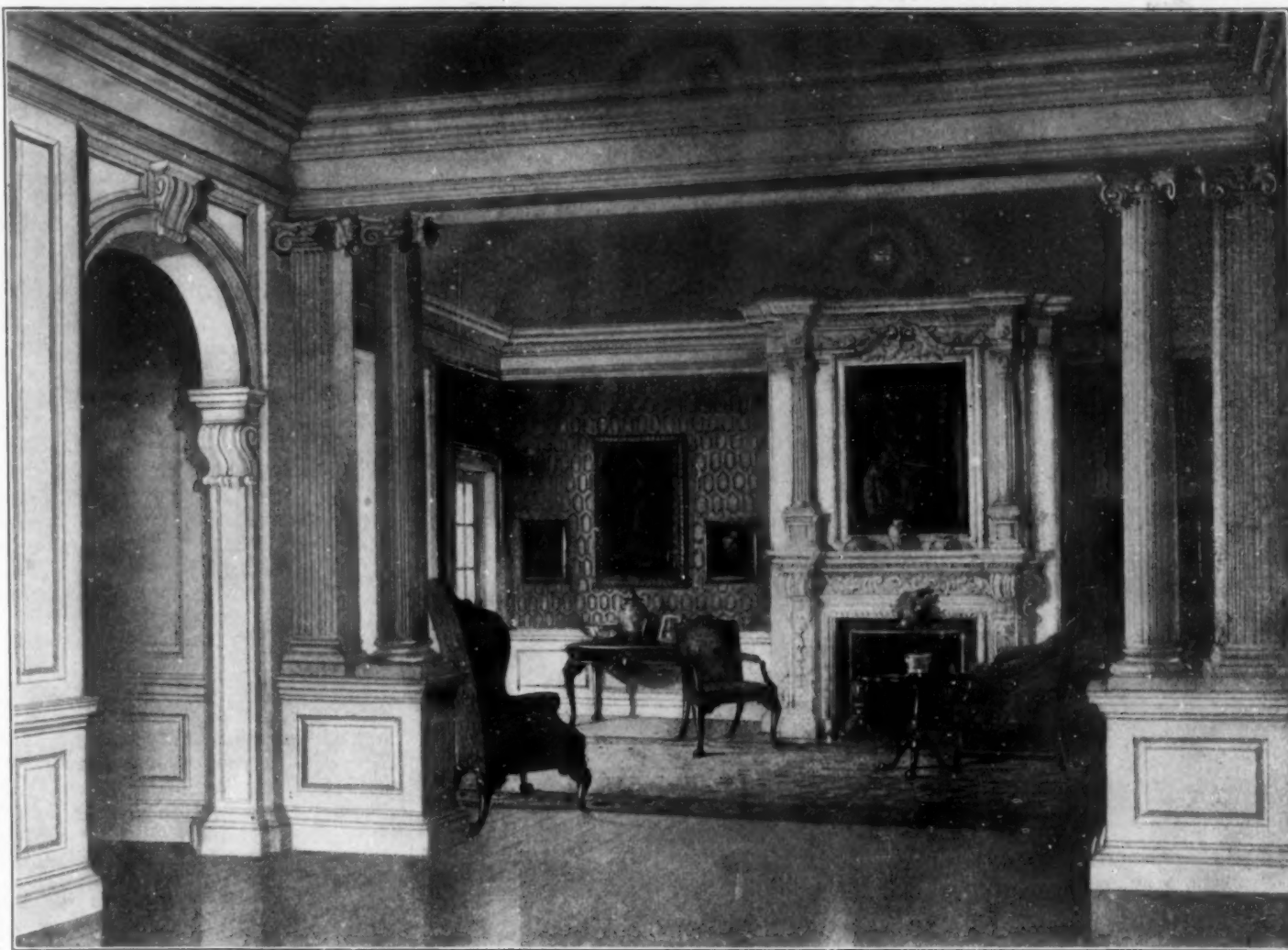
SUGARING-OFF TIME

WHAT a pity it would be if the seasons were lost to us, if life simply rolled on before the same background. To us the tropic's perpetual summer sunshine would be as unbearable as the continual arctic ice. One does not grow old simply by the tale of years; one may often count his youth by them, so why urge that death's-head warning of the Omar school—*Carpe diem*. The seasons' change, our one actual time marker, is not at all a melancholy event. Instead of sadly sighing: "Forty winters old," there would be a joy in smiling: "Sixty springs young." Everything that marks that change to spring is really welcome; worth cherishing. In other days each portent had its celebration apart from the grand festival of Spring's arrival. To-day almost all the festival spirit is left to children while they are young enough not to know any better than to believe in Santa Claus or enjoy the Maypole dance. No, dear reader, we would not dare the eternal ignominy of the twentieth century's direst curse "reactionary!" by suggesting any revival of Nature festivals. What we were approaching was a Spring festival that pays—we are not at all idealistic—in cash. It is the time of Maple Sugaring.

During those days when winter reluctantly retires step by step, often changing his mind and making ugly rushes back again to blow his frosty breath just upon the spot where the discarded camel's hair was thickest; in those fretful, doubtful days of long-ing comes the sugar season. And when you are in the midst of it you forget awhile, to awake and find yourself plump in the lap of spring with new pleasures due. I scorn the scientific doctrine of the reaction of the body every seven years. One is born anew with the flow of the sap each year. That is Spring's eucharist, the joyful celebration of the reawakening of life in Nature and in man. It gives a stir of new vigor to the woods that is reflected in the bodies of men in a more vigorous pulse beat, in a delight in muscular work.

In the country they still have "sugaring-off" parties. The nights are wintry, but the fire drives away the chill, and there is a light-hearted joviality that no indoor good time ever permitted. To eat the sweet jackwax and stir maple sugar is an annual treat looked forward to and remembered. The excitement of wild games played in the sap bush where the fire cast strange shadows over the icy remnants of winter snow, when seen in recollection appears Olympian. Surely the quality and taste of ambrosia was surpassed by the delicacy of boiling sirup poured on snow.

But it isn't the delicious taste of the boiled sirup or the sugar, it isn't the fascination of the night picnics that gives all the thrill; it is the magic time of the change in season. Even the men in the bush, working in the melted slush with the first warming sun above them, begin to feel it. Whether sap simply typifies this change or whether it infuses the spring vigor of nature, cannot be said, but it's worth while experimenting, even if there is only one solitary sugar maple near you.



The above illustration shows the Entrance Hall and Living Room of a Country Residence, in early Georgian style, designed by W. & J. Sloane

Country House Furnishings

The decoration of the Country House may be accomplished in a satisfactory and artistic manner by the selection of one of the early English styles of Decoration and Furnishing.

A specialty of our establishment is the designing and execution of such Interiors. Upon work of this character we bring to bear every facility of the most complete organization of its kind in the world—a staff of designers, decorators and artisans possessing the capacity to meet any requirement.

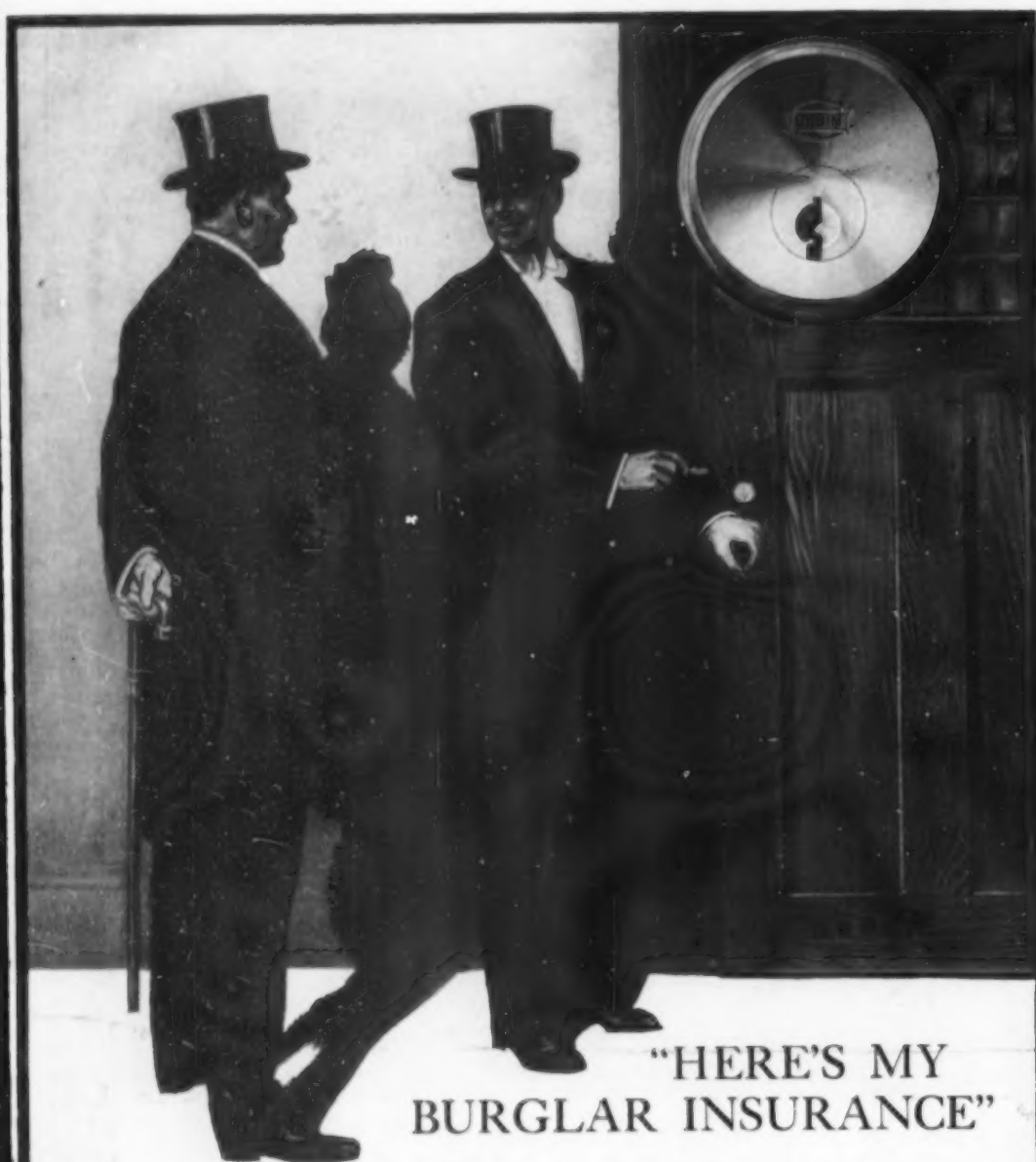
Our large stocks of Furniture, Fabrics and Floor Coverings for Country Homes afford the widest possible latitude for appropriate selection and the expression of personal taste.

W. & J. SLOANE

Interior Decorators - Furniture Makers

Fabrics and Floor Coverings

Fifth Avenue and Forty-Seventh Street, New York



"HERE'S MY BURGLAR INSURANCE"

That sense of security which banishes care accompanies the use of
Corbin Locks

P. & F. CORBIN

Division

The American Hardware Corporation
NEW BRITAIN, CONNECTICUT

P. & F. CORBIN
of Chicago

P. & F. CORBIN
of New York

P. & F. CORBIN Division
Philadelphia



Start a Fernery

Brighten up the deep, shady nooks on your lawn, or that dark porch corner—just the places for our hardy wild ferns and wild flower collections. We have been growing them for 25 years and know what varieties are suited to your conditions. Tell us the kind of soil you have—light, sandy, clay—and we will advise you.

Gillett's Ferns and Flowers

will give the charm of nature to your yard. These include not only hardy wild ferns, but native orchids, and flowers for wet and swampy spots, rocky hillsides and dry woods. We also grow such hardy flowers as primroses, campanulas, digitalis, violets, hepaticas, trilliums, and wild flowers which require open sunlight as well as shade. If you want a bit of an old-time wildwood garden, with flowers just as Nature grows them—send for our new catalogue and let us advise you what to select and how to succeed with them.

EDWARD GILLETT, Box B, Southwick, Mass.

The Further Adventures of John Anthony

(Continued from page 176)

had it." This year on just two occasions we were able to pick apples on two consecutive days! Rain came always on alternate days and often continued for several when it commenced, despite the "always" of pleasant weather. But Mr. West had opened up a channel of escape for some of my corked-up energy. I scoured the country, gathered in all the available help and we tackled those green apples. A single day brought more than a hundred barrels under cover. The enthusiasm was contagious and trees were denuded at a rapid rate. The next day all hands were on the hilltop at an early hour, and we threw ourselves into the work with the same vim. By ten o'clock it was raining! The next day and the next the wet weather continued. Then it was that the spirit of the orchard failed. My own faith broke down and, as if flashed by lightning, the vim of optimism and cheerful hope went out of that crowd. From that time it was fighting against depression and the work dragged. This is a tale of temporary defeat told because it may save someone else from being wrecked on the same rock. Success depends on the man at the head, and if he fails the enterprise will fail. Never allow yourself to admit failure, or even to think it, for, subtly, it will permeate every department and every worker on the place and the spirit that makes success will be lost. I was sunk in an abyss of gloom when I was lifted out of it by the unexpected arrival of Mrs. John. From that moment things began to pick up, and my sense of proportion came back. Mrs. John had been called away and I had had the fight alone. When she came back, she brought my courage with her, and conditions took on a new aspect. We had some apples up to our own standard, we had many just a little below it and a lot of second grade stuff. Plans had to be revised and methods upset for the marketing of them. My pet hobby of searching out the ultimate consumer with a fancy grade apple had to be largely postponed. So far as we had the apples we sought him. Even as I write this he is sending in duplicate orders for more of those "delicious apples." Prices in the city commission houses were worthless to me for any save high grade fruit, but the local market was wide open for seconds. I filled this up and put in the cellar enough apples to supply the winter and spring demand from the locality. The lessons of learning in an unusual season were high, but the returns nearly reached my first optimistic figures and brought an understanding of ways and means that is worth more than any possible financial loss. Never again can I allow myself the luxury of losing courage. With a crop one-fourth that of last year, I took in half the amount obtained by Hiram the previous season. Modern methods must win out in the end.

Lack of space forbids giving details of the rearrangement of packing house, wagons, picking baskets and methods generally. These were adapted to the conditions existing in my orchard, and without an exception worked well. Others must be made another year, but in this line everyone must work out his own salvation. Right here comes the joy of the problem, for it is constructive work, the building up of an organization that will do more work, better work, and do it with less effort than it has been done before. The various branches of the farm must be planned so as to work together, to dovetail one with the other. Time must be utilized whether it rains or whether the sun shines, always there must be jobs on hand and in mind so that sudden shifts can be made to meet changing conditions. It keeps one alive, alert and active in mind and body. It is to live.



The Hospitable Guest Room

(Continued from page 181)

fortable stooping over. Where it is at all possible it is acceptable to guests to find some sort of safe where a lady may put her jewels or a man his valuable papers without having to worry about them. It will avoid the necessity of having to contrive suitable places.

Another great desideratum in a guest-chamber is a spacious closet. If the house has electricity, a light may be so contrived that it will go on as soon as the closet door is opened. The closet should be painted white and enameled inside and above all things it should be kept absolutely unoccupied and free of any of the family belongings or clothing. Too often one finds a guest-chamber closet used by the hostess or some of her family as an overflow receptacle for clothes. A guest-chamber ought always to be kept in perfect readiness to receive a guest, whether one is expected or not, and when one does drop in without warning it does not conduce to a sense of welcome to have some member of the family come and fish out of the closet various things that have been forgotten. The same caution may be added about all drawers in the guest-chamber. In the closet there ought to be either a laundry bag or a hamper, and lastly, some means of ventilating the closet should be contrived where it can be done.

On the bureau or dresser the thoughtful hostess will provide a full complement of brushes, combs, handglass, a pin cushion full of pins, manicure things and all the trifling toilet necessities. These are particularly essential for the convenience of dinner guests or those who have unexpected occasion to stay over night. It is better that they should be of plain ivory or a substitute of some similar character rather than of more ornate workmanship,

WOLFF QUALITY PLUMBING GOODS

The built in Enameled Iron Bath is a marvel of beauty and cleanliness and together with the overhead shower and shampoo attachment make it an ideal bath. Goods bearing "Wolff" guarantee label and "Wolff" trade mark are a positive assurance against disappointment, dissatisfaction and loss.

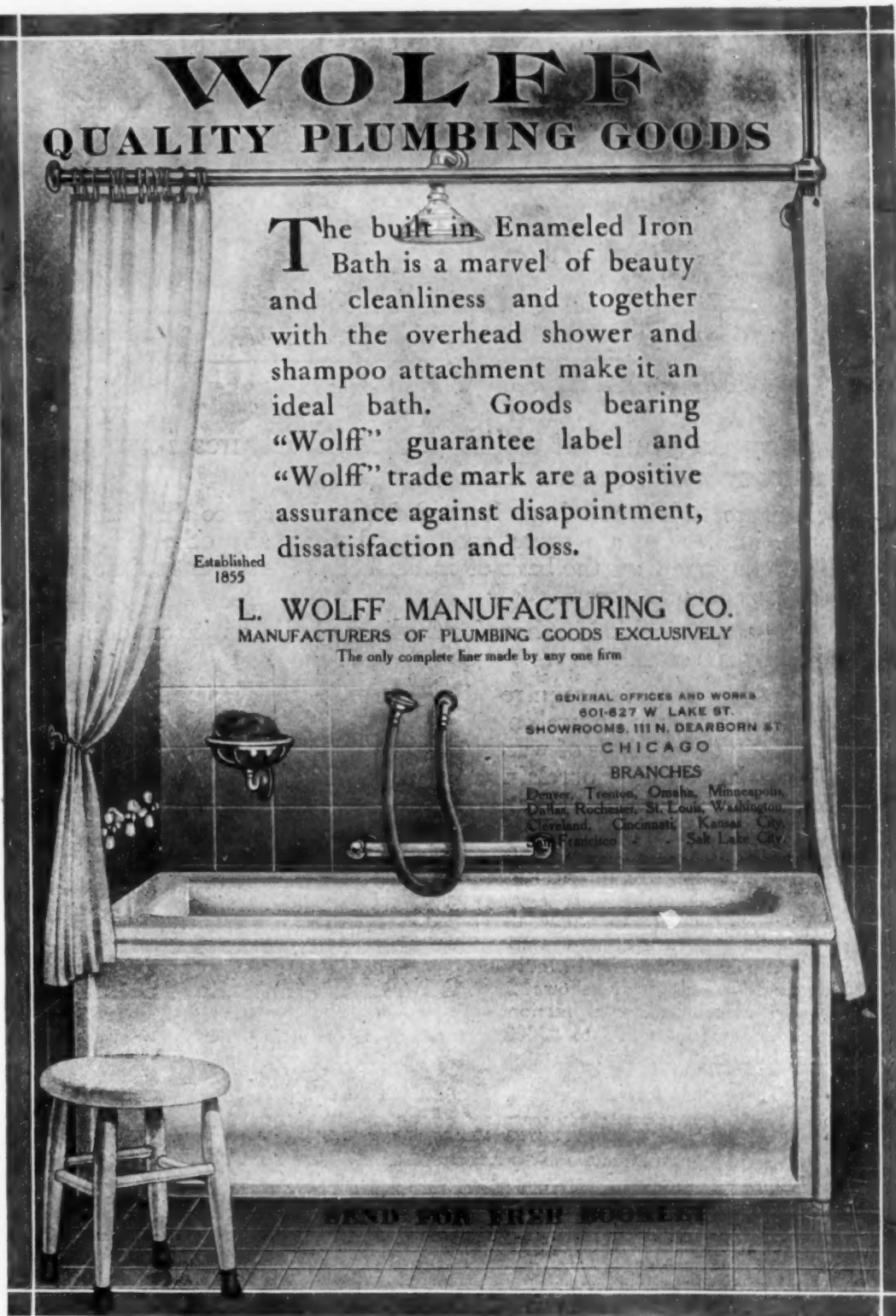
Established
1855

L. WOLFF MANUFACTURING CO.
MANUFACTURERS OF PLUMBING GOODS EXCLUSIVELY
The only complete line made by any one firm

GENERAL OFFICES AND WORKS
601-627 W. LAKE ST.
SHOWROOMS, 111 N. DEARBORN ST.
CHICAGO

BRANCHES

Denver, Trenton, Omaha, Minneapolis,
Dallas, Rochester, St. Louis, Washington,
Cleveland, Cincinnati, Kansas City,
San Francisco, Salt Lake City



To secure harmony with natural surroundings use

Dexter Stains

Stained with Dexter Stains
T. Gill, Architect,
Honolulu



Bring out texture and grain of the wood
Paint conceals the beauty of the surface, fades and blisters — costs twice as much. The special preservative oils in Dexter Stains add years to life of wood. The pure English ground colors cannot fade. The best finish for shingles and all outside woodwork. Recommended by leading architects everywhere.

Write for stained miniature shingles and Booklet A.
DEXTER BROTHERS CO., 115 Broad St., BOSTON

BRANCH: 1133 Broadway, New York

Also makers of Petrifax Cement Coating

AGENTS: H. M. Hooker Co., Chicago; F. H. McDon-

ald, Grand Rapids; Northern Brick & Supply Co., St.

Paul; F. T. Crowe & Co., Seattle, Tacoma, Wash., and

Portland, Ore.; R. McC. Bullington & Co., Richmond;

A. R. Hale, 818 Henson Bldg., New Orleans; Hoff-

schlaeger Co., Honolulu; and DEALERS



In writing to advertisers please mention HOUSE AND GARDEN.

MOTT'S PLUMBING



WHAT THE HOTEL MAN HAS LEARNED



Why do you find solid porcelain fixtures in the bathrooms of modern hotels?

Because hotel men have learned from experience that solid porcelain fixtures are more economical than any other kind when compared on the basis of initial cost, plus servant's time, plus the cost of upkeep.

There's a valuable hint here for the home builder wise enough to plan years ahead.

In order to meet all requirements, we make plumbing fixtures in three kinds of ware—Imperial Solid Porcelain, Extra Heavy Vitreous Ware and Enamelled Iron. Each has its proper use in bathroom equipment.

To enable others to know the strong points of each of these wares we offer an 80-page booklet, "Modern Plumbing." This book shows 24 views of model bathroom interiors, ranging in cost from \$73 to \$3000, with full description and prices.



One of the illustrations (reduced) from our booklet, "Modern Plumbing." Write for it.

THE J. L. MOTT IRON WORKS

1828 EIGHTY-FIVE YEARS SUPREMACY 1913

FIFTH AVENUE AND SEVENTEENTH STREET, NEW YORK
WORKS AT TRENTON, N. J.

BRANCHES:

Boston
Chicago
Philadelphia
Detroit

Minneapolis
Washington
St. Louis
New Orleans

Denver
San Francisco
San Antonio
Atlanta

Seattle
Portland (Ore.)
Indianapolis
Pittsburgh

Cleveland, O.
Kansas City
Salt Lake City

CANADA
The Mott Co. Ltd.
114 Bleury Street,
Montreal, Que.

so that they may be made fresh after the departure of each guest.

If at all practicable, there ought to be an open fireplace for warmth, ventilation and cheer, and on the mantel or somewhere else in the room a reliable clock with an unobtrusive tick and a way of silencing the strike. Some people do not like a clock in the room, so it had better be one that can easily be removed. At the windows it is best to have two sets of shades, the outer dark and the inner light, or else a double-faced single set, light on the side towards the room and dark without. As to the curtains, let them be simple, so that they may be often washed. Broad window sills are not only a boon but a necessity, for guests, time and again, like to spread things out in the sun and air. A French window with a balcony or porch outside, where clothes may be brushed and aired, is a great acquisition. A hardwood or painted floor with small rugs that can be readily taken up and beaten is preferable to a carpet, for then it is much easier to freshen up the room.

And now a word about making the room attractive and cheerful apart from its equipment of essentials. Give the guest-chamber the pleasantest outlook you can—let it be in the front of the house or in a wing quite away from the workings of the domestic quarter. If you are proud of your home you will wish your windows to show the most pleasing part of your surroundings to your friends. As for the room itself, if it can be spacious and airy, so much the better. At any rate, have the windows large and cheerful, so that they will let in plenty of light. If the guest-chamber is on the sunny side of the house, or at least where the morning sun will come in—at which time the guest is more likely to be in the room than later—he will doubtless enjoy the cheery warmth and light.

There are so many charming possibilities in wall-paper that it would be idle to attempt any suggestions beyond recommending that the design be light, simple and restful rather than of intricate pattern. As to color schemes, yellow is always cheerful in a north room and green acceptable in a south room, but here again there are so many possibilities that specific advice cannot be given in this place. Individual taste and conditions must determine the question. There should be few pictures, but those excellently well chosen, and there ought to be little if any bric-a-brac, for as a rule it is superfluous and catches dirt.

Some of the suggestions just given may seem unnecessary because the things suggested are so obviously essential, other suggestions may seem foolish because they deal with such trivial things. The first objection, however, is fully answered by the appalling frequency with which the obviously essential things are forgotten or neglected. All these things people *can* think of, but they do *not*. The second objection is met by calling to mind that it is the little thoughtful attentions, trifling in

1847 ROGERS BROS.

Spoons, Forks, Knives, etc., of the highest grade carry the above trade mark.



OLD COLONY
PATTERN

"Silver Plate
that Wears"

Guaranteed by the largest makers of silverware.

INTERNATIONAL SILVER CO., MERIDEN, CONN.
Successor to Meriden Britannia Co.

NEW YORK

CHICAGO

SAN FRANCISCO

Send for
catalogue "C25."

In writing to advertisers please mention HOUSE AND GARDEN.

themselves, but nevertheless sincere, that make us feel welcome.

The appointing of the guest-room need not be a matter of great expense, as stated before. With a little ingenuity and thought the hints above given may be adapted to individual needs. The main thing is to make your preparations in a spirit of consideration, remembering that the prime requisites of a guest-chamber are that it be cheerful, neat, homelike and convenient. Every hostess wishes her hospitality to be well spoken of and well thought of, and it is by attention to just such little things as those noted above that she is surest to realize her wish. It is not the mere material creature comforts that most please the guest, but rather the consciousness of welcome conveyed by all the little gratifying evidences of thought that has prompted attention to the minutest details.



The Proper Use of Dwarf and Standard Fruit Trees

(Continued from page 184)

furnishing apples for cooking and winter use, such as Baldwins, and depending upon the dwarf trees for a more limited quantity of extra choice fruit for dessert purposes.

From all this it may be seen that there are plenty of real uses for the dwarf and semi-dwarf trees, but no one should attempt their raising who is not prepared to give them proper conditions for growth and devote to them the necessary amount of attention and care.

Generally speaking, fruit on dwarf stocks may be grown where standards of the same variety are successful. One condition which all fruits require in standards as well as in the dwarfs is very thorough sub-drainage. Most of them will stand a great degree of cold, but a wet season is apt to prove fatal either to the crop or to the trees themselves.

Unless the trees are to be planted in a garden soil already rich, holes should be dug out to a considerable size and old, very thoroughly-rotted manure mixed through the soil before it is put back into them. If the trees are to be set in a row along a wall or a trellis, it will be better, instead of making individual holes, to prepare a trench or broad, deep furrow in the same way. Where the trees are to be grown against the wall two things must be avoided—although in Europe they do not have to pay attention to them because of the difference in climate. Do not plant them against the wall, but a foot or so from it and trained on a trellis, for in our hot summer sunshine the wall surface becomes so heated that it might be injurious to the branches trained against it and also training the limbs a few inches away from the wall gives more opportunity for a free

A. P. PAINTS

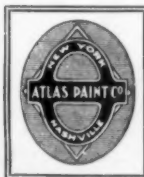


ROCK TOMB, THEBES EGYPT

UNDERWOOD & UNDERWOOD, COPYRIGHT

1913 B. C.—PAINT DISCOVERED

1913 A. D.—PAINT PERFECTED



For 4,000 years paint has been used by mankind
Every age has been one of progress and to-day
A. P. PAINT PRODUCTS are a standard of perfection



THE ATLAS PAINT CO.,

103 PARK AVE., N. Y.
H. N. BRADLEY, Pres.

NASHVILLE, TENN.
A. S. B. LITTLE, Gen. Mgr.

Write for new Catalog—B2

Write for our new Dealers' Proposition

Plant for Immediate Effect Not for Future Generations

START WITH THE LARGEST STOCK that can be secured! It takes many years to grow many of the Trees and Shrubs that we offer.

WE DO THE LONG WAITING—thus enabling you to secure Trees and Shrubs that give an immediate effect. Send for Price List.

ANDORRA NURSERIES BOX H CHESTNUT HILL
WM. WARNER HARPER, Proprietor PHILADELPHIA, PA.

Superlative Beauty

Is Not A Matter of Cost—
Hy-tex proves it

Hy-tex Brick

with its pliable, soft-colored units gives more beauty and individuality to a wall than is possible with any other material. You know the discoloration of stucco and the frailty of wood. Then reflect on the *permanence* of Hy-tex—its elimination of painting and repair costs! To make any judgment fair to yourself you *need* our new booklet "Genuine Economy in Home-Building." Send for your copy *today*—a postal will do.

Hydraulic-Press Brick Company

Dept. C, ST. LOUIS, MISSOURI

BALTIMORE, MD., 11 East Lexington St.
CHICAGO, ILL., Chamber of Commerce Bld.
CLEVELAND, O., Schofield Bld.
INDIANAPOLIS, IND., Board of Trade Bld.
KANSAS, MO., Rialto Bld.

MINNEAPOLIS, MINN., Security Bank Bld.
NEW YORK City, 381 Fourth Ave.
OMAHA, NEB., Woodman of the World Bld.
PHILADELPHIA, PA., Real Estate Trust Bld.
TOLEDO, OHIO, Ohio Bld.
WASHINGTON, D. C., Colorado Bld.



THE SUN ROOM

OF THIS HOUSE IS A DELIGHTFULLY AIRY PORCH IN SUMMER. FOR IT IS COMPLETELY ENCLOSED WITH ENGLISH CASEMENT WINDOWS—AND—THEY ARE AMERICANIZED, FOR THE OWNER WAS WISE ENOUGH TO EQUIP THEM ALL WITH OUR ADJUSTERS, WHICH ARE EASILY OPERATED FROM INSIDE THE SCREENS.

FOR A PICTURE BOOKLET, JUST POSTALIZE

CASEMENT HDWE. CO., 175 N. State St., Chicago

circulation of air and the proper application of sprays, etc., to all parts of the branches. If possible, don't train along a wall facing south, as in such a location the trees are pretty sure to start into bud prematurely in the spring and be injured by late frost. Where an exceptionally warm and sheltered location of this sort cannot be avoided it will be necessary to counteract the effect by sufficient mulching. I have a friend who has done this successfully by giving a big mulching of leaves and corn stalks around the base of the trees after the ground has become thoroughly frozen in winter and by shading the trees themselves from the warm early spring sun by pine boughs woven into a temporary rough wire trellis. This mulch is removed in the spring to allow thorough cultivation, but again spread on toward the end of June to conserve the moisture during the hot, dry mid-summer weeks. The trees should be so planted and arranged, especially in a garden where the horse and cultivator are used, as to allow continuous cultivation in one direction. That is, they should fit in with the rows of asparagus, small fruits, strawberry beds, etc., of a more or less permanent character, in order to make their cultivation as convenient as possible.

In buying the trees it should be remembered, as stated above, apples to be dwarfed are budded on either Paradise or Doucin stock. Pears are budded on quince stocks. Peaches are made somewhat smaller when grown on plum stocks. Plums are budded on Pumila or on the sand cherry, and cherries on Mahaleb stock. Apples and pears are, of course, the most important, and fortunately the best suited for growth in this way. Trees should be bought only from some nurseryman whom you have every reason to believe is reliable, as there is even more chance for you to be deceived on dwarf fruit trees than on the standard stocks. If you insist upon ordering from the itinerant fruit tree agent, it is more than likely that you will either get inferior stock or pay superior prices—or do both. Your fruit trees should be ordered early, but the best arrangement about shipping is to have that left to your instructions later, allowing proper time, of course, for transportation from the nursery to your express office, arranging to get them there as shortly after you have the ground prepared as possible, but not before. As far as possible try to select varieties which you know will do well in your own locality, on standard stock. If you have any doubt as to these and cannot find out from some nearby fruit grower write to your experiment station. Or if you cannot wait to do that, call them up on the phone. It may save you several dollars.

In planting the trees, after receiving your "stock," put it into the soil that has been prepared for it as soon as possible, being careful while you are doing so not to leave the roots exposed to wind and sun even for a short period. If for any reason it is impossible for you to plant the

trees at once, "heel them in," by digging a shallow trench in a shaded place, packing them closely into it and covering the roots with earth. In this way they will keep in proper condition until you are ready to use them. In planting, the trees should be set fairly deep, so that the point of union between stock and bud will be between three and four inches below the surface of the soil. In planting, the trees should, of course, be set very firmly into the soil, and the same raked smooth and fine on top after the operation is finished. Planting may be done in either spring or fall, but as a general rule, north of Philadelphia, it would be better to undertake it in early spring, especially where only a few trees are being set out, so that they can be carefully looked after and mulched during the first season.

The amount of space available and other local conditions will determine whether you want to grow the trees in their regular form or train them near a wall or upon a trellis. In the latter case, the growth is induced to take a lateral form, as far as possible. Even with dwarfs the results will depend very largely upon the thoroughness with which the pruning is done, especially in the early stages of growth. To induce the pyramidal form of growth, which is usually the best for dwarf trees, it is necessary to cut back the main shoots or "leaders" quite low down, thus inducing the more vigorous growth of the side branches, and leaving the tree with an open center. At the time of planting they should be shortened back about one-third in the usual way, and as soon as they become established the centers should be cut back to a height of from ten to twenty inches. If vigorous growth is made, these side branches should be headed in, leaving four or five shoots on each. These will, of course, tend to an upright position in making their growth. The following spring these shoots should be cut back severely—one-half will not be too much if they have made a vigorous growth—and in case they should be too thick remove some of the side branches from which they sprout. This severe pruning should be continued for three or four years, and the shoots should be gone over annually, early in the summer. All branches that crowd or cross should be cut out, and all those that seem to be making too vigorous growth should be headed back in order that the tree may be kept symmetrical. For best results in the fruit there should be free access of air and sunlight to all parts of the tree. Each spring, the annual growth of the year before should be cut back a third or more, as may be required to keep the trees in shape as small as desired.

Where the trees are to be trained upon the trellis, a somewhat different system has to be used. In the first place they should be planted almost directly under

A Durable Stucco

Stuccos are exposed to all kinds of weather conditions and must therefore be made of durable material.

Nothing is more durable than rock, and J-M Asbestos Stucco is made from Asbestos (which consists of ground asbestos rock and fibres). It is combined with Portland Cement, thus forming a tough exterior finish which will not crack or crumble as ordinary sand and cement stuccos do.



Residence of Mr. John Neuacheler, River Edge, N. J. Covered with J-M Asbestos Stucco. Wilder & White, Architects, N. Y.

J-M ASBESTOS STUCCO

is uniform in size and susceptible to a great variety of texture effects in the surface treatment. It dries an artistic gray-white which is permanent. J-M Asbestos Stucco is lighter in weight and can be applied more evenly, smoothly and cheaply than ordinary sand and cement stuccos. In prepared form it can be furnished in various shades of gray, buff and brown.

Write Nearest Branch for Catalog.

H. W. JOHNS-MANVILLE CO.

Albany
Baltimore
Boston
Buffalo

Chicago
Cincinnati
Cleveland
Dallas

Detroit
Indianapolis
Kansas City
Los Angeles

Louisville
Milwaukee
Minneapolis
New Orleans

New York
Omaha
Philadelphia
Pittsburgh

San Francisco
Seattle
St. Louis
Syracuse

Toronto,

For Canada:—THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED.

Montreal,

Winnipeg,

Vancouver.

1259

MORGAN

DOOR

GUARANTEED PERFECT HARDWOOD

The important part of a door—the part that makes it retain its original perfect form and beautifully grained, smooth-surfaced finish through many years of severe use—the part you can't see—is just the part of a

we would like best to show you. Dissect any Morgan Door, turn it inside out, examine it critically, and you will know why we are so willing to protect every purchaser with our liberal guarantee. And remember, Morgan designs set the fashion. Ask for Morgan Doors and insist on seeing "Morgan" branded on the top rail. All good dealers sell them and trustworthy architects specify them.

Morgan Sash & Door Co., Dept. B 6, Chicago, U. S. A.

Morgan Doors are described in detail and clearly illustrated in our handsome art book, "The Door Beautiful." Write for yours now, before you lay aside this paper. We want every intending builder to have a copy, free.

MORGAN COMPANY CO. Bosto., Md.

Architects: Descriptive details of Morgan Doors may be found in Sweet's Index, pages 910 and 911.

MORGAN



"Standard" GUARANTEED PLUMBING FIXTURES

THE home builder knows that when "Standard" Plumbing fixtures are installed in his bathroom, they represent the highest sanitary experience and skill—that better equipment could not be bought. They make the bathroom modern and beautiful and assure a *healthful* home. "Standard" fixtures should be specified always in preference to all others because of their unquestioned superiority.

Genuine "Standard" fixtures for the Home and for Schools, Office Buildings, Public Institutions, etc., are identified by the Green and Gold Label, with the exception of one brand of baths bearing the Red and Black Label, which, while of the first quality of manufacture, have a slightly thinner enameled, and thus meet the re-

quirements of those who demand "Standard" quality at less expense. All "Standard" fixtures, with care, will last a lifetime. And no fixture is genuine unless it bears the *guarantee label*. In order to avoid substitution of inferior fixtures, specify "Standard" goods in writing (not verbally) and make sure that you get them.

Standard Sanitary Mfg. Co.

Dept. 40

PITTSBURGH, PA.

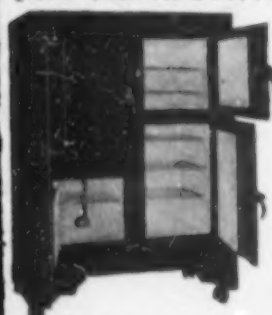
New York . . . 35 West 31st Street	Cincinnati . . . 633 Walnut Street	Hamilton, Can. . . 20-28 Jackson St. W.
Chicago . . . 900 S. Michigan Ave.	Nashville . . . 315 Tenth Avenue, So.	London . . . 57-60 Holborn Viaduct, E. C.
Philadelphia . . . 1215 Walnut Street	New Orleans . . . Baronne & St. Joseph Sts.	Houston, Tex. . . Preston and Smith Sts.
Toronto, Can. . . 59 Richmond St. E.	Montreal, Can. . . 215 Coristine Bldg.	Washington, D. C. . . Southern Bldg.
Pittsburgh . . . 106 Federal Street	Boston . . . John Hancock Bldg.	Toledo, Ohio . . . 311-321 Erie Street
St. Louis . . . 100 N. Fourth Street	Louisville . . . 319-23 W. Main Street	Fort Worth, Tex. . . Front and Jones Sts.
	Cleveland . . . 648 Huron Road, S. E.	

it, that is, so that the main trunk will grow close to the wires and not several inches away. After planting, when growth starts, the main trunk should be cut off a few inches above the first wire and three buds allowed to develop. One of these is trained along the wire on either side of the trunk and the third encouraged to make an upright growth as far as the next wire, where the same process is used; that is three buds are left here, two of which are trained in either direction on the second wire, and the third bud which should preferably be on the opposite side of the trunk from the one below it, up to the third wire, etc. The shoots which start from the lateral branches should be kept cut back to four or five inches, saving only one out of every two or three so they will not be too close together. Every spring, as soon as the buds are well started, all those which are not desired should be rubbed off before they make any considerable growth, as this is not only very much easier but also saves the strength of the tree for the growth which is retained.

As regards the general care of dwarf fruit trees they are not very different from the standards except that in order to be at all successful they must be given excellent care in every way and that it is generally necessary to thin the fruits; an operation which as far as standard trees are concerned does produce better results, but which is not usually attempted on account of the difficulty of doing it thoroughly. With the dwarf trees, however, it is not only necessary, as they have the habit of setting two or three times the fruit which they have strength to develop—but they are much more easily thinned, as most of the fruit spurs may be reached from the ground or at the worst from a step-ladder. The thinning may be accomplished by removing part of the fruit spurs, or a half or more of the fruits themselves after they have set and made some growth, which will be before the first of August.

Not only should the soil be made rich before the trees are set out, but they will need yearly attention in the matter of fertilization thereafter. As with standard fruits, green manuring with clover or some leguminous crop, especially during the latter part of the season, will be beneficial, and the soil should not be allowed to lack in potash. When there does not seem to be a rapid healthy growth in the spring a light application of nitrate of soda will usually be found of great service. Above all things the spraying must not be neglected, and where it is so easily accomplished, there is absolutely no reason for doing so, especially with efficient ready prepared sprays of various sorts which are now to be had from many sources. Before using any of these, however, I would strongly advise the fruit grower to get the report of his experiment station

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 Tettensborn 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 AND GARDEN.

upon spraying and sprays in order that he may see for himself from actual and carefully tried experiments what preparations are likely to give the best results. The percentages of efficiency obtained from the various preparations are sure to prove not only an interesting but in all probability, a money saving study.

The growing of dwarf fruits offers one of the greatest fields for the development and use of the skill of the amateur; and the rewards which he may obtain therein for his labor will certainly be among the most highly prized.



Ornamental Tub Plants

(Continued from page 178)

half pound of alum lumps to a bushel of soil being the simplest application. Iron filings treated with muriatic acid is another method.

Good turfy loam well enriched with well decayed cow manure suits them as to soil, and an open, sunny position in summer. In winter the hydrangeas should be stored in a light, cool cellar and given only enough water to prevent the roots drying up; in summer water should be freely supplied.

The lantanas are remarkable bloomers showing many attractive shades of color. They make neat, symmetrical plants, usually as broad as high and continue in bloom the entire summer. They are of the easiest culture and do best on the east side of the house where they have the morning sun. In winter the plants may be stored in a frost-proof cellar and treated much the same as hibiscus, requiring rather more warmth than the hydrangeas.

The lantanas are easily raised from seed which should be started in flats in the house or green-house early in March and potted when the plants have two pairs of leaves. They should be shifted rapidly from pot to pot as they fill them with roots until the time comes for putting them outside, when they may be given a twelve-inch pot or larger and will soon be in bloom. I have raised from spring-sown seed plants which by mid-summer were two feet or more in diameter and covered with a mass of flowers.



The Epicure in the Garden

(Continued from page 189)

The mushroom house is a shed set against the side of a north wall, and a hot-water pipe, used only in severe weather, however, goes through it. The bed is composed of good horse-dung and loam, and is renewed from time to time when one lot of spawn seems worked out. Roots of rhubarb and chicory stand on the floor



Pure Food

The pleasure of afternoon tea or of any meal is heightened by the satisfaction of serving dainty foods which you know are pure. You can be sure that all provisions will be kept delightfully cool, fresh and untainted by odors or decay if you put them in a modern, sanitary

McCray Refrigerator

Germs cannot thrive in the clear, cold, dry air that is constantly flooding every portion of the interior of the McCray. Easiest cleaned linings of opal glass, porcelain, enamel and odorless white wood. No zinc is used.

The McCray is the quality refrigerator with every refinement of construction to make it the highest achievement of convenience, healthfulness and satisfaction. Perfectly fitting doors, thick scientific insulation, finest cabinet work with beautiful finish.

The outside icing feature which may be added to any McCray keeps the ice man from tracking up the kitchen floor. Special equipment for ice water cooler and handy racks for cooling bottled beverages may also be included. U. S. Pure Food Laboratories and the most luxurious residences and institutions in the world use the McCray. A wide range of stock sizes offers a choice to suit the smallest or largest family. Every new or remodeled house should have a special built-in McCray Refrigerator.

Write for free book "How to Use a Refrigerator" and any of the following catalogs:

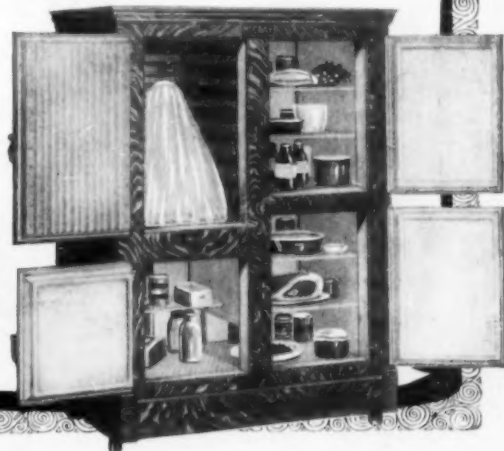
No. 90—Regular Sizes for Residences.
No. 73—For Florists.
No. 49—For Hotels, Clubs, Institutions.
No. 69—For Grocers.
No. 60—For Meat Markets.
No. A.H. Built-to-order for Residences.

McCray Refrigerator Co. 593 Lake St., Kendallville, Ind.

Salesrooms in the following cities:

Chicago, 158 No. Wabash Ave. New York, 231 W. 42nd St.
Philadelphia, 206 So. 11th St. Boston, 52 Commercial St.
Cleveland, 1915 Euclid Ave. Detroit, 239 Michigan Ave.
Milwaukee, Water and Sycamore Sts. Minneapolis, 108 N. 6th St.
St. Louis, 304 No. Third Ave. New Orleans, 225 Baronne St.
San Francisco, Geary and Stockton Sts. Washington, 611 F St., N. W.
Louisville, 643 So. Fourth Ave. Pittsburgh, 114 Market St.
Columbia, S. C., Main St. Atlanta, Ga., 82 Marietta St.
Cincinnati, 803 E. 4th St. Indianapolis, 1116 Prospect St.

For branch salesrooms in other cities see your local phone directory.



REPUBLIC

LAWN FENCES

You will save money and get the strongest, most attractive wire fence ever built when you buy Republic Lawn Fence, besides adding to the value of your home.

Extra heavy weight, thoroughly galvanized wire, close, even spacing of pickets and cables, self-adjustment of uneven ground, and sag-proof construction, are distinctive features of superiority.

Made in many styles. Easily put up—wood or iron posts.



REPUBLIC HERCULES FARM GATES

have no equal for quality and price. Heavy, high-carbon tubular steel frames free from holes. Automatic, stock-proof lock, adjustable raise bar.

Heavy rust-proof fabric. Big catalog and information FREE. Write today. Republic Fence & Gate Co., 37 Republic Street, North Chicago, Ill.

No-Rim-Cut Tires 10% Oversize

We're Building This Year for 500,000 Cars

At this writing the output on Goodyear automobile tires exceeds 6,000 daily.

As fast as possible we are bringing the output up to 8,000 tires a day.

For the evidence is that this year's demand will call for 2,000,000 tires.

Half the New Cars

Our contracts with makers insure, at the minimum, that nearly half of this year's new cars will go out with Goodyear tires.

Forty-three per cent. of all show cars had them at the New York Show.

And the present demand for these favorite tires is seven times larger than two years ago.

What Did It?

Ask yourself what brought these tires to the topmost place in Tiredom. Remember that men are not buying tires blindly. These are days of odometers. Men are comparing tires.

These hundreds of thousands who have

come to the Goodyear must have a reason for it. And that reason, you must own, is based on mileage records.

Men, in these days, insist that tires shall not rim-cut. And that means Goodyear No-Rim-Cut tires.

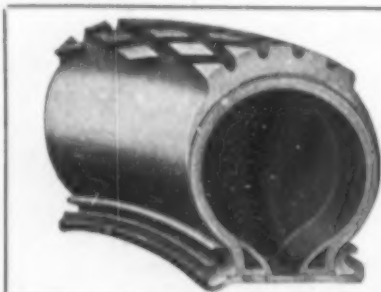
They know that oversize means extra mileage. And No-Rim-Cut tires are 10 per cent. oversize.

Please Find Out

For your own sake, find out this year why Goodyear tires far outsell all others. Other motorists have tested out almost 2,000,000 Goodyears. Their verdict is shown by our present sales records.

This verdict, agreed with by hundreds of thousands, is sure to be your verdict also. And the average saving to those who know it is almost half one's tire bills.

Write for the Goodyear Tire Book—14th-year edition. It tells all known ways to economize on tires.



GOODYEAR
AKRON, OHIO

No-Rim-Cut Tires
With or Without Non-Skid Treads

THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio

Branches and Agencies in 103 Principal Cities. More Service Stations Than Any Other Tire
We Make All Kinds of Rubber Tires, Tire Accessories and Repair Outfits

Main Canadian Office, Toronto, Ont.

Canadian Factory, Bowmanville, Ont.

(984)

Don't Raise the Sash— Just Turn the Little Crank

and open, fasten at any angle, or close and securely lock your shutters from the inside, without exposing yourself to the weather. Install the MALLORY SHUTTER WORKER. Attractively finished to harmonize with the woodwork. Ready to attach to any shutters of any old or new, frame, brick or stone dwelling. A Home Comfort for the Women-Folk. Write for booklet.

Mallory Manufacturing Co. 255 Main Street
Flemington, N. J.



In writing to advertisers please mention HOUSE AND GARDEN.

here, covered with upturned barrels, when needful, for blanching. Here also I make experiments with blanching dandelion for our first spring salads.

As to the commoner kinds of vegetables—carrots, turnips, onions, and the like—we manage them somewhat after this fashion. Early carrots are sown in the hotbed in the last week of February, and after thinning out we have them ready for the table by the beginning of June. The usual spring sowings are also made out of doors later. In August we sow the Scarlet Horn in a warm border, thin out in September, and have them left in the ground all winter, so that when pulled they are crisp and fresh. Turnips fare much the same, but as we value the tops almost as much as the "roots" we sow them more liberally. One crop of parsnips is raised in the summer and stored in the ground for the winter.

A few beets of the Globe variety we grow in a frame for those special dishes which Charlotte prepares so daintily, but the row of beets for salad purposes and winter use make their growth in the usual way. We are experimenting with a variety called the Seakale Beet, and have succeeded in rearing some fine plants; these make a delicious dish when cooked after the manner of ordinary seakale. The upright fleshy stems are stripped of their leaves, and the stalks have a very pleasant mild flavor.

Chicory is sown in the open ground in May, and the roots lifted and taken into the mushroom house in November. The roots themselves are never eaten, but they quickly make a top-growth, and if this is produced too fast it is checked by taking them to a cool cellar.

The cauliflowers, which we sow out of doors in August, are protected with lights, so as to have them ready for cutting at the beginning of November. Those which are frame-sown in spring, and planted out in the open in May, give us a supply for the summer. Of onions we grow only small varieties, sowing a fresh pinch of seed very frequently, as Charlotte, wise woman, eschews the use of large onions in her cookery, and in winter she will have only shallots. To please her we also grow a little garlic, but I have to watch warily lest the susceptible nose of the Better Half be ever offended by an over-dose of the pungent aroma. It is but rarely that she proves indiscreet. We, on the other hand, are very partial to the delicate flavor of chives, and constantly desire her to use the herb; also we praise her warmly whenever leeks are introduced, and, indeed, we think there are few things nicer than a dish of fine white leeks with a creamy sauce. Charlemagne is an expert in the production of good leeks; he loves nothing better than to sit on an old stool snipping and cutting young leeks for planting out, and takes great uncton to himself when he has set out a row, regimentally precise, in a trench.

Another delight of his is to bring me a perfectly-shaped lettuce, Romaine or Cos,

when it is well blanched and firm of heart. Such are not so easily cultivated as one might imagine, for they call for patience and exactitude, but Charlemagne considers himself an example of both these virtues. Endive he troubles less about, and thinks it sufficiently well cared for if covered over with an empty flower-pot, while Batavian endive he utterly despises. But, then, he has never been in Dutchland, and I have.

Dwarf peas we sow in pots and place on the greenhouse shelf early in January. As soon as they have made a fair growth they are brought lower down, and are kept well fed with liquid manure and then staked. Successive sowings take place in the warm pits, and from the beginning of May until the outdoor ones are ready in July we are able to gather a good dishful of peas each week.

We have proved that French beans could be grown pretty well all the year round, where a temperature of sixty degrees can be maintained, but we have not found it needful to keep them going all winter, as before the frosts come we pick a quantity and salt them down in large earthen crocks, putting a layer of salt and one of beans alternately, then filling the crock with water. The brine is occasionally poured off and renewed. If the beans are taken out and washed, then left to lie in cold water for two or three hours before cooking, their flavor is very little inferior to those just gathered from the garden.

Salsify, celeriac, cardoons, maize, and a great variety of dried beans and lentils we keep by us in the storeroom in winter; nearly all of them have been grown on our own land. A bagful of chestnuts comes to me every year from Italy, and very delicious is the *purée* which they make, also the dessert of boiled and peeled chestnuts eaten with sweetened cream.

Since Charlotte has revealed to us what delicious soups pumpkins can provide, I am amazed that so few people grow them. They keep moist for a long time when hanging in the storeroom, and this golden *purée*, garnished with crisp morsels of fried bread, is a welcome sight on a cold winter's day.



Gooseberries and How to Grow Them

HARDY, useful and easy of cultivation in almost every district, gooseberries are worthy of the most careful attention. They are often planted closer together than is advisable, and are left either unpruned or pruned carelessly. The former mistake can be readily corrected, even in a row already formed, but the latter is more difficult to deal with, especially after a few years' neglect. In the case of gardens from which some revenue is to be de-

A CEMENT PORCH LASTS FOREVER

It cannot depreciate, will not rot, is unaffected by exposure to the weather. It costs little more than wood construction, and the outlay is a permanent investment, without a dollar for repairs. Cement structures are simple and beautiful. They fit in well with any clean cut architectural design. The soft tints possible in concrete blend harmoniously with houses of any color.

We Invite Inquiries

for booklets and assistance in planning and executing concrete work. Write us for information on any subject relating to the use of cement. Our experience is at your disposal. The following free booklets are full of interest and information.

Concrete Silos Concrete Sidewalks
Concrete Surfaces Concrete in the Country
Small Farm Buildings of Concrete

When you build of concrete, you will make no mistake in using

UNIVERSAL PORTLAND CEMENT

It is always reliable

UNIVERSAL PORTLAND CEMENT CO.

Address nearest Office:

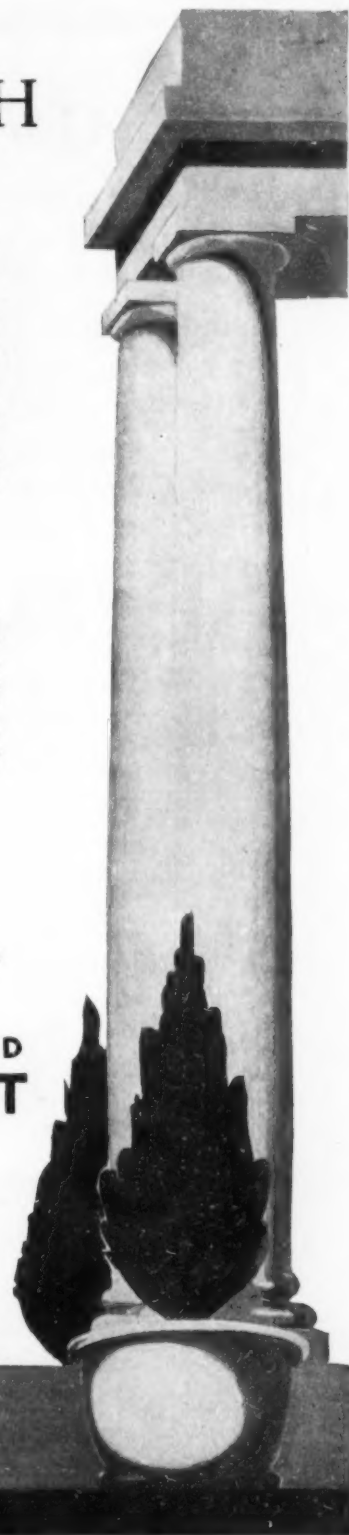
CHICAGO
72 WEST ADAMS STREET

PITTSBURGH
FRICK BUILDING

MINNEAPOLIS
SECURITY BANK BUILDING

Plants at Chicago and Pittsburgh

ANNUAL OUTPUT, 12,000,000 BARRELS



Vitralite
THE WHITE ENAMEL

Andromeda Sorrel Tree Fine Specimens
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N., Connecticut



WATER LILIES

Subaquatic Plants, Trees and Shrubs, Hardy Evergreen, Azaleas, Rhododendrons, Ornamental Grasses, everything suitable for the water garden.

Hybrid Tea Roses, flowering all summer until frost. Hardy Golden Vinca (golden myrtle.)

Wm. Tricker, Water Lily Specialist Arlington, N. J.

Your Guests

will appreciate the refinement of your home, you and they will be relieved from embarrassment, if the closet in your bathroom is a properly installed



Trenton Potteries Company

SIWELCLO Noiseless Siphon Jet Closet

This closet is noiseless because we planned it to be noiseless. It did not just happen that way.

Moreover, it is thoroughly sanitary, flushes perfectly, has deep water seal and is made of Vitreous China, with the texture so compact that, even without the glaze, acids, etc., cannot penetrate it.

Trenton Potteries fixtures of Solid Porcelain and Vitreous China in your bathroom give to that room the touch of refinement that fine China and Cut Glass do in your dining room.

Ask your architect or plumber about Trenton Potteries Vitreous China and Solid Porcelain.

May we send you our new free illustrated book \$8, "Bathrooms of Character," giving particulars? Please send us your name and address at once.



The Trenton Potteries Co.

Trenton, N. J., U. S. A.

The Largest Manufacturers of Sanitary Pottery in the U. S. A.



CHEAP AS WOOD

40 Styles. All Kinds of Fences.
No Agents. Catalog Free

UP-TO-DATE MFG. CO.
BOX P, TERRE HAUTE, IND.

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 natural
color. Also
pure wool, dyed in
any color or combination
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.

Christmas Roses

Six Varieties

Send for Catalog.

The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

HORSFORD'S COLD WEATHER PLANTS

and Flower Seeds that grow

Be sure and get Horsford's free catalogue before buying plants or seeds. You save money and get better stock. A long list of the best kinds to select from, all tried in cold Vermont. Plants, shrubs, trees, vines, wild flowers, hardy ferns.

F. H. HORSFORD, Charlotte, Vermont

rived, the chief question to be settled is whether the extra fruit secured in the early years will pay for the sacrifice of a number of the bushes later on, when thinning becomes necessary. Thick planting also demands consideration as to whether the land is in a sufficiently clean condition to render it a safe proceeding. If gooseberries are put out four feet apart in very large gardens, horse labor can seldom be utilized in the destruction of weeds and surface cultivation, and this means additional expense or an equally serious neglect.

On the other hand, if a distance of six feet be allowed, both between the rows and plants, either in a garden, farm, orchard or market plantation, the bushes will have ample space for development, and the usual operations can be performed economically. Besides this, the intermediate spaces can be devoted, if necessary, to vegetables and flowers, or, where the position is favorable, to strawberries—at any rate, for the first two or three years. There is a marked difference in the growth of varieties. The advice here given refers only to those of good habit which are most extensively cultivated. The weakly varieties, some of which are included in garden collections, may be planted three feet apart, while the restricted forms, like upright cordons, require still less space whether trained to walls or wire trellises.

The chief point is to secure a well-furnished bush with seven or eight main branches radiating and rising equally from the main stem, allowing sufficient space between these to permit the free admission of sun and air, and enabling the fruits to be gathered easily from any part. Sufficient young growth must be retained to provide for the due extension of the bush, and all beyond this should be removed, particularly in the central parts, as well as all suckers from the base, which are apt to be a constant source of trouble if there is no stem clear above the ground level and the original cuttings were not rightly prepared by the removal of the lower buds.

The gooseberry thrives in indifferent soil, provided this be not dry or poor, nor excessively heavy. In every case it should be thoroughly cultivated and drained previous to planting. But there is one matter which is of critical importance, and that is the provision of suitable manure. Old well-stored stable or farmyard manure dug or plowed in before planting time is the best preparation, and from ten to fifteen tons per acre, according to the character of the land, usually give the best results. Such applications can be supplemented later on by surface dressings each year of similar manure, or by a mixture of superphosphate of lime and kainite in equal parts at the rate of four hundredweight per acre, alternately with the organic fertilizer. If growth is deficient, nitrate of soda in the spring, as the buds are starting, is helpful; about two hundredweight per acre are sufficing as an extreme dressing, and less often answers the purpose. Judgment must be exercised in the

matter, however, for while ample crops of fine berries are desirable, undue luxuriance of growth is not advantageous.

The worst enemies of the gooseberry are the caterpillars of the magpie moth and the sawfly. Constant watchfulness for the first appearance of each is important, and equally prompt action in the direction of destruction, dusting with hellebore powder being a simple and effectual remedy. The mildew affects the leaves and attacks the fruit.

For spraying the bushes before the buds open diluted Bordeaux mixture is suitable, but after the leaves are expanding, liver of sulphur dissolved in water may be used at the rate of one pound to forty-eight gallons of water, reducing the water to thirty gallons should a second application be needed. Birds are always troublesome in gooseberry plantations, attacking the buds with frequently serious results. Late pruning, netting the bushes, or running strands of black cotton across them (which can only be done in gardens), and spraying or syringing the plants with lime or other washes are various means of decreasing these attacks, in addition to the use of the gun.

In small gardens trained gooseberries, now obtainable in most nurseries, are useful and convenient, being well under the control of the cultivator, and if it is desired, a large number of varieties can be grown in a limited space. Furthermore, they can easily be arranged in one part of the garden where protection can be provided against birds, etc., by netting the whole quarter, allowing space for a man to attend the plants or gather the crops at any time. The best form is the upright cordon with three or four stems, the latter being like the so-called "gridiron" trees of larger fruits.

W. R. GILBERT



Hints for the Suburban Poultry Raiser

THE suburbanite who would renew his flock of poultry has recourse to any one of three methods. He must buy full-grown pullets ready to lay, or young chicks and raise them himself, or he must hatch and rear his own. He who would be independent and get some real pleasure from the care of his flock also, must choose the last-named method.

If one has but a small flock—say a dozen or fifteen fowls—it is hardly profitable to use an incubator, considering the attention, expense of running and the cost of the machine. One can use two or three broody hens from time to time and let them save the time of the busy man who must count his minutes while home.

Hens—not pullets—that have been laying briskly all winter will show signs of broodiness in the spring—say in March



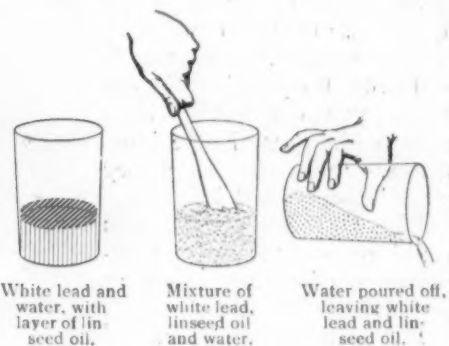
Dutch Boy White Lead—white in the keg—any color you want to make it on the house.

A PAINT LESSON:
To a paste made of white lead and water, add linseed oil and stir.

Watch the oil drive out the water! Presto! an oil paste instead of water paste.

Dutch Boy White Lead and Dutch Boy Linseed Oil rush together and cling together just that way on the house painted with them.

What chance has rain or snow to dissolve *such* paint?



White lead and water, with layer of linseed oil.

Mixture of white lead, linseed oil and water.

Water poured off, leaving white lead and linseed oil.

Dutch Boy White Lead in steel kegs, 12½, 25, 50 and 100 lbs. Dutch Boy Linseed Oil, 1 and 5 gallon sealed cans. Ask your paint dealer.

Let us send you "Painting Helps 18," full of facts every house owner should know about painting. We will include our catalogue of 100 beautiful stencils for walls.

NATIONAL LEAD COMPANY

New York Boston Buffalo Chicago Cincinnati Cleveland San Francisco St. Louis
(John T. Lewis & Bros. Co., Philadelphia) (National Lead & Oil Co., Pittsburgh)

Japan Barberry Extensive Stock
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

Rare Lilacs In Specimen Sizes
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

FRESH RELIABLE PENNY 1¢ SEEDS FLOWER VEGETABLE
Regular size packages of ALL standard Flower and Vegetable Seeds 1¢, postpaid. WHY PAY MORE?
Alyssum, Ass't Annuals, Candytuft, Celosia, Cosmos, Digitalis, Gourd, Hollyhock, Ivy, Kochia, Marigold, Mixed Perennials, Nicotiana, Pansy, Petunia, Phlox, Pink, Poppy, Portulaca, Salvia, Sweet Pea, Vine Mixture, Violet, Zinnia—ALL for 20¢.
Bean, Beet, Cabbage, Carrot, Celery, Corn, Cucumber, Lettuce, Melon, Onion, Parsnip, Pea, Pepper, Pumpkin, Radish, Tomato, Turnip—ALL for 15¢.
These and any other standard seeds 1¢ a packet, doz. 10¢, one hundred 75¢. Complete list FREE.
BUNGALOW GARDENS 88 Dell Av, Netcong, N.J.

GLADIOLI, CANNAS, DAHLIAS, LILIES.

We are the largest growers of these in the world, and are headquarters for new classes, new forms, new colors.

The CHOICEST and BEST at Lowest Prices
FLOWER and VEGETABLE SEEDS.
Special stocks of standard varieties and many startling Novelties.

BULBS, PLANTS, FRUITS. The very newest, choicest and best Roses, Ferns, Shrubs, new Everbearing Strawberries, Etc.
LARGE ILLUSTRATED CATALOG FREE.

JOHN LEWIS CHILDS,
Floral Park, N. Y.





Just an Inkling of What a Greenhouse Will Do for You

OF course you know about the roses, carnations, or orchids it will grow for you, but did you know you could also have melons like those in the illustration—melons so heavy they must be supported in nets?

Did you know that you could grow them in a compartment of a house only 11 feet wide?

Did you know you could use another compartment for strawberries, tomatoes, and buttery golden wax beans?

Did you know you could have an aquatic pool under the bench, and on the same bench grow snap dragons and sweet peas?



Did you know you could have bloom-laden nasturtiums climbing up the columns and cherokee roses blooming against the workroom partition?

Did you know—but why multiply the endless “did you knows”? You have doubtless already made up your mind to write us and find out all about greenhouses; and especially what such a house as the one you want will cost? Along with our answer to your letter, we will send you our Catalog—one of over 100 pages.

The illustrations are many—the text a bit brief—but decidedly informative.

Let us hear from you.

Hitchings and Company

New York Office
1170 Broadway

Philadelphia Office
Pennsylvania Bldg.

Factory—Elizabeth, N. J.

and April. That is early enough to prepare for the advent of the young chicks unless one has an evenly-heated apartment for their care.

The broody hen proclaims her desire for progeny by persistently setting on a nest which may contain eggs or nothing.

The location of the nest is a matter of personal selection. The hen knows where she wants to set, and is frequently too “spunky” to set anywhere else. Madame will often leave a properly equipped nest for one of her own selection. It often pays to consider the whims of a broody hen, and to accord with her rather than to oppose her. She wants seclusion, good nesting material, room to turn in, and the privilege of shaping and arranging her nest. Let her have a day or so to adjust herself before giving her the eggs. When she has settled down and will peck and ruffle up when approached, she is at home. Give her thirteen or at most fifteen eggs for a medium-weight bird. If she contentedly bills them under her feathers, all is well; but if she acts dissatisfied and refuses to cover them, she will probably prove inconstant and it will be better to give them to another hen.

Aside from a regular supply of corn and water, and a convenient sand bath as well as a supply of grit, no other care is needed by a setting hen.

Where several are setting at the same time, it may be necessary to devise some means to prevent their interfering with one another. Sometimes a hen will want to go into partnership or trade nests with another hen. Individual compartments from each nest, provided with food, etc., and covered with wire slats, will save trouble and loss of eggs.

As soon as the eggs begin to hatch, some supervision is necessary. Discarded shells should be removed, as they sometimes get over the hatching eggs and prevent the emergence of the chicks. The hen must be kept upon her nest until the hatch is over, which is about a day and a half or two days from the time the first shell is pipped. The chicks need not be fed until they are strong enough to leave the nest.

M. ROBERTS CONOVER



Selecting Eggs for Hatching

SUCCESS in hatching chicks depends to a great extent upon the eggs, which should be selected with intelligent care and kept under proper conditions until enough have been accumulated to fill an incubator or to start several hens setting at the same time. During cold weather the eggs should be gathered every two or three hours, or they may become chilled. Only those which are well-shaped, of normal size and an even color should be chosen for incubation. Brown eggs and white ones ought not to be used in the same ma-

Witch Hazel Fine Specimens
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

Dutch Bulbs—direct from Holland

And finest new dahlias, described in Free Catalog.
OT. VAN WAVEREN & KRUIJFF
American Branch House, 142 N. 12th St., Philadelphia



Winning Back Our Birds

All my life I've loved and studied birds. I've been building houses for them for years; have won hundreds of martins, bluebirds and wrens to my grounds. My friends wanted bird houses—the birds came to them—calls for more houses came to me. So I now build enough of my five most successful houses to offer them for sale. Write for illustrated folder.
The Martin House. Three stories and attic, 25 rooms. Price \$12.00.
The Wren House is of Solid Oak. Cypress Shingles and Copper Coping. Price \$5.00.
The Bluebird House. Solid Oak, cypress shingles, Copper Coping. Price \$6.00.

Jos. H. Dodson (A Director of the Illinois Audubon Society) 901 Association Bldg. Chicago, Ill.



House for the
White Bellied
Swallow — Price
\$3.00.



House for the
Great Crested
Fly Catcher—
Price, \$3.00.

chine, for the former have thicker shells than the latter. Eggs which have chalky shells must be discarded for best results, and dirty eggs are best thrown out, although they may be washed, if of considerable value.

Two weeks is as long as eggs should be kept before they are placed in a machine or under a hen, and during this time they ought not to be kept in the light or in a very dry place, and the temperature should not go below forty or above sixty-five degrees. Evaporation is prevented to a large extent by putting the eggs into a metal bread box with a tight-fitting cover. Another plan is to wrap them in flannel or to stand them in a box of bran or oats, with a woolen cloth over them.

Much depends upon the hens which lay the eggs. It is poor policy to set eggs laid by hens which have been forced hard all the season. Such eggs are not likely to be fertile, or if they are fertile, to hatch robust chicks. A better plan is to make up a small breeding pen in the fall, and not force the hens for eggs.

Eggs laid by deformed hens or those lacking in physical vigor or the characteristics of the breed they represent should not be set. Like begets like, and it is an easy matter to allow the flock to become decadent by neglecting such matters.

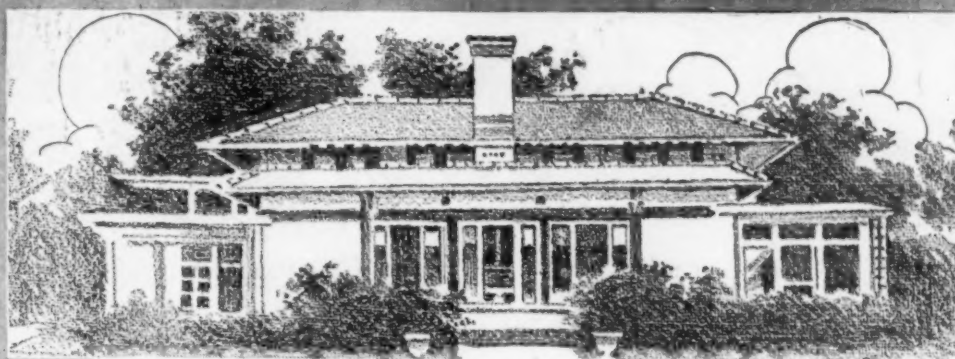
A general rule is to breed from two-year-old hens and cockerels, or from mature males mated with pullets. In actual practice, the first plan seems to give more satisfactory results than the other, although theorists fail to understand why.

Some breeders believe that an excess of pullets is hatched when this practice is followed, while more cockerels are hatched when a well-matured male bird is used with pullets. The logical conclusion is that when the birds of both sexes are the same age an equal proportion of pullets and cockerels result from the mating. This matter makes an interesting study.

In order to make sure of fertile eggs, none should be saved until three days after the breeding pen has been made up. Eggs laid up to the tenth day after the male has been removed will be fertile. It is an excellent plan to allow two males to each breeding pen, alternating them weekly. Two cocks ought not to be allowed to run with the hens at the same time. All the birds should be allowed free access to a hopper of beef scraps and green rations of some kind, as well as an abundant supply of wheat and cracked corn, thrown into the litter, so that they will be obliged to exercise in order to get it.

By following these few simple rules and by giving care to the selection of fertile eggs—which is a matter of far more importance than many owners of hens realize—there will probably be little cause for complaint about difficulties in hatching. The successful chicken-raiser bears them in mind, and the beginner who follows his example will find the results most gratifying.

E. I. FARRINGTON



The risk of fire that makes the home of inflammable construction a constant menace to the lives of the family, is an important reason why you should specify for your new home

NATCO·HOLLOW·TILE

The home built of **Natco** throughout—walls, partitions, floors and roof—represents the best in modern residence construction. Architects build this kind of home for themselves. The increase in cost over perishable types is a mere detail when balanced against the advantages gained—low upkeep cost, fire safety, permanence and superior investment value.

To build your outer walls alone of **Natco Hollow Tile** gives you a house far more "liveable" than if constructed on any of the older lines. The blankets of dead air formed by the hollows in the blocks insulate the interior against sudden and extreme weather changes.

Natco Hollow Tile is precisely the same material—the same company's product—which has made fireproof the greatest business and public structures in the world. For over twenty years this company has inspired and developed Fireproof Construction. The standards it has created set the seal of superiority upon its product. The word "**Natco**" stamped on every block is our guarantee for your protection.

Read up this form of construction before you go ahead with your building specifications. Drop a line for our 64-page handbook, "**Fireproof Houses**." Contains 80 photographs of residences and other moderate-sized buildings where **Natco** has been used for exterior wall construction at costs between \$4,000 and \$100,000, also a few complete drawings and floor plans. An invaluable guide to the prospective builder. **Mailed anywhere for 20 cents in postage. Write for it today.**

NATIONAL FIRE-PROOFING COMPANY

Organized 1889 Dept. Y PITTSBURGH, PA. Offices in All Principal Cities



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 5000 sq. ft. floor space in building. Price: One tube, 75c; 3 tubes, \$1.75; 6 tubes, \$3.25; one doz. \$6.

INDEPENDENT CHEMICAL CO. 72 Front St., New York

Landscape Gardening

A course for Homemakers and Gardeners taught by Prof. Craig and 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.

"CYPRESS lumber defies decay. You save repair bills."

CYPRESS

"THE WOOD ETERNAL"

IS A \$1000. 3-ROOM CYPRESS COTTAGE ABOUT RIGHT? WELL, HERE IT IS!

And a joy and a blessing it will be to anyone with a little plot of earth to put it on.

FULL PLANS & SPECIFICATIONS FREE TO ALL PEOPLE WHO LOVE LITTLE HOMES

Ample for any competent carpenter to build from. Above estimate of cost is a fair average figure the country over.

WRITE RIGHT NOW for VOL. 32, of the CYPRESS POCKET LIBRARY

Think now—
Learn now—
and you'll
do better
buying
when
ready.

Also ask for Vol. 1 with U. S. Gov't
report on Cypress, and full list
of these 35 invaluable text books.



Remember—We recommend Cypress Lumber only where it is your *one best buy*.

Let our "ALL-ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service.

SOUTHERN CYPRESS MANUFACTURERS' ASSN.,
1210 HIBERNIA BANK BUILDING, NEW ORLEANS, LA.

INSIST ON CYPRESS at YOUR LOCAL DEALER'S. IF HE HASN'T IT, LET US KNOW QUICK.

ORIENTAL RUG GEMS MAKE REPEATED SALES

90% of my business comes from discriminating people who are buying from me repeatedly. They do this because they know that antiques should be thick and glowing with soft rich colors, and because they want only worthy rugs that will enhance in value; they abominate doctored rugs; they wish to buy economically, and do it.

Write today for FREE booklet and price list.
All express paid. Rugs sent on approval.

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

Special Interior Decorators OF City and Country Houses

Designs and estimates furnished for single rooms or entire houses in any period desired.
A SPECIALTY MADE OF COUNTRY HOUSES
THE RELDA CO.

Tel. Schuyler 7446 141 West 75th St., N. Y. City

Private Water Supply Plants



THE KEWANEE
SYSTEM OF
WATER SUPPLY



ANY SIZE SEND FOR CATALOGUE HAND OR POWER
KEWANEE WATER SUPPLY CO. KEWANEE, ILL. CHICAGO
NEW YORK CITY

March Activities in Southern Gardens

EDITOR'S NOTE:—To meet the needs of our southern readers, the department, beginning with this number, devoted to the problems and interests of southern gardens, will be continued from month to month.

THE women of other sections of our United States may cover their gardens with wrappings of brown leaves and let them sleep all the long winter through tucked away in warm blankets of soft white snow, but not so may Southern women rest from their labors. Their gardens must be kept in blossom all the year. The violets and tea-olives come with Christmas; January brings narcissus and snowdrops; February wakes the hyacinths, the multi-colored japonicas and the pearly camellias, and, by the time the March winds blow, the garden is in its early spring attire.

March is preëminently garden-waking and garden-making time in the South. The lawn has to be made, if it was not done in the fall; the seed of salvias, verbenas, and antirrhinums must be planted in boxes, and also the vegetables, tomatoes and peppers. In sunny situations, where they are to bloom, are placed the seed of dwarf nasturtiums, morning - glories, dwarf helianthus, ageratum, sweet alysum, larkspur, and marvel of Peru. For either sunny or shady spots are the zinnias and hyacinth beans.

The gladioli and dahlias require full sunlight, and should be planted as early in March as possible, as should also the roses, which ought to have been put out in December or January, but will well repay the later planting. On March Fourteenth last year, I planted fifteen roses, from which I cut many flowers during the summer. They were the Frau Karl Druschki, most glorious of white roses, the Etoile de Lyon, the beautiful yellow, and the Killarney, clearest and most exquisite of pinks. Planting five of each variety enabled me at any time to cut enough of one color for a vase or bowl—a most desirable thing to be able to do.

Sea Island yuccas, cannas of all kinds, shasta daisies, veronicas, and *physostegia virginianas* grow equally well in sun or shade, and planted early in March form invaluable aids to garden beauty and bloom.

The wistaria, *rhynchospermum jasminoides* or star jessamine, *clematis paniculata*, *hydrangea grandiflora*, and roses, having had a fall dressing of manure, appreciate a spring portion of bonemeal and potash. For the lawn, nothing is better than cotton seed meal at this time of the year.

Of the salvias, "Ball of Fire" and "Bon-fire" are most reliable and satisfactory, both as to quality of bloom and length of time of flowering. The salvias can be depended on in any situation, whether sun or shade, provided that the soil is rich.

The Mammoth verbenas, white, pink,

and scarlet, are my favorites, and of the antirrhinums, the giant white, pink and garnet.

Asters make stronger plants when the seed is sown in the sunny borders where they are to bloom, although they grow fairly well in partial shade. If the early-branching and the late-branching kinds are used, a succession of many weeks of flowers may be secured. My preference is for the white, pink and pale lavender of the above varieties, and nothing that grows in my garden gives more beauty and satisfaction.

The zinnias, as we now know them, deserve a place in every garden. I plant both giant and dwarf varieties, and, to avoid clashes of color, use only white, crimson, flesh and salmon pinks, and I glory in their rich luxuriance from early May until late fall. If kept well cut, I know of no more effective summer flowers.

Cannas in the South do not have to be taken up in the fall, and they multiply so rapidly that care must be exercised in placing them lest they overrun their more delicate and less obtrusive garden neighbors. Naturalized in the lawn, against fences, planted in clumps in chimney corners, or where a temporary screen is needed, they make a rich and beautiful background. Careful attention must be given to color, however; for, while hedges of either yellow or red varieties are good, those of mixed colors are rarely ugly. For a screen, the tall kinds are best, while, for a low hedge or clumps in the perennial borders, the dwarf kinds are to be preferred. A hedge of tall yellow cannas, with masses of dwarf helianthus in the foreground, glorified an ugly division fence in my garden for many months last year.

The Stone tomatoes and the Chinese giant peppers, if planted in early March, are ready for transplanting in late April, and give excellent results in very limited space. Radishes planted in the open are ready for the table in early April. If garden areas permit, free planting of all the early vegetables should be made at this time.

First in my summary of garden operations for March, I mentioned the planting of the lawn, and again, because of its importance, I emphasize the sowing of the grass plot. Have the soil deeply spaded, thoroughly enriched, plant the most carefully selected evergreen lawn grass seed, and in the fall it will be necessary only to reseed in order for you to have from March to March a turf that is green and rich and beautiful.

When the seed are all carefully packed away, the bulbs and roots planted where they should be, there is time to breathe in the fragrance and enjoy the beauty of the March blossoms. My garden book shows that, for three succeeding years, March winds have brought to me the spicy sweetness of the hyacinths, and have opened the golden bells of the daffodils and the rich cups of the iris and tulips. March comes in laden with the breath of violets and goes

Let a DAVEY EXPERT Examine Your trees NOW

This Tree split apart because it had a weak crotch. Such a disaster COULD HAVE BEEN prevented by a DAVEY TREE EXPERT.

More than two-thirds of the trees in America have weak crotches, and are liable to be split apart by the first high wind. Such trees are structurally weak—They are bound to split apart sooner or later. It may be five or ten years, or it might be only five or ten days. A weak crotch can seldom be detected by the untrained eye. The danger signals are always there. DAVEY EXPERTS are trained to detect them and prevent disastrous splitting. We will gladly have one of our experts examine your trees without charge, and report on their exact condition. It costs ten times as much to save a tree after splitting apart as it would to have secured that tree against splitting. Splitting branches are a source of danger to other trees as well as to buildings. You may think that your trees are sound—Maybe they are, but guesswork is unnecessary. Learn the truth through a DAVEY EXPERT without cost or obligation. There is a DAVEY EXPERT in your vicinity. Splitting crotches are but one of the ailments of trees. Dead limbs are unsanitary, unsightly and unsafe, and a constant menace to life. Cavities, if not properly treated, continue to decay and destroy the tree. Some trees require more nourishment—Some require water—Some must be sprayed to destroy insects, or treated for diseases—Some few require no attention at all. If your trees need no treatment, you want to know it; if they do need treatment, you ought to know it.

Write for booklet "E"

The Davey Tree Expert Company, Kent, Ohio

BRANCH OFFICES. TELEPHONE:
225 Fifth Ave., New York, N. Y. Madison Square 9546
Harvester Bldg., Chicago, Ill. Harrison 2806
New Birks Bldg., Montreal, Can. Up Town 6726
Merchants' Exch. Bldg., San Francisco, Cal. Telephone Connection

REPRESENTATIVES AVAILABLE EVERYWHERE



SILVER LAKE A Sash Cord

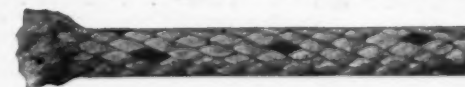
(Name stamped indelibly on every foot)

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
87 Chauncy St., Boston, Mass.
Makers of SILVER LAKE solid braided clothes lines.

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.

Western Electric Sturtevant Vacuum Cleaner

Eventually you will buy a vacuum cleaner, because you know that without it your home cannot be kept wholly and perfectly clean. The only question is—which machine is best?

In the Western Electric-Sturtevant you can buy a cleaner of proven merit representing the combined effort of two manufacturers with over 30 years' experience. The simplicity of this machine will appeal to you, and the name of its makers is in itself a guarantee of satisfactory operation.

Make your choice from our three portable machines. In price they range from \$47.50 to \$125.00. If you are building, let us tell you about our stationary cleaners.

Details in Booklet
No. 4-A



WESTERN ELECTRIC COMPANY

New York
Buffalo
Philadelphia
Boston

Atlanta
Richmond
Savannah
Cincinnati

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

Chicago
Milwaukee
Pittsburgh
Cleveland

St. Louis
Indianapolis
Minneapolis
St. Paul

Kansas City
Oklahoma City
Dallas
Houston

Denver
Omaha
Salt Lake City
Los Angeles

San Francisco
Oakland
Seattle
Portland

EQUIPMENT FOR EVERY ELECTRICAL NEED

out shaking the snowy petals of the spireas, lighting the flaming torches of the fiery cydonias, and scattering sunshine under the long stems of the fragrant yellow jasmines and dainty banksia roses.

JULIA LESTER DILLON



The Collector's Corner

Colonial Candlesticks

THE genuine antiquity of the pair of massive brass candlesticks shown in the illustration is not a matter of mere conjecture, for they were neither a dubious "find" in an out-of-the-way place, nor a product of the ubiquitous antique shop. They were recently left as a legacy to a Virginia woman by a venerable neighbor, the last of her line in a community that contains Washington homes, Washington heirlooms and so many other interesting relics of a historic past that nothing under a hundred years of age is worthy of consideration as an antique.

The candlesticks, of excellent proportions and graceful outline, are eighteen



A Pair of Genuine Colonials

inches high, and like everything else manufactured of brass in those primitive times, are extraordinarily heavy and solid in construction. Their bases, if nothing else, are proof positive of their Colonial origin. Neither circular nor square, as are the bases of modern candlesticks, they are rectangular in shape and seem quite small and out of proportion to the size of the candlesticks themselves. Mantel shelves in Colonial days were so very narrow that nothing with a stand more than three or four inches wide could be placed on them. Candlesticks therefore, no matter how elaborate or massive they might have been, were of necessity made with narrow bases in order that they might occupy the conspicuous places for which they were planned with a small amount of space.

STOKES' STANDARD ASTERS, SEVEN KINDS, FIFTY CENTS



Superb branching asters of white, rose, pink, purple, lavender, crimson, dark violet or mixed, each color the best that can be had. Masses of immense flowers, borne on strong branches, make brilliant display, throughout the summer. Any color, or mixed, 10 cents a packet; one packet of each of 7 colors, 50 cents postpaid.

PLANT STOKES' SEEDS AT MY EXPENSE

To show their quality I will send you 50 cents worth of seeds, credit slip good for 25 cents on your next order, and my 1913 catalog—all for 25 cents. The seeds are one packet each of:

LETITIA—Big Boston. Best heading variety for open ground or frames. Big, solid, crisp, tender.

HEADLINE—Secret Globe. Ready in twenty days.

TOMATO—Bunny Best Early. Earliest, biggest bearer.

ASTERS—Stokes' Standard.

PANSIES—Stokes' Standard. Blend of Sweet French.

Mail 25 cts. to-day and get seeds, credit slip and catalog.

Catalog alone, FREE.

WALTER P. STOKES, Dept. 128, 919 Market St., Philadelphia



Smoky Fireplaces Made to Draw

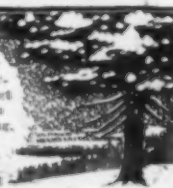
Payment Conditional on Success
FREDERIC N. WHITLEY Engineer and Contractor
210 Fulton Street, Brooklyn, N. Y.
Heating—Ventilating—Air Filtration

Let Us HELP YOU

plan your garden and advise with you regarding the landscaping of your estate. Our nurseries (more than 500 acres) offer the finest collection in America for lawn and garden planting. Our advice is yours for the asking.

Write for Catalog D

THE STEPHEN HOYT'S SONS COMPANY
Est. 1848, New Canaan, Conn., Inc. 1903



The Vital Functions of Light in the Home

(Continued from page 171)

When one is purchasing, look into reflectors, which are usually placed over the lamp, which is in a vertical position. If they have the blinding glare of the automobile headlight, and are filled with streaks and lines of painful brilliancy, avoid them, or insist that they shall be furnished with depolished inner surfaces.

Dr. Percy W. Cobb, physiologist for one of the tungsten lamp manufacturers, states: "In the case of prismatic reflectors it is only when they are so far away that the eye is unable to distinguish their individual surfaces, that there is any reduction in intrinsic brilliancy, significant for the protection of the eyes."

The danger of polished surface reflection is one of the ills attending the advent of our light sources of high intrinsic brilliancy. When light strikes a surface one of two things happens,—it is *reflected* or *diffused*. If the surface is polished or glazed, no matter of what material it may be or in what form, when light impinges upon such surfaces it will be sharply reflected—often directly into the eye, causing glare and eye strain, with all its attendant miseries. Who has not experienced the necessity of shifting the position of the glazed reading page to avoid the glare? Does the position of the *depolished* page of the newspaper, for instance, require shifting? Every impinging ray of light is diffused by its unglazed surface—scattered and disseminated so perfectly that eye strain is eliminated, and eye comfort prevails. Avoid polished surfaces wherever possible,—always in case of inner surfaces of pendant lighting shades, which are shaped so as to disclose the illuminant and its secondary reflecting surface. All glass manufacturers can furnish glassware depolished on the interior. Insist upon their doing so.

And now to revert momentarily from the physiological to the esthetic,—at best but a brief interval to span,—let us consider the use of light in making the home attractive. Referring to the illustration at the lower portion of page 169, a reconciliation of light and decoration is seen. First there is a small art lamp beside the piano. Against a dark green wall of practically neutral color value at night, its graceful shade of blended old rose is just bright enough to emphasize its value as a decorative symbol while it adds beauty to the complexion of her upon whom it shines. Pink gelatine film is placed about the illuminant within the exterior shade and on the side nearest the wall an opaque screen prevents the splotch of wall light which usually mars the effectiveness of wall lamps. Beneath this screen, a dense red film suffuses the small picture, artlessly placed at the lamp base, with a dull glow.

Above this small picture, is a water color reproduction of Burne Jones's "Awaken-

The Telescope of Speech

The astronomer, by the power of his telescope, becomes a reporter of the movements of a hundred worlds greater than ours, and the student of celestial activities millions of miles away.

He points his instrument at any spot in the heavens, and his sight goes rushing through space to discover and inspect a star hitherto unknown.

Up to the power of his lenses, his vision sweeps the universe.

As the telescope may be focused upon any star, so the telephone may

be focused upon any person within the range of its carrying power.

Your voice may be directed anywhere in the Bell System, and it will be carried across country at lightning speed, to be recognized and answered.

The telescope is for a very limited class, the astronomers. The telephone is for everyone.

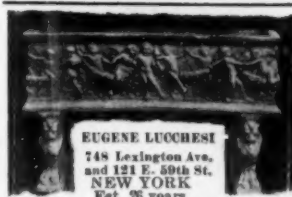
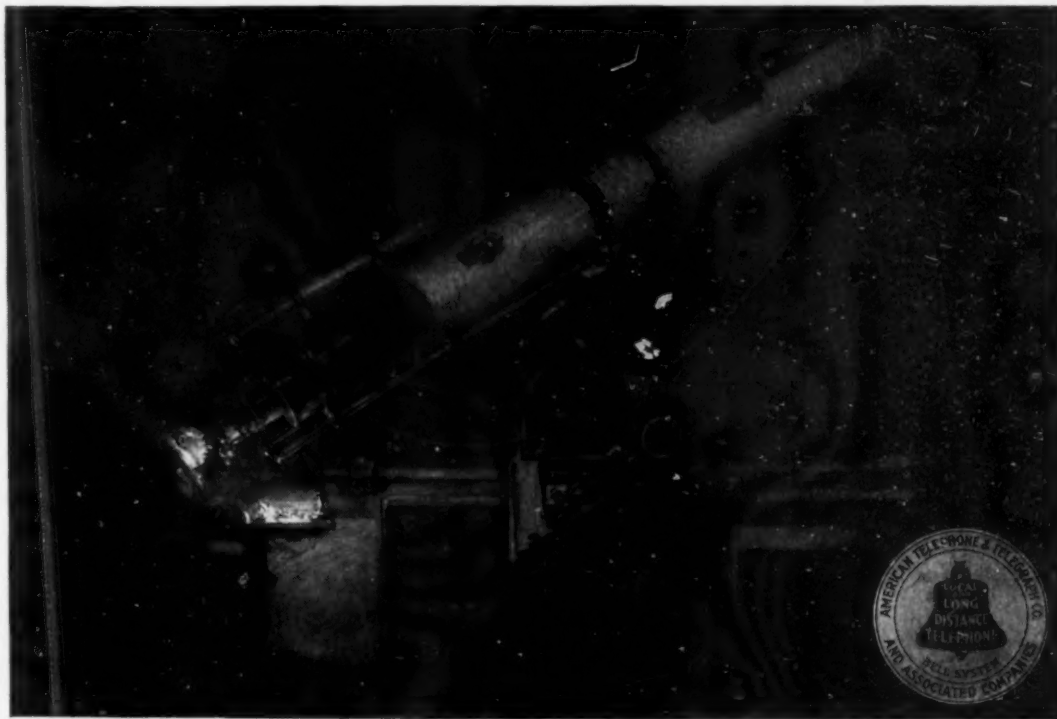
At the telescope you may see, but cannot be seen. At the telephone you may speak and be spoken to, you may hear and be heard. By means of the Bell System this responsive service is extended to the whole nation.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY (AND ASSOCIATED COMPANIES)

One Policy

One System

Universal Service



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

MODERN GLADIOLUS

I am again offering to my old friends and new customers the finest kinds of gladiolus bulbs to be had, the kind that take premiums wherever offered and surprise and delight the people. Not only Groff's Hybrids, but all other sorts that are first class, including the best new named sorts and some never before offered. Fifty selected flowering size bulbs, postpaid, for 50 cents.

GEO. S. WOODRUFF,

"BOX B" INDEPENDENCE, IOWA

IMPORTED CACTUS and DECORATIVE DAHLIAS

At Reasonable Prices

Also 500 varieties of the best to be found in U. S. A.

Dahlias are more popular than ever before, for the new varieties are more beautiful.

Send for my catalog.

MRS. H. A. TATE

OLD FORT

N. C.



Plan to Have Us Care For Your Trees Early

WHEN the first warm Spring days come, everybody wants tree work done at once.

Very naturally, some have to wait. Right now, before the buds have started or the leaves come out, is an ideal time to have us inspect your trees. Everything can now be more plainly seen and more plainly pointed out to you.

Our inspections are a *pointing out* of the attention your trees need. This pointing out in no way obligates you to have any

work done. It simply informs you of what should be done for the preservation of the health and beauty of your trees.

Avoid the Spring rush this year.

Have us make an inspection at once and, if you like, arrange for the immediate carrying on of the work.

Our booklet—"Trees: The Care They Should Have"—tells about the kind of work we do and who we are who do it. Send for it.



MUNSON WHITAKER Co.

Forest Engineers

New York: 470 Fourth Ave.; Boston: 623 Tremont Bldg.; Chicago: 513 Commercial Bank Bldg.



Never Sold in Stores

Gbc "Monroe"

30 Days' Trial—Factory Price—Cash or Credit

Direct from factory to you—saving you store profits. We pay freight and guarantee your money back and removal of refrigerator at no expense to you if you are not absolutely satisfied. Easy terms if more convenient for you. Send for book NOW—Use coupon or a letter or postal.

Monroe Refrigerator Co., Station 4-C, Lockland, Ohio

Is Your Refrigerator Poisoning Your Family?

Your doctor will tell you that a refrigerator which cannot be kept sweet, clean and wholesome, as you can easily keep the Monroe, is *always dangerous* to the health of your family. The Monroe is the only refrigerator made with

Solid Porcelain Compartments

which can be kept free of breeding places for the disease germs that poison food which in turn poisons people. Not cheap "bath tub" porcelain-enamel, but one solid piece of show-white unbreakable porcelain ware—nothing to crack, craze, chip, break or absorb moisture—but *genuine porcelain, over an inch thick*—as easily cleaned as a china bowl—every corner rounded—not a single crack, crevice, joint, screw-head or any other lodging place for dirt and the germs of disease and decay. Send at once for

Free Book About Refrigerators

which explains all this and tells you how to materially reduce the high cost of living—how to have better, more nourishing food—how to keep food longer without spoiling—how to cut down ice bills—how to guard against sickness—doctor's bills.

TEAR OFF AND MAIL NOW FOR BEAUTIFUL FREE BOOK.

Monroe Refrigerator Co., Station 4-C, Lockland, Ohio.

You may send me your book about refrigerators.

Name

Address

ing of Galatea" and suspended from the jaws of a gargoyle by antique chains hangs an old Egyptian urn. Within, a lamp, placed in a home-made reflector of asbestos, and covered with scarlet gelatine film casts a rosy glow upwards, which in turn is re-diffused downwards by the ceiling, conveying with just sufficient emphasis the flesh tints betokening the awakened life of the beautiful Galatea. The lower portion of the body receives just a touch of white light, enough to mark the gradation twist marble and flesh. Below, the figure of the sculptor Pygmalion, kneeling reverently at the base of his masterpiece, is barely revealed beneath impressive shadows. The interpretation of the artist is enhanced and the theme of this legend of ancient Greece, embellished by light. From any viewpoint in the room the effect is equally perfect, there being no glaring reflection from the picture-glass, so characteristic of our art gallery lighting.

Above the piano is a small cabinet, serving to support a transparency invisible by day but at night revealing two little owls upon a tree branch sharply silhouetted against the full moon. The player at the piano by the touch of a switch may diminish or increase the quantity of light on his music without destroying the pictorial effect by a burst of light,—the music page alone being brightened. In other parts of the room light has been directed upon a picture or even shines through the canvas of a work in oils. Where an object is to be emphasized or its effect heightened,—light is used to bring out its beauty. On a bookcase a simple candlestick with its shade of pink silk delicately illumines the face of an old French clock, and brings out the rich brown tints of the old wood, while at its base the lines of a bronze are suggestively relieved by silhouette. Another simple effect is produced by shining a soft light through a panel-skylight of stained glass set in the ceiling of a bay-window embrasure. The light shining down upon a fern is like the late glow of sunset entering the room.

The hall, too, can be relieved of its cañon-like narrowness and height, so common to some houses. Here the usual, tiresomely conventional hat-rack and umbrella-stand are absent. From above a latticed ceiling streams a light like that of the moon, making it seem like a loggia open to the sky. The light brings out in strong relief the outlines of an appropriate urn, while at the entrance arch a globe of soft golden hue is contrasted with what appears to be the blue sky overhead.

These effects are but simple arrangements that second the ordinary equipment with very slight expense and small trouble. Though one would not wish to combine them all as is done here, they suggest possibilities for heightening the atmosphere of home.

New inventions and new methods have made such possibilities in lighting methods almost unlimited and have given great opportunities to the home decorator.

A Grease Tank

WHEN cesspools are used to receive the waste of farmhouses, it often happens that the water fails to drain away after a time because of an accumulation of grease from the kitchen sink. This grease collects on the surface of the water, sometimes reaching a thickness of an inch or more, and as the water rises and falls it is deposited on the sides. If the cesspool becomes dry, as often happens when the drainage is good, the bottom is also covered with grease. Then the water is unable to seep away and the cistern becomes full in a comparatively short time, while it might not require attention for years except for this accumulation of grease.

The remedy for this condition is a smaller cesspool or tank made preferably of cement, although an empty tar barrel will serve the purpose, into which the pipe from the kitchen sink leads. Another opening, a few inches above the bottom, feeds a pipe which connects this preliminary tank with the main cesspool. When such a plan is carried out, the grease is collected on the surface of the water in the small tank, and may readily be removed at intervals. If the outlet pipe is allowed to project into the tank an inch or two and is bent downwards, there will be no escape of the grease, and the natural drainage of the cesspool will no longer be interfered with. This plan is just as applicable to houses at the seashore where there is not a regular sewer system as to those in the country, although soil at the shore is likely to be more porous than that in the country and therefore not so easily affected by the grease.

E. I. FARRINGTON



Suggestions on Vine Growing

LOVERS of gardens have a wonderful list of vines to choose from, and garden problems would be much easier if we could put the right one in its right place in the beginning. Vines of a twining nature like the wistaria and others can hardly fail to be rightly placed, as we all know their requirements and habits, but certain locations call for special qualities which can only be determined by planting, sizing up and, if necessary, removing. Only the unskilful gardener plants anything too deep to be dug up again, although many such gardeners do exist.

My pantry window is on the north side of the house, with no trees near, and it was necessary to shade it. This was a situation calling for the right vine, so I spent a few days examining the gardens of my neighbors. Much experimenting and waiting could be saved if this plan were followed in general, and guided by

**THE
WHITE
STAR
LINE**

**NEW YORK
PLYMOUTH
CHERBOURG
SOUTHAMPTON**

THE NEW "OLYMPIC"
VIRTUALLY "TWO SHIPS IN ONE"

PROMENADE DECK B

WATER TIGHT

C DECK

BULK HEAD

D DECK

WALLS

E DECK

BULK HEAD

F DECK

WALLS

G DECK

Fitted with

DOUBLE SIDES

as well as

DOUBLE BOTTOM

WATERTIGHT BULKHEADS

extending from the

BOTTOM

TO THE TOP OF THE HULL

THUS AUGMENTING THE

FLOTATION CAPACITY

and enhancing

TO THE UTMOST

THE SAFETY OF THE VESSEL

The New "Olympic" is the greatest production of the premier British shipbuilders—the highest achievement of their long and fruitful experience in constructing many of the largest steamers of recent years—and in her, will be embodied everything that human foresight has devised for the safety of the passengers and crew.

Sailing from
NEW YORK **April 12, May 3**
MAY 24. JUNE 14. JULY 5.
 and regularly thereafter.

White Star Line, 9 Broadway, New York.
 Offices and Agencies Everywhere

PROMENADE DECK B

WATER TIGHT

C DECK

BULK HEAD

D DECK

WALLS

E DECK

BULK HEAD

F DECK

WALLS INNER SKIN

G DECK

INNER SKIN

DOUBLE BOTTOM

GRASS BORDER

One of
ground plans
in our booklet on
"Hardy Gardens
Easily Made."

Hardy Permanent Gardens Now an Open Sesame to the Busy Man

In our attractive booklet "Hardy Gardens Easily Made For The Busy Man" we have endeavored to simplify the making of a Garden of Perennials or Old-Fashioned Flowers by prepared plans adaptable to most situations with the lowest estimates of cost that make them no longer a Utopian Dream. Let us send you one and save hours of needless worry over catalogues and surprise yourself what can be done for so little money.

Sent on receipt of 10c, together with our 48-page 9 x 12 Catalogue of Hardy Plants.

THE PALISADES NURSERIES, Inc. R. W. Clucas, Mgr. Sparkill, N. Y.

Growers of Palisades Popular Perennials, and Landscape Gardeners
 Visitors always welcome at our Nurseries, where they can make selections from more than a thousand varieties of Hardy Plants

Your Garden:

Your garden and grounds should be thoroughly and carefully planned during the winter and early spring. A new and special feature of our 1913 issue of the "Garden Guide and Record," is the introduction of a department showing several garden plans laid out by our experts, to fit various sized plots, with the view of obtaining the most satisfactory results.

To get the best results from your garden it is necessary to get the best seeds. Every packet of Henderson's seeds that is sold has behind it the accumulated experience of sixty-six years of successful seed growing and selling. Most of the accepted methods of seed testing and trials in use to-day originated with the founder of our firm, and the methods that were the best three generations ago have been improved and bettered by us from year to year and are to-day still the best. The initial cost of the seeds is really the smallest cost of your garden and it pays to be sure you have started right. Henderson's are Tested Seeds.



Special Offer

Our 1913 catalogue, "Everything for the Garden," a book of 209 pages, over 800 illustrations, color plates, etc., will be mailed on receipt of 10 cents. In addition, we will send without extra charge, our new book, "Garden Guide and Record," and our collection of 6 Henderson Specialties, in a coupon envelope which will be accepted as 25 cents cash payment on any order of one dollar or over.

PETER HENDERSON & CO.

35-37 CORTLANDT STREET

NEW YORK

Alphano Humus Better Than Chemical Fertilizers Costs Less

IT'S not a chemical preparation. It is odorless. It's Nature's own make. She has been hundreds of years in the making. It is pure Humus, rich in nitrogen and various other elements essential to plant growth.

It is not a flashy stimulant, but a food that lasts, strengthening the plants for a surprisingly long time. For lawns it is unequalled. Being a powder, it is not unsightly. No danger of burning the roots by putting on too much.

For roses and all kinds of flowers and vegetables, it is ideal.

100 pounds of Humus goes six times farther than an equal amount of stable manure, and has the great advantage of at once being available to the roots.

Alphano Humus is not a new thing. It has been on the market for years. If not absolutely as we guarantee, money back.

Sold in 100 lb. bags. 5 bags for \$5. Try it in your gardening this Spring. Results will surprise you.

Special price on ton and car-load lots.

Send for booklet.

Alphano Humus

938 Whitehall Bldg., New York City

my observations I finally decided on the perennial pea as best meeting all particular requirements. Soon afterward the young seedlings were ready for business.

My house has the modern overhanging roof that extends three feet beyond the window. I had a wide piece of wire fastened to the extreme edge, stretched tightly and pegged to the ground. Another strip was fastened parallel to this, joining a hollow square to be covered with vines, allowing a fine circulation of air and keeping the pantry excellently cool. Vines growing flat against a window add but little to the comfort of a house, and the extension roof is so sane an idea that it makes one wonder at its comparative lateness.

The perennial pea vine is not considered a rapid grower, but with good rich soil and plenty of water it covered my wires to the roof in less than a year. This vine is easily kept in trim. It is not too heavy in growth, and has shown itself in all respects perfectly adapted to its place. For three months the vine itself goes into total eclipse under a veil of sprays of the tiny pink peas, giving a striking and beautiful effect that cannot fail to attract attention. And the delicate form and tender green of the vine itself is extremely pleasing even when out of bloom.

In the winter when its shade was no longer needed, and even disadvantageous through the need of extra light, I cut it back to the wires and thinned it out, leaving only enough to guard against the frames becoming unsightly.

The beautiful old jasmine with its starry white flowers grows anywhere in the garden, and in practically every locality except where there is very cold weather. Yet this beautiful vine that is attractive throughout the year is often disregarded.

A. E. STOCKTON



The Hundred Per Cent. Garden

(Continued from page 172)

surface of the soil becomes simply a layer of hard lumps among which the roots are unable to find a continual feeding ground. The degree of fineness to which the soil is pulverized has a great deal to do with the amount of plant food which will be released for the crop that is growing. Some years ago the Cornell Experiment Station grew potatoes several successive years on the same ground without adding fertility of any sort, except what they were able to release in the soil itself by extra thoroughness in plowing, harrowing, cultivating, etc.—and the crops they produced averaged over three times as much per acre as those of the average farmers in the state, the great majority of whom used manures or fertilizers of some sort. Another very desirable property of soil upon which crops are growing is plenty of humus, or decayed vegetable

matter. The great value of humus, which for a while puzzled the agricultural chemist, frequently lies as much in the physical effect which it produces in the soil, keeping it friable and enabling it to absorb and retain moisture, as in the actual plant food which it adds. This is one of the reasons, for instance, why the ton of manure mentioned above produced greater results than a bag or two of chemicals containing the same amount of plant food.

It was also discovered as experiments continued to be carried on, that certain crops, as clover, would sometimes show upon analysis more nitrogen than could be accounted for by the supply in the soil. Where, then, did it come from? After a good deal of speculation it was discovered that this extra nitrogen was furnished to the plant through the agency of colonies of micro-organisms which took up their abode in the plants' roots. And as nitrogen is the most expensive of the plant food elements, this was evidently a valuable fact to learn. The theory of soil inoculation for various crops which has been written about and advertised extensively during recent years, is based upon the idea of supplying these little nitrogen-gathering "bugs" of various species to soil where they do not already exist, thus making it possible to grow thereon bigger crops of peas, beans, clover, alfalfa and other things which come within the lucky group.

So much for the general principle of how plants feed and how they may be fed—and it is essential that one should have some knowledge of these things in order to deal intelligently with the problems which even the smallest of gardens offers.

The question of more intimate interest is, of course, *what can you do to make your own garden rich?* This problem naturally assumes the double aspect of how to add humus and the proper plant food to the soil, and how best to prepare it for the plant crops that are to be planted in it.

The products of the home garden, practically speaking, are disposed of at retail prices, for a penny saved is a penny earned. And as they can all be used, if proper care is exercised in planning the proportions of space for the various plantings—any additional price in buying manure or fertilizers in small amounts is more than counterbalanced, so that the home gardener, as a matter of fact, has a wider margin out of which to pay for his added plant food than has the commercial grower. First of all endeavor to secure a supply of manure. As manure varies so as to be worth from practically nothing to six or seven dollars a cord (delivered), you should be careful to get it only from someone upon whom you can rely. It should be well rotted and have been kept under cover. Furthermore you should see that it has not been burned out or "fire-fanged" from becoming superheated, in which case it will have in spots

(Continued on page 226)

A Garden Full of Gladioli for 50 Cents



The **GLADIOLUS** is probably one of the most satisfactory flowers grown because it blooms continuously when it is cut and put in water just as well as when in the ground.

Did you ever consider the possibilities of this grand flower?

You can have them in bloom from July to frost if you plant a few bulbs each month from April to July.

For only 50 CENTS we will send **50 BULBS** of our **GRAND PRIZE** Mixture, including the best representative varieties.

The culture of Gladioli is a simple one: bulbs may be inserted in the ground with a trowel, about four inches deep and one or two feet apart, being careful to rake over the ground with a small weeder after the bulbs have started to grow, so as to keep the ground from becoming hard and cakey. This will insure splendid blooms. Write today and secure this splendid collection of Gladioli Bulbs for only **50 CENTS** with our **1913 CATALOGUE**.

Stumpp & Walter Co.

50 Barclay Street

NEW YORK



Residence of Judge Garden Green,
Norwich, Conn.

PARKER, PRESTON & CO.'S Art in Shingle Stains

(Waterproof and Odorless)

These Shingle Stains are famous for their artistic richness and tone of colors. The colors being absolutely pure insure extreme durability.

Free from creosote and unpleasant odor. Made from Pure Linseed Oil and our own Waterproof Liquid combination. Sheds water like a duck's back, thereby increasing life of shingles fourfold. Write for Cabinet "H" of artistic colors—free.

Adamant Floor Coating.
Adamant Cement, Brick and Plaster Coating.
Parker's Asbestos Shingle Coating.
Waterproof Flat Brick Stains.
Weatherproof Coating.

PARKER, PRESTON & CO., Inc.

Manufacturers Paint Specialties
NORWICH, CONN.
Branch: 501 Fifth Ave., New York

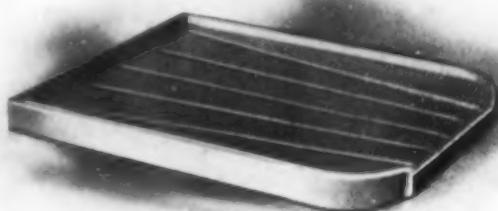
MANHATTAN DRAINBOARDS

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

The seams and cracks in a wood drain-board 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 STREET, NEW YORK



Equipping the Kitchen

(Continued from page 187)

seen. White is the dominant note of the modern kitchen, the perfect cleanliness of which is its chief beauty. While a simple stencil border is sometimes seen, other decorations are rather out of place, except those given by carefully chosen utensils, displayed on the walls, or seen through cupboard doors.

Kitchen furniture requires little consideration. A small chair or so, and a kitchen table, are all the movables necessary. Sometimes a hinged shelf, dropped when not in use, is substituted for the table. A niche for an ironing board is often contrived in some convenient corner.

To stock the kitchen with new utensils is an interesting task in view of the fascinating ware to be found in the shops. Many home builders think aluminum the best ware to invest in; since it is light, heats through quickly, and is practically indestructible. The initial cost is, of course, greater than in buying enamel and other wares. Blue and white or brown and white enamel, not long ago a favorite ware, is still seen in many kitchens, making a charming array, though it chips easily and must then be discarded as dangerous. Tin is best for many purposes, and while soon worn out, is cheap. While heavy iron kettles are no longer used, an iron "spider" is still a necessity. Before selecting utensils it is a good idea to study the lists and pictures of kitchen ware used by that nation of cooks, the French. While evidently behind us in the hygienic planning of kitchens and in the utilizing of mechanical devices, their utensils have a way of being admirably adapted to their purposes. In a number of lists made out for households of various degrees, from the poor man's to the prince's, in a French book recently published, there are, among other delightful things: a kit of ladles and spoons, each with its designated use, and a metal hanger to keep them on; kettles for bouillon and ragout, of uncommonly good design; pretty sets of little saucepans with hot water pan, for the making and keeping hot of sauces; also all sorts of handy basins and strainers. While these utensils are in the copper preferred by the French, similar models may be found in our shops in other materials. The cost of the aluminum ware shown in our range illustration was as follows: saucepan \$1.98; small double boiler \$2.25; percolator \$7.00; covered casserole \$3.49.

For kitchen crockery, white, decorated with blue stripes, or yellow ware are commonly seen. Occasionally white pottery, decorated in a special device furnished by the home builder, is procured from the manufacturer, a method that gives a distinctive air to the kitchen cabinet.

The kitchen and its equipment fully planned, the adjoining cool room, pantry and entries must be considered. As to walls and floors they receive practically the same treatment as the kitchen, except that the dado of tile or cement may be omitted. Built-in features are confined to



THE LAWNS OF OLD ENGLAND

are famous for their wonderful perfection and durability. Such lawns may be had here if real

IMPORTED ENGLISH LAWN GRASS SEED

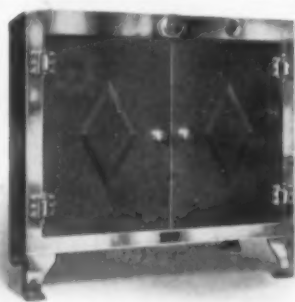
is used. This seed is the result of centuries of selection. No weed seeds or coarse grasses in it. Hardy and fine in texture and beautiful in color. We have handled this seed for more than one hundred years. We import the choicest quality only, with seed for shady places a specialty.

Write for free Booklet.
"How To Seed & Keep A Beautiful Lawn"

Barwell's Agricultural Works

Madison and Sands Sts., Waukegan, Ill.

Established at Leicester, England, in 1800.



ALL the elements of convenience that you associate with the idea of a hot closet are enhanced and new uses develop when you have

THE PROMETHEUS ELECTRIC

A turn of the switch is all the attention it needs. The joy of life is less frequently enshadowed when you have this useful and handsome aid to good living. Write us for a booklet. "Yours for warm service."

THE PROMETHEUS ELECTRIC CO.
233 East 43rd St. New York City

Timely
hints for
the home

ENGLISH Garden Baskets—handsome, substantial, convenient—furnished with a complete equipment of shears, pruning knives, trowels, weeding forks, etc.

China and Glass—a practical and admirable selection of domestic and imported wares.

Tea Kettles, Table Dish Warmers, Chafing Dishes—electric and alcohol—Coffee Makers, etc.

Cooking Utensils, Cutlery, Earthenware.

Refrigerators, Kitchen and Laundry Furniture.

Vacuum Cleaners, Carpet Sweepers, etc.

Goods delivered free at stations within 100 miles.

LEWIS & CONGER

45th St. and 6th Ave., New York

the pantry. The "butler's pantry," large and fitted with every convenience for elaborate entertaining, is not a small house feature. A small serving room, however, is frequently placed between kitchen and dining-room, since kitchen noises and odors are then lessened in the rest of the house, and convenient space is provided for storing china and table linen. Though space is restricted, a sink is sometimes set into the window ledge. If the serving room can consist of rather a long, narrow hallway, filled in at one side with cupboards, and well lighted on the other by a group of two or three windows occupying the entire upper wall space, it proves much more convenient than the ordinary cave-like room, lighted by a single window and with much wasted floor space. Also the window ledge is then of sufficient length to be of some use. If the house is steam heated, a steam plate warmer is installed beneath the ledge, or an electric warmer may be used. It is a modern innovation and gives good results. A corner is perhaps utilized for a built-in cupboard to hold table leaves. Drawers fill the lower sections of the cupboards, as more convenient of access. High cupboards are used only for storing purposes. In those placed at a height easily reached, the glass and china are kept.

The small, cool room opening from a kitchen opens also, as a rule, into an entry or porch. If ice must be put through a window the refrigerator should be of a kind that permits this method of filling. Usually it is not. Thick walls with an air space keep an even temperature in the room. A shelf or so to put groceries on and a place for milk bottles are found convenient. A recently built cupboard, a substitute for a refrigerator, takes the place also of cool room. Built into a shallow bay, with a small window at one end, the walls and floor are coated with cement mixed with cinders. With an ice shelf, draining into a sanitary trap, and food shelves made of zinc, the cupboard is easily flushed with a hose. It is used without ice the greater part of the year.

Preserve and vegetable rooms are kitchen auxiliaries on the cellar floor. Thick walls ensure an even temperature. In some preserve rooms slits in the outer wall serve as ventilators, all outside light being excluded. In others the tradition of keeping preserves from the light is disregarded, the housewife relying upon sterilization of jars and the perfect cleanliness of modern methods to prevent fruit from fermenting. The old-fashioned, hanging shelf that occasionally spoiled a season's work by falling, has given place in the modern preserve room to neat cases of shelves, with or without doors, that line the walls. On these shelves is an array of stored-up delights, preserving the colors as well as flavors of summer. For with the study of Colonial furniture and architecture has come a study of Colonial recipes and a revival of jams and jellies, no longer bought from the grocer, but



A Little Timely Talk on Moon's Shrubs



EARLY this Spring when the golden bloom branches of Forsythia are making cheer spots on your neighbors' grounds, you will again wish that you had planted some of Moon's Shrubs last fall.

Later on, when the feathery crests of Spirea; the big round flowers of the Japanese Snow Ball and the lovely blooms of the Hydrangeas are at their height, you will wish you had

planted Moon's Shrubs this year, *this Spring.*

So year after year you go on wishing and dreaming—while your neighbors' shrubs and trees are each season growing the more beautiful.

Better make a break right now, by sending for Moon's Catalog, and then order early so you can plant early.

There are a few plain, common-sense reasons why Moon's Hardy plants, shrubs and trees are superior. Why they are so reasonable in price.

The catalog tells the reasons.



The smaller shrubs show the character and quality of our shrubs about 2 feet high, which sell for twenty or twenty-five cents each. The larger, about 4 feet high, sell for fifty to seventy-five cents each.

The Wm. H. Moon Company

Makefield Place  Morrisville Pa.

Philadelphia, Room "D" 21 So. 12th Street



There's but one best in anything—

In Carpet Sweepers
Who Doubts It's **BISSELL'S**

Thirty-seven years of unbroken leadership tells in brief the history of the Bissell Sweeper. Our goods have been constantly improved until today the "Cyclo" BALL-BEARING typifies the highest achievement in the carpet sweeper art. Runs so easily a mere touch propels; sweeps deeply and thoroughly without noise or dust and with no injury to fine rugs or carpets. Saves time, labor and health and will last for years. Price \$2.75 to \$5.75.

For sale by all the best trade.

Write for free booklet, "Easy, Economical, Sanitary Sweeping."

BISSELL CARPET SWEEPER CO.

Dept. 131, Grand Rapids, Mich.

(Largest Exclusive Carpet Sweeper Manufacturers in the World.)





WATER

PLENTY OF IT—AND AT A HIGH PRESSURE is a luxurious necessity.

People living in the city never know or realize what a blessing water is at a "high pressure." Because they have always had water without worrying about its source, people when building in the country are apt to neglect the question of water, until the house is finished.

Before building, they should remember that nothing is as dependable as water, delivered by force of gravity, from a high pressure tank, and that the best tank tower is the CORCORAN TANK TOWER, and they should also know that the best way of getting the water into the tank is by means of the CORCORAN WINDMILL.

Before they build they should let CORCORAN submit plans and designs, following out the line of architecture which they plan to build and show them how attractive a windmill and tank tower can be built in conjunction with the house that they are already planning and how the space in the bottom part of the tower can be utilized to advantage.

Don't fail to write for estimate of complete cost, including designing, material and construction.



A. J. CORCORAN, Inc. 17 JOHN STREET, NEW YORK



To Build Beautifully You Should Have These Books

More than three hundred illustrations and plans of artistic and comfortable homes of practically every size and style. Innumerable valuable suggestions and ideas.

MODERN DWELLINGS—8 x 12 in. 900 Illus. (2,500 to \$50,000) with Plans.....\$1.50
AMERICAN HOMES—150 Illustrations. (2,000 to \$10,000) with Plans.....\$1.00

BOTH BOOKS \$2.00

These books contain a profusion of the latest ideas in GEORGIAN, COLONIAL, ENGLISH, BUNGALOW, ETC. For those who are planning to build GEO. F. BARBER & CO., Architects, KNOXVILLE, TENN.

SUN DIALS

A Beautiful Illustrated Booklet, "WHERE SUN DIALS ARE MADE," sent upon request. Estimates furnished.

Any Latitude

Ask for Booklet No. 4

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



Plant your garden with Selected Seeds; it pays. Write for my Little Green Book. It explains. Paul Dove (A) Wellesley, Mass. (Copy free).

Dwarf Fruiting Sizes Apples
Send for Catalog.
The Elm City Nursery Co.
New Haven, Conn.



Garage



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 circulars and state what you are interested in.

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

Pony Stable



Sand House

concocted in the home kitchen as in former days.

The vegetable cellar is also furnished with shelves and may have in addition a rack with ventilated trays for the keeping of choice fruits. If the vegetable room is properly built and ventilated, with pits for the storing of certain of the vegetables, it does much to lessen the cost of living by permitting the storage of supplies bought in the fall when prices are comparatively low.

A garbage reducer and hot water heater combined is sometimes installed on the cellar floor, disposing of at least one problem of the kitchen. If garbage must be kept in cans to be collected each week, it is placed in a covered but ventilated place, often on the rear porch foundation, reached from above through a trap door in the floor. If the family garage is near the house, outside corner cupboards may be built in it, just large enough to hold garbage and ash cans.

In the devising of convenient features for the kitchen and its tributary rooms, each home builder has individual ideas. Carefully worked out, these ideas are what give distinctive quality to the culinary department of the household, perhaps the most important in its effects on the health and contentment of a family of any of the home departments.



The Hundred Per Cent. Garden

(Continued from page 223)

a light, gray, ashy appearance. For a garden 100 x 50 ft. two to three cords will not be too much; and though this may seem to you at first glance a large amount to spend for plant food for a garden of this size, you must remember that from one to two hundred dollars worth of vegetables can be removed from it during the year, if it is producing up to its maximum capacity; and it will pay you much better to have it do that than to be getting half-crops from it, with just as much money spent in preparing the soil, planting, cultivating and looking out for it. Have this manure packed in one or two convenient piles until you are ready to have the ground plowed or spaded, whichever the case may be.

In case it is not possible for you to obtain manure and you have to place your reliance in commercial fertilizers, try to pick out a place for your garden which was in sod a year or two ago, as this will to a large extent take the place of the humus furnished by the manure. Most garden crops require what is termed a "4-8-10" fertilizer, one which has four per cent. of nitrogen, eight per cent. of available phosphoric acid, and 10 per cent. of potash. A fertilizer approximating this formula may be bought in one of the ready mixed "Market Garden" brands, at from two to two-and-a-half dollars per one

hundred pounds. Two to two hundred and fifty pounds will be ample for a garden of the dimensions above. If you want to take the trouble you can get as good or better results by the mixing of your own fertilizer. One hundred pounds of Nitrate of Soda, two hundred of Muriate of Potash, three hundred of Acid Phosphate and four hundred of high-grade tankage—or smaller amounts in the same proportions—will give you a mixture excellent for garden use.

A very satisfactory way is to apply part of the plant food in the form of natural manure and the rest in a mixture like the above, using say half of each. Where manure alone is used, it is very advisable to use fifty to a hundred pounds of muriate of potash in addition as the manure is quite certain to be deficient in this element. The manure should be spread over the ground evenly, just before is is plowed or forked up, and the fertilizer should be spread on *after* the ground has been turned over, but before harrowing or raking. Special fertilizers for some crops are used for a "top-dressing" after growth begins, but these will be mentioned later on, in another article.

Having thus gathered together the raw material, on which our plants are to thrive and grow fat, the next question is how to prepare in the most effective way. The first operation, of course, is that of turning over the soil where it lies, packed hard and cracked after the previous season's tramping and the previous winter's freezing and thawing. First of all clear off and burn any old pea-brush, bean poles, cabbage stalks or corn stalks which may have been left over, otherwise they will be catching in your implements and turning up unexpectedly to annoy you all through the summer.

If your garden is large enough to admit the management of a horse or team, have it plowed instead of dug up by hand; the job can be done much more thoroughly, quickly and cheaply that way. The ground should be turned over just as early in the spring as it is fit to work, as there are quite a number of things that can be planted at once. Care must be taken, however, not to be too previous with this work, because if the soil is plowed while wet and sticky it may be injured for several seasons. If it happens to be heavy, low-lying ground, it may have to remain untouched for several weeks after your more fortunately situated neighbors have been able to begin their garden operations.

The depth to which the soil should be turned over is determined by the condition of the soil itself. If it is a good garden loam that has been worked for many years before, you may be able to work it up for six or even twelve inches in depth. A pretty safe general rule to follow—except where the soil is a very light, sandy one—is to turn it over as far down as the "sub-soil" which is usually hard, lumpy and of a different character from the surface. It will do no harm if a little streak of this is turned up here and there, but by all means



Coldwell Lawn Mowers

Near the first hole, Pelham Bay Park links, N. Y.

Two Mowers in One

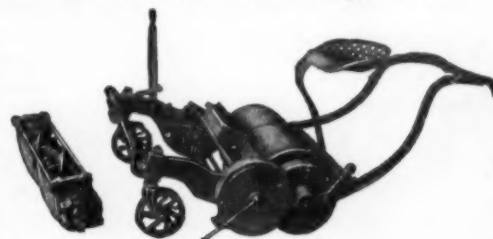
You get practically two horse mowers—or two putting green mowers—in one with Coldwell Demountable Cutters.

These cutters are removable at will, like the blade of a safety razor, and two or more go with each machine.

If one cutter needs sharpening or repair, it takes less than a minute to remove it from the frame and attach another.

No waste of time sending the whole mower to the shop. No heavy freight charges.

The new Coldwell Horse Mowers and Putting Green Mowers are now made with this money-saving, time-saving, labor-saving device—Coldwell Demountable Cutter (patented). Send for leaflet giving full description and prices.



Demountable Horse Mower

The Coldwell Company makes lawn mowers in 150 different styles and sizes. The Coldwell Combination Motor Roller and Lawn Mower is the best and most economical mower ever made for use on large stretches of lawn.

Descriptive catalogue mailed on request, together with practical booklet on The Care of Lawns.

COLDWELL LAWN MOWER COMPANY
Philadelphia NEWBURGH, NEW YORK Chicago

Planet Jr.

time-saving labor-lightening farm and garden tools get the greatest yield from your crops. Light, strong, and lasting. Fully guaranteed.

[No. 11] Planet Jr. Double Wheel Hoe, Cultivator, Plow and Rake works both sides of plants at one passage until crops are 20 inches high. Indestructible steel frame. Steel leaf lifters.

FREE! An instructive 64-page illustrated catalogue!

Shows latest tools for all cultivation including seeders, wheel hoes, hand and horse cultivators. Send postal for it today.

S. L. ALLEN & CO.
Box 1110K, Phila., Pa.



No. 1

No. 2

No. 3

Rustic Cedar WREN HOUSES by Parcels Post, prepaid. Your choice for \$1.25, three for \$3.50.

Can be fastened under eaves, gable, on pole, pergola, arbor, trees or suspended. No. 2 is particularly suitable for this purpose.

***Wrens never build in colonies, only one family in a house. The many roomed houses so expensive are unsuitable and unnecessary. Address

THE CRESCENT CO.
Box 252, Toms River, N. J.

MAKE YOUR GROUND RICHER

PLANT Food Blend fed to the ground in the right way and at the right time will give better crops. It will make more velvety verdant lawns, richer foliage and more luxuriant blooms and better flavored and finer vegetables.

U-TREE-T-ME

U-TREE-T-ME — is absolutely odorless

concentrated—all available, a scientific discovery, tested six years. It is rich in all elements necessary to fertilize the ground. It is economical—3 lbs. for \$1.00 express prepaid anywhere in United States. Enough for 500 feet law or 150 rosebushes or other shrubs. 100 lbs. \$5.00, freight prepaid east of Mississippi River. Special prices for quantities. Send for valuable authoritative booklets on fertilization of lawns, flower and vegetable gardens and trees and shrubs—Free.

THE PLANT & LAND FOOD CO.

206 N. Garrison Lane

BALTIMORE, MD.



A BOOK ON BIRDS

By Augustus Wight Bomberger

A nature book you can scarcely lay down before finishing. You feel yourself at the author's side, crossing meadows, climbing fences, tramping the damp, fragrant earth of the woods—seeing and hearing wonder after wonder of bird life through the keen, knowing eye and ear of the author—amazed, charmed and instructed. 32 Photographs from Life, the result of years of toil by William L. Baily. A Novel Field-Key enables anyone to classify the birds of the Eastern States. 200 pages. Bound in gold-decorated cloth. At all booksellers, or sent postpaid for price and postage. Price, \$1.00 net. Postage, 8c.

THE JOHN C. WINSTON CO., 1012 Arch Street, Philadelphia, Pa.



This well known formal garden which we designed and erected on the grounds of R. R. Colgate, Esq., Sharon Station, Conn., admirably shows the delightful effects secured by the proper use of Garden Ornaments.

We will gladly submit plans and estimates to reproduce on your estate the delightful gardens of Italy, France and England.

Our splendid collection of garden furniture and ornaments modelled from the masterpieces of the Old World and our own original designs offers such a large variety of subjects that it is possible to get exactly the results desired. We will mail our handsome illustrated catalogue on request.

The Erkins Studios 226 Lexington Ave.
NEW YORK CITY

The Largest Manufacturers of Ornamental Stone

avoid getting a layer of it on top of your good soil.

If the garden is too small to make the use of a plow practicable, and you have to resort to having it spaded, see that this is done both deeply and thoroughly, as no amount of care afterwards will make up for slovenly work here. If it is an old, well-worked garden soil it may be necessary to "trench" it or dig it two spades deep in order to turn it over clear to the bottom. In doing this the soil from the first row or furrow is thrown up on the surface and the layer below it is turned over where it is. The surface soil from the next row is thrown on top of this, leaving the lower layer open to the spade—and so forth for the length of the patch.

Harrowing should be done with more care, if anything, than the plowing, the object being to pulverize the ground very thoroughly below the surface for three or four inches down; then to "finish off" the surface itself until it is as fine and smooth as it can be made. Modern harrows are adjustable so that the same one will do both the two kinds of work. The garden is then left to be finished off by hand with an iron rake according as it is needed for crops.

Do not be disturbed if it seems to dry off very quickly on the surface after harrowing, for this is simply a sign that in reality the moisture below is being saved from evaporation by the "dust mulch" on top of it.



Hints from the Agricultural Department

IN the report of the Department of Agriculture for 1912 are found the following paragraphs of interest to gardeners:

FOOD HABITS OF BIRDS

Careful studies have been made of the food habits of birds considered injurious and of many species that are known to be beneficial. More than 50 species of birds have been found to destroy the cotton boll weevil and 31 have been found to feed on the alfalfa weevil which has recently become so destructive in Utah. Special studies have been made of the food of birds in the fruit-growing districts in California and of special generally distributed groups, such as the flycatchers, grosbeaks, shore birds, and waterfowl. A summary of some of these studies, entitled "Common Birds in Relation to Agriculture," has proved one of the most popular bulletins ever issued by the department, more than a half a million copies having been distributed in recent years.

GIPSY MOTH AND BROWN-TAIL MOTH

The gipsy moth and the brown-tail moth, two insects accidentally introduced into New England, became so abundant and destructive in 1905 as to call not only for large State appropriations but for governmental aid. Realizing the hopelessness of

exterminative work after these pests had gained a firm foothold over 4,000 square miles of territory, Congress appropriated to the department a sum of money to be used in the effort to prevent the spread of both gipsy moth and brown-tail moth.

During the years in which this appropriation has been made, the bureau and the different States acting in co-operation have succeeded in preventing any extensive spread and in making the conditions of the towns and villages within the infested territory perfectly livable, whereas previously both species had been enormously destructive and very annoying.

During that period further extensive importations of the parasites and natural enemies of the gipsy moth have been made from Europe and from Japan, and of the brown-tail moth from different parts of Europe. Very many species have been imported in great quantities, and a number of them have been established in New England territory. The effect of their work is being more strongly seen each year, and it is hoped that they will shortly become so numerous as to be important factors in holding the destructive insects in check.

Recent discoveries have been made which promise, by observing certain principles in forest management, to result in the preservation of good stands of timber in the New England forests in spite of the continued presence of these tree pests.

OTHER NOXIOUS INSECTS

The introduction of the parasites and natural enemies of the gipsy moth and brown-tail moth is not the only work of this kind done by the bureau. An important enemy of the black scale of the orange and olive has been introduced, an egg parasite of the elm-leaf beetle as well, and at present the bureau is engaged in importing the European parasites of the alfalfa weevil. Similar shipments of American parasites to foreign Governments have also been made, and the most striking success has been achieved in the sending of a minute parasite of the mulberry scale from the United States to Italy, where it is reported to have been of the greatest benefit in the destruction of the scales, which bred so numerously in the mulberry plantations as to threaten the entire destruction of this tree upon which is based the great silk-growing industry of that country.

A few years ago a thrips appeared upon pear trees and other deciduous fruit trees in central California, completely blasting the crops and spreading rapidly, threatening the destruction of practically all deciduous fruits on the Pacific Coast. After two years' investigation of the method of life of this pest, the bureau discovered perfectly competent remedies, by the use of which orchardists are once more growing their normal crops.

Three years ago a weevil destructive to the alfalfa was discovered in the vicinity of Salt Lake City. It has spread rather rapidly to the north and to the east, and

James McCreery & Co.

34th Street

23rd Street

REED AND WILLOW FURNITURE

Very much in evidence this season is this particular style of Furniture, the popularity of which is manifested by the growing demand.

Reed or Willow Furniture is much sought for its simplicity and cosy attractiveness, also for its durability and moderate price.

Suites to harmonize with decorations are finished in shades to match any wood trimming or White Enamel; cushioned seats and backs of plain colored fabrics or handsome Imported Cretonnes, being most attractive for bedrooms or summer sitting rooms.

Willow Suites consisting of Sofa, Arm Chair, Arm Rocker, Side Chair and Side Rocker, handsomely cushioned seats and backs.
\$87.50 and upward.

Suites in White or French Grey Enamel, \$95.50 and upward.

34th Street

NEW YORK

23rd Street



Hicks' Shrubs and Trees for Quick Results

EVEN if your grounds are as barren of planting as the one at the left, we can in one summer make them as cozy and homelike as the one above.

It is not an exceptional result either—we are doing it all the time.

We have shrubs in all sizes—trees little and big.

We advise big trees because you get a mature decoration at once—not years afterward.

It costs more to go to Chicago on the twenty-hour limited express train—but it's worth all it costs in the time it saves. Exactly the same applies to buying Hicks' Big Trees; they save ten to twenty years.

You can come to our nursery and pick them out or order direct from our catalog. Either way you will get trees, well grown and symmetrical, with an unusual system of roots, dug and handled with skill. There are several thousand to select from.

What a contrast to the house above. If you have a bare foundation, let us treat it for you. If your porch is exposed to the street or glare of the sun, one of our big Maples, Lindens, or Pin Oaks, spreading fifteen feet, will overcome it immediately and at the same time add to the valuation of the property more than the cost of the tree. Ever think that side of it?

Isaac Hicks & Son, Westbury, Long Island

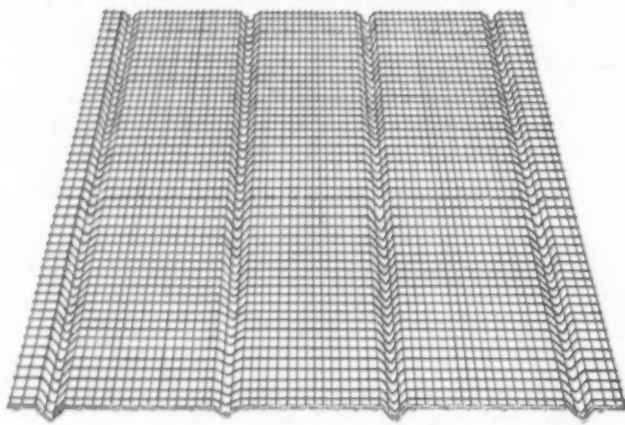
Grimm's Galvanized Corrugated Wire Lathing

requires no furring on account of the V-shaped corrugations which are imbedded at intervals of seven inches.

This feature alone is worth considering, but that's not all. It **WILL NOT RUST** as it is heavily galvanized with the finest grade of Western Spelter, and is much easier to handle and will conform to irregular curves much better than any other form of metal or wood lath.

Walls or ceilings plastered on this lathing **WILL NOT CRACK OR DROP OFF**, owing to its great keying qualities, which we will explain if you will drop us a card asking for our booklet No. 61.

"Note the V"



Our general catalog will also be mailed free upon request, which describes our entire line, such as Greening's Patent Trussed Steel Wire Lathing, Buffalo Crimped Wire Concrete Reinforcing, Wire Cloth of all kinds and Wire and Artistic Metal Work for all purposes. **DROP US A LINE AT ONCE.**

BUFFALO WIRE WORKS COMPANY

464 TERRACE

FORMERLY SCHEELER'S SONS

BUFFALO, N. Y.

A Little Green Book for the Flower Garden

(A list of selected stock)

PAUL DOVE (B) Wellesley, Mass. (Copy Free)

Euonymus Alatus

A Large Stock

Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

Norway Maples

A splendid lot of trees

Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

GARDENING With Modern Tools

Means better gardens. This book free.



Suburban Gardening without them is not to be thought of lightly—You have little time and less inclination for gardening under old conditions—but, with modern tools you can easily realize your ambition.

IRON AGE

GARDEN DRILLS AND WHEEL HOES

Sow accurately in drills or hills, hoe, cultivate, weed, ridge, open furrows and cover them, etc. Parts change quickly. High steel wheels, steel frame, necessary adjustments for close work. 39 combinations, \$2.50 to \$12.00. Ask the nearest dealer or seedsman to show them, and write us for new booklet, "Gardening With Modern Tools." Also one on Sprayers for every purpose.

With these tools you can make the garden right and keep it in perfect condition without hard work.

BATEMAN M'F'G. CO.

Box 64-G

GRENOCH, N. J.



Burpee's Seeds Grow!

and are the best it is possible to produce! If you love flowers, you have a rare treat on pages 111 and 112 of BURPEE'S ANNUAL FOR 1913, where we strive to describe and picture in nine colors the amazing beauty of the

New African Daisies These unique Dimorphotheca Hybrids are the most attractive annuals that have been "created" in a decade! Wonderfully profuse in bloom, they carpet the ground with bright, large, daisy-like flowers and are easily grown everywhere. Per pkt. 10 cts.

Crimson Ray Cosmos Burpee's distinct novelty of 1912—three times as many petals as the old Cosmos and star-like. Per pkt. 10 cts.

Burbank's Rainbow Corn Beautiful as a Dragon; as easily grown as field corn. Per pkt. 10 cts.

Burpee's "Airy-Fairy" Morning Glory Countless flowers, ivory white, flushed rosy pink, remain fully expanded until afternoon. Per pkt. 10 cts.

For 25 cts. we will send ALL THE ABOVE and ALSO one regular ten cent packet each of Burpee's Improved IMPERIAL CENTAUREAS—Burbank's New FIRE-FLAME ESCHSCHOLTZIA—Fordhook Finest Mixed GRANDIFLORA PHLOX and the charming new BURBANK POPPIES.

8¢ EIGHT ELEGANT ANNUALS, costing eighty cents separately,—mailed for ONLY 25 CTS. Choice seed of each all grown upon our own farms in Pennsylvania, New Jersey and California.

8¢ If not already received, be sure to WRITE TO-DAY for

Burpee's Annual

Long known as "The Leading American Seed Catalog,"—this bright book of 180 pages for 1913 is better than ever before. It is mailed FREE, upon application.

W. ATLEE BURPEE & CO.

Seed Growers, Philadelphia

Largest Mail-Order Seed House

8¢ See our "COLUMN OF SWEET PEAS" on page 29 of House & Garden for February.

appeared to threaten great danger to this vitally important crop of the irrigated regions of the West. The bureau's experts have been studying it since the beginning, have been engaged in importing its natural enemies from Europe (it is a European insect), and have now discovered a method by which the pest can be handled after the first crop of alfalfa has been harvested. It is hoped that in time some other means will be discovered whereby the important first crop can be saved.



A Manure Water Sack

R OSES should always receive a generous wetting with manure water as the flower buds begin to swell. The size of the succeeding blooms is a splendid reward for the courtesy on your part. But to have a barrel of a slop of manure and water in your yard is offensive in many ways. A much better plan is to put half a bushel of manure in an old sack, drop it at the root of your favorite rose, stick the nozzle of the garden hose in the sack and turn on a gentle stream of water. The manure solution will go right to the spot and the sack later dropped in an obscure corner of the garden. HARRY N. HOL



When the Spring Run Starts in the Sugar Bush

(Continued from page 193)

means a long sap season if you have a freeze and it thaws a little during the day. Of course, if it freezes up tight for long the sap stops and you've got to set around waitin' for good weather. Same thing if it gets too warm. That may end the season for good."

The next day a new problem presented itself. For in many of the buckets ice was floating when we got around.

"Chuck it away," was Ray's advice, "unless you find the whole pail frozen solid."

This seemed to me wasteful at first, but when I thought of salt water freezing, I knew that the action of freezing would accomplish the separation of sugar quite similar to that of evaporation. Ray told me later that an old Indian used this very method of getting his sirup from the sap.

We worked as before during several days. First a cold snap interrupted our labors and later a few very warm days seemed to suspend the flow. One day when a heavy wind swept through the bush we got hardly any run whatever. The season lasted well into March and the camp was open six weeks in all. But by no means did we have sap run each day; perhaps we had ten or twelve all together. Toward the end of the season the sap



**Before you
select your shades, write for
this book**

This book not only tells why it is more economical to buy Brenlin Shades, but shows how clever housekeepers everywhere are using Brenlin to make their windows look much better. It contains actual samples of Brenlin in all grades and many rich colors, and gives valuable suggestions for their artistic use in harmonizing room color schemes and draperies.

With this book we will send you the name of the Brenlin dealer in your town who is now ready to show you the three popular grades, priced, for the ordinary window (1 yd. x 2 yds.) at

75c, 55c and 30c (Except in the Far West)

BRENLIN UNFILLED—the 75c grade—is the world's finest window shade. It should always be chosen where length of service and attractive appearance are desired. For this grade is made of closely woven cloth without the "filling" that causes ordinary shades to crack and show unsightly streaks and pin-holes. Sun won't fade it nor water spot it. It is supple—not stiff—yet always hangs straight and smooth. And it really shades. 75c for windows 1 yd. x 2 yds. Special sizes and Brenlin Duplex—white one side, dark the other—made to order at proportionate prices.

BRENLIN FILLED at 55c and **BRENLIN MACHINE MADE** at 30c, for less important windows, will be found by far the best value in shades at these prices.

Write for the Brenlin Book today. CHAS. W. BRENNEMAN & CO., 2080 Reading Road, Cincinnati, Ohio.

There is a Brenlin dealer in nearly every town. If there should not be one in yours, write us and we will supply you direct. We satisfactorily fill hundreds of orders by mail every year.

WHAT SEED PLANT AND OUR SEED TREE CATALOG MEANS TO YOU

1. Complete instruction in all branches of Horticulture.
2. Convincing proof of the value of Northern Grown Products.
3. The very best varieties in cultivation to choose from.
4. Full directions as to when, how and what to grow to get the most out of your garden or farm.
5. Landscaping your home grounds at small expense.

This book of 128 pages, beautifully illustrated, mailed on application. Write today. It is full of just the information you are looking for to make your garden, farm and home profitable and attractive.

FREE SEEDS If you mention this paper we will send you either of the following varieties free, to convince you of the quality of our Northern Grown Stock.

May's Selection of Colossal Parsnips; May King Lettuce, the new early Head Variety.

L.L.MAY & CO. SAINT PAUL, MINNESOTA

changed from clear white and later on got a yellowish tinge, and again it was on Ray's diagnosis that the season was decided to be ended.

As he tasted it one morning he made a face and said, "Buddy sap." It had a peculiar flavor and a peculiar odor.

"It don't do no good to keep on a day later than when you get buddy sap. Besides it spoils your trees," was Ray's explanation. "If you notice, on some of the branches buds are beginning to grow full."

So the buckets were brought in and together with the spouts boiled and dried. The evaporator was cleaned out with vinegar and the little shack closed up to wait for another season.

Some of the sirup was boiled in a great wash boiler over the kitchen stove as Ray had decided, and made into cakes and those with a shining row of sirup cans stowed away for the delectation of others throughout the year.

I made another visit to the bush with Ray a few weeks later and this time we cleared out some birch and oak that seemed crowding on the maple.

"The best sugar bush needs some care," Ray opined, "but it is worth it. You see we make quite a bit on a stand like this with about five hundred trees. The work is fun and it comes when we've got nothin' else to do. And we couldn't use this land for nothin' else save pasturing and we've got enough of that. I only have to keep other sorts from crowdin' in. You get more sap from a straight tree that ain't crowded. Seems as though the trees that have the best spreadin' crown give the most sap. But then again the ground ought to be shady and well covered with a litter of leaves so it don't dry out in summer. That's why I don't let the cattle graze here. You see the maples don't root deep and much of the nourishment comes near the surface. We've got it about right here 'cause on the south side of the slope we get an earlier start than most of the bushes and when we are through there we can work on the north side. That starts later. The trees are good first growth, too, and uncrowded. Why from some big trees here we may get as much as forty gallons, although on the average it's less. You see that makes from about a pint to a gallon of sirup to a tree. Rather a tidy little item that just comes if you are a bit careful. But I don't care what it nets, it's an awful lot of fun. When a man's been locked up in a cow barn most all winter or settin' round a stove, seems like this sugarin' was a sort of ritual celebratin' spring and meanin' you was to be purified into a real man 'stead of a bunch o' clothes."

And if a countryman can feel like that about it you may imagine the effect that the spring run has upon the man fresh from the city. The first coming of spring is an experience well worth having; indeed one has not entirely lived until it has been enjoyed. The sap run in the sugar bush typifies the whole experience, if for that alone it is worth while.



Nothing adds greater beauty to a house than a tastefully-arranged garden—and nothing detracts more from the appearance of a garden than the barren spots where seeds "refused" to grow.

It is not always poor soil or improper care that makes these blotches; but very often inferior seeds are to blame. Planting poor seeds in a garden always has that air of dubiousness—perhaps they may grow, and then again perhaps they may not.

Why not make a good garden a certainty by using Good Seeds?

Thorburn's Seeds

"The Most Reliable Seeds"

for over a century—since the days of Washington and Jefferson—have been renowned for their uniform purity and fertility.

We have extensive trial grounds in Connecticut and Long Island, as well as in France, and no effort is spared that might possibly lead to the betterment of our seeds.

Our catalog contains a most complete list of flower and vegetable seeds, and the descriptions it contains are both clear and accurate. Write for a copy now, it is just full of helpful suggestions.

And while you have your pen in hand, ask for a packet of the seeds of that beautiful new flower, the Hybrid African Daisy—ten cents in coin or stamps will cover the cost.

J. M. THORBURN & CO.
33 E Barclay St., (M12) New York

Redfern—Corsets

In any fashionable gathering Redfern figures may be distinguished by greater elegance. The fine American corset that makes Paris look to her laurels—

Redfern.

Found where all good corsets are sold **\$3.50 to \$15.00**
The Warner Bros. Co.
New York—Chicago—San Francisco

Band With Tree Tanglefoot!

No Creeping Insect Escapes Its Sticky, Deadly Grip!

The destroying army is coming! Don't wait until you see the vanguard. Band your trees with Tree Tanglefoot two weeks before the Gypsy, Brown-tail and Tussock Moth Caterpillars, Canker Worms, Climbing Cut Worms and Bag Worms begin their ravaging work.

Easily and Quickly Applied With a Wooden Paddle

Tree Tanglefoot is harmless and the only sure and safe protective. One pound makes about nine lineal feet of band. One coating lasts three months and longer in any temperature, rain or shine—remains sticky and powerful twenty times as long as any other substance. Needs no mixing—just open the can and apply. Will not soften or run down the trunks of the trees. Absolutely prevents

any creeping, crawling pests from harming your trees.

Sold by Reliable Seed Houses

Prices: One-pound cans, 30c; three-pound cans, 85c; ten-pound cans, \$2.65; twenty-pound cans, \$4.80. Write today for valuable free booklet and name of nearest dealer.

THE O. & W. THUM COMPANY, Dept. L 3 Grand Rapids, Michigan
Manufacturers of Tanglefoot Fly Paper and Tree Tanglefoot (2)



From actual photograph taken at Melrose, Mass. TREE TANGLEFOOT saved the tree on the left. Moths stripped tree on right.

Correspondence

EDITOR'S NOTE:—From the numerous letters which come in from subscribers who take advantage of our offer to help them solve their house problems, we select the following which, in conjunction with the replies, seem to us to have somewhat more than a merely individual value.

Query.—As a subscriber to HOUSE & GARDEN I am going to take advantage of your offer to answer questions relative to interior decoration.

I wish to know what you would suggest for pictures for a living-room 12' x 22' (this room being the only one in the house where pictures could be hung to advantage) paneled by means of battens nailed on rough plaster, plate shelf 5' 7 1/2" from floor, battens and shelf fumed oak and plaster dark brown below plate shelf and turquoise blue above, beamed ceiling and plaster on ceiling buff.

There are four available spaces for pictures: 2' 5 1/2" x 8' 6", 2' 5 1/2" x 3' 6", 2' 5 1/2" x 4' 9" and 2' 5 1/2" x 10' 0" (over fireplace).

Furniture is slightly mission, fumed oak, and consists of couch, table, bookcase, two rockers and two pieces of willow, and two dark red rugs of saraband pattern.

F. G.

Answer.—Choosing the pictures for one's home is so much a personal matter that it is hard to give any advice on the matter. I can give you a few suggestions that may be of some aid to you in determining what to buy for your living-room. In the first place, I should have harmonious color. The color of the wall being dark brown below the plate rail and turquoise blue above, I should certainly bring the color of the lower wall into the upper division in some way. If you are going to use Oriental rugs, I should use fairly colorful pictures (perhaps some embroideries, Chinese, Japanese, or Indian) either under glass or tacked carefully on the wall. Every year at the various art exhibitions there are some charming paintings which are moderate in price. One can buy some very excellent things in this way at from \$25.00 to \$150.00. If you are a devotee to Japanese prints there would be no difficulty in selecting subjects of very beautiful colors, which would bring in the brown, blue, and perhaps a touch of that very beautiful Japanese orange which they use so much.

Single prints could be framed on silk (as I recommend all Japanese prints being framed) in a soft brown frame, that would fit the smaller spaces you have, while the long spaces could have triptyches (three piece prints) or five piece prints. A triptych would fill your eight foot space nicely, while a five or seven piece print would be decorative for over the fireplace.

If you do not care for Japanese prints, some photographs or carbon prints of the old masters, more particularly prints of drawings, would be excellent. Holbein prints come in at least three sizes, at \$1.00, \$1.75 and \$2.50 each, and are very excellent. For the long space over the fireplace

Grow An Old Kentucky Lawn

You can have a lawn as beautiful and velvety as those for which the Blue Grass State is famed, if you use the genuine

Seal of Kentucky Lawn Seed

Direct from the Blue Grass State. Grown, selected and cleaned by people who know how. Hundreds of enthusiastic users are enjoying the beautiful lawn it produces—why not you? 1 lb. bag 30c; 4 lb. bag \$1.00; 9 lbs. \$2.00; 14 lbs. \$3.00; all prepaid. One pound is sufficient for 300 square feet. Order today. Interesting folder free upon request. BLUE GRASS SEED CO., Sta. F, Covington, Kenton Co., Ky.

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 whole 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 subscription start with March 1st, and include this helpful expert among your regular visitors. \$3.00 a year; 25 cents a copy.

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

Meehans' 1913 Specialty Plant Book

—sent free on request to any garden lover— is more than a mere catalog of well-grown nursery stock. It features the new, rare and unusual plants you need to give your garden individuality. For instance,

unusual hedges that lend distinction to any grounds

Meehans' New Improved Variegated-leaved Althaea is a splendid flowering shrub, of upright, sturdy growth—admirably adapted for hedge use. Can you imagine any hedge more beautiful than this; with its neat variegated foliage and profuse covering of flowers from late July until September?

For English Garden effects, you need Beech Hedge. It is well nigh impossible to get it right. Our years of effort and three transplantings have been well rewarded in the remarkable stock offered now.

Write at once for this 1913 Specialty Plant Book. If you have a new, unplanted property less than an acre, ask also for our

Special New Property Proposition

Thomas Meehan & Sons

Box 40

Germantown, Phila.

Pure walls



HYGIENIC KALSOMINE

Adams & Elting Co.

Safeguard the Health of Your Family.

Your walls can be perfectly sanitary as well as artistic. Hygienic Kalsomine purifies and at the same time creates a charming, healthful environment, and is the most economical wall finish on the market. It goes furthest, lasts well longest and does not rub off.

We want you to have a copy of our "Home Decorator," a book of helpful decorating suggestions in colors. Ask your dealer or write us. It is free. Department F.

ADAMS & ELTING CO.
716-726 Washington Blvd., CHICAGO

Rhododendrons

Hardy Varieties
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N., Connecticut



GROWN IN NEW JERSEY
under soil and climate advantages, Steele's Sturdy Stock is the satisfactory kind. Great assortment of Fruit, Nut, Shade and Evergreen Trees, Small-fruit Plants, Hardy Shrubs, Roses, etc. Fully Described in my Beautiful Illustrated Descriptive Catalogue—it's free!
T.E. STEELE, Pomona Nurseries, Palmyra, N.J.

you could have several of the most attractive of the subjects framed together, and you might use one or two single prints. I would not use too many Holbeins in the same room as the general character of the prints is the same, which is not the case with Japanese prints. For the other spaces you could choose carbon prints of some of your favorite subjects. Carbon prints measuring 14 x 18 to 16 x 20 inches cost about \$5.00 each.

Very beautiful Japanese prints that would be appropriate for your room can be bought for from \$4.00 to \$50.00, \$60.00 or \$75.00 for a series of prints to fill your large spaces.

If I can be of any service to you in selecting your pictures I should be very glad to do so. I am in touch with most of the artists, try to attend the greater part of the exhibitions and see the pictures that are offered for sale and know the prices asked. I have a large collection of Japanese prints of my own, and am well prepared to make selections of prints for any one desiring them, and I am, of course, in touch with most of the stores that carry prints and photographs.

Query.—I am about to furnish a new home and would be most grateful for some suggestions as to wall treatments, floor coverings, hangings, etc.

The house covers a ground space of 41' x 30' with 41' frontage west.

The hall is in the center with living-room on south and dining-room on north side, both rooms facing west. Opening off from the living-room toward the east is a den.

I would also like color schemes and ideas for bedrooms, one furnished with cream enameled bedroom set and another in Circassian walnut. The bedrooms on upper floor are laid out much like the rooms in lower floor. All woodwork on upper floor is old ivory enamel.

On lower floor, Oregon pine in dark brown, wainscoting up to window sills. Finished hardwood floors down stairs; waxed pine upstairs.

We have a glorious view of San Francisco Bay, the Golden Gate and surroundings and I would like some suggestions for a name or inscription or motto suggestive of this fact; and where such an inscription might be placed.

E. W. H.

Answer.—Your letter of inquiry did not state whether you had any furniture which must be employed in your down stairs rooms, nor give me any suggestion as to the preference for the color scheme for your lower floor. The varieties of wall coverings, rugs and other furnishings are in innumerable colors, and tones of color, are so great that any one of many color schemes might be suggested. Old gold and blue, or old gold and mulberry make very beautiful combinations of color, and I would suggest that you have some wall covering of grass cloth fabric, or paper of an old gold used in your dining-room, hall and living-room.

Globe-Wernicke

Sectional Bookcases



A GLOBE-WERNICKE Bookcase in the home encourages the whole family to reading habits. Its unit principle encourages library building as it permits of classifications according to topics or authors and extra units can be purchased as needed at a few dollars each. Its beauty and utility have made this the Globe-Wernicke period in bookcases. Globe-Wernicke Bookcases are made in many styles and finishes to suit the color scheme of different interior trims. Sold by 1500 authorized agencies. Where not represented goods will be shipped on approval, freight prepaid.

Booklovers' Shopping List—FREE

This little book lists the works of great authors and gives their prices in sets. The list includes the low-priced popular sets as well as the deluxe editions. Every book buyer should have a copy. Sent free with the Globe-Wernicke Catalogue.

[Address Dept. H. G.]

The Globe-Wernicke Co. Cincinnati, Ohio

Branch Stores—New York, 380-382 Broadway, Philadelphia, 1012-1014 Chestnut Street, Boston, 91-93 Federal Street, Washington, 1218-1220 F Street, N. W., Chicago, 231-235 So. Wabash Avenue, Cincinnati, 128-134 Fourth Avenue, E.

Moth Proof Red Cedar Chest

On 15 Days' Free Trial



A PIEDMONT
Southern Red Cedar Chest

shipped direct from factory to your home at factory prices. Freight prepaid. No more beautiful or useful bridal or birthday gift. Pays for itself in every home. Protects furs and woollens from moths, mice, dust and damp. Write for illustrated catalog and particulars of special offer.

PIEDMONT RED CEDAR CHEST CO., Dept. B Statesville, N. C.

Postpaid, Free

Write for 64 Page Catalog Book, "Story of Red Cedar"

A properly designed and well planned Pergola is the finishing touch to the architectural and landscape perfection of elaborate grounds—it is the one thing needful to confirm the artistic character of a modest home.

If interested in Wood Columns, send for Catalogue P-40.



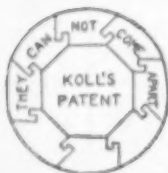
Our Pergola Album P-28, just issued, contains 48 large pages devoted to the illustration and description of Pergolas, sunrooms, and other garden accessories in their adaptations to every requirement of landscape work. Same will be sent on request.

HARTMANN-SANDERS CO.

Manufacturers of

**KOLL'S PATENT
LOCK JOINT COLUMNS**

**ELSTON and WEBSTER
AVENUES, CHICAGO, ILL.**



Suitable for

**PERGOLAS, PORCHES,
and INTERIOR USE**

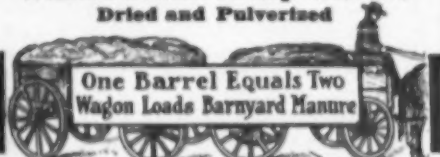
EASTERN OFFICE

1123 Broadway, New York City

Beautiful Lawns and Gardens

With their wonderful colors and delicious perfumes; their luscious berries and tender greens depend upon natural fertilizer. The best soil will fail unless it is kept rich and fertile with

**Wizard Brand Sheep Manure
Dried and Pulverized**



**One Barrel Equals Two
Wagon Loads Barnyard Manure**

\$4.00 for 200 lb. barrel prepaid east of Omaha. Special quantity prices and Free Booklet—sent for your name on a postal.

**THE PULVERIZED MANURE CO.,
24 Union Stock Yards Chicago**

Wizard Brand is sold by Seedsmen and Garden Supply Houses

Beautiful Lawns

Lawns that are distinctive; that show early and late and all of the time that they are different; lawns of wonderful texture; a rich green, velvety carpet out of doors; such lawns are made with

**KALAKA
FERTILIZED GRASS SEED**

Expert blending of purest seeds of choice lawn grasses in combination with specially prepared natural fertilizer insures best distribution and quick, strong germination.

Kalaka in 5 lb. boxes at \$1.00 express prepaid East or \$1.25 West of Omaha. Special prices for quantities of 50 lbs. and over. Order today.

Free Booklet "How to Make a Lawn," valuable to every lawn maker, sent free if you mention your dealer.

THE KALAKA CO., 1102 W. 35th Street, Chicago

The over hangings, seats of your dining-room chairs, rugs and other furnishings of your dining-room might be of figured mulberry, or in mulberry tones. A linen tapestry for the draperies; a woolen tapestry for the chair seats, and a rug embodying the two colors—mulberry and old gold.

The hall I should furnish in tones of old gold. The living-room, being a south room, might be carried out in tones of old gold and old blue. Many beautiful fabrics, rugs, potteries, etc., coming in these colors.

In the den back of the living-room, the tapestry paper might be used. The predominating color should be old blue. Where the paper is figured, hangings and other fabric furnishings of the room should be plain old blue goods.

The bedroom in which you are going to use the cream enamel set, would be charming in a shell pink. Shadow cretonnes in beautiful patterns come in these tones, and a striped wallpaper at only 30 cents a roll can be had. Plain mohair "Tudor" rugs, size 3 by 6, which are a lovely color, and are soft to the feet, cost \$9.50 each.

The Circassian walnut set I should use in the blue room. Tudor rooms are also to be had in a charming tone of blue wall-papers and fabrics.

Shadow cretonnes, or linen tapestries come in beautiful designs and colorings appropriate for use in such a room.

Why do you not use the name "Golden Glow" for your place, and have planted in the yard, or grounds, large clumps of this profusely flowering plant? The name is also suggestive of your view of San Francisco Bay, and the Golden Gate. The name might be designed and cut out of heavy brass or wood, covered with gold leaf, and inserted in the chimney or wall of your house in some way. I refer you to the article in the September number of this magazine. "Distinctive Devices for House Exteriors" for suggestions.

Should you be interested in carrying out any of the color schemes suggested, I would be glad, upon hearing from you, to send you samples of wall paper, rugs and fabrics suggested.

Query.—Have read with interest your "Inside the House," and wish for a few of your good suggestions for a new home. The exterior is "Germantown Colonial"—Bokara brick, white trimmings, formal entrance, and living porch at right.

The living-room is to be finished in dark oak, but the furniture is mahogany. What would you suggest for the color scheme; also kind and color of brick for a plain brick fireplace?

The dining-room is to be in white woodwork, blue walls, with mahogany furniture. Would you advise panels; if so how high? The ceiling is nine feet and the room 15' x 16'—no high windows.

What do you consider the most practical finish for kitchen walls, woodwork and floor?
V. R. P.



"Gaumer Lighting everywhere, follows the evening glow"

Is your Den artistically lighted?
Have you appropriate fixtures in your Hall or Billiard Room?

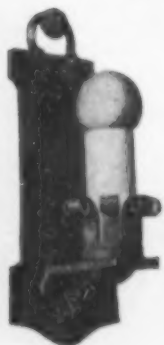
**GAUMER
Hand Wrought
Lighting Fixtures**

if wisely selected, will harmonize with the surroundings and blend with the furnishings in color, tone and style.

We are the acknowledged authority on hand-wrought unusual fixtures. A book of recent designs is at your service.

The Antique Copper, Bronze or Brass finish on every piece for interior installation is positively guaranteed—look for the Guarantee-Tag as displayed on each fixture in the stores of Progressive Dealers who stock our latest designs.

**JOHN L. GAUMER CO., DEPT. A
22D AND WOOD STS., PHILADELPHIA, U. S. A.**



No. 6202

LIGHTING FIXTURES

Answer.—As the walls of your dining-room are to be covered in blue, and I judge that the hall, dining- and living-room are closely related, the color scheme should be carefully considered.

It seems to me I should have the hall in brown, and the living-room in blue and brown. Rugs copied from Chinese patterns may be had at prices very considerably under the price of Chinese rugs, and these are in delightful tones of blue and brown.

The walls might be a good tone of brown grass cloth, or paper of grass cloth effect; the over hangings and other furnishings of old blue. A brown tone of tapestry brick, in which there are little specks of blue, would be appropriate for the fireplace.

Personally, I prefer painted wood for the kitchen, and light color for the wall. While this soils easily, it is also easily cleaned, and it seems so much more cheerful and clean than any other finish or color. If you wish to go to the expense of a linoleum floor covering, this is most satisfactory, and easily cleaned. If not, leave the kitchen floor perfectly plain. It can be kept in good condition and made almost white by conscientious cleaning.

Query.—Your letter in answer to questions regarding the decorations of my house received. Thank you very much.

Our home, as I mentioned before, is to be Georgian Colonial in style and we have decided to change the inside finish from oak to ivory white enamel throughout, in order to conform more nearly with the exterior. Liking your suggestions for the oak finish so much we wish you would suggest a color scheme suitable for the white finish. The dining-room I wish to keep in blue. Do you advise paneling in the dining-room and if so to what height?

There is a cornice in the living-room, (which is 15' x 26' by 9'). The windows are two feet from the floor and are 3' x 5' having fifteen square panes. Same in the dining-room.

The fireplace is very large, being 5' x 8' with the opening 2 1/3' x 4'. We wish to have it brick rather than tile. Can you suggest a color for the brick that would harmonize with white woodwork and mahogany furniture? Could the shelf of the mantel be mahogany or should it, too, be white?

Have you a suggestion on lighting fixtures?
V. R. P.

Answer.—Enclosed I am sending you samples of blue paper (silk fibre for your dining-room, and a tan Java canvas for your living-room and hall) which it seems to me should be alike. The prices are marked on the back. For draperies in the dining-room I am sending a linen tapestry at \$1.25 a yard. Into your dining-room you might add a note or two of this mulberry cotton velvet, which carries out the note in the linen.

For the draperies in the living-room I am sending a sample of unfadeable fab-

TIFFANY STUDIOS



IF you are perplexed over any Decorative problem, a visit to the Studios may prove of interest and assistance. In addition to the displays in our show rooms, Experts in Interior Decorations and Furnishings will be pleased to make suggestions without obligation. Inquiries by mail will be given prompt attention and Illustrations sent upon request.

TIFFANY STUDIOS
347-355 MADISON AVE. COR. 45TH ST. NEW YORK CITY.
CHICAGO OFFICE, ORCHESTRA BUILDING - BOSTON OFFICE, LAWRENCE BUILDING

NOW IS THE TIME TO GET
A COPY OF

Planning a Trip Abroad

By BLAIR JAEKEL, F. R. G. S.

IT is not too early to begin to think about your trip to Europe, and to make plans for it. Particularly timely, therefore, is this valuable book, for it is a guide to both the planning and the going. It suggests preparatory reading, helps you to choose steamer and stateroom advantageously, tells you the clothing you will need, how to carry your money, what provision to make for steamship comforts, how much and when to give tips; and there is a great wealth of other information on every travel need.

Your bookseller can supply you. Send for catalogue.

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

HEISEY'S GLASSWARE

The appetite readily responds
to food that is daintily served

Heisey's Glassware

with its shimmering glints of light and its suggestion of
purity and refinement, seems actually to lend a delicate
savor to the food and
drink which it contains.

There are many useful sugges-
tions in the book "Table Glass
and How To Use It."

Write for a copy.

A. H. Heisey
& Co.

Dent, 52 Newark, Ohio



**Norway
Spruce**

SPECIMENS TEN TO
FIFTEEN FEET
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N., Connecticut



GARDEN FURNITURE

Benches, Chairs, Tables,
Arbors, Treillage, Per-
golas, in painted and
rustic

Send for catalog of many designs

North Shore Ferneries Co.
BEVERLY, MASS.



OWNERS AND BUILDERS OF CEMENT HOUSES

Write for interesting free book telling how cement
buildings can be successfully painted and water-proofed
at slight cost.

It contains color plates showing how CHI-NAMEL
CEMENTONE will improve the appearance of new cement
buildings, and make the exterior of old buildings look new.
THE OHIO VARNISH CO., 8602 Kinsman Rd., Cleveland, O.

Free Book on Lawn Making

It tells you how to make
and care for a new
lawn. Also tells you
how to renew an
old worn-out
lawn. In fact,
this book gives
all data on
making and
maintaining a
beautiful lawn.
Every home owner
should have this book.
It is free for the asking. Write for it to-day.



Dunham "Water-Weight" Rollers Roll Your Lawn

Do you know that the most essential tool
for the care of a lawn is a Roller? A roller
will eradicate weeds, discourage moles and
ants, keep grass from dying out in spots, and
promote even growth from a hard, smooth
surface over which the mower will operate to
perfection. Dunham "Water-Weight" Roller
Bearing Rollers are superior to all others.
They are roller bearing and easy to operate.
Insist on a Dunham. If your dealer does not
have them, write us. For sale by leading
Hardware and Seed Stores. Don't fail to
write for our Free Book on Lawn Making.

THE DUNHAM COMPANY
130 FRONT STREET, BEREA, OHIO
The Largest Roller Manufacturer in the World

ric, 50 inches wide and \$2.50 a yard. One-
half width, however, does for the over-
hangings if they come only to the sill. I
also enclose samples of cotton velvet in
old blue and rustic brown, which you
may need for notes of accent in the living-
room.

I am sending a sample of a very inex-
pensive but effective fabric made of jute
for portières and hangings in the hall.

I should not have the shelf of the mantel
of mahogany. It should be white like the
rest of the mantel.

It seems to me that lighting fixtures in
a small house are best kept extremely sim-
ple. Charming effects can then be had by
making silk shades of materials that har-
monize with the furnishings of each room.
Soft silk gives a much cosier and more
homelike effect than glass shades and pen-
dants, and I should be very glad to give
you some suggestions if you carry out
the color schemes I have suggested, or
any definite scheme.

The dining-room might be paneled to
either three and one-half or four feet, or
as high as six feet.

I enclose a sample of a very effective net
that would be appropriate for the window
curtains throughout the house. The effect
from the outside of the house is much
more pleasing if all the curtains which
hang next to the windows are alike.

Should you wish to use any of these fab-
rics of which I have sent samples, I should
be very glad to purchase them for you
which entails no extra expense to you.

Query.—Will you give me some sug-
gestions of artistic furnishings and decora-
tion for a large living-room 27' x 16' west
front and south side, finished in dark ma-
hogany wood. What would you suggest
for the walls and lamp and general furni-
ture? The ceiling is beamed and the
house is a bungalow.

I also have a lounging room whose in-
side wall is finished in pressed brick, red,
more yellow than dark, with green finished
woodwork. What would you suggest for
furniture and rugs, etc. This is strictly
a family room and is on the southeast,
with many windows.

Both rooms have open fireplaces.

What wallpaper would you put in a
north dining-room, finished in quartered
oak stained dark brown?

M. O. K.

Answer.—Hof Cloth would make a very
pretty wall covering for your lounging
room. This comes in a number of weaves
and colors, and costs forty-five cents per
yard. I enclose a sample that you may
know what the material is. The sample
enclosed is an excellent color to go with
your green woodwork, but there are other
colors which I can send to you if you are
interested.

In this room I would suggest having
some large comfortable chairs of willow,
stained to harmonize with your wall cover-
ing and woodwork. I will also send you
samples of willow if you are interested.

As your dining-room is a north room you will have to use a paper with some warmth of color.

The paper with the little fleur-de-lis pattern of which I send a sample would make an exceedingly pretty room. While the little pattern is not blue it gives the effect of being so, and blue is usually very nice introduced in a dining-room.

I would suggest, if you use this paper that you get curtains with a little blue in them—Japanese towelling makes very pretty side curtains—and also use some pottery, such as the Brittany pottery, with blue and yellow in it. The rug for the dining-room should be in this case of old blue and yellow or buff. Many excellent rugs come in these colorings.

Since the woodwork in the living-room is mahogany, I should use a paper with some red in it. I am sending a sample of very handsome paper with gold, blue and red in it. Khiva rugs with their dark, rich colorings would be beautiful in this room if this paper were used. Hangings could be of the same tone of red, and some comfortable, spacious lounging chairs, and a large divan in the same colorings would be appropriate and harmonious.

If these suggestions interest you, I should be very glad to go into the matter more fully, sending you samples of the materials, furniture or rugs you might decide upon. This service entails no extra expense to you.

Query.—I should be very greatly obliged to you if you would kindly give me your advice in the following matter:

I am building a small house in the suburbs, and I am very much puzzled to know what color draperies and rugs to get for the living-room (size 14' 8" x 16' 8") the walls of which are yellow, the woodwork white and the furniture mahogany. What would you suggest? The curtains will hang between two white columns, which form the doorway leading to the entrance hall. Also, what color tiles would you suggest for the fireplace in this room? The woodwork, mantel, etc., will be white.

J. F.

Answer.—Almost any color will harmonize nicely with your yellow walls; brown, blue or green. My own preference would be for brown or for blue, according to the location of the room, whether it has a northern or a southern exposure. Whichever color you employ for your draperies and rugs I would suggest that you carry out in the tiling of the fireplace. By all means I should have the woodwork of the mantel white. Cotton velvet, which comes 50" wide for \$2.50 a yard would be excellent for your heavy draperies, and some of the unfadeable fabrics for the lighter draperies. I enclose a few samples of both materials.

If you do not feel that you can buy Oriental rugs, in which I would suggest that the colors be mostly blues and browns, the Caledon rugs which come in many excellent colors at \$4.00 a square yard, or

LOCKS
YALE
LOCKS

THE word "lock" is not safe enough for you to use to lock up valuable possessions. There are locks in which positive security has been carried to the superlative degree.

There is a Yale Lock for every purpose, from the smallest bureau drawer to the largest barn door—from the simplest padlock to the most complicated bank lock. In order that you may recognize these locks and that we, the manufacturers, may get the credit for making them, we put the word "Yale" like this



on every lock we make. The word "Yale" identifies the lock and protects the lock-up.

THE YALE & TOWNE MFG. CO.

9 Murray Street, New York

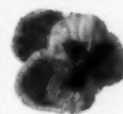
Makers of Yale Products

GALLOWAY POTTERY

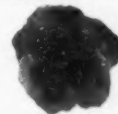


YOUR Garden and Home will have New Charm with Artistic Pottery selected from the Galloway Collection Strong and Durable Material at Reasonable Prices.

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



Pansies for Remembrance



THERE is a charm about the pansy that brings up pleasant recollections and makes it everyone's favorite. Be sure that it is upon your planting list. Never before have we been so successful in growing sturdy plants that are unsurpassed for wonderful color, variety and size of blossom. We can ship you at any time plants that are bound to grow; our famous prize pansies at the nominal price:

50 cents a dozen, 3 dozen for a dollar, \$2.50 per hundred, \$20.00 per thousand.

A stamp will bring a list of exceptional dahlias that will surprise you.

Martinsville Floral Company, Martinsville, Ind.



Your celery and cauliflower will be bigger—earlier



You can get earlier—bigger—more profitable plants

And with far less labor and expense than with an ordinary single glass sash

With Sunlight Double Glass Sash, you don't have to cover and uncover the frames with heavy mats and boards. The small $\frac{1}{4}$ inch air space between the layers of glass affords perfect protection against frost, and your plants get all the light and warmth they need.

Now is the time to get ready to start your cauliflowers, celery, cabbages, melons, etc.

With Sunlight Double Glass Sash, your plants will be earlier—hardier—and you

The Sunlight Double Glass Sash Co., 944 E. Broadway, Louisville, Ky.

can begin gathering while they are still a luxury on the market. **So order now!**

Send us your name and address and we shall mail you our free catalog and net price list. We shall make immediate shipment on receipt of order. On receipt of \$4 we will mail you in addition, Prof. Massey's book on cold frames and hot beds, an authority on the subject. Write for these books today.



Plant White Pine Look at this Picture!

White Pine planted 28 years. Timber alone worth \$200.00 an acre.



White Pine Planted 28 Years

We have 25,000,000 healthy forest trees White Pine, Red Pine, Norway Spruce.

Our stock is vigorous, hardy and free from disease; grown from selected seed. Prices very reasonable. Write today. A postal card will do.

Keene Forestry Association
Keene, N. H.

MOW YOUR LAWN QUICKER, CHEAPER, BETTER

Here, at last is the very machine that home owners, Park Superintendents, Greens Committees and others interested in big lawns or parks have been looking for. Never again is it necessary to have the lawn tracked up by horses pulling a lawn mower—or need the beauty of your place be marred because the man-power mowers can cut so little in a day. With the

BRODESSER AUTO-MOWER

the whole lawn can be mowed quicker, cheaper and better than you ever thought of. Cuts the grass and rolls the lawn in one operation. Easiest running, cleanest cutting power mower ever invented. Weighs only about 1200 lbs. and does not kill the grass. Simply and substantially made. Steers by means of front wheels. Three-point suspension gives flexibility. Is not expensive and will pay for itself by the great saving of labor.

Write today for Free Booklet

giving complete description and illustration. Mailed free.

BRODESSER MFG. CO.
Burlingame and Well Sts.
Milwaukee, Wis.



STAR OR WONDER BLACKBERRY TRULY A STAR PERFORMER

A wonder indeed! in growth, excellence, productiveness. Bears for two months; large, luscious berries in clusters, like grapes—see illustration. A single plant has yielded over two bushels in a year. Write for particulars. Headquarters also for St. Regis Everbearing, the best red Raspberry; and Caco, by far the choicest of all hardy grapes.



A full assortment of Strawberries, Raspberries, Blackberries, Grapes, Currants, Gooseberries, Garden Roots, hardy Perennial Plants, Shrubs, Vines, Evergreen and Shade Trees, Roses, Hedge Plants, etc.

Illustrated descriptive catalogue replete with cultural instructions. **FREE TO EVERYBODY.** Established 1878; 200 acres; quality unsurpassed. **PRICES LOW.**

LOVETT, Box 182, Little Silver, N.J.

White-Fl. Dogwood Large Specimens
Send for Catalog.
The Elm City Nursery Co.
New Haven, Conn., Dept. N, Connecticut

For The Garden And Lawn

It's easy to double the yield of the garden and also produce better vegetables—lettuce, radishes and onions that are crisp and tender; peas and beans full-bodied and rich; corn with a good ear and a juicy grain; melons large and luscious; full hills of sound potatoes, and tomato vines that bear all summer.

You can also hurry the growth for early table use. But you must feed the soil with

SHEEP'S HEAD SHEEP MANURE

Richest of all manures. No weed seeds—all killed by intense heat. Rich in nitrogen, phosphoric acid and potash. Adds humus to soil by decomposition of animal matter. Dried and pulverized, ready to apply. Get the kind guaranteed full strength—Sheep's Head.

A wonderful fertilizer for lawns to secure a quick growth of green grass. Also for lawns, shrubbery and orchards.

200-lb. barrel, \$4.00. Smaller quantities if desired. Freight prepaid East of Missouri River. Folders free.

Natural Guano Co., 804 River St., Aurora, Ill.

It Makes Things Grow

rugs made of a plain color, Axminster or velvet carpet which you can buy for a moderate price are very effective and satisfactory.

In any case, the rugs should be a deeper shade than the walls of the room.

Query.—I expect to get new curtains and drapery for my living-room and I would be delighted if you would help me to get something stylish and in good taste.

The living-room is finished in oak with tan walls and the Wilton rug is a mixture of tan, old rose and blue. The room has four windows, one north, one south and two on the east.

The dining-room is finished in Mission furniture and has dark green walls with two windows on the south.

I want something pretty but not too expensive. Write me how long the drapery should be and would the same material do between living- and dining-room, for a portière? Would also like something inexpensive for pink and blue bedrooms.

M. H. C.

Answer.—It seems to me you could carry the color scheme of your living-room into tan and blue, bringing in notes of old rose (as in your rug) in an occasional pillow, piece of pottery, lamp and candle shades, etc. I am enclosing a sample of unfading fabric in tan and blue for overhangings and other draperies. For the dining-room draperies I am sending a sample of linen tapestry, in which there is a good deal of soft green. The living-room side of the portières (from your letter, I judge that the dining-room and living-room open into each other) could be lined with this old blue cotton velvet. The sample of curtain net which I am sending is very effective in the piece. The curtains should come slightly below the sill.

You did not mention what the woodwork of your bedrooms is. If it is oak, this sample blue and white cretonne will not be as good as though the woodwork were white. I will be glad to send you other samples, should these not be satisfactory, and to purchase any materials which you may select at no extra cost to you. Should you like to see larger samples of the cretonnes (that you may see the patterns and try them in your rooms) I will be glad to send them to you, if you will return them promptly.

Query.—I wish to furnish my living-room new. It is in an apartment house, and quite a good sized room. I wish to have an upholstered davenport. What color would you suggest and also what material for it. What color scheme would you use in the room, as the woodwork is finished in mahogany with an old-fashioned brick fireplace; and what other furniture would you suggest for the room?

M. E. D.

Answer.—If the woodwork of your living-room is of a brown tone, I would suggest carrying the color scheme out in brown and old blue. If the woodwork, however, is rather red, you had better

Have clean, beautiful walls

By using Lowe Brothers Mellotone, you can have the most beautifully decorated rooms, even where the children play and mark the walls with their hands—generally none too clean.

Your walls will be very beautiful, washable and fadeless if you decorate them with



The Modern Interior Finish. Does not easily scratch or mar. With Mellotone you can keep your house beautifully decorated at a cost which in time is cheaper than paper or calcimine, and Mellotone is more desirable than either.

Ask your local "High Standard" dealer-agent to give you paint information and color combinations for Exteriors, Interior Walls, Floors, Woodwork, etc.

Valuable Books FREE

Have the best looking house in your neighborhood. Our booklets will tell you how—"Homes Attractive From Gate to Garret" and "Mellotone Your Walls." Sent free to readers of this magazine. Write today. Also let us help you with your special decorative problems.

The Lowe Brothers Company
464 E. Third St., Dayton, Ohio

Boston,
New York,
Chicago,
Kansas
City

Lowe
Brothers,
Limited,
Toronto,
Canada



Grow DAHLIAS For Garden Satisfaction

Nothing you can plant will give such variety of color and shape as well selected DAHLIAS. They keep the garden bright and beautiful from mid-summer on, when other flowers fall. 500 Varieties to choose from. All colors and shapes, novelties and standard varieties all grown on our 100-acre tract—largest DAHLIA growers in the world. FREE Beautiful catalog with colors showing how they will look in your garden. The only color catalog of Dahlias. Complete, standard, authoritative. A postal brings it to you. Send today.

DAVID HERBERT & SON, Box 471, Atco, N. J.

carry the color scheme in a sort of red tone.

At the present time there are fabrics made in so many colors that you can make your scheme in terra-cotta, amethyst, or any tone that harmonizes with your woodwork.

I would suggest that the wall be a warm tone. "Japanese grass cloth" makes an excellent background for the furniture, pictures and coloring that are introduced into the room. The curtains I would make of a simple figured net or scrim; or if you have a plain paper, you might use a lining tapestry with the tones you select for your room, either old blue, as in the blue and tan scheme, or some tone of red, as in the other scheme suggested. For handsome lining tapestry with designs of peacocks and other birds, and beautiful flower patterns can be bought for \$3.50 per yard, and as they are fifty inches wide, a width can be split, using half for each side curtain.

For the davenport covering use a plain material, cotton velvet or velours, crinkled tapestry, or any other fabric, the color of which is the predominating tone of your figured goods, either old blue or some tone of red. If you use a figured paper, reverse the scheme, using plain overhangings. The davenport might be plain, or some unobtrusive pattern.

The chairs in the room may be upholstered in some figured material. I would suggest that, if the room is large enough, your davenport be placed in front of your fireplace, at a comfortable distance; and back of that, that you have a large reading table on which are your books and lamp.

Comfort should be the keynote of the living-room, and I should see to it that there are one or two comfortable, upholstered chairs, and you could also have one or two easy chairs of willow, stained an appropriate color, one or two small tables for the tea tray, and other necessities, such as large vases, and jardinière for plants and flowers.

It depends upon the character of your living-room, whether you want cases and a desk.

As the trimming of your room is mahogany, I would suggest that your furniture be also of this wood.

Query—Your articles on interior decorating have interested me, and as we are about to build would like suggestions from you.

Our entrance hall, with an east frontage, is six feet wide, with an extra large archway leading to living-room, has a wide stairway at west end. At west end of living-room, which is twenty-two by thirteen feet, there is a fireplace six feet wide, with bookcases on either side. French doors on south opening out onto sunporch. At east end there are three windows (in group).

As living-room and hall are practically one, I suppose their woodwork would be the same. What finish would you sug-

Orinoka

Guaranteed Sunfast Fabrics

for Draperies and Coverings

MADE in a wide range of weaves and textures, both plain and in designs, to suit all styles of decoration.

Reproductions of rare old stuffs in Tapestries, Brocades, Damasks; copies of old museum pieces in many examples of unusual interest.

Guaranteed absolutely color-fast to sun and water, even in the most delicate shades.

Every bolt tagged with the guarantee tag shown below. Insist on seeing this tag before purchasing.

At leading stores everywhere.

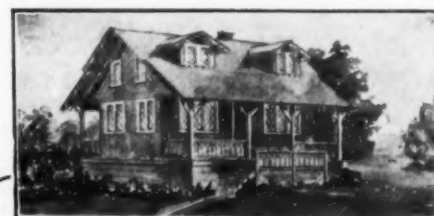
Ask your dealer for our book, "Draping the Home," showing a variety of practical interiors in color, or write to us for it.

ORINOKA MILLS
215 Fourth Ave., New York

Guarantee

These goods are guaranteed absolutely fadeless.

If color changes from exposure to the sunlight or from washing, the merchant is hereby authorized to replace them with new goods or refund the purchase price.



Cozy, Attractive Bungalows

You should have my new book—"Bungalows." It's most complete—shows floor plans, interior and exterior perspectives from photographs, with prices for the completed building. I guarantee to construct at prices named. If book isn't satisfactory in every way I'll refund your money—promptly, cheerfully. Send \$1.00 for copy—it's really worth far more. Order today.

O. S. Lang, Bungalow Specialist, Maple Springs, N. Y.

Go This Winter



Go to the lands of Constant Summer. Enjoy the thrill of sunlight and sparkling surf; of outdoor fun and familiar sports.

Take one of the AGWI Steamship Lines and slip southward over soft, 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 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.
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," rich in traditions, interest and products. You can reach it in four days and remain on board during delightful cruise around the island. Weekly sailings. S.S. BRAZOS, 10,000 tons, with de luxe cabins, some with private baths, and other big steamers in winter service. Write for booklet and all information.

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

DISTRICT PASSENGER OFFICES

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

gest for them and for the stairway, which will have a railing on one side?

What colored brick and tile for fireplace and mantel? What finish of woodwork and built-in bookcases? Also, color scheme of walls. Would prefer not to use paper. Our furniture for living-room is a mixture of mahogany with black leather cushions and some of oak finished in dark mission style.

Now for the dining-room. Would you advise us to have paneling, and how high? I am fond of white woodwork in dining-rooms, but could we have it with our golden oak furniture, which we are going to have finished a dark, dull finish?

Should the paneling, if we have it, be white, too?

Will white woodwork be right upstairs with mahogany finished doors?

If you will kindly answer my questions I shall be very grateful indeed.

M. G. J. P.

Answer—By all means, I should have the woodwork of the entrance hall and living-room the same. English oak, finished dull like the enclosed sample, makes a very satisfactory color for living-room and hall. The bricks I would have red—an orange, gray red. By that I mean not too brilliant, and the tiles in the fireplace I should have an orange brown, that would harmonize with the color of the bricks and with the wall as well. I enclose a sample of grass cloth that makes an excellent wall covering for living-room and halls. This is \$4.50 a roll of eight yards, but instead of only eighteen inches wide, as most wall-papers are, it is thirty-six inches wide, so it goes just twice as far.

The height of the paneling for the dining-room would be regulated by the height of the ceiling. I think white woodwork for a dining-room is very satisfactory and ornamental as well. Mahogany furniture is more often used in a dining-room which has white woodwork, but I think your oak furniture finished dark will not be out of place. White woodwork with mahogany doors is quite appropriate for the bedrooms.

I shall be glad to be of any further assistance to you, either in making suggestions or in purchasing any material that I may suggest for you. This service entails no extra expense to you.

Hodgson Portable Poultry Houses

WIGWARM Setting and Brood Coop

For a hen and her chicks and while she is sitting. 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

We make portable houses for all purposes.



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 15 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

E. F. HODGSON CO.,
Room 326, 116 Washington St.,
Boston, Mass.



A Gorgeous Display

A MOST gorgeous flower display recently seen was in the most beautiful shades of reds and yellows. The flower bed extended across the front and around one side of the house of one of my flower-loving neighbors.

The house is on a slight elevation, and the ground slopes from the flower bed,

My Fairfax Roses Are Grown Slowly

Sappy growth, secured by forcing Rose plants under glass, lacks the vitality necessary to enable it to produce good flowers out of doors. I grow "Fairfax" plants slowly, in nature's way, so they form vigorous wood and sturdy roots.

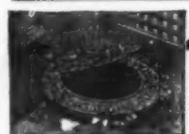


Then, to establish their hardiness, I winter them out of doors. A Rose from the outside, that has had five months of rest, is bound to give you better results than one taken right from a greenhouse bench.

My Free Book, "Fairfax Roses" Shows You the Way to Success

With Fairfax Roses, and the directions, "How to Grow Roses," contained in my 1913 book, you can have blooms better than you ever imagined possible. My book describes 128 kinds of Roses, gives engravings of these from nature, and lists the best of the flowering plants, bulbs and shrubs. May I send it? Free.

W. R. Gray, Box 26, Oakton, Va.



The Stephenson System of Underground Refuse Disposal
Saves the battering of your car and scattering of garbage from pounding out frozen contents.

Underground Garbage and Refuse Receivers

A fireproof and sanitary disposal of ashes and refuse. Our Underground Earth Closet means freedom from frozen plumbing.

In use nine years. It pays to look us up. Sold direct. Send for circulars.

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



Rare Beauty Taste Elegance For Your Home

A little money, wisely invested in thrifty evergreens, transforms an ordinary place into one of distinction and character. Make your home surroundings more eye-pleasing. Make your property more valuable.

Hill's Evergreens

Best for over 56 years

are hardy, certain of growth. Largest, choicest selection in America. Don't risk failure. Plant Hill's Evergreens—get finest trees, handsomest foliage.

Send Today for Hill's Free Evergreen Book

Write at once for this beautiful color-illustrated book. Learn Hill's perfected method of growing, transplanting, shipping. This new book and our expert advice absolutely free.
B. Hill Nursery Co., Inc.
301 Cedar Street
Dundee, Ill.
Evergreen Specialists



which is level. Next to the house was planted a row of yellow cannas. In front of these was a row of scarlet salvias, or scarlet sage as it is more commonly called. On the extreme edge of the bed, a row of yellow dwarf nasturtiums grew lustily and made a fringe varying in color from pale lemon to deep orange. Scattered about irregularly throughout the bed were climbing nasturtiums of every known shade of red and yellow. These climbers were allowed to wander at will, and covered the ground and ran down the slope into the grass.

This brilliant display of reds and yellows looked much handsomer than one can imagine from a description. This same neighbor always plants climbing nasturtiums among the dwarf varieties and lets them cover the ground and make a carpet around the more upright plants. In this way a solid mass of blossoms and foliage is obtained.

J. V. ROACH



Medicinal Leaves and Herbs

THE Department of Agriculture has issued a bulletin on leaves and herbs used as medicine. Nor is this the first publication put out by this Department on the subject of medicines, the others being Weeds Used as Medicine, Root Drugs, and Medicinal Barks.

Collectors of medicinal plants have made such insistent demands on the Department for a guide in their work that a description of thirty-six medicinal plants, including only such as are in most common use, has been prepared by direction of the Secretary, fifteen of these being mentioned in the Eighth Decennial Revision of the United States Pharmacopœia. Each plant is listed under the name in most common use, but synonymous common names, and the pharmacopœial name, if any, are also given, that no one should have difficulty in recognizing the plants familiar to him, or in identifying an unknown one, if of the series, from the description given.

Perhaps the best known plants included in this bulletin are peppermint and spearmint, which are not only found in the wild state, but are also cultivated for the distillation of oil, an important American industry. Witchhazel, almost a household word, is found in low, damp woods from New Brunswick to Minnesota, and south to Florida and Texas. The soothing properties of this plant were known to the Indians, and it is still employed for the relief of inflammatory conditions.

Wintergreen is described as having stimulant and antiseptic properties, though its chief use seems to be as a flavoring agent.

Horehound, one of the best known domestic remedies for colds, has a wide

Our Newest Rose Triumph

No Lawn or Garden should be without it

The Climbing American Beauty

The most beautiful climbing, pillar or bush rose ever introduced. Hardy as an oak. Fine, dark green, healthy foliage, free from black spot or mildew. A perfect mass of bloom in June and flowering occasionally throughout the entire growing season. Roses 3 to 4 inches in diameter on single stems; color and appearance like the old American Beauty, with the same exquisite fragrance. While the old American Beauty is rarely satisfactory in the open ground, our new Climbing American Beauty has proved perfectly hardy, stands heat and drought as well as any rose in our collection and produces twenty times as many flowers as its pollen parent.

Don't fail to plant this beautiful rose this spring. Strong One Year Plants, \$1.00 each, \$10.00 per dozen. Sent immediately upon receipt of price, or at the proper time for spring planting, post or express paid. Colored illustration on request.

UNEXCELLED NURSERY FACILITIES

Our Nurseries cover about 800 acres, where we grow a full line of Fruit and Ornamental Trees, Evergreens, shrubs, Vines, Roses, etc., 60 years of experience enable us to offer exceptional service. Landscape work in all its branches. If you contemplate the improvement of your grounds or the planting of a commercial orchard, write us for information or prices.

HOOPES, BRO. & THOMAS COMPANY

Dept. 205,

West Chester, Pa.

Philadelphia Office: Room Stephen Girard Bldg.

ELLWANGER & BARRY

FAMOUS as propagators and growers of standard and unusual Fruit and Ornamental Trees, Shrubs, Evergreens, Flowers, Roses and Hardy Plants for the improvement and beautification of gardens and grounds. Perfect specimens only—from the Most Complete Nursery Stock in America. Backed by a 73-year reputation for honest, accurate dealing.

Write for our 78th Annual Catalogue Indispensable for orchardists and for planning lawn, garden and park decoration. Will mail you a copy free on request.
ELLWANGER & BARRY
Mt. Hope Nurseries, Box 20, Rochester, N. Y.



IN THE LIVING ROOM

WILD'S PARQUET INLAID LINOLEUM

Brings an air of refinement, repose and perfect cleanliness to the comfort haven of the home. There is no danger to young or old from slipping as on hardwood floors; no noise; no need of costly refinishing; and no annual upheaval at Spring cleaning time as with carpets.

WILD'S PARQUET INLAID LINOLEUM is noiseless, elastic and in appearance closely resembles wood parquetry. It is perfectly sanitary, the permanent presence of linseed oil being actually destructive of germ life. It has a safe stepping surface; is easily cleaned with soap and water; is less expensive than hardwood; never requires refinishing and will wear for years as the patterns are INLAID, the colors being the same right through. It is suitable also for other rooms, likewise for offices, public buildings, etc.

Sold by dealers in high grade linoleum. The trade mark on the back is your guide and guarantee.

Send for folder "K" showing the 26 patterns reproduced in colors, and list of dealers in your locality handling the line

JOSEPH WILD & Co.

WHOLESALE DISTRIBUTORS

366 FIFTH AVE., NEW YORK

BOSTON Est. 1858 CHICAGO



KENNEL DEPARTMENT



WHITE SCOTCH COLLIES

No country home is finished, no family circle complete, without a big, brave dog, and the Scotch Collie is the ideal home dog. Mothers are at ease when a sleepless, faithful, fearless Collie follows the children on their rambles in the country. Fathers know that the tireless, vigorous playmate of the children will keep them out doors and doctors' bills out of sight. Young ladies know that white Collies are the most beautiful, graceful, and sympathetic aristocrats of dogdom. Little girls love their gentle ways. Boys swear by them because they know a Collie is ALL DOG ALL THE TIME. The tired business man, disgusted with the shams and trickery of the world, has his faith renewed every time he looks into the face of his faithful Collie. The entire household regard him ONE OF THE FAMILY. On the farm he is the first to detect trouble of any kind, drives away all two and four-legged enemies, and saves hours of labor by herding the cattle and sheep. White Collies are very rare and extremely beautiful. Ours are country-raised (out on an island) hardy, healthy and rugged, requiring no artificial heat in winter. Pedigree stock only. A pair will raise more than \$150.00 worth of puppies a year. We ship anywhere in North America.

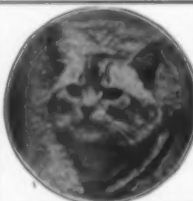
THE ISLAND WHITE KENNELS, OSHKOSH, WIS.



BEAUTIFUL CATS AND FLUFFY KITTENS FOR SALE

Short-haired Domestic, Rare Manx-Siamese and Abyssinian, Native long-haired and pedigreed Persians. Ideal boarding place for Cats, Dogs and Birds. Resident Veterinarian. Write for beautifully illustrated Catalogue and Sales lists.

BLACK SHORT HAired CATTERY, Oradell, N. J.



AIREDALE TERRIERS

The best all round dog and companion. Our Terriers are blue ribbon winners at New York, Boston, Pittsburg, Chicago, Kansas City and other large shows.

Puppies for Sale, \$25 and Up. Champion Red Raven at Stud. Fee \$25. The greatest living sire.

Beautiful illustrated booklet for stamp. ELMHURST FARM KENNELS, Sta. E. KANSAS CITY, MO.



Delight the Child's Heart

A Shetland Pony

— is an unceasing source of pleasure. A safe and ideal playmate. Makes the child strong and of robust health. Inexpensive to buy and keep. Highest types here. Complete outfits. Entire satisfaction. Write for illustrated catalog.

BELL MEADE FARM, Dept. 3 Markham, Va.



OSOKO

The Paramount
Dog Food

Keeps Your Dogs in Condition
the Year Round

Are your dogs thriving as they should? If not, try OSOKO. A good, solid, common sense dog food, composed of fine beef and high grade materials, with all the nutrient left in it. Absolutely pure and free from chemicals, appetizing spices or other harmful substances.

Do not forget the name "O-S-O-K-O."

Manufactured by
Spillers & Bakers, Ltd., Cardiff, England
Send for sample and Booklet No. 10

H. A. Robinson & Co.

Importers
128 Water Street New York City

WHEN in need of any information pertaining to the Kennel, write to our Kennel Dept. We shall be glad to answer any inquiries.

HOUSE & GARDEN
31 EAST 17th STREET NEW YORK CITY

In writing to advertisers please mention HOUSE AND GARDEN.

range, being found from Maine to South Carolina, Texas, and westward to California and Oregon. Jimson weed, a common weed in field and waste places, is found almost everywhere except in the North and West. The dried leaves are frequently smoked or the fumes inhaled, as a remedy for asthma. Catnip, familiarly associated with a tea for babies, is described as a common weed naturalized from Europe. It is noted for its quieting effect on the nervous system.

Boneset is another familiar plant in many households, the leaves and tops of which form an old and popular remedy in the treatment of fever and ague. Pennyroyal, aside from its value as an aromatic stimulant, has an odor which is very repulsive to insects, and is therefore much used for keeping away mosquitoes and other troublesome insects.

Among the other plants not in such common use, mentioned in this paper, are foxglove, gum plant, bugleweed, balmony and skullcap. Tansy, wormwood, fireweed and fleabane are described as furnishing useful oils.



A Good Inexpensive Concrete Fence

A CONCRETE fence which should prove of interest to our readers was recently designed by R. V. Moss, city surveyor of New York City, for the Glen Ridge Tennis Courts. It is strong and durable, of neat appearance, and is of a style that can be quickly erected and at low cost.

At 12' 1" centers three-inch I-beams 12' 6" in length were sunk in the ground to a depth of two feet six inches, leaving ten feet of post above the surface. The flanges of these beams were wrapped with metal lath to a height of six feet above grade to carry cement plaster.

A 2" x 3" spruce bottom rail was placed between the posts along the ground and a top rail of the same size at a height of six feet, with reinforcing plates. The concrete was then applied on the reinforcing plates to a thickness of three inches.

Above the reinforced concrete portion of the fence, wire netting is fastened to the height of four feet, making the entire height of the fence ten feet, six feet of which is concrete and the remainder wire.

The cost of this type of fence is extremely low, especially for the concrete portion of it, which in this case is increased by the fact that the I-beam posts extend four feet above the concrete to carry the netting. The concrete portion alone costs about twenty-five or thirty cents per square foot, including the contractor's profit, which made the cost of the six-foot fence from \$1.50 to \$1.80 per lineal foot. The average fence costs from \$2.00 to \$2.50 per foot—is neither as easily nor as quickly erected, and seldom as strong and durable, and concrete again proves its superiority in a new form.



A Truly Modern Home Has No Ice-Box

In its place has been installed clean, convenient, sanitary, mechanical refrigeration. The uniformly cold, sweet dry atmosphere furnished by a

BRUNSWICK Household Refrigerating and Ice-making Plant

keeps food better and purer in every way than damp, germ-laden air that is inevitable from melting ice.

A Brunswick is economical, takes up little room, and can be run without trouble by your help. It makes the home entirely independent of the iceman. Yet a daily supply of pure ice for the

Send for Our Literature. It will tell you about the many advantages and comforts this modern convenience will add to your home. Every Brunswick plant is designed especially for the house in which it is to be placed and our absolute guaranty of satisfaction goes with it.

table can be made without difficulty. The plant itself occupies but small space and may be located in the basement or any other convenient place, even an out-building.

BRUNSWICK REFRIGERATING Co., 103 Jersey Ave., New Brunswick, N. J.

BRUNSWICK

BOBBINK & ATKINS

WORLD'S CHOICEST NURSERY and GREENHOUSE PRODUCTS SPRING PLANTING

Our Products are of a higher grade than ever this season, placing us in a better position to fill orders with a class of material that will give satisfaction to all our patrons. Our Nursery consists of 300 acres of highly cultivated land and a large area covered with greenhouses and storehouses, in which we are growing Nursery and Greenhouse Products for every place and purpose.

BOXWOOD. Everybody loves the aroma of old-fashioned Boxwood. We grow thousands of plants in many shapes and sizes.

ROSES. We have several hundred thousand Rose Plants that will bloom this year. Order now from our Illustrated General Catalogue for Spring Delivery.

RHODODENDRONS. Many thousands of acclimated plants in Hardy English and American varieties are growing in our Nursery.

ORNAMENTAL SHADE TREES AND FLOWERING SHRUBS. We grow many thousands of Ornamental Shade Trees and Shrubs in all varieties and sizes.

TRAINED, DWARF AND ORDINARY FRUIT TREES AND SMALL FRUITS. We grow these for all kinds of Fruit Gardens and Orchards.

HARDY OLD-FASHIONED PLANTS. We grow thousands of rare, new and old-fashioned kinds, including Peonies and Iris in a large variety. Special prices on quantities.

HEDGE PLANTS. We grow a large quantity of California Privet, Berberis and other Hedge Plants adapted to all parts of the country.

OUR NEW GIANT-FLOWERING MARSHMALLOW. Everybody should be interested in this hardy New Old-Fashioned Flower. It will grow everywhere, and when in bloom is the queen of flowers in the garden. Bloom from July until the latter part of September.

EVERGREENS, CONIFERS AND PINES. Many acres of our Nursery are planted with handsome specimens.

BAY TREES, PALMS and other DECORATIVE PLANTS for Conservatories, interior and exterior Decoration.

ENGLISH POT-GROWN GRAPEVINES. For greenhouse cultivation.

HARDY TRAILING AND CLIMBING VINES. We have them for every place and purpose.

BULBS AND ROOTS. We grow and import quantities of Bulbs and Roots from Japan, Holland and other parts of Europe.

LAWN GRASS SEED. Our Rutherford Park Lawn Mixture has given satisfaction everywhere.

PLANT TUBS, WINDOW BOXES and ENGLISH GARDEN FURNITURE. We manufacture all shapes and sizes.

STRAWBERRIES. Potted and field grown, in all the leading varieties.

OUR ILLUSTRATED GENERAL CATALOGUE 40 **DESCRIBES OUR PRODUCTS;** is comprehensive, interesting, instructive and helpful to intending purchasers. Will be mailed upon request.

THE PROPER WAY TO BUY is to see the material growing. We shall gladly give our time and attention to all intending purchasers visiting our Nursery and invite everybody interested in improving their grounds to visit us.

VISITORS take Erie Railroad to Carlton Hill, second stop on Main Line; 3 minutes' walk to Nursery.

WE PLAN AND PLANT GROUNDS AND GARDENS EVERYWHERE WITH OUR "WORLD'S CHOICEST NURSERY AND GREENHOUSE PRODUCTS."

BOBBINK & ATKINS, Nurserymen, Florists and Planters, RUTHERFORD, N. J.



Orchid Flowering Sweet Peas

1/4 lb. for 1/4 Dollar

THIS quarter-pound of Sweet Peas contains the finest mixture of named Spencer varieties, carefully selected so as not to have a preponderance of any one color, which range from purest white to darkest crimson, with all the intermediate shades.

The Spencer Sweet Peas are the latest creations of this beautiful annual and are rightly termed "Orchid Flowering," owing to their size, color, and the lovely frilled and fluted flowers—often four to a stem.

They make a glorious display growing, or for house decoration.

In our Garden Guide which we will send you, are full and valuable suggestions by an expert Sweet Pea and other growers.

It is also a complete catalog of Boddington's Quality Seeds, Bulbs, and Plants.

This Guide will be of great assistance to you in the planning of your flower, vegetable, or rose garden—it's full of helpful gardening hints.

Where shall we send the Sweet Peas and the Guide?

The Guide is free.



BODDINGTON'S SEEDS

ARTHUR T. BODDINGTON
334 West 14th Street
New York

The Improved and Approved Method of Keeping Sheet Music Involves the Use of a Tindale Music Cabinet

The music is found instantly and quickly replaced. Shallow sliding trays and an index. Elegant in design and finish. Mahogany or oak, various sizes. Prices \$15.00 up. Cash or instalments. Call or send for Booklet of Designs No. 6.

Tindale Cabinet Co.
One West 34th St.
New York



Using Gladioli to Succeed Tulips

TWO beds three by nine feet in the garden were planted with one hundred mixed tulips; when these appeared above ground in the spring, it was decided to have gladioli succeed them. A boring tool was made from the handle of a discarded spade; this was sawed off at the curve, sharpened to a point, and eight inches up a notch was cut in the wood to mark the depth for planting; this depth obviated the necessity for staking. The last week of April, when the ground was soft after a rain, rows of holes were bored between the rows of tulips, and one hundred large bulbs of gladioli in light mixed colors (pink and white) were planted.

The mixed tulips provided an abundance of bloom from the last of April till the beginning of June, and were followed very shortly by the gladioli, which lasted till October. The greater number of these gladiolus bulbs sent up two stalks of flowers each, and great quantities were obtained for cutting. Aside from the display provided, each gladiolus bulb gave an increase of two to three good-sized young bulbs, making a considerable quantity for next season's planting.

B. M. STRAIN



Superintending the Hen's Care of Her Chicks

WHEN the care of her family is left to the hen alone, usually only the fittest survive. In some instances where the stock is strong and weather and ranging conditions are favorable, the hen will raise her brood with little human aid, but thoroughbred stock usually requires some supervision lest the hen overtax the strength of her progeny in her quest of insect life.

While the hen cannot cover more than thirteen or fifteen eggs satisfactorily, she can brood twenty chicks and even more with ease. With a little care she can often be induced to adopt others if they are put under her at night.

The hen mother must be kept in a coop for the first two or three weeks, and at the end of that time given very limited range. The chicks, however, may be allowed to roam farther, as they will not go beyond the limit of their strength.

Dry-floored coops must be provided for shelter with dry, clean soil for range. Soil sweetened by the growth of vegetable life the previous year is safer for young chicks. I would not attempt to raise young chicks upon damp, clayey soil. If one has no other available site, however, the Rhode Island Reds are best adapted to take the risk.

A light, sandy soil is far safer, as the moisture filters through it.

Young, newly-hatched spring chicks should not be permitted upon the ground for a week at least, if the weather is chil-



Reg. U. S. Pat. Off.

Your Stucco or Concrete House Needs Bay State Brick and Cement Coating Protection

The coating does not destroy the distinctive texture of concrete, protects against dampness and moisture and has been endorsed by the National Board of Fire Underwriters as a fire retarder. It comes in different colors.

Let us send you a booklet that tells you all about it. It has been used by the best architects, contractors and builders as a coating in light as well as heavy construction of every kind; houses, mills, breweries, garages, and railroads.

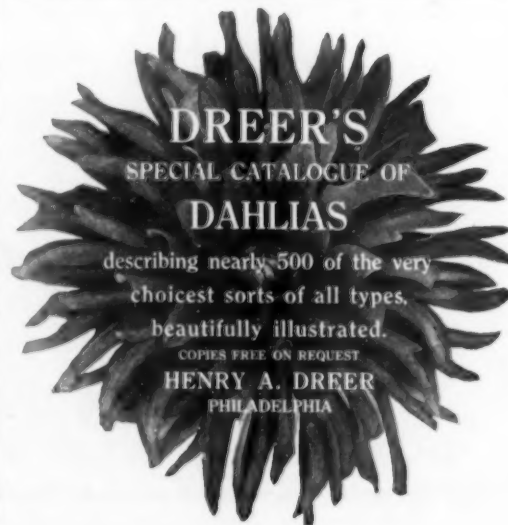
It is very effective as a tint for interior decoration on wood, cement or plaster.

Address for Booklet B

Wadsworth, Howland & Co.

Incorporated
Paint and Varnish Makers and
Lead Corroders

82-84 Washington Street, Boston, Mass.
New York Office, 156 Fifth Avenue



DREER'S

SPECIAL CATALOGUE OF

DAHLIAS

describing nearly 500 of the very choicest sorts of all types.

beautifully illustrated.

COPIES FREE ON REQUEST

HENRY A. DREER

PHILADELPHIA



It's Time to Order
"The Best Roses for America"

Guaranteed To Bloom. Will make your garden an envied beauty spot this summer.

Conard & Jones Roses



Write for Unique Rose Catalog

Here is undisputed rose authority. Lists and describes the 300 Best Roses for America; shows 11 in natural colors, 85 photographed. All own-root bushes, extra large and vigorous. Also contains full data on selecting, planting, pruning and cultivating, a complete Rose Lover's Calendar, and FREE DELIVERY OFFER on orders of \$5.00 and over. Write for your free copy TO-DAY.



The Conard & Jones Co.
Box 126, West Grove, Pa.

Rose Specialists—50 years' experience.

Special Offer

Our BEST DOZEN roses; no two alike; all colors; strong, healthy bushes—all 12 in 2-year size, \$3.00—or \$3.25 delivered free. Guaranteed to bloom this season. We prepay expressage on orders of \$5.00 or more anywhere in U. S. or Canada.



"Hardy Garden Flowers" Has 110 Illustrations

ABOVE is one of them. All were made from photographs taken especially for Biltmore Nursery. They show the charm of hardy perennials, new and old. The book has 64 large pages. It describes all the perennial plants that are used to produce the pleasing landscape effects illustrated, and gives concisely and accurately the characteristics and cultural requirements of many others. It breathes the spirit of the charm of hardy gardens. It depicts the beauties of the modest Pink, the brilliance of the Poppies, the charm of the Peonies, the stately grace of Foxgloves and Larkspur, and the striking effect obtained by masses of Hollyhocks and other plants.

HOW YOU MAY GET THIS BOOK AT ONCE, WITHOUT COST

"Hardy Garden Flowers" is too expensive for promiscuous distribution, since each copy costs 30 cents and requires 3 cents postage. If you have a garden of perennials, or contemplate planting one soon, and want to know how to select the most beautiful kinds and use them to the best advantage, we will be glad to send you a copy by return post.

Biltmore Nursery, high in the mountains of North Carolina, has extremes of climate that give the stock great hardiness. Biltmore Nursery products are bred, fed, trained and packed so they will start into vigorous growth as soon as they are transplanted, anywhere in America. Biltmore Nursery products are offered in sizes and varieties sufficient to meet every requirement of purse or preference.

BILTMORE NURSERY

OTHER BILTMORE BOOKS THAT WILL SHOW YOU HOW TO PLANT

"Flowering Trees and Shrubs," a valuable companion to "Hardy Garden Flowers," similar in style and helpfulness. "The Iris Catalog," showing magnificent flowers in natural colors. "Biltmore Nursery Catalog," a guide to the cultivated plants of North America, most valuable to those who have large estates.

Ask for the book you need most.

Box 1635, Biltmore, N. C.



"Farr's Hardy Plants" a book that you want

AN old hardy garden is a place sacred with tender memories. There is a personality and a sense of companionship about the plants which bloom there that make us become attached to them. They are a part of the old associations and the home life, like members of the family—perhaps they remind us of absent ones who planted them long ago, as year by year we tenderly protect them for their winter sleep, and impatiently await their awakening each spring.

Perhaps yours is not an old garden but a new one, the planning of which has been all your own, and its accomplishment a realization of your own fancies. But whether new or old, it is a place of recreation and forgetfulness of business cares, a safety-valve from overwork and a place where the man who is city-tired may find rest and new life.

Let Me Help Make Your Hardy Garden

If you love the hardy garden flowers as I do, you will want my new book, which tells how my hobby grew into a business and how I came to have the largest American collections of Peonies, Irises, Anemones, Phlox, and other truly desirable perennial plants.

The book may be an inspiration to you, as it has been to others. When you read it, you may want to write and tell me about your garden and share with me your joy in hardy plants. The message of the stately Iris, "the rainbow flower," the charm of the glorious Peony, and the lure of the gorgeous Poppy are expressed in the book, which too, contains full page color plates of fine flowers in each class. Shall I send you a copy? Free if you write.

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

DREER'S DIAMOND JUBILEE GARDEN BOOK

Are you looking for a novelty in flowers or vegetables? Or a new Rose which delighted you last summer? Or perennials which are not kept in stock by the average dealer? Nine times out of ten

"You can get them at Dreer's"

The Diamond Jubilee edition of Dreer's Garden Book describes and offers nearly five thousand species and varieties of Seeds, Plants and Bulbs—everything really worth growing in this country. The illustrations and practical cultural directions make this book of greater value than any half dozen books on gardening.

Mailed free to any one mentioning this publication.

DREER'S CARDINAL CLIMBER is the most beautiful, brilliant and distinct annual climber ever introduced. It is a strong, rapid grower, with deeply lacinated foliage and covered with brilliant red flowers, which make it a blaze of glory from mid-July till frost. 25c per packet.

Dreer's Garden Book free with each order.

HENRY A. DREER
714 CHESTNUT ST.
PHILADELPHIA



Pecan and English Walnut Trees for Zero Climates.

A Strong Statement, but True. You cannot plant Southern Grown Trees and accomplish anything but failure, but with our Northern Grown trees, strong and rugged, grown under Northern conditions, from Northern seed and budded from Northern fruiting trees, you will succeed. You cannot secure such trees from any other source this year, and we doubt if you can for several years to come. We are pioneers in the propagation of hardy nut trees for Successful Nut Culture in the Northern States. Look us up—verify our statements, and then entrust us with your order. Fifty years in business is our guarantee that we know our business.

Hardy Northern Pecans

Luscious Raspberries.

Crop after crop, all summer long—two and three good "pickings" every week of large, sugary, crimson-bright berries. This you can have by setting out these wonderful St. Regis Everbearing Raspberries this Spring. For commercial growing St. Regis has been called the "mortgage lifter." Set out St. Regis this Spring—they yield bountifully from June to October, year after year—succeed in any soil—endure severest heat, drought and cold.

Northern English Walnut

Valuable Catalogue and Booklet—Free.

Full information about successful Northern Varieties of Southern Nut Trees for commercial and decorative purposes; also our 64-page General Catalogue of trees, shrubs, flowers, etc.—mailed free on request.

GLEN BROS., Inc.

Glenwood Nursery. Established 1866
2074 Main St., ROCHESTER, N.Y.

St. Regis
Everbearing
Raspberry



STATEMENT OF THE OWNERSHIP, MANAGEMENT, ETC.

of HOUSE & GARDEN, published monthly at New York, N. Y., required by the Act of August 24, 1912.

The Editor is Henry H. Saylor; Post-office Address, 31 East 17th St., New York.

The Managing Editor is Wm. A. Vollmer; Post-office Address, 31 East 17th St., New York.

Publisher: McBride, Nast & Company; Post-office Address, 31 East 17th St., New York.

Owners: McBride, Nast & Company, a corporation.

Names and addresses of stockholders holding one per cent. or more of total amount of stock:

Robert M. McBride, 31 East 17th St., New York.

Condé Nast, 449 Fourth Avenue, New York.

Known bondholders, mortgagees, and other security holders, holding one per cent. or more of total amount of bonds, mortgages, or other securities:

Harris-Dibble Company.

Architectural Publishing Company.

This statement is signed by Robert M. McBride, President, for McBride, Nast & Co.

Sworn to and subscribed before

FREDERICK C. OHSE,

Notary Public, New York County, No. 14,

October 2nd, 1912.



A Wagner Old Fashioned Hardy Garden Sent to You By Parcel Post

Don't miss the joy of a Wagner Hardy Garden. A brilliant succession of bloom from spring to late fall.

Finest-grown hardy herbaceous perennials arranged for color harmonies, picturesque outline, continuous bloom and permanence.

A Wagner Hardy Garden, varieties labeled, numbered and packed in order of planting, saves money on regular catalog rates; saves the trouble of planting; insures certain success.

Write us about soil and surroundings, and we will advise you.

Arranged Ready for Planting—Sent Prepaid Anywhere

Assortment B1—4x10 feet, 15 strong, hardy plants.....	\$2.25	large size	\$3.75
Assortment B2—4x20 " 30 " " "	4.50	large size	7.50
Assortment B3—5x10 " 30 " " "	3.00	large size	5.00
Assortment B4—5x20 " 40 " " "	6.00	large size	10.00

Order Your Wagner Hardy Garden Now. We will ship at the proper time.

"Plants and Plans for Beautiful Surroundings." A most helpful book—Free on request.

THE WAGNER PARK NURSERY COMPANY, Box 720, SIDNEY, OHIO

ly. With those hatched in late May or June, the case is different.

Dry-mixed grains of size suited to the young birds are better than wet mashers for early feeding. The ready-prepared chick foods are usually safe and in proper proportion for the young chicks. Fresh, clean water, and coarse sand for grit should be supplied them. Ranging chicks, however, will procure the necessary amount of grit.

A young growth of oats is relished by chicks and aids in their rapid growth.

When the chicks have grown to a good size, the hen will abandon them. Chicks of this age will do better if kept in groups of twenty-five or thirty than if forced to crowd together at night in greater numbers. Care must be taken that the coops are well ventilated. A coop that has one end covered with canvas gives satisfaction, but there should be an additional protection of small-meshed poultry wire securely fastened on either under or over the canvas or burlap covering to prevent wild animals from harming them. In warm summer weather the burlap curtain may be removed.

Where successive hatchings of chicks bring together different-aged groups, some means of separating them at feeding time must be devised, else the younger birds will suffer. Uniformity of growth depends upon uniformity of strength in each group. Feeding cages made by tacking vertical strips to box-like frames, so as to admit chicks of different sizes, are about the most satisfactory scheme used. Three or four cages to accommodate the different ages are convenient. For younger chicks the strips may be placed about two inches apart. Those of the larger cages being about three, five and seven inches apart.

M. ROBERTS CONOVER



The All-Phlox Border.

A HARDY perennial border in the height of bloom in July and August—the time when most perennials, having passed their season, show the effects of midsummer heat, and blossom but fitfully or not at all—is far too rare a sight in our American gardens. Phlox is the plant par excellence which can make the hardy border a midsummer blaze of glory.

A few other plants, such as the Japanese anemone, can with dignity and fitting grace aid in such an office, but since phlox is supreme among the mid-season perennials, some borders or beds in every garden, should be devoted to little else but phlox. Feeling sure that those who have not tried an all-phlox border will be very well pleased with it, I give a few simple suggestions for its formation and care.

The main part of the border should be filled with a few—only a very few—of

ORIGINAL AND BEST

TRADE

D J A

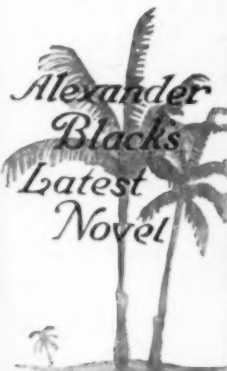
MARK

SCOTCH GINGHAMS

CAN BE OBTAINED AT LEADING RETAIL STORES

Avoid imitations

Thorney



\$1.25 net
Postage 12c



Frontispiece in color
by Orson Lowell

Time: To-day—very much to-day—with an up-to-the-moment light on a situation never before handled in quite the same way.

Place: The oddest little island (in the Indian Ocean) that you ever didn't see—beautiful, but with a tragic corner in it.

Girl: Zalia Thorne, marooned on the island when she was twelve, and alone there for six years, when the story begins with the coming of Barry Carshall.

McBride, Nast & Co., Publishers
Union Square, New York City



Stop

Let Us Draw Your Attention to

THE SECOND CLAY PRODUCTS EXPOSITION

TO BE HELD AT THE
Coliseum
CHICAGO

**February
26th
To March
8th
1913**

There are reasons why you should be interested in CLAY PRODUCTS. They are essential in every home, from the sewer pipes below to the chimney that tops the house—from cellar to garret; they are found in the laundry—the kitchen, in its utensils—the mantels in library and living room; in the bath room, in bric-a-brac and dinner service and in the tile on the roof. This will be a complete exhibit of everything made from Clay.

**COME AND SEE
ITS MANIFOLD UTILITIES**

Learn its true value and how it is adapted to many practical uses in building, fire-proofing, sanitation and ornamentation.

SOUVENIRS
of Clay Products
for Everyone

**A
Brick House
and Lot
Given Away**

Real Clay Modeling Daily
Pottery Making Daily
**GOOD MUSIC AND
REFRESHMENTS**

The World's Best will be shown here in Roads, Homes, Pottery, Tableware and Art of Burned Clay

You must be interested in some of the following enumerated products and you will see many of them exhibited here in the highest development of the arts and industries:

Pottery, Face and	Drain Tile	Chimneys	Teraplasts	Lamps	Bath-room	Garden Walls and
Common Brick	Wall Coping	First-Brick	Clips	Marbles	Equipment	Walls showing
Terra Cotta	Pottery	Yellow Brick	Acid Tanks	Tobacco	Washboards	entrances
Roofing Tile	Faceware	Painted Brick	Roamer Brick	Pipes	Flower Pots	to carcases and
Decorative Tile	Garden	Condolite	Antique China	Clay Novelties	Terra Cotta	residences
Sanitary Ware	Ornaments	Insulators	Imported China	Crockery	Lumber	Laundry Tubs
Sewer Pipe	Stone Ware	Dickey Birds	Model Homes	Tableware	Pine Brick	Sinks

For further information address
F. L. HOPLEY, Secretary

The Clay Products Exposition Co., CHICAGO, ILLINOIS

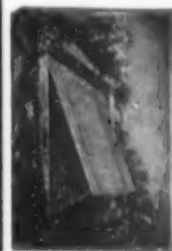


Modern Sleeping Porch Fitted with Wilson's Blinds

Practically makes an Outdoor Room of the ordinary porch; a room at night, a porch by day.

WILSON'S VENETIANS

for outside and inside of town and country houses; very durable, convenient and artistic.



Special Outside Venetians

most practical and useful form of Venetian yet devised for porches and windows; excludes the sun, admits the breeze.

Write for Venetian Catalog No. 3. Orders should be placed NOW for spring or summer delivery.

Jas. G. Wilson Mfg. Co.

1, 3 & 5 W. 29th St., New York
Also Inside Venetians; Rolling Partitions, Rolling Steel Shutters, Burglar and Fireproof Steel Curtains, Wood Block Floors.

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

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

Formerly Fence Dept., American Wire Form Co.

Rare Climbing Hydrangea

Heavy Pot Grown

Send for Catalog.

The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

English Ivy

Seven to Eight Feet Specimens.

Heavy Pot Grown

Send for Catalog.

The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

A RARE EASTER GIFT



Lily of Valley Grown in Our Mossfiber

grow Lilies of Valley successfully.

LILIES of Valley raised by yourself. Your friends will appreciate this far more than some plant or other purchased at a store. The phenomenal growth and flowering of the pips is a **DELIGHTFUL EXPERIENCE**. Planted in **OUR PREPARED Mossfiber**. In eight days the beautiful emerald foliage is full grown; in ten days the buds appear, and in three weeks, the glorious flowers, silvery white and exquisitely fragrant, are in full bloom. You can plant them in any bowl, pot or jar you have handy. No drainage is needed. We furnish the mossfiber free, also send full directions how to

6 Lily of Valley with mossfiber.....	\$0.35
12 " " " " " " " " " " " " " " " "	.60
25 " " " " " " " " " " " " " " " "	1.00

PRICES include delivery

Are you a lover of nature and all that is beautiful in it? Do you care to raise succulent vegetables for your home table?

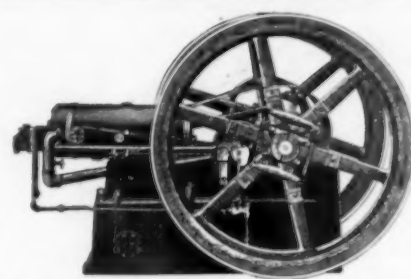
Send for our 1913 Garden book. It will interest you as it contains all the best novelties and full descriptions of the best in Flower and vegetable seeds, plants, bulbs, etc.

Address H.H. Berger & Co., 70 Warren St., New York

the best of the named varieties of *Phlox paniculata* (called sometimes *Phlox decussata*), grouped in as large masses as the space allows. As there is wide variation in the color and height of the different named varieties of this species of phlox, these few kinds should be chosen and arranged with a view to color harmony and height. For white, which harmonizes well with every color and shows more at night, the variety Jeanne d'Arc is a most excellent one, having large and perfectly formed flowers which open a little late, making fresh and fair the very hottest and driest time of the year. One might well have a long mass of this at the back of the border and extending its full length, the mass widening at the center to come almost to the front. To the right and to the left of this forward projecting white mass, Coquelicot and either Pantheon or Iris may be grouped, the two groups being separated by the white. The Coquelicot, on the right, is a strong grower and a popular favorite, with fiery scarlet, carmine-eyed blossoms. The Pantheon, on the left, has large flowers of a beautiful salmon-rose color. The variety named Iris, if preferred to Pantheon, is more unique among these phloxes, being bluish violet with blue center, its individual flowers being very large and perfectly formed.

Much is also added to the attractiveness of the whole bed if a narrow, full-length border of *Phlox subulata* be planted in front. This, while exceedingly different, is just as true a perennial phlox as the above. It grows only a few inches high, has narrow, evergreen leaves, and blossoms very early in the spring, being then literally covered with bright bloom. It often blooms again, more sparingly, in autumn. As a final touch this species adds a minor charm to your all-phlox border at a time when it would otherwise be entirely void of bloom, and its pretty mat of foliage enhances the beauty of the bed at all seasons. It is sometimes called "moss-pink."

The phlox border responds generously to rich soil, well-drained and not too heavy, but will grow in any good land. Several thorough drenchings of the soil in dry seasons greatly increase the wealth of floral display, as the plant loves an abundance of moisture. The roots may be had of reliable growers either in early spring or in the fall. If secured in spring, it must be in the very earliest part of the planting season, as soon as the ground can be dug, for after the buds have started it is a poor shipper and not likely to do as well. In the fall there is less need of haste, for after the season's growth has been made and the foliage ripened, the plants may be shipped and transplanted at leisure during a more or less extended season from, say, the middle of September until sometime in October. For this reason the fall is preferable, and altogether the safest time to plant phlox. The roots should be carefully spread and the plants set well apart. After the profusion of June flowers has



Take Comfort in Your Country Home

Dependable power makes the difference between comfort and discomfort, satisfaction and dissatisfaction, on the country estate or farm. Dependable power is also economical when furnished by

I H C Oil and Gas Engines

They can be used to furnish a never failing water supply for all purposes. They can be used for spraying, sprinkling, sawing and grinding, and to operate any machine to which power can be applied. They run on the cheapest and most convenient fuel, high or low grade oils, gas or alcohol. They require little attention besides oiling.

They are built in all sizes from 1 to 50 horse power. I H C oil tractors for plowing, threshing, etc., 12 to 60 horse power.

Write for the most interesting engine catalogues ever printed, showing the complete line.

International Harvester Company of America
(Incorporated)

170 Harvester Building Chicago U S A

The Poultry Department

of House and Garden will furnish free of charge, upon request, authoritative information upon any question pertaining to the raising of chickens or poultry.

Poultry Department,

HOUSE & GARDEN

31 East 17th St., New York City.

European Beech

Fine Specimens

Send for Catalog.

The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

ALEXANDER'S QUALITY DAHLIAS



THE
TWENTIETH
CENTURY
FLOWER

The Dahlia of to-day is of surpassing beauty as a single flower, exquisite for private gardens, charming in masses, and ideal for planting against shrubbery.

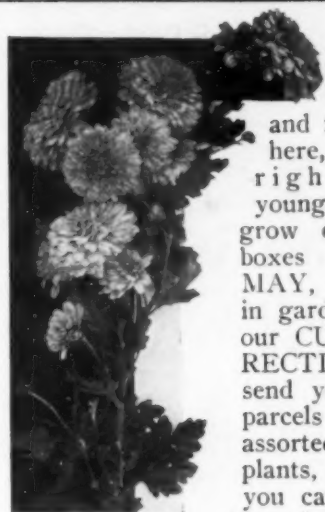
Alexander's Up-to-Date Dahlias lead the World; because they are perfect in type and shape, beautiful in color, and most important of all—Free-flowering.

Our many customers are satisfied; they receive *good stock*; true to name, and best of all—Guaranteed to Grow.

All Flower Lovers are invited to send to the Dahlia King for his latest *Free Illustrated Catalogue*, which contains helpful descriptions and valuable cultural hints on Dahlias, Gladioli, Roses and Cannas.

J. K. ALEXANDER

Box 174 - - The Dahlia King
EAST BRIDGEWATER, MASS.



YOU, reader, can grow chrysanthemums as large and fancy as shown here, if you start right. BUY the young plants now, grow on in pots or boxes of soil until MAY, then plant out in garden, and follow our CULTURAL DIRECTIONS. WE will send you postpaid by parcels post 20 choice assorted colors, strong plants, for \$1.00. OR you can make up the 20 plants, in part, of carnation pinks, all colors, geraniums, heliotropes, icepinks, double nasturtiums, marguerites, salvias, coleus, or any bedding plant you desire. CULTURAL directions free with all orders.

ADDRESS at once THE HARLOWARDEN GREENHOUSES, Box 148, Greenport, N. Y.

DINGEE Roses

Sturdy as Oaks. Founded 1850

Our Rose Plants are strongest and best. They are always grown on their own roots.

More than 60 years of "knowing how" behind each plant; that fact is your guarantee of satisfaction. Under our special low price order plan we will prepay all express charges and guarantee safe delivery—our guide explains. No matter where you live you can depend on getting D & C roses in perfect condition. Write for

Our "New Guide to Rose Culture" for 1913—Free

This is absolutely the most educational work on rose culture ever published. It isn't a catalog—it is the boiled-down, lifetime experience of the oldest rose growing house in the United States. The guide is free. It is profusely illustrated in natural colors and the cover pictures the new Charles Dingee Rose, the best, hardest free-blooming rose in the world. This guide will be treasured long by rose lovers—write before issue is all gone. It's free. No other rose house has our reputation.

Established 1850, 70 Greenhouses.

THE DINGEE & CONARD CO.
Box 374, West Grove, Pa.



Roofed with Fireproof Asbestos "Century" Shingles. Last forever. Never require paint.

IF you do not know the French or diagonal method of laying Asbestos "Century" Shingles ask your roofer about it. It presents many advantages. The Shingles are fastened independently with copper storm nails, giving the roof great flexibility under expansion and contraction.

This method saves considerable in the number of shingles and labor required.

Write for the names of representative roofers who can supply Asbestos "Century" Shingles—and booklet, "Roofing: A Practical Talk."

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

Branch Offices in the Principal Cities of the United States.

Haven't You Ever Wished

that you could save your back copies of HOUSE & GARDEN? Of course you have. You like to read the magazine each month and would be glad to save every issue if you could only find some way to take care of them. Well, here is what you want—a

Big Ben Binder

to hold your loose copies and put them into volume form. Big Ben is a strong and handsome cover, bound in deep, rich brown and stamped in gold, and will accommodate six copies of HOUSE & GARDEN. It is simple, strong and practical—just the binder you have been wishing for.

We are prepared to send you a Big Ben for HOUSE & GARDEN at once, prepaid for \$1.25.

McBRIDE, NAST & CO.

Union Square, New York

Plant Green's Sure-Grow Fruit and Ornamental Trees

Apple, peach, pear, plum, quince and cherry trees—500,000 for sale at wholesale prices! Shapely, well branched, clean, healthy, hardy, Northern grown, and all full bearers. 100,000 of these are fine apple trees. Read Green's guarantee—trees true to name

Green's Trees 500,000 FOR SALE

Make excellent shade trees for country estates. Berry plants, vines, roses and shrubs. All at one-half usual prices. We have no solicitors, but give our customers the saving of agents' commissions. A reliable, well-known nursery of 24 years' experience.

This BOOK FREE

This interesting booklet, free on request. Contains valuable advice and experiences with fruits and flowers that every grower should read. Ask for a copy of Green's 1913 Catalog, also FREE.

GREEN'S NURSERY CO.,
10 Wall St., Rochester, N. Y.

Thirty Years with Fruits and Flowers



Stained with Cabot's Shingle Stains.
Aymar Embury II, Arch't, Englewood, N. J.

For Shingles, Siding, Boards
and all other outside woodwork it will pay you to use

Cabot's Shingle Stains

They give soft, transparent coloring effects that bring out the beautiful grain of the wood, and never look "painty." They cost less than half as much as paint, and can be put on twice as quickly. The Creosote penetrates and thoroughly preserves the wood, and they are the only genuine wood-preserving stains. They are the only harmonious and suitable colorings for modern country and suburban houses, bungalows, camps and cottages.

You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.
SAMUEL CABOT, Inc., Manufacturing Chemists
11 Oliver St., Boston, Mass.



Have a Beautiful Lawn and Attractive Home Surroundings

Flowering trees and shrubs require but little space in the yard or lawn and are always the admiration of passers-by. Among the best are the Arafias, Catalpa, Japan Cherry, Cornus, Crabs, Horse Chestnut, Judas, Magnolias, Thorns, Altheas, Hydrangea, Weigela, Spiraea, etc. These, in connection with groups of Dwarf Shrubbery, Roses, Grasses and Hardy Herbaceous Plants, make a beautiful lawn and attractive, homelike surroundings. They can be had at a nominal cost, within the reach of everyone. We carry everything for the Garden, Lawn, Park and Orchard. 59 years of fair dealing has put us to the front. 1,200 acres. 47 greenhouses.

Write today for General Catalog No. 2, 168 pages, free. TRY US. We guarantee satisfaction. (61)

The Storrs & Harrison Co., Box 129 Painesville, Ohio

NOTABLE SPRING PUBLICATIONS

The Dutch Colonial House By Aymar Embury, II

Mr. Embury, whose characteristic designs for small and large country homes have become so well known throughout the country, has based the majority of these designs upon the flexible style of architecture that was evolved by the Dutch settlers through northern Jersey, parts of Long Island and, to some extent, along the Hudson above New York. Mr. Embury's contention is that the Dutch Colonial—or gambrel roof—type, presents the most logical and, at the same time, the most attractive solution of the problem of securing the most room and the most charming exterior appearance in a home, coincidentally with a minimum of cost.

Illustrated, \$2.00 net; postage, 20c.



Reclaiming the Old House By Chas. Edw. Hooper

It was Alfred Austin, poet laureate of England, who said he could not understand why a man should prefer to build a new house or to occupy one built for him rather than adapt an old one to his needs. Many people undoubtedly feel the same but are perturbed by a lack of knowledge as to the proper procedure in reclaiming an old house, so as to preserve the charm of the past while incorporating the present-day conveniences. Mr. Hooper shows just how this may be done and supports his directions with an abundance of splendid photographs, plans and diagrams. It is an essentially practical book.

Illustrated, \$2.00 net; postage, 20c.

Modern Farm Buildings

Mr. Hopkins is known throughout this country and abroad as an architect who has specialized in stables and farm buildings of all kinds. In his many years of active practice he has developed a knowledge of methods, materials and design that is unrivaled; and best of all, Mr. Hopkins has put most of this knowledge into a book. Photographs and diagrams illustrate practically every detail, and it is astonishing to find to what extent modern scientific methods have revolutionized the art of building the hay barn, stable, sheep fold, ice house, dairy, garage and all the rest.

Illustrated, \$3.00 net; postage, 20c.

By Alfred Hopkins

The Gardener and the Cook By Lucy H. Yates

To keep a constant supply of fresh vegetables upon the table, and to grow those that were the most tasty, was the ambition of the author of this book. She enlisted the co-operation of a clever cook and a capable gardener, and gives the reader the fruit of her experience. Not only does the book tell what vegetables and fruits are profitable to grow, but gives the instruction to transform them into delicious courses, tempting salads, preserves and jellies.

Illustrated, \$1.25 net; postage, 15c.

Lilies

By H. S. Adams

This is the first in a series of FLOWER MONOGRAPHS which deal in an instructive and authoritative way with the more important families of popular flowering plants. Mr. Adams, who is well known as a writer on horticultural subjects, has given us in this book the last word on the lily—its classification, the peculiarities of varieties, and its culture indoors and in the garden.

Illustrated, \$1.00 net; postage, 10c.

The Children in the Shadow

Mr. Coulter, who was for ten years Clerk of the Children's Court of New York City, presents graphically and forcibly the obligations of the State toward the "citizens of to-morrow." Forty years ago children were being hanged in England; to-day in many cities of the United States they are confined in jails with hardened criminals, and there is still much work to be done in the establishment of children's courts. The author of this vitally interest-



*Reduced illustration from "The Children in the Shadow."
Your bookseller can supply you. Let us send you a year's free subscription to "The Quill" a little magazine of books and authors.*

The Home Poultry Book By E. I. Farrington

Here is the just the book for the beginner who wants to keep a few hens to supply fresh eggs for the table. No elaborate systems or expensive fixtures are advocated. Good, sound common-sense is the keynote of every chapter. Detailed plans and photographs of successful small houses are given, together with specific information covering every phase of poultry-keeping.

Illustrated, \$1.00 net; postage, 10c.

Golf for the Late Beginner By Henry Hughes

The title describes precisely the purpose of this practical book. The author himself took up the game in middle age, and with his experience fresh upon him, explains the correct principles of golf in a way especially helpful to the late beginner. The illustrations are from actual photographs, showing correct and incorrect methods, also the various positions for the different strokes.

Illustrated, 60c. net; postage, 5c.

By Ernest K. Coulter

Introduction by Jacob A. Riis

ing book points out the evils of congestion in the tenement districts of the larger cities, and suggests remedies for legislation to curb this potent factor in making for delinquency among the children. He traces the development of the Children's Court as it is to-day, and shows its inner workings. There is also a chapter on the Big Brother Movement, of which Mr. Coulter was the founder.

Illustrated from photographs, \$1.50 net; postage, 15c.

faded away, you will be proud indeed of your phlox border when it comes into its glory.

RALPH E. DANFORTH



A Garden of Delight in One Plant.

I HOPE, for the increased beauty of their gardens, that before another planting season, many people will learn of the merits of the beautiful new German rose—Tausendschon or "Thousand Beauties." This is a hybrid, from crossing a rambler with a tea, and the wonderful variety of coloring has led to its name. I planted a small rooted cutting next a high wire fence two years ago this spring. It grew rapidly, and the following year showed many blooms, in semi-double form, of a dainty pink. As the coloring was quite uniform, I concluded that it was just another case of over-worked imagination on the part of the descriptive catalogue writer, who said no two blooms would be the same. By the second summer the bush covered over twenty feet across the fence. On the 30th day of May—Decoration Day—we cut three large clothes-baskets of blooms, leaving the plant still so loaded as to fill us with wonder. The individual flowers are large for its class—fully three inches across—and of an elegant, graceful form. It seems to need several years of growth to produce flowers of the wonderful color variations—as the second season's bloom showed all that was promised by catalogue description—and more. As a matter of fact, its full variety could never be described. Palest of pinks, deep rose, without shading, pink and rose, blended like an apple blossom, pink, mottled and streaked with red. A beautiful form is of pale pink with ruffled edge of red like the Tulip class of roses.

Many other variations are like those found in the Dianthus or pinks. Another interesting peculiarity is the varied form of stems. Thousands grow on their own graceful individual stem, but all over the plant are thrown out strong shoots three or four feet long bearing each a bunch or cluster of ten to twenty roses, each a bouquet in itself, and in this cluster will be found no two of the same shading. These strong wands of bloom are fine for decoration, on a large scale. Those on single stems make the most graceful of center pieces. Added to everything else is the keeping quality of the flowers—on the bush. It keeps as a cut flower like a camelia, being still fresh and perfect a week after cutting.

The bush bloomed freely for three months. As a bush without bloom, it is an ornament through the year, its dark, slender, glossy leaves adding to the garden's charm in the winter. It is said to be hardy in all climates, and it certainly would be hard to imagine it taking on delicate airs, in any situation. E. S.





RUST-PROOF ANCHOR POST LAWN FENCES

Surrounding your lawn and garden with a woven wire fence would insure greater seclusion for you and your guests and make the upkeep of your grounds a simpler matter. Anchor Post Fences have defied the action of the elements for twenty years. Posts and fabric are galvanized throughout to prevent rust and the patented post construction insures permanent alignment. We have catalogues illustrating lawn fences of wire or wrought iron—tennis court backstops and iron gates. Write for the one you need.

ANCHOR POST IRON WORKS
11 CORTLANDT STREET (11th floor) NEW YORK
2008-G

GLADIOLUS BULBS

WE are offering a hundred varieties selected from the best that Europe and America have produced. Many of them are for sale by no growers but ourselves. Among these is

Mrs. Frank Pendleton, Jr.

The coloring of this flower is exceptionally beautiful—a rich, soft pink, shading to a darker tint and in striking contrast with a brilliant carmine patch on the minor petals. Such coloring does not produce the delicate, subtle beauty that is the charm of America, nor the majestic beauty of Rajah, nor the poetic, winsome beauty of Spring Song and Myrtle, nor the quiet stateliness of Daisy Rand. But the Pendleton has a beauty all its own; a brilliant, dashing, compelling beauty that makes you stop and admire.

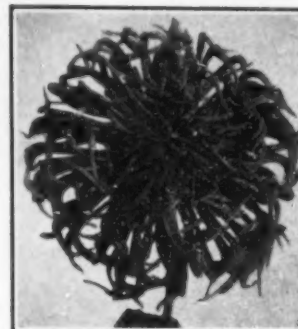
CHAMBERLAIN & GAGE SOUTH NATICK, MASS.

MONTAGUE CHAMBERLAIN
L. MERTON GAGE

Fottler, Fiske, Rawson Co.

Highest Grade Seeds BOSTON

It is our aim to grow and have grown for us only the very best and **Highest Grade Seed**—both flower and vegetable—that experienced growers can produce.



Asters

One of the most complete lists published. All of the best varieties. All of the shades of coloring in these varieties. See pages 66-67-68 of

Our 1913 Seed Annual Free

Contains a most complete list, fully illustrated, of Vegetable and Flower Seeds—the latest introductions.

Dahlias

The largest collection in America. We issue a special Dahlia and Gladiolus Catalogue, **mailed free on application.**

Remember: Our Seed Annual mailed free.
Our Dahlia Catalogue mailed free.

Fottler, Fiske, Rawson Co.

Faneuil Hall Square, BOSTON

“EXCELSIOR” RUST PROOF



FLOWER GUARDS

FOR edging walks and flower beds there is nothing so lasting or ornamental as Excelsior “Rust-Proof” Guards. The clean silver gray of the pure zinc coating looks well in contrast with flowers and shrubbery.

The Guards are made just like the famous Excelsior Fences, and are impervious to the ravages of time and weather. They successfully resist rust without any painting. These guards are sold in rolls, and may be bent to conform to any desired curve or angle.

Ask any hardware dealer for them. Let us send you ILLUSTRATED CATALOG “C” and sample of the “Rust-Proof” finish.

WRIGHT WIRE COMPANY, Worcester, Mass.



A Typical 7-lb. Yama Minorca Female from an Untouched Photograph. [Note the Long Back and Depth of Body and all Egg-Laying Characteristics.]

Why Keep Yama Black Minorcas?

It is admitted that Minorcas lay the largest hen's egg known, and the Yama strain of Minorcas is the result of years of scientific breeding for extra large eggs from this strain of large-egg layers. The birds themselves are the largest of any of the egg-laying breeds, and their extremely long breasts supply an extra amount of white meat. Yama Minorca eggs are 30% larger than the best first-class A-1 eggs, and usually sell at a fancy price.

Breed for quality of birds as well as egg-laying strain—and when you see those green-sheened Yama Black Minorcas with their bright red combs and white ear lobes on your green grass, you will never regret having selected Minorcas for your home breed.

Wherever Yama Black Minorcas have been shown they have won the highest honors. At the last Madison Square Garden Show in New York, Yama Minorcas won four firsts out of a possible five, and two weeks later we showed two collections of birds at two shows during the same week. At the Great International Show at Buffalo, Yama Minorcas won all the firsts except one, and many specials, and at our County Show at New Paltz they won all the first prizes and many others.

We have proved the efficiency of Yama Minorcas for eggs, flesh and beauty. Eggs for hatching, \$10 a setting. Eggs for hatching utility egg-layers, \$3 a setting, \$15 a hundred.

There is no better line of **Barred Plymouth Rocks** in this country than we are breeding at Yama Farms. We had more Barred Plymouth Rock hens placed at the last Madison Square Garden Show than any other breeder, and at the International Show at Buffalo, we won all the Barred Rock first prizes except one, and the first Cockerel of Yama Farms was the Championship Male of all American breeds. Eggs for hatching, \$10 a setting. Utility hatching eggs, \$3 a setting, \$15 a hundred.

Send for illustrated catalogue for both breeds, and if you are interested in squabs, ask for the Pigeon Book by Thomas Wright, which will give you much valuable information about breeding large squabs.

All birds sold on approval.

YAMA FARMS

NAPANOGH, ULSTER COUNTY, NEW YORK
NEWTON COSH, Manager Poultry Dept.



VICTORIA

“Just what I came out for”

CHICKEN MEAL

Now on Sale in America

Hundreds of thousands of chickens have been successfully raised on this celebrated English Chicken Meal which is used exclusively by leading foreign fanciers.

Prove it by trying it for a week on a single brood of chicks and compare their appearance with a brood fed on some other food. The results will astonish you.

Send for free sample and the Victoria Poultry Book No. 10
Manufactured by
Spillers & Bakers, Ltd., Cardiff, England

H. A. Robinson & Co.
Importers
128 Water Street New York City



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.

Book Your Order Free, Now, for “Baby Chicks of Quality”

Healthy, vigorous day-old chicks hatched from a heavy egg-laying stock of

WHITE PLYMOUTH ROCKS
(The 257 Egg Strain)

Send no money. Just write that you will want “Baby Chicks of Quality.” Then just before you want them shipped, send your remittance. This service protects you, yet it costs you nothing. Safe delivery in good condition guaranteed.

A New Catalogue Is Now Ready

One of the finest ever issued by any breeder. It tells just how “Baby Chicks of Quality” are produced, and describes every grade of stock that we have to sell, with prices. A copy is ready for you.

Suburban Flocks of twelve females and one male sold on approval, for three days' free examination.

R. C. CALDWELL, Box 1030, Lyndon, Ross Co., Ohio



G. D. TILLEY
Naturalist

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Ornamental Ducks and Geese, Flamingoes, Game and Cage Birds

“Everything in the bird line from a Canary to an Ostrich”

I am the oldest established and largest exclusive dealer in land and water birds in America and have on hand the most extensive stock in the United States.

G. D. TILLEY, Box H, Darien, Connecticut

山 9 丙

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

MEURER'S METAL SPANISH and MISSION TILES



An Ideal Artistic and Durable Roof Covering made in tin painted, galvanized and copper. Designed after the old Spanish Clay Tile giving light and shadow effects. Easily applied, absolutely weather proof and fire resisting.

MEURER'S COLUMBIA COMBINATION RANGE BOILER and GAS WATER HEATER

A combination of Range Boiler and Gas Water Heater, essential in small kitchens. Its installation is a step towards solving the problem of economy in the household. Saves fuel, time and labor. Can be operated independent of coal range. Easily installed, does not get out of order, and always ready. A Thermostat can be furnished if required. Send for descriptive catalog.



MEURER BROTHERS COMPANY
BROOKLYN N.Y. NEW YORK CITY.
SAN FRANCISCO, CAL. LOS ANGELES, CAL.

TRAVEL FOR MARCH

covers the world, from Palm Beach to Siberia, from British East Africa to British Columbia. Reading it, you can broil in the Tropics or gradually freeze to death in northern Asia.

We don't like to boast, nor to recommend any one of our articles more than the others; but we simply can't help telling you that "Cruising Through Siberia," by Richardson L. Wright and Bassett Digby, is just about the most absorbing, human interest, *live* travel article we have ever seen. These two men really know Siberia from the inside, and this story of their trip in a small boat down the ice-choked Shilka River is a vivid portrayal of a little-known side of Asiatic travel.

Of course there are other articles in the March number—eight others, in fact. The desolate island of St. Helena, Florida, Germany, Canada, New Mexico, Tunisia, France, and British East Africa, all come in for the attention of authors who know them well.

Let us add your name to our subscription list now, for there are going to be some special features in TRAVEL for the coming year that you'd be sorry to miss.

25c per copy

\$3.00 per year

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

DAY-OLD CHICKS

Healthy, vigorous, from heavy laying stock. Guaranteed full count and satisfactory. Place your order NOW—and avoid the early spring rush.

Hatching Eggs Breeding Stock
S. C. W. Leghorns, White and Barred Rocks.

All eggs and stock GUARANTEED.

Write for big new catalog: "Tywacana Quality."

Contains full description and prices.

TYWACANA FARMS POULTRY CO.

A. E. Wright, Supt.

Box 63, Farmingdale, Long Island, N. Y.



TYWACANA
FARMS
POULTRY CO.

Tomlinson's S.C. White Leghorns

EGGS FOR HATCHING BREEDING STOCK

A BIG STRONG STRAIN of heavy Layers. Raised under absolutely sanitary conditions. Producers of LARGE WHITE EGGS.

Prices Reasonable. Fertility Guaranteed.

EVERETT R. TOMLINSON, BATAVIA, N. Y.

How I Bred \$50 to \$1600 in 2 Years

I want to tell you how one man took \$50 worth of my kind of poultry and in two years multiplied them to sixteen hundred dollars in value. He was a novice and started in a box stall. A true and convincing story, told by the man himself. You can do the same, or start smaller and grow. More experience of the same kind, illustrated. Ask me for the book. It is free.

RICE, 451 Howard Street, Melrose, Massachusetts

Greider's Fine Catalogue



and calendar of fine, pure-bred poultry for 1913. This book contains many pages of poultry facts. 70 different varieties, some shown in natural colors. All illustrated and described, tells how to make hens lay, raise and care for them, all about the Famous Greider Incubators and Brooders. Shows photo of the largest poultry farm in Penn. Prices of breeding stock and eggs for hatching and supplies within reach of all. A perfect guide to all poultry raisers. Send 10c for this noted book on poultry.

B. H. GREIDER, Box 70, Rheems, Pa.

The Light of Home

is seldom strong enough to allow of the best indoor photography with an ordinary lens.

But you can overcome all difficulties with a

Bausch and Lomb Zeiss TESSAR LENS

Its remarkable power of gathering and transmitting light and its precise optical corrections enable you to make indoor portraits in comparatively weak light as well as action pictures under the most difficult conditions. No lens equals it in all-round efficiency.

Booklet 38H giving prices and information as to the best lens for your purpose, will be sent free on request. And why not call on your dealer?

Bausch & Lomb Optical Co.
NEW YORK WASHINGTON CHICAGO SAN FRANCISCO
LONDON ROCHESTER, N.Y. FRANKFORT



\$92.50—Our Price for Next 30 Days!

We now offer the Edwards "Steelcote" Garage (1913 Model), direct-from-factory, for \$92.50. But to protect ourselves from advancing prices of steel, we set a time limit upon the offer. We guarantee this record price for 30 days only. Just now we can save you \$35 or more.

Edwards Fireproof GARAGE Quickly Set Up Any Place

An artistic, fireproof steel structure for private use. Gives absolute protection from sneak thieves, joy riders, fire, lightning, accidents, carelessness, etc. Saves \$20 to \$30 monthly in garage rent. Saves time, work, worry and trouble. Comes ready to set up. All parts cut and fitted. Simple, complete directions furnished. Absolutely rust-proof. Joints and seams permanently tight. Practically indestructible. Locks securely. Ample room for largest car and all equipment. Made by one of the largest makers of portable fireproof buildings. Prompt, safe delivery and satisfaction guaranteed. Postal sent today brings new 56-page illustrated Garage Book by return mail.

THE EDWARDS MANUFACTURING CO.

700-750 Eggleston Ave. Cincinnati, Ohio (90)



The Literary Event of the Year

Theodore Roosevelt's

Chapters of a Possible

AUTOBIOGRAPHY

The first installment will appear on the Twenty-second of February in *The Outlook* and later installments in the succeeding monthly magazine numbers of the year.

NOW a private citizen, after thirty years of continuous public service, Mr. Roosevelt will devote himself to relating in familiar and intimate fashion the stirring events of his first half-century of life.

Few have had the privilege of meeting Mr. Roosevelt at close range. The millions who know him as speaker, soldier, public servant, will now have the opportunity to know him intimately. He has taken part in so much and has done so many things that what is now to be told is largely a matter of selection. He will relate serious and amusing incidents—will give sidelights on happenings that have interested and

puzzled the Nation. He will write about events as he has known them personally—as a participant.

So much of the personal side of public events as may properly be made known at this time Mr. Roosevelt will relate in these papers. He will tell of the Standard Oil and Sugar Trust prosecutions; of the voyage of the battle fleet around the world; of the creation of the Inter-State Commerce Commission; of the Panama Canal; and of many other historical events in which he had so large a part. He will deal not only with events, but with the men who made the events.

To Begin February 22

The Outlook

New York

Send Three Dollars for a Year's
Subscription—or Use the Coupon

I
enclose
10 cents
for three
consecutive
numbers of *The
Outlook* beginning
with the first installment
of Theodore Roosevelt's
Chapters of Autobiography.

Name _____

Address _____

The Outlook · 287 4th Avenue · New York

VOGUE

You may not need Vogue the whole year. But you *do* need the next five numbers—now that the time for new Spring clothes is at hand. In these five numbers, you will find Vogue a complete guide to a Spring wardrobe of individuality, distinction, and *correctness*.

Vogue may be a luxury at other times, but these five Spring Fashion numbers coming at the moment when you are planning to spend hundreds of dollars on the very things they describe is a straightforward, self-supporting, business economy. Remember, please, that Vogue *for a whole year*, would

cost you but a tiny fraction of the waste on a single ill-chosen hat or gown. And that any *one* of these five numbers may possibly save you a whole series of such expensive and mortifying mistakes. Vogue's expert advice during these weeks of planning, therefore, amounts practically to Spring Clothes *Insurance*.

Here are the five special Spring Fashion Numbers that you ought to have to secure this insurance, and the dates on which they will appear on the newsstands

FORECAST OF SPRING FASHIONS

The earliest authentic news of the Spring mode.

February 10th

SPRING PATTERNS

Working models for one's whole Spring and Summer wardrobe.

February 25th

DRESS MATERIALS AND TRIMMINGS

How the Spring models shall be developed.

March 10th

SPRING MILLINERY

The newest models in smart hats, veils and coiffures.

March 25th

SPRING FASHIONS

The last word in Spring gowns, waists, lingerie and accessories.

April 10th

You can get any one or all five of these numbers from your newsdealer. Order now—the very next time you pass the stand. Any newsdealer will tell you that the increased demand for Vogue just now makes it probable that those who fail to reserve in advance will be likely to miss the very numbers they want most. For your convenience, a handy memorandum blank is printed below. All you have to do is to check—tear off—and hand it to any newsdealer. He will be glad to save your copies



In writing to advertisers please mention HOUSE AND GARDEN.

Mr. NEWSDEALER: Please reserve for me, as they appear, one copy each of the numbers of VOGUE I have checked below.

Forecast of Spring Fashions	Feb. 15
Spring Patterns	March 1
Dress Materials & Trimmings	March 15
Spring Millinery	April 1
Spring Fashions	April 15
Name and Address	

Build A U-Bar Swimming Pool



BUILD it U-Bar way even if it does cost a bit more than other ways. It costs more because it's worth more. Worth more, not because you can have any more pleasure out of the pool itself—but that you will be decidedly better pleased with

the U-Bar way of constructing the glass enclosure part. Better pleased, because of certain points of durability, attractiveness and niceties of finish not possible with other constructions. Not possible, because the U-Bar is a distinctly different construction from any other, making possible distinctly different results. To repeat a phrase in one of our previous talks, "the U-Bar construction for greenhouses, conservatories, and glass-enclosed swimming pools, stands in relation to other con-

structions as Steinway pianos do to other pianos. That's about as plain a way as we can state it." For your further conviction, why not talk it over with us? Writing, of course, is the next best. Let us tell you the particulars of this particular pool shown.

U-BAR GREENHOUSES

PIERSON U-BAR CO 1 MADISON AVE. N.Y.

CANADIAN OFFICE - 10 PHILLIPS PLACE MONTREAL

SPRAY IN TIME

DON'T

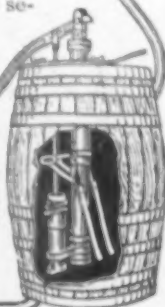
wait till bugs show themselves. It's too late. Be ahead of them with a Douglas pump and be glad in Fall that you waged war against 'em. This cut shows the "Arlington"—a strong, long wearing style selected from many other

DOUGLAS SPRAY PUMPS

Free Book vividly describes spraying and fire-fighting. Write for it. These pumps sold by dealers or direct.

W. & B. DOUGLAS
200 William St., Middletown, Ct

NEW
BOOK
FREE



THE WHY AND HOW OF ORCHARD SUCCESS

R. D. Anthony, instructor at Cornell University says: "Your book is an excellent publication." "I appreciate your sending me a copy."

This Book tells the results of years of experimenting. How to plant, cultivate and spray fruit and shade trees and vegetables to the best advantage.

It may save you hundreds of dollars every year.

Sent postpaid for 50 cents.

FIELD FORCE PUMP CO.
605 Grand Ave. ELMIRA, N. Y.

SHADOW KO-NA CLOTH

A Highly
Artistic Wall
Covering

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."

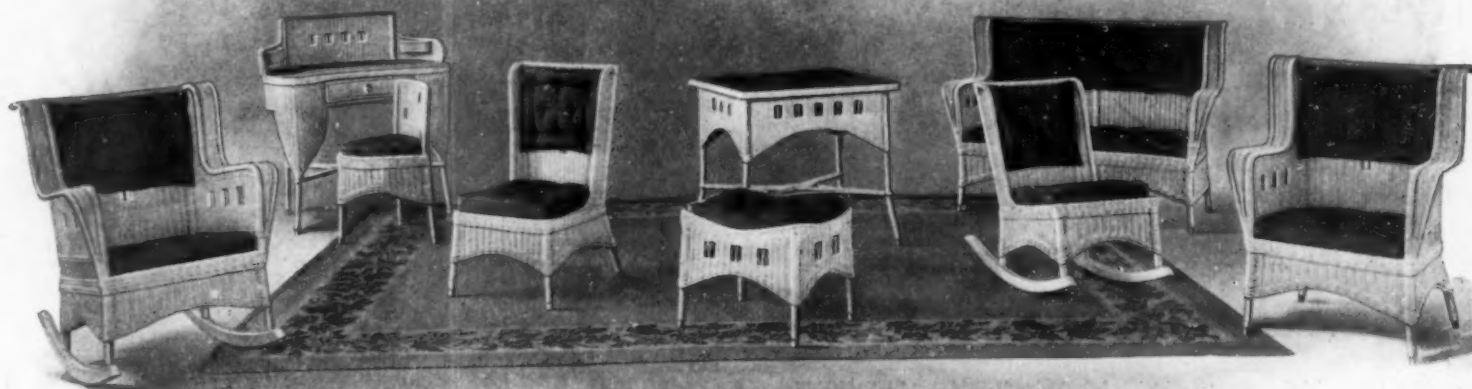
H. B. WIGGIN'S SONS CO.,
216 Arch St., Bloomfield, N. J.

34th Street

James McCreery & Co.

23rd Street

SUMMER FURNITURE AND RUGS



An extensive stock of Reed Suites in any desired color to meet requirements. Suite of six pieces ranging in price from \$110.00 to \$200.00 per Suite.
SCOTCH ART RUGS in a large variety of sizes and color combinations, at moderate prices.

34th Street

New York

23rd Street

**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 & GARDEN*. They will soon be sold. Order to-day, to-morrow may be too late.

This \$1.00 Should Save You Hundreds

THE ARCHITECTURAL RECORD,
281 Metropolitan Annex, New York

Enclosed is \$1.00. Mail six numbers (including the October, 1912 COUNTRY HOUSE NUMBER), according to special offer in *HOUSE & GARDEN*.

Name

Address



Specially
Prepared
Canvas

Requires
but One
Coat of
Paint

Bayonne Roof and Deck Cloth

Waterproof—Windproof—Weatherproof

Durable and economical, this chemically treated canvas stands the test of all kinds of weather. Its fiber is preserved and resiliency given by our secret process.

Architects and owners recognize Bayonne Roof and Deck Cloth to be the ideal covering for porch roofs, porch floors and decks, and recommend it.

**BAYONNE
ROOF AND DECK
CLOTH**

Is easily laid—requires but one coat of paint, and is in great favor and demand for rural buildings of all types.

Send for Booklet K, containing full information about Bayonne Roof and Deck Cloths, and many suggestions as to how it can be economically used.

JOHN BOYLE & COMPANY, Inc.

112-114 Duane Street NEW YORK 70-72 Reade Street

In writing to advertisers please mention *HOUSE AND GARDEN*.



Real Estate



TYPICALLY ENGLISH

in all the quiet charm and dignified reserve that the term implies, GRENWOLDE presents a type of residence colony unique in plan and result. Quaintly interesting houses under wide-spreading shade trees, winding roads and delightful views of Long Island Sound and the rolling hills, landward, create an atmosphere delightful and refreshing.



GREAT NECK Grenwalde LONG ISLAND

Resembles the delightful country districts of England and lends itself admirably to the reproduction of quaint, half-timbered houses with ivy-covered entrances and high privet hedges. The house shown in the sketch was inspired by a charming roadside cottage near Evesham in Worcester, England. The effect of the thatch roof is maintained, the timbers of the second story are adz-hewn as in the original. One enters, through an old-time batten door, a dainty stairhall with a view through the living-room onto an enclosed porch. Both living and dining-rooms are light and airy with large fireplaces. On the second floor are four master's bedrooms and two baths; on the third, two maids' rooms, bath and ample attic space. There is still time to make changes in the interior if you wish.

GRENWOLDE, designed in every sense to meet the requirements of a restricted, exclusive community, has been divided into a limited number of plots, generous in size and unique in shape and outlook. An attractive booklet, fully describing GRENWOLDE, with floor plans and elevations of houses under construction, and full directions for reaching the property by motor or train, sent on request. Your inquiry will have prompt and courteous attention.

286 FIFTH AVENUE NEW YORK CITY **PAUL V. SHIELDS** TELEPHONE 1926 MADISON SQUARE

Princeton

The ideal place to live. A home town—handsome residences, attractive surroundings; no manufacturing. Equally distant from New York and Philadelphia—express train service.

Rentals \$300 to \$6,000 a year. Tastefully furnished homes also for rent.

Bayhead on Barnegat Bay, N. J. Desirable summer properties for rent at this seaside resort.

WALTER B. HOWE, Princeton, N. J.
New York Office, 56 Cedar Street

FOR SALE

"PARRAMATTA," the Summer Home of President Taft; a Colonial house, twenty rooms. Seventy acres beautifully located on the North Shore. Other desirable smaller properties. For pictures and terms apply to Edgar J. McGill, 157 Essex St., Beverly, Mass.

FOR SALE

BLACK HALL, CONNECTICUT

One mile towards the Sound from Old Lyme; 21 acres with well-built house of 10 rooms; modern conveniences; fine piazza. Gardener's cottage. Price very reasonable. Address, Belknap, 1322 Fourth Avenue, Louisville, Ky.



RAYMOND B. THOMPSON OR CHESTER MONTGOMERY

GREENWICH, CONN. Select Location Near Country Club
For rent for season, furnished, very attractive house with plenty of bedrooms and baths. Spacious piazzas. Large, beautiful grounds and gardens.
We Have Several New and Distinctive Places; also Waterfronts
Smith Building. Telephone 866



"FIELDSTON" Riverdale-on-Hudson

Provides the opportunity to purchase residential plots or houses amid agreeable surroundings, with all improvements supplied.

COUNTRY HOMES IN NEW YORK CITY

Reached in 35 minutes from 42nd Street, by automobile, by subway to Van Cortlandt, or by New York Central trains, both divisions.

Booklet B and circular on application

DELAFIELD ESTATE INC.

27 CEDAR STREET
Telephone John 277 NEW YORK CITY

Property For Sale At Port Jervis, Orange Co., N. Y.

Attractively situated house on high ground, consisting of 13 rooms. New sanitary plumbing. Large back and front veranda with beautiful surroundings. A center for many trips of interest. Two minutes' walk to street cars, and 42 miles over perfect roads to Delaware Water Gap. Grounds in rear of house extend to Neversink river—good boating. Good train service to N. Y. and the West.

Mrs. O. P. Howell, Port Jervis, Orange County, New York.

Norway Spruce

SPECIMENS TEN TO FIFTEEN FEET
Send for Catalog.
The Elm City Nursery Co.
New Haven, Conn.

COME TO THE BERKSHIRE HILLS LIFE'S WORTH LIVING UP HERE

High altitude, dry air, good water, and a beautiful country. I sell Farms, Estates, Homes and Manufacturing Sites. All kinds and prices. Let me know what kind of property you are looking for.

I'll send illustrated booklet.

GEO. H. COOPER, Pittsfield, Mass.

Room 210 Agricultural Bank Building



Edgemont Estate At Scarsdale Station

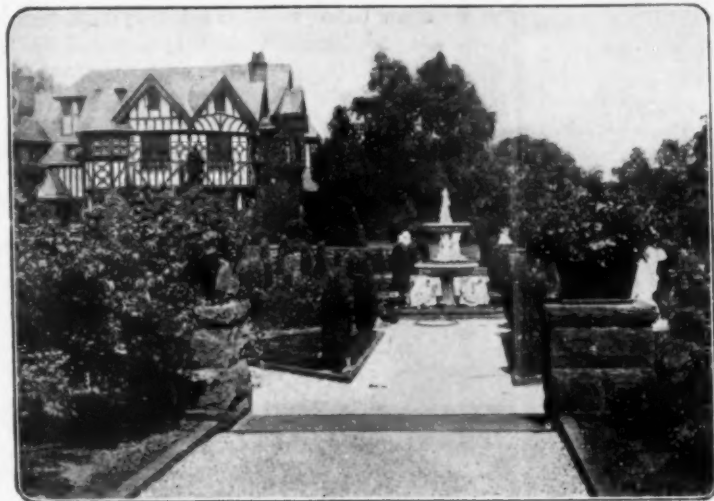
Attractive homes of moderate cost
For delightful all-year residence
Full improvements and city conveniences
Advantageous terms and assistance for home building.

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale New York
503 Fifth Ave.
New York City



Real Estate



FOR SALE ESTATE OF 8 ACRES at BELLE HAVEN, GREENWICH, CONN.

Residence of 24 rooms (8 Master's, 8 Maids' Rooms), 6 baths. View of Sound, beautiful grounds, Floral and Vegetable Gardens. Greenhouse. Garage. Large Stable. 1/2 Mile from Station. Choice Location. Must be seen to be appreciated. Might entertain renting furnished for summer season.

Address

Thomas N. Cooke

Real Estate Agency

Smith Building

Tel. 430

Greenwich, Conn.



Sacrifice of a Perfect Colonial Summer Home

On Buzzard's Bay, Monument Beach, Mass. Five master bedrooms, two servant rooms, tiled bath, screened sleeping-porch. Four fireplaces, hot-air furnace, two artesian wells; one hundred feet of broad porch. Acre of ground in shrubs and fruit trees. First-class order. Write for particulars to G. R. Brill, Overbrook, Pa., or W. R. Brown, Amherst, Mass.



"RIVERSIDE"

Offered for Rent Season 1913

Fully Furnished \$6000

Wilburtha, New Jersey. Situated on Delaware River four miles above Trenton. One of the most beautiful country estates in New Jersey. Comprising 12 acres. Apply

CHAS. J. FISK, Room 504-E, 30 Church St., N. Y.



FOR SALE Miraflores At Elberon, N. J.

The Residence, situated in the centre of extensive grounds, is of Elizabethan design and contains over 30 rooms, including gymnasium, tank room, billiard room, eight master's bedrooms, and exclusive of nine bathrooms, refrigerator rooms, &c. The grounds comprise about 18 acres; there are stables, greenhouses, tennis courts, &c.; price \$150,000. Apply

CHAS. J. FISK, Room 504 E, 30 Church St., New York City

GREENWICH CONN.

THE CHOICEST SELECTION OF
FURNISHED HOUSES
FOR THE SEASON OR YEAR,

may be secured through

FRANKLIN EDSON

REAL ESTATE AGENCY,

Smith Bldg. Tel. 876—Greenwich, Conn.

FARMS

Virginia and Maryland

Colonial Homes, tidewater properties, dairy, fruit and stock Farms, Game Preserves and Investments. All sizes and prices. Catalogue Free.

J. W. LATHAM

1420 New York Avenue, Washington, D. C.

VILLAGE FARM FOR SALE IN MASS.

An unusual opportunity. Seven and one-half acres on main street, near stores and churches. Good colonial house, newly renovated, papered, painted. Steam heat, pure mountain water supplied by town. Bath-room complete; four fine bedrooms and servant's room, two parlors, large dining room, pantries, kitchen. Large barn. Orchard, berries, big asparagus bed, grapes, etc. Valuable all-year home. Northfield, Mass. Price, \$8,500.

Room 1607 A, 31 Union Square New York, N. Y.

Euonymus A Large Stock
Alatus Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N. Connecticut

BUZZARDS BAY AND THE SOUTH SHORE OF CAPE COD

LANDS, ESTATES AND COTTAGES
At widely varying prices throughout this beautiful section

FOR SALE and TO LET

The desirable places are listed with us. Send for illustrated booklet with road map.

H. NELSON EMMONS & CO.

John Hancock Building, Automobile Service, Boston



FOR SALE Lake George, New York

Country home on west shore of Lake George, fully furnished, about 58 acres of land including farm. Large stucco mansion, tiled roof and veranda, 8 master bedrooms, 5 bath rooms, beautiful gardens, excellent furnishings. Gardener's cottage, barns, steam yacht, electric launch, boat houses, farm implements, etc. Everything in A1 condition, house rebuilt 1910. Property has large bay, and a point of land commanding excellent view of the Lake. For particulars address

ESTATE OF WILLIAM DEMUTH

507 Broadway

New York City

In writing to advertisers please mention HOUSE AND GARDEN.

EDWARD HUNGERFORD'S LATEST AND BEST NOVEL

Gertrude



Reduced from colored frontispiece by
George Brehm.

Here is a story of distinct novelty—telling first of the rejuvenation of an old country tavern into a modern and comfortable inn, and then of the rejuvenation of the family that moved into it. The story centers about Gertrude, the girl who made herself strong and winsome, and then conquered the great tragedy of her own life. As a woman of great power and beauty, she is comparable with the character "Helena Ritchie," of Mrs. Deland's novel. Throughout there runs a strong love interest; indeed, the entire pages are filled with a company of quaint and lovable folk. The book itself is a page of America—the America that we all know to-day—and its characters are the men and women with whom we are constantly brushing shoulders. *Frontispiece in full color by G. Brehm. \$1.25 net; postage 11 cents.*

BOOKS FOR THE HOME BUILDER

Reclaiming the Old House

By Chas. Edw. Hooper



All through this country—especially the New England States—there are scores of rambling old houses which, abandoned by the unknowing, are merely waiting for you to come along and turn them into great cheerful homes; homes that hold something of the atmosphere of other days. Mr. Hooper not only tells you how to find and choose your old house, but how to reclaim it and retain that age-old feeling of cheer and comfort.

His suggestions are supported by an abundance of splendid photographs, plans and diagrams. It is a remarkable book, beautifully made and decorated by Mr. Hooper himself.

Illustrated. \$2.00 net; postage 20 cents.

The Dutch Colonial House

By Aymar Embury, II

Mr. Embury has based most of his own well-known designs on the flexible style that was evolved by the old Dutch settlers through New Jersey, Long Island and the upper reaches of the Hudson. He contends that this Dutch Colonial—or gambrel roof—type of house is the most logical solution of the ancient problem of securing, at a minimum cost, an attractive house with a free sweep of air and light and plenty of room.

As with the preceding volumes of The Country House Library, there are many illustrations from photographs and floor plans.

Illustrated. \$2.00 net; postage 20 cents.

Modern Farm Buildings

By Alfred Hopkins

Mr. Hopkins is known throughout this country and abroad as an architect who has specialized in stables and farm buildings of all kinds. In his many years of active practice he has developed a knowledge of methods, materials and design that is unrivaled; and best of all, Mr. Hopkins has put most of this knowledge into a book. Photographs and diagrams illustrate practically every detail, and it is astonishing to find to what extent modern scientific methods have revolutionized the art of building the hay barn, stable, sheep fold, ice house, dairy, garage and all the rest.

Illustrated. \$3.00 net; postage 20 cents.



Standard Books for Home Makers

Bungalows

By Henry H. Saylor. Illustrated, \$2.00 net; postage 20 cents.

The Half-timber House

By Allen W. Jackson. Illustrated, \$2.00 net; postage 20 cents.

Concrete and Stucco Houses

By Oswald C. Hering. Illustrated, \$2.00 net; postage 20 cents.

Architectural Styles for Country Houses

By Henry H. Saylor. Illustrated, \$2.00 net; postage 20 cents.

Distinctive Homes of Moderate Cost

Edited by Henry H. Saylor. Illustrated, \$2.00 net; postage 30 cents.

A Book of House Plans
By W. H. Butterfield and H. W. Tuttle. Illustrated, \$2.00 net; postage 20 cents.

Inexpensive Homes of Individuality

Introduction by Frank Miles Day. Illustrated, 75 cents net; postage 8 cents.

Furnishing the Home of Good Taste

By Lucy Abbot Throop. Illustrated, \$2.00 net; postage 20 cents.

A Book of Distinctive Interiors

Edited by William A. Vollmer. Illustrated, \$1.00 net; postage 14 cents.

**The Furniture Designs of
Chippendale, Hepplewhite
and Sheraton**
Illustrated. Royal 4to, \$15.00 net; postage 50 cents.

Royal Copenhagen Porcelain

By Arthur Hayden. Illustrated in color and half-tone, \$15.00 net; expressage 50 cents.

Reproducing the English Estate on a Long Island Development

HERETOFORE America has looked toward England and the Continent for ideas in planning community dwellings, laying out small towns and the suggestion of English precedent. But no one has thought to reproduce here that particular phase of English countryside where the great estates are. Almost as much of the charm of the English landscape depends upon these country homes as upon the thatched roadside cottages. There is such a typical home atmosphere about the old places. They appear as permanent as the



A half-timbered house adjoining Grenwolde, Great Neck

country itself and one loses that sense of apprehension that is sometimes found here in America when one wonders, How soon will this district become changed?

At Grenwolde this idea of the English estate is being worked out in an interesting manner. Upon a natural, advantageous background it is planned to reproduce the landscape of the English estates by building a superior class of homes of good architecture. Best of all American democratic ideas will make these homes available for the man of moderate income. Among



Much of the property provides such views of the Sound as this

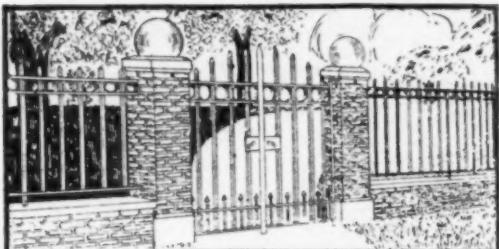
some of the novel ideas in developing the suburban community is the desirable one of eliminating the bare expanses of concrete sidewalks and curbs that intersect one another at right angles. In the roads and sidewalks all visible concrete will be absent and wherever possible hedges will be substituted for stone and concrete fences. The beauty of green edged roadways is appreciated and will be taken advantage of where possible. Notwithstanding the look of settled age resultant from these plans, they will not sacrifice modern comfort.

Your bookseller can supply you

Send for complete catalogue of our books



In writing to advertisers please mention HOUSE AND GARDEN.



Iron Railing

Entrance Gates and Wire Fencing of all designs and for all purposes.

Unclimbable Fences for Estate Boundaries and Industrial Properties.

Tennis Court Enclosures

a specialty. Fences for paddocks, poultry runs, etc., ornamental iron and wire work.

No order too large or too small for us to handle.

Send for our Fence Catalog of original designs. It's yours for the asking.

F. E. CARPENTER CO.
855 Postal Tel. Building NEW YORK



CHEAP AS WOOD

40 Styles. All Kinds of Fence.
No Agents. Catalog Free

UP-TO-DATE MFG. CO.
BOX P, TERRE HAUTE, IND.

Christmas Roses

Six Varieties
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

Dutch Bulbs - direct from Holland

And finest new dahlias, described in Free Catalog.
GT. VAN WAVEREN & KRUIFF
American Branch House, 142 N. 12th St., Philadelphia

Japan Barberry

Extensive Stock
Send for Catalog.
The Elm City Nursery Co.
New Haven, Dept. N, Connecticut

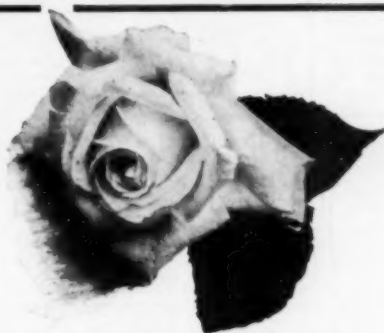


We solicit your inquiries in relation to

IRON FENCES AND GATES

Titchener Iron Works

Dept. 10 BINGHAMTON, N. Y.
Illustrated Literature and Specifications
furnished on request.



THE WOMAN

"I think your 'A LITTLE BOOK ABOUT ROSES' should be excluded from the mails. Here I have been saving all the odd dollars all winter to dress the babies prettily next summer, when the mail brings to me your charming booklet, which I simply cannot resist."

Tighten your purse strings, harden your heart, and "take a chance"

Mailed to intending purchasers, on request. To anyone, without obligation to purchase, for 10c. in coin or stamps.

TAKE A CHANCE?

The experience of a man and a woman who took it and—lost(?)

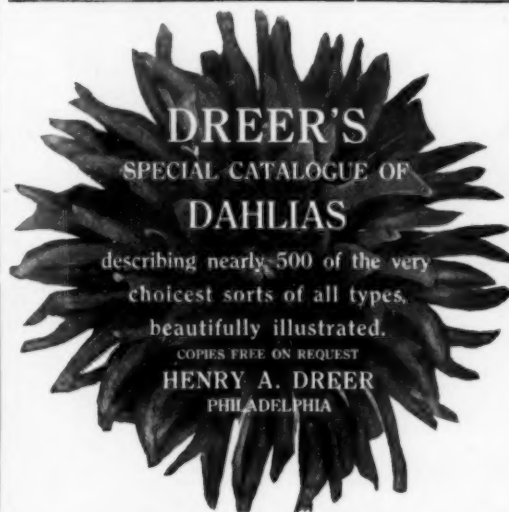
THE MAN

"I had just been talking to my wife, saying, that owing to the very mild winter, our Roses would come through in fine shape and so we would not have to buy any more this season; when along comes your 'LITTLE BOOK ABOUT ROSES' and I find all my economical resolutions gone to the winds, for if there is anything in this hemisphere that will get blood out of a turnip, it's that little, irresistible book of yours—so here goes."

GEORGE H. PETERSON

Rose and Peony
Specialist

Box 30, FAIR LAWN, N. J.



DREER'S SPECIAL CATALOGUE OF DAHLIAS

describing nearly 500 of the very choicest sorts of all types, beautifully illustrated.

COPIES FREE ON REQUEST
HENRY A. DREER
PHILADELPHIA

You can always have a dark green velvety lawn if you make it with

U-TREE-T-ME The Plant Food Blend

for fertilizing lawns, flowers, trees, shrubs, vegetables and all things that grow. Concentrated, all available, clean, odorless. A scientific discovery. Six years tests. Use one-half less of U-TREE-T-ME than ordinary fertilizer and grow more fruit and vegetables earlier and of finer flavor. 5 lbs. express prepaid \$1.00 (enough for 500 feet lawn or 130 rose bushes, etc.); 100 lbs. \$5.00; freight prepaid east of Mississippi River. Write for valuable free booklets.

THE PLANT & LAND FOOD CO.
206 N. Garrison Lane Baltimore, Md.

"Gaumer Lighting everywhere, follows the evening glow"

No. 07872

The eye naturally turns toward the sources of light, therefore, let those sources be

GAUMER

Hand Wrought
Lighting Fixtures

They harmonize in contour and proportion of line, and in finish with period and color of room decoration. Our designers are acknowledged authority on hand-wrought, unusual fixtures. A book of recent designs is at your service—then ask your dealer to show you the genuine Gaumer goods.

JOHN L. GAUMER CO., [DEPT. A]
22D AND WOOD STS., PHILADELPHIA, U. S. A.

LIGHTING FIXTURES

KENNEL DEPARTMENT



OSOKO

The Paramount
Dog Food

**Keeps Your Dogs in Condition
the Year Round**

Are your dogs thriving as they should? If not, try OSOKO. A good, solid, common sense dog food, composed of fine beef and high grade materials, with all the nutriment left in it. Absolutely pure and free from chemicals, appetizing spices or other harmful substances.

Do not forget the name "O-S-O-K-O."

Manufactured by
Spillers & Bakers, Ltd., Cardiff, England
Send for sample and Booklet No. 10

H. A. Robinson & Co.
Importers
128 Water Street New York City



THE BEST DOG

for a companion or watchdog is the Collie. Alert, intelligent, faithful, handsome; he meets every requirement. We have some fine specimens to sell at low prices. Send for copy of "Training the Collie," price 25c. We are selling many fine dogs.

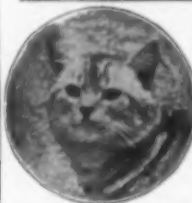
FRANK R. CLARK, Sunnybrae Kennels, Bloomington, Ill.



Delight the children with a Shetland Pony

—an unceasing source of pleasure, a safe and ideal playmate. Makes the child strong and robust. Inexpensive to buy and keep. Highest types here. Complete outfit, Satisfaction guaranteed. Write for illustrated catalogue.

BELLE MEADE FARM
Box 3 Markham, Va.



BEAUTIFUL CATS AND FLUFFY KITTENS FOR SALE

Short-haired Domestic, Rare Manx-Siamese and Abyssinian, Native long-haired and pedigreed Persians. Ideal boarding place for Cats, Dogs and Birds. Resident Veterinarian. Write for beautifully illustrated Catalogue and Sales lists.

BLACK SHORT HAired CATTERY,
Oradell, N. J.



AIRDALE TERRIERS

The best all 'round dog and companion. Our Terriers are blue ribbon winners at New York, Boston, Pittsburg, Chicago, Kansas City and other large shows.

Puppies for Sale, \$25 and Up. Champion Red Raven at Stud. Fee \$25. The greatest living sire.

Beautiful illustrated booklet for stamp
ELMHURST FARM KENNELS
Sta. E. KANSAS CITY, MO.



WHITE SCOTCH COLLIES

No country home is finished, no family circle complete, without a big, brave dog, and the Scotch Collie is the ideal home dog. Mothers are at ease when a sleepless, faithful, fearless Collie follows the children on their rambles in the country. Fathers know that the tireless, vigorous playmate of the children will keep them out doors and doctors' and druggists' bills out of sight. Young ladies know that white Collies are the most beautiful, graceful, and sympathetic aristocrats of dogdom. Little girls love their gentle ways. Boys swear by them because they know a Collie is ALL DOG ALL THE TIME. The tired business man, disgusted with the shams and trickery of the world, has his faith renewed every time he looks into the face of his faithful Collie. The entire household regard him ONE OF THE FAMILY. On the farm he is the first to detect trouble of any kind, drives away all two and four-legged enemies, and saves hours of labor by herding the cattle and sheep. White Collies are very rare and extremely beautiful. Ours are country-raised (out on an island) hardy, healthy and rugged, requiring no artificial heat in winter. Pedigree stock only. A pair will raise more than \$150.00 worth of puppies a year. We ship anywhere in North America.

THE ISLAND WHITE KENNELS, OSHKOSH, WIS.



OLD DOMINION LINE

SHORT SEA TRIPS—DELIGHTFUL WEEK ENDS IN THE SUNNY SOUTH
A Trip Over Night to Old Point Comfort, Norfolk and Richmond, Va.



New York to Norfolk
and Old Point Comfort,
Va., and return

\$14.00

to Richmond, Va.,
and return

\$15.00

Tickets include meals
and stateroom
berth.

The Only Direct Line to OLD POINT COMFORT and NORFOLK Without Change

Hot or Cold Sea Water Baths can be Procured on Steamer Without Charge
Steamers are all Equipped with the Marconi Wireless Telegraph System.

STEAMERS SAIL EVERY WEEKDAY AT 3 P. M.

Tickets and Stateroom Reservations, Pier 25, North River, Foot of North Moore Street, New York.

Phone 3906 Franklin

W. L. WOODROW, Traffic Manager.

Send for Illustrated Pamphlet, Desk L

J. J. BROWN, General Passenger Agent.

The Collector's Corner

CONDUCTED BY N. HUDSON MOORE

Questions will be cheerfully answered by the writer of this department. Letters calling for a personal answer should contain postage for reply.

CONCERNING OLD BLUE CHINA

THE writer of this department has had a small deluge of letters regarding Old Blue China since the note on the platter of "New York from Brooklyn Heights" was published. Many an owner of a piece of old blue, no matter by whom made or of what pattern, has jumped to the conclusion that his piece was a treasure, and has had to be undeceived.

In the first place, this blue ware, properly speaking, is not china; it is earthenware, which in the biscuit state is too porous for domestic uses and has to receive a coat of glaze. Most earthenware is opaque, while porcelain is translucent. Semi-china is earthenware with a white or chalk body, highly glazed, and made to look as much like porcelain as possible; a fake, in fact. Stoneware is a very hard pottery more like porcelain than earthenware and capable of being used without being glazed. It is frequently found glazed, however, and the glaze employed is commonly salt thrown in the kiln while the ware is being fired.



A plate by Adams that is worth but fifty cents

Now, the earthenware which has on it the patterns in dark blue, whether historic or commercial, was made to be sold at a small price. The blue, cobalt, was cheap, effective and so dark that it covered all the defects in the earthenware. The patterns were printed on by a method invented by Sadler and Green, two Liverpool potters in 1756, and for some years they printed for other potteries as well as for themselves, even Wedgwood employing them. By degrees the secret became known and "the potteries" in the district in Staffordshire comprising the towns of Tunstall, Hanley, Burslem, Stoke, Longton and Fenton, all took up the method.

Most of the "historic china," so called, was made between the years 1800 and 1830. The American market was found to be a rich one, and the English potter, with small regard for the history and trials of his own country, turned to the struggle between England and America for many of his designs. The battle of Bunker Hill, a number of sea fights, portraits of our heroes, the Erie Canal, Hudson River, cities and towns of importance and public buildings were all utilized to make their tableware and domestic crockery attractive to the Americans, colonists no longer.



This platter, with the arms of Pennsylvania, is really valuable

Very little earthenware or pottery of any kind was in general use before the Revolution, and such as there was was confined to the coast town whither it had been brought by sailing vessels which touched at Oriental or Dutch ports. By the end of the eighteenth century, perhaps as early as 1780, money began to be quite plentiful with us. We felt able to improve our domestic services. Trenchers and pewter ware were old-fashioned, and the fine new earthenware sent over from Staffordshire—mind you, this included Wedgwood—met with a ready sale. Even Worcester, the aristocrat of early English factories, made printed ware, and their "Tea Party" (not the Boston one) and "King of Prussia" designs made by Hancock became most popular.



A good looking old teapot, but it will hardly find a purchaser

The question sometimes arises: "If so much of this blue ware was sent to this country, what has become of it?" 'Tis (Continued on page 342)

POULTRY DEPARTMENT



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.

Tomlinson's S.C. White Leghorns

EGGS FOR HATCHING BREEDING STOCK

A BIG STRONG STRAIN of heavy Layers. Raised under absolutely sanitary conditions. Producers of LARGE WHITE EGGS.

Prices Reasonable. Fertility Guaranteed.
EVERETT R. TOMLINSON, BATAVIA, N. Y.

Greider's Fine Catalogue

and calendar of fine, pure-bred poultry for 1913. This book contains many pages of poultry facts. 70 different varieties, some shown in natural colors. All illustrated and described, tells how to make hens lay, raise and care for them, all about the Famous Greider Incubators and Brooders. Shows photo of the largest poultry farm in Penn. Prices of breeding stock and eggs for hatching and supplies within reach of all. A perfect guide to all poultry raisers. Send 10c for this noted book on poultry.

B. H. GREIDER, Box 70, Rheims, Pa.

Chase's Champion R. & S.C. Black Minorcas and R. C. Brown Leghorns



again prove to the poultry world, their super-excellent qualities, by winning at the Great Chicago Show, in the hottest competition. 6 1sts, 7 2ds, 3 3ds, 1 4th and 3 5ths. Beyond doubt we stand head and hands above all our competitors, as we have been winning for years at the best shows in the country, also supply winners for our customers. We are offering for sale 1,000 cocks, hens, pullets, and cockerels. Some of these birds will win in the best of competition, others will make the best of breeders and layers. Remember, all stock sent on approval. You must be pleased or the deal will cost you nothing. 40 breeding pens have been mated for egg trade, therefore, we can supply them in any number. We have installed a large incubator, so your order for day old chicks can be filled for any number. All eggs guaranteed fertile.

SPECIAL PROPOSITION

We will replace dead chicks free. We have a to offer every honest person interested in poultry. If you are going to start raising poultry, or want more stock, eggs, or chicks, write to me at once, as we do not require all cash with order. Our big catalog and poultry book, full of good practical poultry knowledge, sent for 5 red stamps. Price and mating list free.

EDGEMONT POULTRY FARM, W.O. CHASE, HILLSBORO, ILLINOIS.

G. D. TILLEY Naturalist

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Ornamental Ducks and Geese, Flamingoes, Game and Cage Birds

"Everything in the bird line from a Canary to an Ostrich"

I am the oldest established and largest exclusive dealer in land and water birds in America and have on hand the most extensive stock in the United States.

G. D. TILLEY, Box H, Darien, Connecticut

Book Your Order Free, Now, for "Baby Chicks of Quality" Healthy, vigorous day-old chicks hatched from a heavy egg-laying stock of

WHITE PLYMOUTH ROCKS (The 257 Egg Strain)

Send no money. Just write that you will want "Baby Chicks of Quality." Then just before you want them shipped, send your remittance. This service protects you, yet it costs you nothing. Safe delivery in good condition guaranteed.

A New Catalogue Is Now Ready

One of the finest ever issued by any breeder. It tells just how "Baby Chicks of Quality" are produced, and describes every grade of stock that we have to sell, with prices. A copy is ready for you.

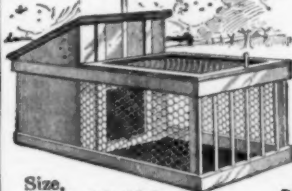
Suburban Flocks of twelve females and one male sold on approval, for three days' free examination.

R. C. CALDWELL, Box 1030, Lyndon, Ross Co., Ohio

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.

\$300

We make portable houses for all purposes.

No. 0 Colony Laying House—

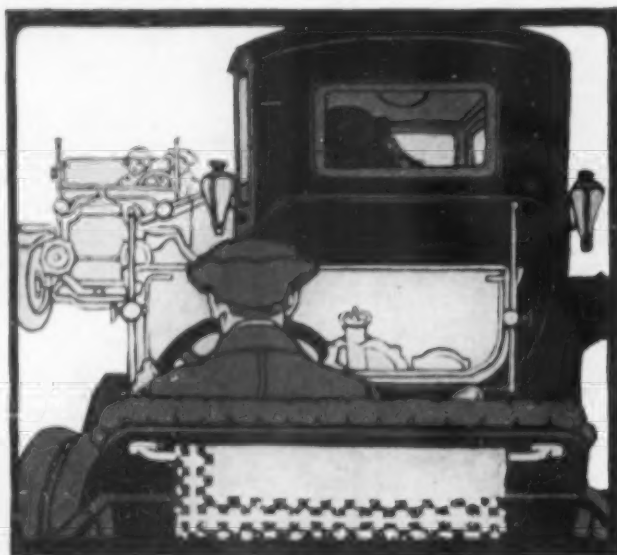
for 12 Hens Fitted complete with nests, fountain and feed trough. Sanitary—easily cleaned. One man can easily care for several hundred birds. Nicely painted—set up in 15 minutes. A comfortable year-round house. In stormy weather the run may be covered, giving a protected scratching room.



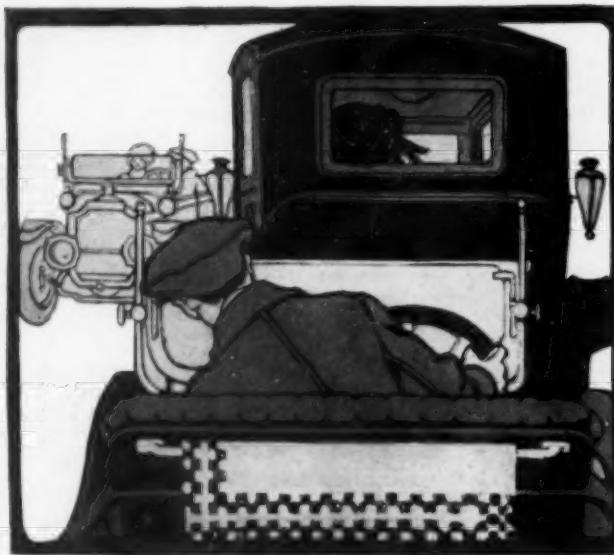
Size, 10x4 ft., 5 ft. high.

\$2000

E. F. HODGSON CO., Room 326, 116 Washington St., Boston, Mass.



THE PACKARD WAY



THE OTHER WAY

Convenience, Security, Maximum Service Packard Left Drive Motor Carriages

The New "38"

The New "48"

Left Drive

Packard left drive, with electric self starter and centralized control, means this to you:

You enter the car directly from the curb.

You avoid muddy pavements and the dangers of passing traffic.

You start the motor by touching a button and pressing a foot pedal.

You control all the lights and the carburetor adjustments from the driving position.

When driving in traffic you have an unobstructed view of the road ahead.

When turning off to the left in traffic, your protection is assured by a position convenient for signalling with left arm.

When turning off to the right, you are naturally protected by the adjacent curb.

UNEXPECTED emergencies demand the bridge builder's factor of safety. Efficiency far exceeding the requirement, is the uncompromising standard to which every Packard is built. The new "38" and the new "48" represent knowledge of emergency requirements, knowledge gained through fourteen years' experience in the factory and on the road.

Ask the man who owns one

COLOR CATALOG ON REQUEST

Packard Motor Car Company, Detroit, Michigan