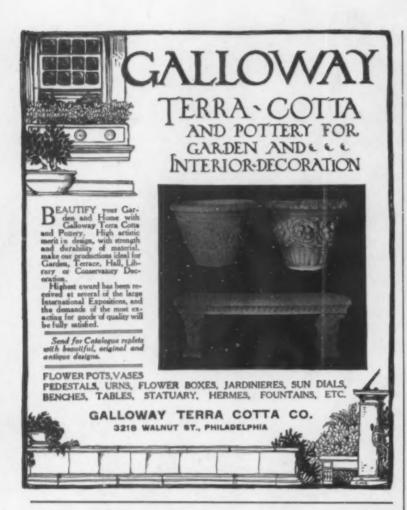
MAY 1910

Furniture and Floor Coverings for the Summer Home-The Busiest Month in Flower and Vegetable Garden-Roses —— 10 Pages of Distinctive Homes.

25¢ A COPY

# House Egarden





# Bobbink & Atkins

World's Choicest Nursery Products

### Spring Planting

Inteuding purchasers should first visit our Nursery and inspect the material we offer. The quality of our products must be seen to be appreciated. Having two hundred and fifty acres of the most fertile ground under cultivation places us in a position to fill orders of any magnitude.

BUXWOOD—Everybody loves the aroma of old-fashioned Boxwood. We have thousands of specimens. It is worth while to travel any distance to see our collections, consisting of all sizes and shapes.

RHODODENDRONS, Catawbiense, English Hardy Hybrids and Maximum. Our collection consists of thousands of choice specimens and ordinary sizes in the most desirable varieties.

BOSES—New, rare, ordinary and old-fashioned kinds. We have more than 100,000 in several hundred varieties in two-year-old strong, field-grown plants. These can be inspected in our store-house at this time. Special prices on quantities.

HAEDY HERBACEOUS PLANTS—For New and Old Fashioned Gardens, Beds, and Borders. We have the largest quantity and most complete collection in the country.

country,

EVERGREENS, CONIFERS, AND PINES—Upwards of 100 acres of our nursery are planted with the handsomest and choicest lot of specimens in the world.

SHADE TREES, FLOWERING SHRUBS AND HEDGE PLANTS—Many

acres of our nursery are devoted to their cultivation.

TRAINED DWARF AND ORDINARY FRUIT TREES AND SMALL FRUITS—We carry at all times large quantities of the best varieties.

HARDY TRAILING AND CLIMBING VINES—In all varieties for every place

and pergola.

BAY TREES—We have several thousand of these attractive decorative trees in all forms and sizes. A visit to our nursery would be pleasing if only to see these

trees.

DECORATIVE PLANTS FOR CONSERVATORIES INTERIOR AND EXTERIOR DECORATIONS—We grow in our 150,000 feet of greenhouses.

BULBS AND ROOTS—For Spring, Summer. Autumn and Winter flowering.

LAWN GRASS SEED—B. & A. Rutherford Park Evergreen Mixture.

TUBS—We manufacture them in all shapes and sizes. Ask for price list,

OUR ILLUSTRATED GENERAL CATALOG NO. 18 is comprehensive and especially interesting, instructive and helpful to intending purchasers or those who are unable to visit our nursery. It describes each article, giving prices. Will be sent upon request. Special prices on quantities.

The General Supervision of Public Grounds and Private Estates a Specialty

We Plan and Plant Grounds and Gardens Everywhere Visitors to Our Nurseries are Always Welcome We are only a few minutes from New York City

NURSERYMEN, FLORISTS AND PLANTERS, RUTHERFORD, N. J.

\$10,000

# Garden Furniture

at 50% below former prices. The list contains some 220 Vases of 34 different designs, Sun Dial Pedestals. Flower Boxes, Benches and Statuary, many of them of our best

designs, all of them equal to our best grade of workmanship.

The prices are actually

50% below former prices and the offer will not be made again. Send for our illustrated catalogue which contains some 600 designs of Garden and Hall Furniture.

A 100 C 63



### THE ERKINS STUDIOS

312 Madison Avenue

New York

Carrara, Italy

SUBSCRIBE NOW

for the best practical journal of advertising in America. One that deals knowingly, and from the inside, with the thinking, planning, selling side of business.

is written-not by theorists-but by real workers in the actual advertising field.

It is a journal of modern advertising news and methods—100 pages monthly—right off the advertising griddle and piping hot.

It's the newsiest, brightest and most helpful exponent of all that is good in America and England in Newspaper, Magazine, Mail Order, Street Car and Outdoor Advertising.

Every business-man in America ought to read an advertising maga-if he doesn't, he's neglecting the only permanent foundation for any business.

### READ IN THE JANUARY NUMBER:

"The Harpoonist"

"Sparks and Misfires"

monthly jabs at the ads that are uncouth, inept or ill-advised. -by D. Herbert Moore, widely-known ad-smith and brilliant writer of ad-vertising.

"The Battle with the Waste-baskets" -

"Honorable Mention" for the win-ning Commercial Booklets of the month, by the Editor, L. R. Moore.

"Current Comment on Advertising" -

-by our New York Spectator, F. E. Dayton.

"Advertising—That's It."

-by Joe Mitchell Chapple, Editor of the National Magazine.

and a dozen valuable leading articles

We'll send sample copy on request. The regular subscription is 50 cents per year. Right Now we'll send it Three Years for One Dollar.

### AGRICULTURAL ADVERTISING LONG-CRITCHFIELD PUBLISHING HOUSE

1320 Corn Exchange Bank Bld'g

Chicago



# Contents, May, 1910

COVER DESIGN: THE HOME OF CARLTON MACY, WOODMERE, L. I. From a photograph by Julian Buckly CONTENTS DESIGN: TULIPS From a photograph by Nathan R. Graves FRONTISPIECE: CASA DEL PONTE, TOKENEKE, CONN. Slee & Bryson, Architects By Louis Boynton LIGHTING THE COUNTRY HOME...... 173 By T. E. Whittlesey ROSES FOR THE SMALL PLACE..... 174 By Hugo Erichsen THE WILLOW AND WICKER FURNITURE FAMILY ...... 177 Ru Katherine Newhold Rirdsall By F. F. Rockwell FLOOR COVERINGS FOR THE SUMMER HOME...... 182 By Margaret Greenleaf PRACTICAL TALKS WITH HOME-BUILDERS ...... 184 By Alexander Buel Troubridge THE PART FLOWERS PLAY IN GARDEN AND LANDSCAPE...... 185 By Dr. C. D. Jarvis "LYNDANWALT" ..... 190, 192 Bu Oswald C. Hering ROCK-GARDENS AND HOW TO MAKE THEM...... 194 By G. A. Woolson THE HOME OF MR. JOHN A. GURD, ARCHITECT, RIVER EDGE, N. J. ..... 196 THE HOME OF MR. LAWBENCE BUCK, ARCHITECT, ROGERS PARK, CHICAGO, ILL. ..... 197 By J. J. Levison INGENIOUS DEVICES ...... 199 INSIDE THE HOUSE ...... 200 Edited by Margaret Greenleaf Edited by Gardner Teall The Rearing of Puppies Caring for Motherless Chicks To Make Cement Work White and Waterproof Hardy Annuals for Autumn's Outlook Growing Soft-wood Cuttings or Slips Collecting Miniatures Southern Gardening Operations for May Book Notes

HENRY H. SAYLOR, EDITOR

Copyright, 1910, by McBride, Winston & Co.

McBRIDE, WINSTON & CO., A FOURTH AVENUE, NEW YORK CITY Robert M. McBride, President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Post-office, New York, N. Y.



CASA DEL PONTE, AN ITALIAN HOUSE AT TOKENEKE, CONNECTICUT

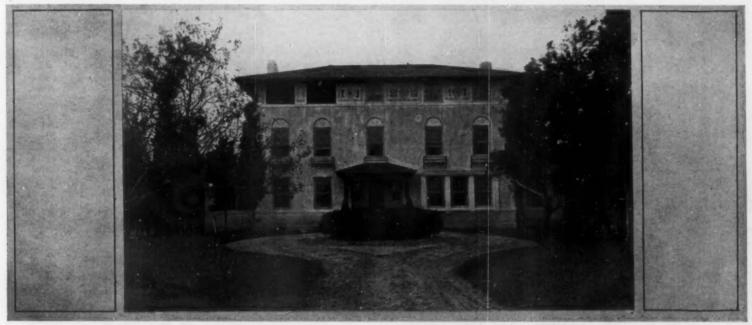
The summer home of two New York bachelors that was built very economically of cement by day labor. Slee & Bryson, architects

# House&Garden

VOLUME XVII

May, 1910

NUMBER 5



An Italian adaptation in Cedarhurst, L. I. Color is employed in the frieze by using mineral colors in a cement wash applied through a stencil. Louis Boynton, architect

# Italian Adaptations for American Homes

BY LOUIS BOYNTON

Photographs by Julian Buckly and others

[The problem of choosing an architectural style for the American country or suburban home is one of the most puzzling that confronts the home-builder. In order to bring about a better understanding of the more common types and with the idea of clarifying, as far as possible, this whole matter, we have asked a number of prominent architects to present each the case for one particular style. In the December issue Mr. Frank E. Wallis, the well known authority on Colonial architecture, told why a house of that type is the only one to build. Mr. Allen W. Jackson presented in the January issue the case for the Half-timber house. In February Mr. Aymar Embury, II., added his convincing argument for the picturesque Dutch Colonial. Mr. J. Lovell Little, Jr., told the merits of English Plaster houses in March. A number of other styles will be explained and illustrated in future issues. The Editors will gladly do all in their power to answer any questions regarding style, details or construction.

LET us begin by frankly admitting that the style employed in the design of a house should be determined by the special conditions of environment, by the material used, and by the social and intellectual characteristics of the people who are to occupy it.

For instance, it is often appropriate to build a camp in Maine or in the Adirondacks of logs, and in its place this seems the most fitting material and properly influences the "style" or character of the building. However, while one may admit this, it would not make a structure built of this material with its resultant "style" seem especially appropriate or fitting on, say, Fifth Avenue, New York. It is difficult to imagine an architect who really designs his buildings saying, "Go to, let us now design a building in Tudor Gothic or Dutch Colonial," without having

first studied his problem. No; a design should grow from the conditions imposed by the site, the material to be used and the needs of the owner and his family, and the style should be determined, almost automatically, by these requirements.

Granting all this, there are still valid reasons why an adaptation of the Italian Renaissance is the logical style to use in an increasingly large number of cases. Undoubtedly all good design is the result of a frank use of the materials employed; and any forcing of the materials is sure to result either in a distorted design, or in what, I think, may fairly be called "building scenery," that is to say, in constructing an effect that looks like something different from what it is.

For instance, building in frame with a covering of stucco is,



Mark Twain's home, "Stormfield," at Redding Ridge, Conn., is an excellent example of Italian motives applied to American needs. Howells & Stokes, architects



A large part of the charm evident in the smaller Italian villas is due to a well considered lack of stiff symmetry

to my mind, distinctly disingenuous. Stucco represents the idea of plaster on a backing of some form of masonry—stone, brick, terra cotta, or what not, but never a cover for a wood frame.

Now, there is one question which has to be considered in building, and consequently in designing, every house; and that is the question of materials. "Of what shall we build our house?" is a question that has to be settled first of all for every case. Frequently there are only two or three materials that are to be had, without undue expense, and usually the materials of the locality are the ones to use. Rightly used, they will generally give results which seem harmonious and fitting.

Of course, in this country the tradition is to build as much as possible of wood. Formerly wood was the cheapest as well as the quickest material to use, and the idea that wood is cheap is so firmly ingrained that most people are surprised to learn how little basis there is at the present time for this belief.

For some years there has been a well marked and increasing tendency among owners and architects to try to find some substitute for frame construction. This is partly to be explained by the constant advance in the price of lumber and the fact that the difference in the expense of building in wood and some incombustible material is rapidly reaching the vanishing point; and partly by the growing conviction that the risks of fire in a wooden house are too great. People are realizing more and more fully that the extra expense of building either fireproof houses, or houses where the walls at least will resist fire, is more than justified by the added security obtained. Furthermore, the reduced cost of maintenance in buildings that do not require frequent painting is a factor that appeals more and more strongly to prospective builders, especially if they have had experience with the constant drain for repairs brought about in even a well built frame house.

Now, undoubtedly, the most economical and straightforward way of building in fireproof or semi-fireproof construction is to use straight simple wall surfaces with the minimum of breaks, and to stop the wall at an even height.

If the top of the walls are protected from the action of the weather by a projection of the roof, you have the maximum of

efficiency with the minimum of effort and expense. These conditions naturally suggest the sort of building so prevalent in central Italy and especially in Florence.

In other words, they suggest the Italian type of building, with its plain, simple wall surfaces, its long, hori-



An American adaptation that shows the distinctively Italian loggia treatment for an interior courtyard. Charles A. Platt, architect



In the living-room of Casa del Ponte (see frontispiece). Slee & Bryson, architects

zontal projecting cornice or eaves, and the simple roofs which are so characteristic of the type.

It may be said, and with some truth, that the Georgian or Southern Colonial type fulfills these requirements equally well. This may be true in some cases, but, as has been frequently pointed out, the almost entire lack of flexibility in the Colonial style makes it often difficult to use without forcing a plan into a more or less arbitrary rectangle, and in so doing distorting the natural requirements of the house.

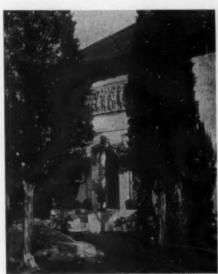
Now, unlike the other renaissance styles, and contrary to the usual impression, the Italian work, except in the later and more formal examples, is one of the freest, most flexible styles ever developed. Even the most cursory inspection of any of the well known works on Italian villas will convince the doubter of the absolute accuracy of this statement.

During a somewhat prolonged stay in Italy, the present writer made a practice of measuring and making drawings of the most important, or at least the most interesting, buildings and details that came under his observation; and it happened, not once, but so many times that it came to be almost a commonplace, that some unexpected departure from the normal, some unperceived variation from symmetry perhaps, made a second visit necessary to check the measurements. This almost invariably resulted in uncovering some perfectly frank lack of balance which had been perpetrated in so naïve a way as to elude the eye of even a trained observer.

One came to feel, after a while, that there was no such thing as absolute symmetry in Italian work, and I firmly believe that a large part of the interest in this work is due to that fact. That this subtle lack of obvious balance accounts in some measure for the strange compelling charm of the style seems no more than a reasonable deduction.

But it is in the Italian villas, which correspond most nearly to our country houses, that one sees this quality carried to an extreme that seems almost incredible. The general mass of the houses is so simple and the effect so regular that the mind scarcely

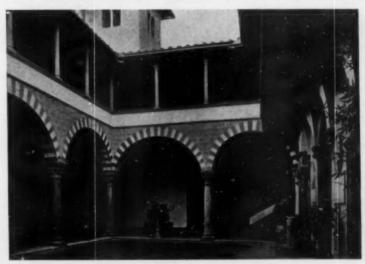
grasps the fact that the windows are put in where needed for use, and without any thought of absolute symmetry, but with a wonderfully subtle sense of balance; so that the effect of a rectangular facade, with a strong shadow from long horizontal projecting eaves, is of a well balanced sym-



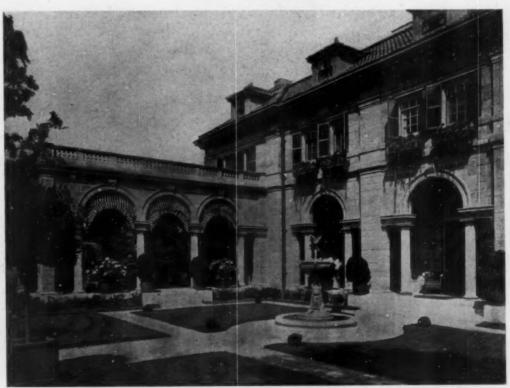
Nothing can approach the Italian style in a setting of cedars such as that found at Casa del Ponte



In the Cedarhurst house shown on page 169 the view over the trees is obtained from a loggia on the third floor level



The Villa Bondi, Florence, might well furnish a precedent for enclosed courts in American country homes



The Italian style may be well expressed in the frank use of plain cement blocks as used in this fireproof country home. Lord & Hewlett, architects



The Villa Bleu, Garden City, L. I., is of cream-color stucco with blue roof and blinds. Albro & Lindeberg, architects



Villa Castello, one of two small palaces owned by the Royal House of Italy, illustrates the charm of subtle asymmetry in the openings

metrical whole—an effect difficult to obtain in any other style. Of course objection is made that this is not an "indigenous style." My own impression is that except for the Pueblos and the cliff-dwellers the only "indigenous style" is the wigwam, but

I do not feel myself ent.rely limited to this precedent.

The fact is that our modern conditions, both material and intellectual, are so far removed from even the colonial farmer that their kind of house does not fit, at least not without such serious modification as to destroy its entity. Whereas the architecture of the Italian Renaissance is the result of an activity, both intellectual and material, which is measurably reproduced in our present conditions. And the indications are very strong that we are entering on a period of esthetic renaissance which has a very vital impulse.

Both on the score of practical economy, therefore, of adaptability to the materials, and as representing the intellectual and esthetic status of the present generation, the Italian Renaissance seems the most reasonable starting point from which to develop our domestic architecture, especially as regards country house work.

Of course, it does not need saying that the fact that this Italian style is not necessarily formal and symmetrical, does not make it any the less well adapted to the most formal and precise type of building.

While this type of house may be executed with equal propriety in stone, marble, brick, or concrete blocks, it is peculiarly adapted to a stucco treatment. In fact a very large proportion of the buildings in Italy, even among the finest examples, are built of stucco on a rubble stone wall. The writer well recails passing a Flor-

entine palace near the Riccardi in the company of an educated Italian. Something was said about the building being of plaster and, surprise being expressed, my companion, with the utmost sang froid, took the end of his umbrella and broke off a good-sized piece from what looked like a heavily rusticated stone. This, however, should not be taken as an indorsement of the vicious practice of imitating stone in stucco. There is no worse crime in the somewhat extended repertoire of an architect than this same lack of frankness.

As a rule, a stucco house, unrelieved by decoration or ornament, has a cold and rather uninviting look, and it is, I believe, for this reason that half-timber work has been so often tried, unfortunately with almost uniform lack of success. Now it is quite possible to use exterior color decoration on stucco if it is done discreetly and with good judgment.

By using simple designs and quiet low-toned color, the monotony of the plaster wall may be relieved. This method of decoration is, of course, not uncommon in the north of Italy and is found even as far south as Florence, and may be perfectly well adapted to the conditions of our modern design.



Italian adaptations give the most appropriate setting for the most perfectly developed type of formal garden design. Charles A. Platt, architect



The W. D. Guthrie home at Locust Valley, L. I.—C. P. H. Gilbert, architect—is lighted by three hundred electric lights operated by a thirty-horsepower gas engine

# Lighting the Country Home

CONVENIENT AND TRUSTWORTHY SYSTEMS FOR LIGHTING THE COUNTRY PLACE THROUGH AN INDEPENDENT PLANT GENERATING ACETYLENE, ELECTRICITY OR GASOLINE VAPOR

BY T. E. WHITTLESEY

NOT many years ago a great draw-back to country living lay in the fact that it was necessary to put up with the nuisance and disagreeable odor of kerosene lamps. To-day one can build a country home with no fear whatever of trouble on the score of proper lighting. There are numerous systems, all having their enthusiastic advocates, any one of which will do the work that is required of it.

In selecting a system there are several important considerations to be kept in mind. In the first place, the cost of installation must not be given too much weight. The initial cost of installing a thoroughly reliable generator will be distributed over many years, and if one makes his selection solely for the reason that a plant is cheap he may be disappointed in a very short time to discover that it must be torn out to make way for a new one.

The cost of maintenance, of course, includes the fuel that is used, the repairs to machinery, and the labor involved in caring for the plant. With the use of electricity, also, it must be remembered that the lamps will have to be bought from time to time—a comparatively small item.

In a case of a country place where not only a lighting problem must be solved but an adequate supply of water must be provided for daily use and for fire protection, it would probably be well to install electricity, for the reason that the same engine used for producing current through the dynamo would be coupled up to a pump for a part of the day and both of these problems solved more economically in that way.

# ACETYLENE GAS

Acetylene gas is coming to be more widely and favorably known through its use in automobile head-lights as well as for lighting the isolated country home. It has the distinction of being the whitest illuminant in general use, more nearly approximating sunlight. The gas is made from calcium carbide, a product resembling in color crushed granite and made by melting together in an electric furnace ordinary lime and coke. Until

brought into contact with water the carbide is non-combustible and actionless.

An acetylene generator takes the place of the ordinary gas meter that would be had in districts supplied with common illuminating gas through street mains. In this generator the carbide and the water are brought into contact to produce acetylene gas. In some forms the carbide is dropped into the water, in others the water drips upon a pile of carbide, but in all types there are three parts to the generator—the carbide receptacle, the water tank and the gas tank. And in each type there is an automatic device for bringing the carbide and the water together just fast enough to make the needed amount of gas.

From the generator, which is usually set in the basement, wrought iron pipes lead the gas to the various rooms, and the gas is delivered through a special form of burner which consumes about one-half cubic foot per hour—about one-tenth the amount burned at a common illuminating gas outlet.

Calcium carbide costs, delivered, about \$4 per 100 lbs., and this amount should make from 400 to 500 cubic feet of gas. A generator of reliable make, with piping, brass fixtures, globes and burners for 35 lights, costs from \$200 up, and the cost of producing a 24-candlepower light—the equivalent of one and a half ordinary 16-candlepower electric lamps—is about four-tenths of a cent per hour. West of the Rocky Mountains the increased freight charges on the carbide bring the cost up about 25 per cent.



A five-horsepower, three kilowatt direct connected gasoline engine and dynamo, with switchboard, suitable for a moderate-size

# ELECTRICITY

There is no doubt that electricity has a strong hold upon popular favor for lighting purposes. Where a public service supply is not obtainable a plant may be installed in the cellar, stable or outhouse. It consists of a dynamo, a switchboard and some form of engine to run the former.

A combination consisting of dynamo, gasoline engine, switchboard and all equipment except wiring and installation,

(Continued on page xxvi)



In the rose garden of to-day we are not satisfied with the old-fashioned bedding plants; we must have a two-story display by training half the bushes on high stakes

# Roses for the Small Place

CHOOSING THE MOST SATISFACTORY ROSES TO THRIVE IN VARIOUS LOCATIONS-BEDDING, CREEPING, ARCH AND HEDGE TYPES IN RELIABLE VARIETIES AND COLORS

BY HUGO ERICHSEN

Photographs by the J. H. McFarland Co. and Nathan R. Graves

OF all the children of Flora, none is more accommodating nor or because a lot of "standard" roses are offered by someone at a

hedges with the Rose while you cannot fill bed or border with any more lovely flower.

Unfortunately the purpose for which Roses are intended does not always receive due consideration at the time they are purchased. Too frequently are these queens of flowers selected because some friend has given a chance recommendation of some varieties which may not fit the place another has for them at all, or because the buyer was beguiled into their acquisition by some of the garish pictures with which occasional irresponsible dealers are wont to hypnotize their victims, instead of buying from responsible nurserymen and florists,

can be used in so many different ways as the Rose—rightly phenomenally low price which seems to indicate a bargain though in reality they are worthless old stock being got rid of. In all three fences, porches, pillars, poles, arches, arbors, and even make respects I write from experience. Buying roses without careful

The half-evergreen Memorial Rose (Rosa Wichuraiana) makes a beautiful cover for banks or stone walls

thought of the matter or when purchasing at emporiums whose regular business is other than that of dealing in plants is very much like a game of chance. Now and then at rare intervals I have scored, as when I acquired a rose under the name of Prince Bismarck that turned out to be a magnificent Frau Karl Druschki; but more often I have failed lamentably, and plants purchased under the grandiloquent name of "American Beauty" had to be discarded from my garden because of the insignificant flowers they put forth. They scarcely bloomed at all with all the painstaking care given them.

For this reason it is imperative that the beginner in rose-culture should limit his patronage exclusively to dealers who may be depended upon to give him a square deal, who will not resort to misrepresentation, and who will provide him with plants that are really worth growing and which will bear transplanting. Fortunately there are many such throughout the United States and so the beginner need have no discouragement in the matter of obtaining good plants if he will go about it sensibly.

At this point we are confronted by the old question whether preference should be given to a Rose grown upon its own roots or to a budded specimen. Personally I should pronounce in favor of the

latter, not only on the score of economy, but also because I have found the results in my own experience to be quite as favorable, when care has been taken, as it should be, to exclude any shoots that may sprout from the roots.

In the matter of varieties, the embryo rosarian has a wide choice. But at first, I believe, it would be advisable for him to confine himself to Roses known to be floriferous and of strong growth. To mark the progress of a vigorous climbing rose, such as the Dorothy Perkins, is one of the joys of even the smallest garden.

With reference to the purpose for which they are selected Roses may be divided into Bedding, Creeping, Arch and Hedge varieties

The list of Bedding Roses is of course especially large



Lady Gay, a pink rambler, and Paradise, a beautiful single pink-and-white climbing rose with imbricated petals

and includes such garden favorites as the Magna Charta, Mrs. John Laing, General Jacqueminot, Ulrich Brunner. Clothilde Soupert, Maman Cochet, La France, Catherine Mermet, Clio, Anne de Diesbach. Prince Camille de Rohan, Paul Neyron and the Francesca Kruger. Among the newer Roses in this respect I would recommend the white and pink Killarneys, Mrs. Sharman-Crawford (pink), the Lyon Rose (chrome yellow), Reliance (pink), Dr. O'Donel Brown(carmine) and the snowwhite Molly Sharman-Crawford. Of Frau Karl Druschki (white) I have already spoken. In my own limited collection this Rose and the pink Killarney have made the best showing and have combined a free-flowering habit with vig-

orous growth. Most of the new Roses mentioned are Hybrid Teas, which are becoming more and more popular every year and have proven just as hardy in most parts of the country as the Hybrid Perpetuals.

Among the Roses that may be interspersed with shrubbery or planted in groups to advantage the two, in my opinion, most worthy of mention are the Madame Plantier (white) and Harrison's Yellow. Both of these are commonly known as Bush Roses, a term that is indicative of their habit of growth, and should not be selected for producing flowers for cutting.

Among the Creeping Roses I would call particular attention to the hybrids of Rosa Wichuraiana, also known as the Memorial Rose, Universal Favorite, Manda's Triumph, Gardenia, South Orange Perfection and Pink Roamer. These roses are valuable



Marechal Neil, a tender climbing Tea Rose, dark golden-yellow in color. Requires winter protection in the North



Gloire de Dijon, a creamy-amber pillar rose, perfectly hardy south of Washington, D. C., but thriving with careful protection in the North



Killarney, the comparatively new Hybrid Tea Rose, having a beautiful shell-pink color, has achieved a wide popularity



The Anemone Rose, a hybrid of R. Sinica and a Tea Rose, has large light pink flowers



The Yellow Rambler, a fragrant cousin of the well known Crimson Rambler, blooming for three weeks



Hiawatha, a hardy climber. The petals are ruby-crimson, the center white and the anthers yellow

for covering waste ground, stumps of trees, pillars, posts, trellises, rocky slopes, gravelly embankments, and will flourish where other roses could not possibly live. They are very floriferous and delightfully fragrant.

Roses adapted to arches are also useful for training over porches, pillars, or trellises, and will do well wherever they can have support. Among the old hardy Climbing Roses that are

widely known in this connection are the time-honored favorites -the Baltimore Belle, Prairie Queen, Pride of Washington and the Tennessee Belle, but no Rose was ever more highly esteemed for this purpose than the Crimson Rambler, although rosarians justly consider the Dorothy Perkins as much superior, for its flowers are much more beautiful, being of a dainty shell-pink color and they last a very long time. But when our friend the rose-grower asserts that they do not fade, I am constrained from my own experience to disagree. However, as the Crimson Rambler does the same thing I do not see that it makes any difference. Tausendschön, a comparatively recent introduction among the hardy climbers, is a beautiful novelty of the Crimson Rambler type. It blooms from the first of June until the beginning of August. The flowers are about the size of Clothilde Soupert, soft pink, changing to rosy carmine. The foliage is very handsome and not subject to disease or attacks by insects.



Even if you have not the time to care properly for a whole rose garden, have at least a few of the hardy climbers to arch a path or cover a wall

Among the Hedge Roses, we need only consider the Japanese Rosa Rugosa and its hybrids. They combine hardiness with freedom from disease, and elegance of foliage with beauty of fruit. They make impenetrable hedges, splendid screens, and for single specimens, clumps, and cemetery decoration have no equals. The colors of these Roses are red, white, and pink.

If large flowers are desired the tyro rosarian's choice should

fall upon the Paul Neyron, Ulrich Brunner, Frau Karl Druschki, Mrs. John Laing, and the La France, whereas the reverse may be obtained by means of the aptly-named Miniature, and the Gruss an Teplitz. The latter is also sometimes marketed under the name of the Virginia R. Coxe.

word

term

of re

as to

of th

of th

matt

suite

bedr

in c

can

and

aver

insp

than

bein

on r

elab

### A CLASSIFICATION BY COLOR

It may be desired to arrange the Roses in accordance with their colors, in which case the following lists will prove of service:—

PINK—Magna Charta, Paul Neyron, Mrs. John Laing, Killarney, Maman Cochet, Reliance, La France, Catherine Mermet, Clio, Baroness Rothschild, Mrs. Sharman - Crawford, and Anne de Diesbach.

RED—General Jacqueminot, Ulrich Brunner, Prince Camille de Rohan, Gruss an Teplitz, and Dr. O'Donel Brown.

WHITE—Frau Karl Druschki, Molly Sharman-Crawford, the White Killarney, and Clothilde Soupert.

YELLOW—Franceska Kruger, Lyon, and Soleil D'Or.



A great advantage of willow furniture is the fact that it seems at home with furniture of nearly any type



White wicker to the left, green willow to the right. A good com-parison of weaves, and both in harmony with the room

# The Willow and Wicker Furniture Family

AN INTRODUCTION TO WILLOW, REED, WICKER, PRAIRIE GRASS, FIBRE-RUSH AND CHINESE GRASS FURNITURE-THEIR POSSIBILITIES IN FURNISHING THE HOME

BY KATHARINE NEWBOLD BIRDSALL

Photographs by the Author and others

T is surprising to find how few home-makers are at all familiar with the various kinds of woven furniture. One hears the words wicker and willow used almost continually as though the terms were synonymous, and both are applied to furniture made of reed or prairie grass as well as in their true sense. A few words as to their respective meanings, therefore, and the characteristics of the furniture, with some detail photographs showing the texture of the various weaves, may help to clear the

The best of this woven furniture is not only suited to the country home, the bungalow, the bedroom, but in the all-year-round living-room in country or city home, its beauty and utility can scarcely be exaggerated.

th

it. le

ls.

ld

n.

arl

ıg,

ed

ed

an

lso

xe.

ar-

nce

ase

ove

ta,

ng,

Reine thawh. mince an onel

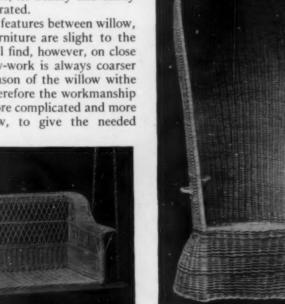
schord. and

(ru-

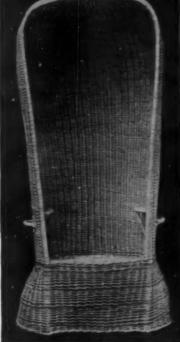
The distinguishing features between willow, and reed or wicker furniture are slight to the average eye. One will find, however, on close inspection, that willow-work is always coarser than reedwork, by reason of the willow withe being the larger. Therefore the workmanship on reed furniture is more complicated and more elaborate than willow, to give the needed strength. A wicker chair will need twelve strands of reed in a border where the same style of chair made in willow will require only six or eight to make it strong and durable.

While the heavy furniture that has been popular for some years has its advantages, it has also two great disadvantages—that of its heaviness and its gloominess. Willow brings a breath of the brookside, a flash of the sunlight from the heart of the spring.

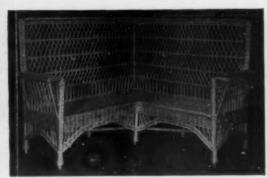
> For solid comfort, combined with artistic effect and great durability, willow furniture is a great favorite. The cheapest in the end is perhaps the most expensive in the beginning, so one should be careful in selecting readymade pieces to observe the workmanship as well as the material. Every piece of willow furniture is fashioned by hand-every article is hand-made from the raw material, with no glue and only very occasionally a nail. harshest criticism that has ever touched willow pieces is that they occasionally "creak". Much of this creak is due to the shellac with which some manufacturers coat the furniture; and the creak wears off very soon when the



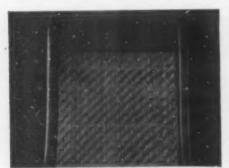
These swings cost from \$12 up, depending upon the length



One of the first wicker types and still a favorite. The smallest cost \$15



A corner seat for a piazza, 52 inches long each way, costing \$25



Close-weave split rush is a new as well as an old favorite for piazza use. Rush chairs are seldom seen excepting with wooden frames

piece becomes acclimated. In the best made furniture however, where the willow is thoroughly pliable and the workmanship exact, the creakiness is not noticeable.

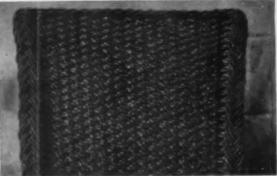
Some of the good points in the use of willow, besides its attractive appearance, are that its color may be changed as often as desired; it may be used in the natural state at the start and may be subjected to heat and cold without damage. In its natural state it may be cleaned by the application of water; and it may even be left out in the rain without damage to the wood other than a yellowing of the strands if left continually as a prey to the elements. Even then, after years of hard use, when a willow chair in its natural color has come to look sunburned, it is still as good a foundation for dye, paint or enamel, as when it was new.

To color the natural willow is a simple matter for the home decorator, This can be done effectively with a reliable Japanese stain, supplemented by a colorless varnish or shellac. It is sometimes necessary to apply only one coat of stain; at other times a second application will be needed to secure a color to suit the eye. After being carefully applied with a brush, the stain should be rubbed gently with a cloth, to remove the excess and to make a smooth surface.

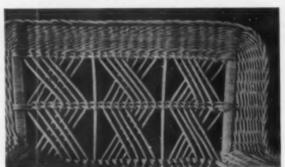
Some of the dealers in willow furniture first treat the willow with a pigment of lead, then with a special mixed color, the body of which is oil, and finally with shellac, if intended for indoor use; or with spar varnish if intended for out-of-doors. For coloring in brilliant hues, an aniline dye is used,

with a finish of shellac. The willow assimilates turpentine and oil, acquiring a lasting color; if an entirely dull finish is desired, the stain is carefully rubbed in by hand and the varnish omitted. Water-color dyes are not desirable, as the colors are apt to fade, and to show the effects of the weather.

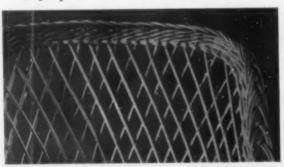
From an economic viewpoint, as well as from an artistic, it is desirable to buy the willow in the natural color, use it as it is until you wish to change its aspect, and then stain it at home with good



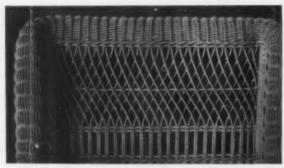
Prairie grass is a manufactured product woven together with cords. It wears well, though not so long as reed or willow



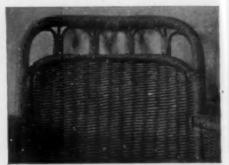
A solid border of willow with a cross-weave body. Several chair patterns are obtainable, costing from \$6.50 up



The simplest design for willow work, with coarse cross withes and a braid edge. A small armchair in this pattern costs \$4



The more intricate weave of the wicker, and the smaller withe, makes more work for the weaver, and consequently as higher price



Fibre-rush is a paper product that wears well. It is more expensive than willow and reed

Japanese stain mixed with turpentine. If desired to match room hangings, and you buy direct from the maker, give him the sample color and he will stain the willow to match or to tone in with the shade.

The possibilities in willow are great; for the clever workman who makes the pieces weaves from a sketch only, and can make any piece to fit a special corner of your room; and he can carry out an exclusive design. Being entirely hand-made, from raw material supplied by nature, it is quite probable that no two pieces of willow furniture are ever exact duplicates. This of course lends greatly to the distinction and artistic merit of the material.

Thus far we have spoken of furniture made only of willow. There are good points to be mentioned in connection with reed, wicker, prairie grass, fibre-rush and Chinese grass furniture, and the accompanying illustrations will serve to make clear the differences in texture and general appearance between these various materials. Reed or wicker may be bought "in the white" and colored afterwards in very much the same way as willow furniture, but with the remaining materials the pieces usually are sold already stained and cannot readily be altered.

To the housekeeper who has much of her own work to do, this light furniture cannot fail to appeal—the pieces are so easily moved, the positions so freely changed. A large easy-chair may be lifted in one hand clear of the floor, and a big settee or desk may be moved with a gentle push. This sort of furniture helps to make a game of housework that might otherwise be drudgery. Dust which will settle on

the flat surfaces presented by modern furniture will miraculously disappear from the rounded surfaces of the woven natural materials.

The chairs and settees are often used without cushions, especially for summer, but may easily be made to suit any room with cushions of a color to harmonize with the walls; or, if desired, with the woven material itself colored in a harmonizing shade. Figured cretonne cushions are used extensively, for back, sides



This table of whole and split willow, in a convenient bedroom size costs

and seat; also plain colors in any suitable furniture material; as well as velours and silk in delicate colorings. A special chair intended for summer use is made of straight lengths of willow, not interwoven, which is intended for use without cushions. It is unusually comfortable and seems to conform to the shape of any body. The chairs made with wide spaces between the willow sticks are the most artistic, but the close and more expensive weave is perhaps more durable.

Great comfortable couches are made of these materials, strong enough to hold the heaviest of men, and some of them are now constructed with box springs, instead of having the regulation This form for the porch sleeper should prove invaluable.

A unique suggestion for a bungalow or cottage bedroom is to use this light woven furniture throughout. Single beds, fitted with comfortable box springs, make a change from the ever-present brass bed, and can be constructed at reasonable price. Beds are not among the stock articles furnished by the dealer, but any worker who has made the heavy couches can fashion a very satisfactory bed when supplied with a good design. Dainty desks may be had in various patterns; straight-backed,



A pocket chair is a great piazza conve-nience, costing \$6.50 as here or with two pockets

easy and high or low rocking chairs; dressing tables; waist and shoe boxes; couches; swings; tea wagons; smoking chairs; tables of varied design; dining chairs; high-chairs; muffin stands; anything, in fact, that one could want.

# Grow Your Own Vegetables

IV. THE IMPORTANCE OF FREQUENT AND REGULAR CULTIVATION OF THE GROUND TO KEEP DOWN THE WEEDS AND TO HELP THE SOIL TO RETAIN MOISTURE

BY F. F. ROCKWELL

[This is the fourth of a series of articles which will cover in a thorough and practical way the subject of amateur vegetable gardening. The aim is to furnish the information covering every detail of what to do and in such a form that it will be clear to the very beginner just how to do it. Each article and its tabular data will give the information needed at the time of its publication, so as not to confuse the home-gardener with an overwhelming quantity of detail; that is, the reader will learn what is to be done at the proper time for doing that particular thing. Those who follow the suggestions made, from the selection of seed to the storing of winter vegetables, may confidently expect a successful garden.—EDITOR.]

about keeping his garden clean. He knows that if his crops are cultivated as they should be the weeds will never have a chance to get a start. The frequent stirring of the soil so essential to the best growth of plant life, if it is thoroughly attended to, makes

the matter of keeping down weeds a side issue. There is an enemy much more insidious than Weeds, which must be fought to a finish by the gardener who hopes to be successful. It is crusted soil, that keeps out air; crusted soil, that lets out water. And yet the Weed bugaboo is so thoroughy fixed in the general horticultural imagination that I have had to use "weeds" in the title of this article, rather than risk scaring readers away with such an abstruse statement as "Cultivate to conserve soil moisture!"

Plants need to breathe. Their roots need air. You might as well expect to find the rosy glow of happiness on the pale cheeks of a cottonmill child slave, as to expect to see the luxuriant dark green of healthy plant life in your suffocated garden. You will look in vain-and then most likely turn away from your meagre and tasteless crops, prematurely in the sere and yellow leaf, and say unpleasant things about those deceptive magazines which inveigled you into venturing upon the sea of horticulture. The fault will be your own—the trouble not with the sea but with your leaking boat. Admit air to the

e

e e

n

n

THE experienced planter does not need to be told very much roots of your plants by frequent cultivation. Though the leaves are really their lungs, still the root system requires also a certain amount of air, just as you would suffocate to death if your pores were all tightly closed.

There is another reason why the surface of your garden,

especially about the plants, should be broken up, and be kept broken up, sufficiently to admit air freely. The food for plants, to a large extent, has to be what we may call predigested, that is, supplied in a very assimilable form, especially for some of the quick-maturing crops. The chief ingredients of plant food (nitrogen, phosphoric acid and potash) may be in the soil in abundance. but unless they are there in a form ready to be assimilated easily by the feeding roots of the plant, it may starve, on the principle that one would not grow very fat on a diet of frozen meat and vegetables. Air and water are both necessary to "convert", as the gentlemen with spectacles say, this raw plant food to a form in which the plants can use it. But long before they made their discovery, the man with the hoe observed that he must keep the soil nicely loosened about his growing crops, and that water was necessary, if they were to do well. Even the lanky and untutored aborigine saw to it that his squaw not only put a bad fish under the hill of maize, but plied her shell hoe over it.

Important as the question of air is, that of



To produce large, healthy veg-etables keep the ground cul-tivated so that it will never show crusted soil



If you have a wheel hoe with the drill seeder attachment the whole process of planting can be done with little more effect than walking up and down the rows. The cost is \$11

water ranks beside it. You may not see at first what the matter of frequent cultivation has to do with water. But let us stop a moment and look into it. Take a strip of blotting paper, dip one end in water, and watch the moisture run up hill, soak up through the blotter. The scientists have labeled that "capillary attraction"—the water crawls up little invisible tubes formed by the texture of the blotter. Now take a similar piece, cut it across, hold the two cut edges firmly together, and try it again. The wetness refuses to cross the line: the connection has been severed.

In the same way the water stored in the soil after a rain begins at once to escape again into the atmosphere. That on the surface evaporates first, and that which has soaked in begins to soak up through the soil to the surface. It is leaving your garden, through the millions of soil tubes, just as surely as if you had a two-inch pipe and a gasoline engine, pumping it into the gutter night and day! Save your garden by stopping the waste. It is the easiest thing in the world to do—cut the pipe in two. And the knife to do it with is—dust. By frequent cultivation of the surface soil not more than one or two inches deep for most small vegetablesthe soil tubes are kept broken, and a mulch of dust is maintained. Try to get over every part of your garden, especially where it is not shaded, once in every ten days or two weeks. Does that seem like too much work? You can push your wheel hoe through, and thus keep the dust mulch as a constant protection, as fast as you can walk. If you wait for the weeds, you will nearly have to crawl through, doing more or less harm by disturbing your growing plants, losing all the plant-food (and they'll take the cream) which they have consumed, and actually putting in more hours of infinitely more disagreeable work. "A stitch in time saves nine!" Have your thread and needle ready beforehand! If I knew how to give greater emphasis to this subject of thorough cultivation, I should be tempted to devote the rest of this article to it. If the beginner at gardening has not been convinced by the facts given, there is only one thing left to convince him-experience.

Having given so much space to the *reason* for constant care in this matter, the question of methods naturally follows. I want to repeat here, my advice of last month's article—by all means get a wheel hoe. The simplest sorts cost only a few dollars, and will not only save you an infinite amount of time and work, but do the work better, very much better than it can be done by hand. You can grow good vegetables, especially if your garden is a very small one, without one of these labor-savers, but I can assure you that

you will never regret the small investment necessary to procure it.

The wheel hoe, however, will not do away entirely with the work of hand hoes and hand weeders, and to the uninitiated brief descriptions of the various forms of these, and their uses, will be of some assistance.

The iron garden rake I mention first, because it can be used within a few days after the garden is made, and several days before the little seedlings are above ground, to rake, very lightly, crossways over the rows, thus destroying the first crop of weeds, and also to prevent the soil from crusting over, as it will tend to do after a rain.

The ordinary hand hoe is familiar to everyone. It is usually constructed with a blade six to nine inches wide and half that in depth, and is still employed more universally than any other single agricultural implement, because of the wide variety of use to which it can be put. It is used to open up drills or dig out hills for seeds, to cover the seed and firm the earth over it: and when the little plants push through, to break and loosen the soil about them, and to cut off and dig out weeds. Then, later, to keep the rows be-tween the plants loosened up and clean, and to draw moist fresh earth about such plants as require it. In the infancy of agriculture -and half a century ago it had hardly been weaned—the hoe had to be made pretty heavy to stand all the rough work required of it. But now there is a modified form, often listed in the catalogues as an "onion hoe", which is much smaller and lighter, much easier and more rapid to use, and which, for opening up drills for small seed, and cutting out small weeds about plants in the rows-after the wheel hoe has taken care of the spaces between, is in every way preferable. In my own work, even in field culture of such rank growing crops as potatoes and corn, except for heavy soils, it



Try to get over every part of your garden, especially where it is not shaded, once in every ten days to break up the surface crust

has almost entirely supplanted the regular pattern. Then there is the "Warren" hoe, made especially for planting. Its heart-shaped blade will open up and cover furrows more rapidly, but not much better, than the ordinary hoe. The "scuffle" hoe is used for crops grown in narrow rows, especially during the latter part of their growth, but since the advent of the wheel-hoe, there is little use for it.

For some crops, such as onions, beets, carrots, and many others, you will find it necessary to use, while they are small, one of the various hand weeders on the market. This work is the most tedious connected with gardening, and will require the use of the fingers as well as the weeder, and much of the work must be done on hands and knees. But when one becomes accustomed to it, and, particularly in a small garden, it may be very pleasant work. Of the many hand weeders, personally I prefer Lang's, which has a bent solid blade, and most of our men seem to like it best too, but the individual must suit himself. They all assist in the work, and only practice can teach which may be best adapted to any one person. But whatever tool is used, the work of band weeding must be taken in time and done thoroughly. Weeds must be pulled or cut out below the surface, or they will soon sprout again, more vigorously than ever. Every inch of the soil must be broken or stirred, or the hundreds of little weed seedlings, many of them not yet above ground, will not be destroyed, and they will mean work increased manifold a few weeks later, besides

Both hoeing and hand weeding will be reduced to a minimum by the use of the wheel hoe. An attachment for hilling, or throwing the earth from the center of the row to and about the stem of the plants, may be had to go with it. The catalogues sent out by houses making these machines give many valuable points as to their



With beans, the ground may be worked over more deeply than with some of the other vegetables. Hoe the earth up about them a little each time



The labor of both hoeing and hand weeding will be reduced to a minimum if you will spend a few dollars for a wheel hoe

various uses that lack of space prevents my describing in detail here.

Only actual work in the garden can teach the beginner the "knack" in using these various tools and machines, but he will find such practice to be absorbingly interesting.

In the remainder of this article I give a few "first aid" suggestions about the special cultural needs of various crops. But let me emphasize once more, in capitals, the need of all crops for THOROUGH CULTIVATION, during their entire growing season. And if, when they have matured and you can no longer "work" them, a few big weeds appear, cut these off to prevent their going to seed.

As many of the vegetables in the small garden will require about the same treatment, we will consider them in groups.

Asparagus and Rhubarb plants, though they are simply making growth for future service, should be kept carefully cleaned and cultivated to assist their development. If you have a few established plants of Rhubarb, a small dressing of nitrate of soda, not more than a handful, sprinkled about each plant and worked into the soil, will produce astonishing results.

Beans, Corn, Eggplants, Okra, Peas, Peppers, Potatoes, and Tomatoes, will stand being worked about more deeply than small seedlings like Carrots and Onions, and will want the earth drawn up about them a little at each hoeing, especially corn and potatoes. See to it that poles for pole beans and tomatoes are put firmly in the ground before these make much of a growth. Don't make an excavation and "plant" the poles; take a crowbar and make a hole just large enough to force them into. Peabrush may be put in in the same way; then with a knife or pruning shears trim off the tops and all straggling branches, and stick them into the ground where the little plants can get at them easily, and thus be led to higher things. Watch Tomatoes, and particularly Eggplants, for Potato bugs and other pests.

Beats, Carrots, Kohlrabi, Onions, Parsnips, Salsify, Spinach and Turnips, will need attention as soon as the rows can be seen. Go through them with the hoe or the wheel hoe, working at a shallow depth and as close to the rows as possible without throwing dirt on the small plants. Then get your handweeder, and go over them on hands and knees (it really isn't as hard as it sounds). Even if they seem a little too thick in the rows, better leave the thinning until next weeding, After you have killed every weed, remember that you must keep the soil cultivated just the same!

(Continued on page xvi)

# Floor Coverings for the Summer Home

THE AVAILABLE RUGS, MATTINGS AND CARPETS IN WHICH MAY BE FOUND WEARING QUALITIES AND GOOD DESIGN AND COLOR-HARMONIOUS TREATMENT OF THE FLOOR BOARDS

BY MARGARET GREENLEAF

Photographs by H. Shobbrook Collins and others

In making the selection of floor coverings for the summer home there are two points which should be held well in mind:—first, the character and color of the furnishing and decoration of the room in which the rug or carpet will be introduced; and second, the quality of the textile itself. While to many people it would

seem that these points should be reversed in | importance, we purposely put them in this way; every good housewife will look for quality in purchasing the fittings for her home, therefore this feature will take care of itself, while unfortunately the necessity for harmony in color and design of the floor covering with the other furnishings of the room is not always sufficiently consid-

There are manufactured to-day some excellent inexpensive domestic

rugs, and these offer a much wider choice than was afforded a few years ago, when one was practically limited to matting, rag rugs, and art squares of impossible colors and patterns. One of the best all-wool rugs now made, which is well suited to a house of the bungalow type or on Craftsman lines, comes in delightful colors-rich mulberry red, golden and chocolate brown, dull blue, sage green, and mahogany. These rugs show a twotoned border effect, while the body of the rug shows the lighter tone. Some of the designs have spaced conventional figures in a lighter shade of the same color, or in ivory or black on a plain field. These rugs are hand-woven and of heavy wool and give good return for the money expended for them. In size 9 x 12 ft. the price is \$36. The next stock size is 7 ft. 6 in. x 10 ft. 6 in., which costs \$27.50. They may be obtained as small as 2 ft. 3 in. x 4 ft. 6 in. for \$3.50. These rugs can also be made in special sizes and combinations of colors to order at about \$3 a square yard. Where there is a pronounced figure in the side walls and draperies such a floor covering is particularly effective.

There is another style in all-wool rugs known as the "Scotch Art" rug. It is reversible and made in a great variety of colors, running largely to the more delicate tones, and is particularly

suitable for bedrooms. These can, however, be made to order in any size or color. In size 9 x 12 ft. they cost \$27.50. The smallest stock size is 1 ft. 6 in. x 3 ft., and costs \$1.75.

Then, too, for bedrooms there are rugs made after the old rag rug of our grandmothers' days. These are sold under various

trade names, among them the Priscilla, Pilgrim, and Ragstylerugs. These are all very good makes. The Pilgrim sells in size 9 x 12 ft. for \$22.50. The Priscilla is a cheaper grade and sells in the same size for \$18.

The best among the cheapest rugs to be found are those of matting made of heavy twisted straw. They come in good designs and colors, and frequently are found very effective in completing a color scheme for a summer cottage.



With the approach of the season for cool furniture coverings and the removal of heavy hangings, rid your floors of carpets, re-finish the floor boards and consider which of the many available kinds of rugs will make the floors look cool and inviting

In furnishing a moderate priced bungalow, the floor coverings can be of the simplest type and yet the finished effect be thoroughly satisfying and practical.

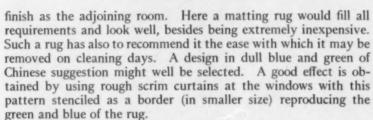
In the large living-room, which is a usual part of the plan of such a house, if the walls are of rough plaster tinted in a shade of dull tan, the floor of yellow pine should be stained to a light brown tone and finished with a material which will supply the effect of rubbed wax, but which is more durable and does not require renewal. The hard usage to which the floors of a summer cottage—particularly in the mountains or at the seaside—are subjected makes the question of the finish given the floors an important one. A "Bungalow rug" in two shades of brown, almost matching the color of the woodwork, would look well in a room of this character.

If the size of the room requires it, this central rug may be tomplemented by two runners of the same weave and color. With the plain walls and the two-toned floor covering, figured draperies, cushions, etc., should be introduced.

For the dining-room, where the walls may be Delft blue in tone, and the woodwork stained a lighter shade of brown or treated with white enamel, the floor should be given the same color and



The pronounced design and vigorous coloring of this rug make plain walls a necessity



Where the house is old and the floors are not in condition to be exposed, matting by the piece can cover all floors attractively. A heavy padding of quilted paper should be placed beneath the matting; this preserves it, as well as making the floor covering more agreeable to the tread. With this treatment for floors, rugs may or may not be used, as desired. A beautifully cool and dainty effect is obtained where no color is introduced on the matting-covered floor. Where walls are light in color, and much gaily-flowered chintz showing a white or ivory ground is employed, the finished room is dainty and attractive.

A good quality of matting which will give satisfactory service can be purchased for \$14 a roll of 40 yards. The cheaper grades are scarcely worth buying, as they wear so badly.

A very special interest has been aroused recently in old Chinese



The Oriental in your dining-room receives hard usage; take it up to rest it through the summer

rugs, as some very beautiful specimens of these have been on exhibition in New York during the past year. The wonderful tawny yellows, dull bronze, copper, blue, and gray tones these show are a revelation in color quality. The price of these rugs is prohibitive to the majority of people and their rarity makes them almost museum pieces, but it is interesting to note that some modern Oriental rugs of the Mahal family show similar colors, and while the designs in these carry only a general suggestion of the Chinese characteristics the whole effect is reminiscent of the more costly rug.

Such a rug is really a wise investment, as it lends itself well to the decoration of any room which is not too delicate in treatment. In about 13 x 15 ft. size such a rug may be purchased for \$300 or a little less. These rugs, of course, are suitable to interiors fitted for all-the-year-round use or to the more elaborate summer home.

Also the Body Brussels, the Royal Wilton, the Axminster, and other good and well known makes of domestic rugs give satisfactory service in such houses. In selecting any of these, however, much care must be taken to find those of good design and soft colors, as the time has evidently not yet arrived when the maker produces *only* harmonious and beautiful effects in floor coverings.



Rugs of Oriental design adjust themselves to all types of rooms. Walker & Hazzard, architects



The old Chinese rugs are prohibitive in cost for most of us, but modern Mahals show similar colors

# Practical Talks With Home-builders

VII. SECURING AN ADEQUATE SUPPLY OF GOOD WATER—THE PROCEDURE IN CONTRACTING FOR AND DIGGING WELLS—GRAVITY TANKS AND AIR PRESSURE SYSTEMS

BY ALEXANDER BUEL TROWBRIDGE

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



dOSE who build in the open country, outside of the water service of a town or corporation, should take the matter of water supply into consideration even before the house plans are very far advanced. No building site, however alluring, is worth considering if it is not supplied with plenty of good water.

Unless the ground is very rocky the location of a well is not dependent upon any fixed rule. Driving a well consists in forcing a 4-inch, 6-inch or 8-inch pipe into the ground by means of special machinery not unlike that of a pile - driver in operation. An ingenious form of plunger is used to remove earth, sand and gravel from the interior of the pipe. The well is brought to the spot in sections 8 feet or 10 feet long, the separate lengths being screwed together as the pipe descends into the earth. The top of the

descends into the earth. The top of the pipe is protected from the blows of the hammer by a large wooden

Generally it is impossible to foretell the depth at which water in abundance will be found. If wells have been driven in the near neighborhood a guess may be made which will enable a contractor to submit a definite figure for the work. Even then he takes chances, for the water-bearing stratum may slope downward from the neighboring property, thus giving him a deeper problem to solve. If a well-driver is required to give a definite bid, guaranteeing to find plenty of water, in a locality not entirely familiar to him, he will put up his price to cover a possible loss. For this reason the most satisfactory method seems to be to ask for estimates per foot of depth. The contractor will drive the pipe until he reaches a water-bearing stratum of gravel. If, in his judgment, the stratum looks favorable, he will test with a pump the quality and quantity of the water. If, then, he believes the supply is ample he is ready for a 24-hour test. This consists first, in timing the operation of filling a 50-gallon barrel. The strokes of the pump are timed and counted. At the end of 24 hours of continuous pumping the same operation of filling the barrel is tried. This time the speed of the pump is carefully kept the same as it was during the first test. If there is no apparent diminution in the supply the test for quantity may be accepted as satisfactory. For quality a chemist should be engaged to analyze the water in a laboratory and submit a signed report. It is obviously impossible for an owner or an architect to be present during the continuous 24 hours of pumping, so the word of the contractor must be accepted for a large portion of the test. It is to his interest to produce a good well, so it is not worth while to worry over the danger of being deceived in this test. The best way is to deal with a first-class contractor who has many references of satisfied owners to speak for him.

In letting a contract the specifications should cover the additional cost per foot of a brass screen which is placed in the bottom of the well to keep fine gravel and sand from getting into the water. Also it is wise to have some provision for extra pay in case rocks

are encountered during the driving; otherwise you will pay a higher per-foot rate. The depth of the well may be readily measured by means of a weight and a cord, also the depth of the water in the well. In a recent case a well was driven to a depth of 70 feet and in the process the pipe went through two minor strata of gravel before the contractor believed it was time for a 24-hour test. The third stratum was about 10 feet thick. The water rose in the well to a height of 30 feet, at which point it remained approximately stationary. These figures were necessary before the stroke of the pump and the horse-power of the engine could be calculated.

The customary methods of storing the water supply are: a tank in the upper part of the house; a tank raised on a trestle or placed in a water tower; and an underground supply under air pressure. For large places, where the tank and trestle may be hidden among trees, or where a picturesque water tower may be built, the gravity system seems to be acceptable. The engine chosen to operate the pump is obliged to lift the water much higher in this system than in the underground storage system, and must, therefore, have greater horse-power. Windmills are still popular in some sections of the country, but their chief objection seems to be the danger of a protracted calm. For small places where the unsightly tank in the air cannot be considered, the pneumatic system is excellent. This consists of an air-tight iron storage tank, buried a few feet below the surface of the ground, joined to a machinery group consisting of a pump, an air compressor and an engine or motor. By means of belts, shafting, etc., the engine is coupled to the pump or to the air compressor independently or to both at the same time. When the tank is ready for use it has two-thirds of its capacity occupied by water and the top filled with air under a pressure of 40 lbs. to 60 lbs. A gauge gives the desired information as to pressure, and a glass tube tells how high the water stands in the tank. A cylinder 6 feet in diameter and 30 feet long will hold, when two-thirds full, about 4000 gallons of The amount of pumping needed per day varies with the family life. In summer when shower baths are popular and the laundry work is at the high-water mark, it might be necessary to pump for an hour each day, whereas a half hour would suffice in winter. If, at the end of a day, the pressure weakens by a reduction of the stored water, the air compressor may be coupled to the engine and in a few minutes the pressure will be sufficient to hold through the night. This is worth while as a safeguard

Some of the companies that make and install these pneumatic systems recommend the use of internal combustion engines in preference to electric motors. There are two sides to this question. If a house is to be used throughout the year and the pump room is not heated, there is great danger of injury to the engine through freezing of water in the cooling jacket. A draining cock must be inserted and the jacket completely drained each day. Also, the engine is hard to start in cold weather. The electric motor responds instantly to the closing of the switch and is affected by outside troubles only when the wires are down in a heavy storm. So the problem is governed largely by the character of the house, whether it is for summer use only or whether it is an "all the year" house.



One of the most natural and reasonable places to plant flowers is in a border edging the house or along a path

# The Part Flowers Play in Garden and Landscape

WHERE FLOWER BEDS MAY BE EFFECTIVELY USED AND WHERE THEY BECOME EYESORES—SUGGESTIONS FOR FLOWER BORDERS AND FOR COLOR ARRANGEMENT

BY GRACE TABOR

Photographs by Nathan R. Graves and others

[The eighth of a series of articles by Miss Tabor on the subject of landscape gardening as applied to the American home of moderate size. Preceding articles in the series have appeared under the titles: "Utilizing Natural Features in Garden Making" (Oct., 1909); "Getting Into a Place" (Nov.); "Formal or Informal Gardens" (Dec.); "Screening, Revealing and Emphasizing Objects or Views" (Jan., 1910); "Boundary Lines and Boundary Plantings" (Feb.); "Planting Trees for Air, Light and Shade" (Mar.); "Planting Shrubs for Mass Effects" (Apr.). Questions relating to further details and planting information will be gladly answered.—Editor]

IT is decidedly contrary to our American ideas, but it is nevertheless a fact that a garden may be absolutely flowerless—and yet be lovely. And on the other hand, one may have quantities of flowers and yet have no garden in the true sense. In other words flowers do not make the garden, revolutionary though the thought seems at first glance. The conception of them which immediately establishes their real place holds them to be the garden's jewels—the bright gems with which its design is embel-

lished and "picked out" as a jeweler would say. They may be used in quite as lavish abundance with this ide? prevailing as any enthusiast can wish—but they will be used quite differently from the customary fashion of planting wherever fancy strikes and the space presents itself.

However beautiful the ruby, the opal, the sapphire may be, lying unset within one's hand, none will deny that their loveliness is brought out and shines to far greater advantage when the craftsman has worked them into

proper relation with each other, and with the metal that forms a clearly thought out and purposeful pattern around them, as it supports and binds them into place. And, to carry the analogy still farther, the designer gives the eye intervals of rest from the dazzle of precious stones in a piece of jewelry, which correspond exactly to the relief from color and brilliance which should be provided for it in the garden.

The rule of contrast that came in for attention when light and

shade were under consideration, here presents itself again. Applied to the question in hand, it shows us at once that there must be places where no flowers bloom, in order to accent and emphasize the flowery spots - and it more than hints that the secret of brilliancy and a spirited liveliness in the garden lies in the liberal use of white-flowersbecause, of course, white furnishes a much more vivid contrast with many colors than green, and contrasts more vividly with green itself. Indeed, white blossoms are, in



Flower beds of this sort are justifiable when they carry out the design of a formal garden



When flower beds are used in a formal way they are much more effective if they are extremely simple in outline

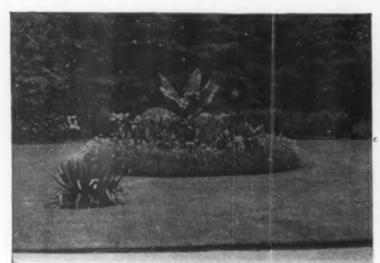
one way, the most precious of all—the diamonds of the collection, that enhance the colors of all they are brought in contact with and at the same time reconcile them one to another, when they are inclined to clash.

But this I mention only in passing; the questions that have to do with color are premature just here, for the first proposition must deal with the locating of flowers in the garden—with the manner of determining their place in any particular garden design.

### FLOWER BEDS

Sometimes it is easier to find out what to do by eliminating the things that ought not to be done, and I think this is especially true of gardening, from the landscape or pictorial side. We have grown so accustomed to doing it wrong that the habits are fixed, and we cannot oust them by the accepted plan of ignoring them and cultivating the right ones in their places. They simply will not be crowded out, even though the better ideas are acquired, but crop up continually like noxious weeds. So up by the roots let us drag them and start anew.

First, here is the flower bed habit, almost the greatest abomination of them all! It is going to die hard even with those who truly wish to kill it—and many there are who will not wish to, for its star and crescent and circle and triangle forms have so impressed



There is a place for flower beds but it is not there, where the unrelated units spoil a perfectly good lawn

themselves upon its victims that they cannot see a stretch of smooth and velvet turf without an instant temptation to fall upon it and carve some one of these figures from its heart.

But lest I seem unduly prejudiced let me hasten to say that there are places for flower beds—a few places—and that, in their place, I am not objecting to them in the least, although I have never been able to see any beauty in the gimcrackery which shapes them on the elaborate lines that good, wise old Bacon dismissed contemptuously with "They be but toys; you may see as good sights many times in tarts." He spoke of the parterre filled with colored sands instead of flowers, to be sure—but the fancy beds of to-day are the direct descendants of these sanded parterres, "knots or figures with divers-coloured earths."

A flower bed brings us again to the flowers' likeness to jewels, for properly placed, a bed occupies a position in the garden corresponding to the position of a properly used jeweled pin or buckle on a robe. (I say "properly used" to evade the dictum of fashion which is sometimes known to strain a point for the sake of adding a little extra trimming.)

A study of the costume of any well clad race will show at once that pins clasp two portions of a garment together or hold the folds of some drapery in place; that buckles buckle something. Indeed by going back to derivatives the idea can be emphasized still more, for "buckle" comes from "bocle," which is the boss at the center of the ancient skin-covered, wicker-woven buckler or shield—the meeting and gathering up of the wicker at the center being the reason for the prominence.

Here is exactly the demonstration of reasonable and proper use that we need; likening the flower bed to a jeweled buckle, it is at once apparent that the places for it must be focussing points in the general design—centers, not necessarily in the midst or middle of the general scheme, but rather points to which the strong lines of the design converge possibly, or from which paths branch. In such positions a flower bed of simple form—circular or oval or conforming to the lines which approach it—is in good taste. Elsewhere it is exactly what an elaborate jeweled buckle or pin is, when attached to a gown in some utterly and obviously useless position—a gaucherie of which one does not like to feel oneself capable.

The beds which carry out the design of a formal garden are of course exempt from this condemnation, having as they do a very real place in the design. These too, however, are of the simplest form and outline—if the designer is an artist—and are so arranged as to give the relief already spoken of which comes of suitable spacing. All other flower beds fall under the ban—let them be taboo to those who want them—and who, for wanting them, deserve them.

### FLOWER BORDERS

Ever and ever again recurs one question in every branch of landscape planting, and that is "Is there a reason for it?" Not simply the personal reason of liking or disliking any particular thing, but a *real* reason, based on logic and good sense and utility; that is the kind that must be advanced to gain the approval of the highest standards. And that is the kind that may be advanced for the garden form known as a "border." The name alone implies that.

A border follows something, borders something, ornaments something; is an attribute of something greater than itself, is secondary to some more important thing, to a conception of a whole—in the case of a garden secondary to some particular portion of it, taken as a whole. Possibly it follows a walk or drive, or the side of a building, or the line of a terrace, or the margin of a lawn; it really doesn't matter what, so long as it follows something. So long as it is truly a border be sure that it cannot go wrong; the limitations of that definite name will keep it what it ought to be.

And it may be straight and narrow, like the path of virtue, or

it may dawdle along in all manner of curves, according to the thing it follows. That is a matter that settles itself; likewise its length is pre-determined and sometimes, though not always, its width. A border that can be reached from both sides can of course be wider than one which must be tended from only one.

Generally speaking, it is safe to say that walks within private grounds ought always to have a border, on one side anyway, if not on both—the exigencies of the situation will decide this—and the hedge, fence or lattice divisions between different parts of the grounds also invite such treatment, invariably. I should, however, hardly call the planting of perennials in the foreground of shrubbery, a border in themselves, for they are placed intermittently when thus used and only when they and the shrubs are considered together, does a "border" result.

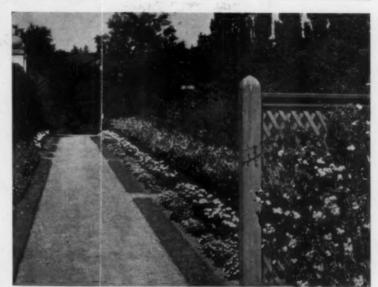
### COLOR AND GENERAL ARRANGEMENT

Any wild roadside border where Nature has been allowed to have her way undisturbed, is usually an unrivalled object lesson in planting, for both color and mass. One of the loveliest borders I have ever seen followed the bank of a tiny brooklet as it meandered across a meadow which lay at the foot of a gentle slope, whereon dwelt some splendid beeches. Here Nature and Art combined and from early, tender spring until the lusty autumn, color succeeded color in the magic broidery that fringed the little stream and divided the pleasaunce from a hay field beyond. Only the native plants and "weeds" had found lodgment there, and it was wild in the best sense of the word. One thing or another dominated it at different times during the season, but there was never an unbroken line of bloom the entire length of it. Early in the summer clumps of iris, bearing a scattered dozen blossoms, broadened suddenly here and there into great masses which presented a marvel of almost solid blue, but these gave way to long stretches of vari-colored green where no blossoms were. Later, marsh mallows spread their pink loveliness like rosy clouds at intervals; daisies flourished in dazzling whiteness, and elder and the meadow sweet; then came goldenrod, and white and purple wild aster. Each month brought its dominant note, but always there were quantities of green and plenty of white, so nothing ever clashed, though each strong color held over until its successor was well established. And the whole length of the border-several hundred feet-was always a treat for even the weariest eyes or head, every day, all summer.

Here then is one of the fundamental secrets—if secrets they be—of planting a border, or, speaking more broadly, of planting flowers. Let there be a succession of dominance, not merely a succession of bloom; let one color in different shades be repeated, here in a mass, there in a few fugitive blossoms throughout the whole. By this I do not mean that other colors are to be excluded, by any means—but everything should be secondary to blues when blues prevail, to yellows when they lead, to scarlet, to pink, to any dominant hue.

Of course this means that clumps, varying in size, of the leading varieties chosen should be planted more than once and possibly several times in the length of a border. These, blooming simultaneously, carry the color throughout the whole; then, when they have finished blossoming, they furnish the necessary intervals of green, while their neighbors, who have been their green reinforcement, go on with the procession under the color which they have to offer. White-flowered plants of one kind and another will supply blossoms to keep each delegation company, while odds and ends, planted one kind in a group here, another kind there, may fill in the "chinks" and give sufficent variation to stimulate interest.

In other words a multitude of colors may and should be present at all times, but in this multitude one should always be more in evidence than the others. It is practically the same as a color scheme in anything else: a gown, a room, a jeweled bauble, a



For the flower border it is much more satisfactory to avoid these long, straight rows and to plant so that there will not be an unbroken line of bloom in the entire length at any time

picture—each one has its color motif. Other colors appear, complementing sometimes, contrasting or harmonizing, as the case may be, but always secondary to the leading color; and if this is not so, what a disastrous failure any one of the things mentioned is sure to be!

Certain tones dominate when used in much less quantity than others. Yellow for example comes right out and shouts wherever it appears, and for this reason less plants producing yellow flowers are needed than of any other hue. Blue, on the contrary, continually retires, consequently it must be used in profusion; this is true of the purple also, only in less degree. Red stands about midway between the yellow and blue, growing less obtrusive as it grows darker.

Remember, too, that blue is the color to use when a sense of distance in small space is to be produced, or actual space exaggerated, while yellow diminishes space in rather more than inverse ratio, bringing even remote points forward and into the picture in a sometimes startling fashion.

The kinds of flowers to plant are of course largely a matter of individual preferment. Annuals, lovely though they may be can hardly be seriously considered in a composition that must, primarily, be permanent in order to enjoy that charm which is (Continued on page xiv)

Bacon said of such as these "They be but toys; you may see as good sights many times in tarts"



The most important requirement for growing good celery is a rich, moist soil. It is readily raised in the small back-yard garden, where adequate irrigation is easily possible

# Celery-growing for Everybody

STARTING THE PLANTS FROM SEED OR SEEDLINGS—THE REQUIREMENTS IN SOIL AND CULTIVATION TO GROW 400 BUNCHES ON TEN SQUARE FEET—A SIMPLE AND SATISFACTORY METHOD OF BLANCHING

BY DR. C. D. JARVIS

Photographs by the J. H. McFarland Co., and N. R. Graves

It is remarkable that celery should be left out of so many home gardens. Contrary to the general belief, it is not a difficult crop to grow. Success in this direction is dependent upon the supplying of a few modest needs. The most important requirement is a rich, moist soil. Celery is well adapted to growing in the back yard, for there is probably no vegetable crop that responds so readily to good treatment. During the hottest days in the summer it is greatly benefited by irrigation, and water is usually available in the small back-yard garden.

Celery is one of our hardiest vegetables, being able to withstand several degrees of frost. For early use it is set out in the field as soon as the ground can be fitted. The late crop is usually planted in July and left in the ground until the ground freezes, making its best growth in the fall when the nights are cool. There is seldom any trouble from insects and diseases. The celery worm sometimes appears but can be controlled easily by hand-picking. The disease known as rust seldom causes trouble and may be prevented by spraying the young plants with Bordeaux Mixture.

THE EARLY CROP-SOWING THE SEED.

Although many who begin this year their first celery raising will purchase the young plants all ready for setting out, it will be interesting to learn how the early crop is started, against being ready to start one's own seedlings another season.

The seed for the early crop will have been sown about the first

of February, or two months before planting time, a "flat" about twelve by eighteen inches in size having been employed to grow enough plants to supply the average family with all the celery it can use. Such flats are easily made from wooden soap boxes, which may be obtained at any grocery store. The flat, when prepared for early plants, is filled with fine rich soil. Ordinary garden soil will answer the purpose, but it is greatly improved by mixing in some well rotted stable manure or leaf-mold. The addition of sand likewise improves a heavy clay soil. The soil is sifted into the flat and the seed sown in rows about two inches apart. After dropping the seed, about a quarter of an inch of soil is sifted over them and the soil firmed down with a short piece of board or block. The flat is then watered liberally and placed in a warm position. To prevent the seeds from being washed out, a piece of moist burlap or cheese-cloth is thrown over the surface. The soil is not allowed to become hot and should never be re-watered until required. When the plants begin to push up through this ground they are placed in a window where they will get the most light.

PRICKING OUT

When about an inch above ground the little seedlings are ready to be pricked out. The object of pricking out is to give the plants more room and to encourage the development of a large root system. The seedlings are then watered and then transferred





one by one into other flats, setting them about an inch apart each way. A better root system may be formed if the tap-root is removed in every case. In about two weeks, when the plants have started to grow nicely they may be transferred to other flats again, giving them a little more room. This second pricking out is not necessary but tends to make stockier plants. About two weeks before planting time the young plants should be placed outside during the day to harden off.

### TRANSPLANTING

There are several methods of growing celery, but the one most satisfactory for small gardens is the trench method. A trench about eight or ten inches in depth is dug and about half filled with well rotted stable manure. The manure should be mixed thoroughly with about the same quantity of fine soil, leaving the trench nearly filled. The plants, after watering, are taken from the flats, and set about five or six inches apart along the trench. In setting the plants it is important to firm the soil well around the plants. The tips of the leaves are usually cut off at the time of transplanting to prevent excessive transpiration. They should be shaded from the hot sun for several days after planting. This may be done by placing boards over the trench. The plants should be shaded only when the sun is very hot. Every precaution should be taken to prevent the plants from drying out. There is danger also of having them too wet. As the plants become larger care should be exercised in keeping water from the heart or inner leaves of the plant, and the plants should not be handled while they are wet with dew or rain.

### BLANCHING

Probably the simplest and most satisfactory method of blanching celery is that of standing boards on edge on each side of the row. They should be sloped inward somewhat at the top and held firmly in place with cleats at intervals across the top. The soil should be banked up against the boards on the outside so that the latter may be raised from time to time. The boards should come up almost to the tops of the plants and be raised as the plants grow.

## INTENSIVE CULTURE

Those who have only a small area at their disposal will be interested to know that it is possible with special treatment to grow 400 bunches of celery on ten square feet of soil. To do this the soil must be extremely rich and the plants set six inches apart each way. Water must be supplied liberally whenever the plants require it. Another advantage of this method is that the plants being close together will blanch themselves. The varieties White Plume and Golden Self Blanching are better suited to this system of

culture. While it is not always possible to produce extra large bunches in this way, large yields of medium-sized bunches may be confidently expected.

### THE LATE CROP

The growing of the late crops for fall and winter use differs very little from that of the early crop. The seed for this purpose is usually sown about April in a hotbed in the garden and the seedlings transplanted once or twice before being set in their permanent position. The late crop of celery usually follows some other crop such as beans, peas, radishes, lettuce, or beets and is not planted until about the middle or last of July. The blanching may be done in the same way as described for the early crop, but where there is plenty of room the rows may be farther apart and the plants blanched by banking them with soil. This is done by grasping the plant with one hand and packing the soil tightly around it with the other. More soil is then banked up against the plants with a hoe. In order to get enough soil for this purpose the rows should be at least four feet apart. In small plantations, however, the necessary soil may be carried in with a wheel-barrow. To avoid so much hand work the leaves may be tied up with weak twine or yarn. The string may be attached to a stake at the end of the row, twined around each plant, and the other end fastened to a stake at the other end of the row. The soil then can be banked up with a hoe without the preliminary handling. The important part about blanching is to keep the light entirely away from the leaf-stalks, leaving only the tops of the leaves exposed.

### STORING THE SURPLUS

The most convenient way to store celery on a small scale is to cut off the bulk of the roots and pack tightly in boxes. The boxes should be about two feet deep and each supplied with three or four inches of light soil or coal ashes, into which to pack the bases of the bunches. The soil should be kept moist, not wet, by pouring water through a long-throated funnel. If any water should get on the leaves it is likely to produce disease. The boxes should be stored in a cool, dark cellar or shed. If stored in this way and kept at a uniformly low temperature, it is possible to preserve it in good shape till the following spring.

### IN CONCLUSION

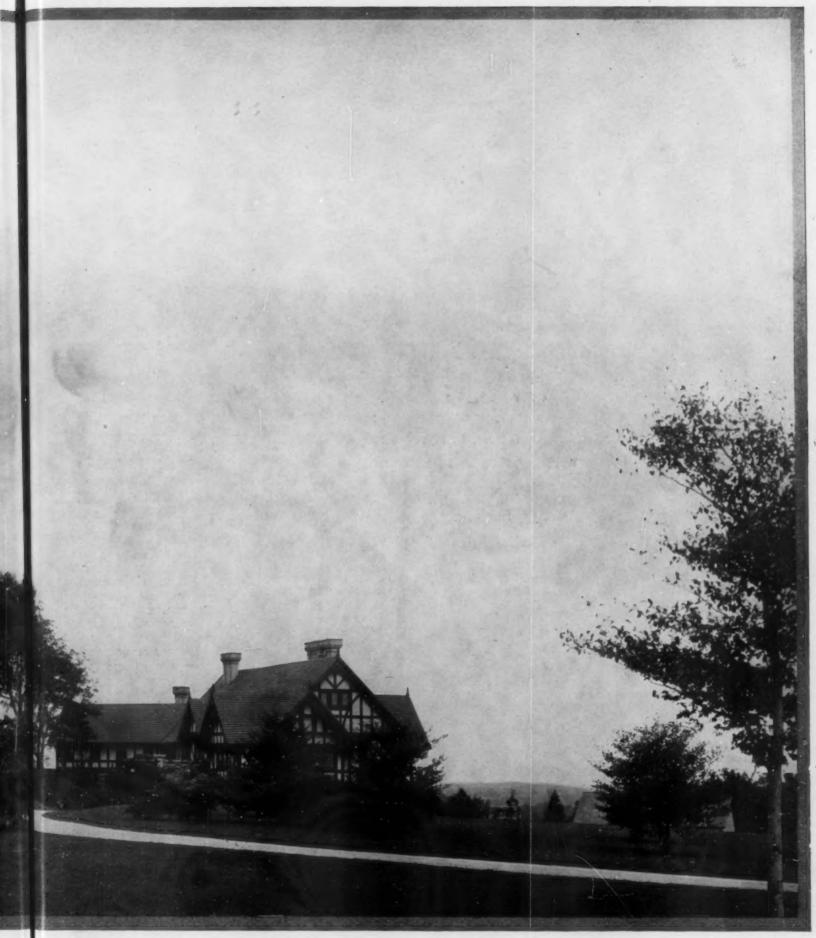
There has been a widespread impression among amateur gardeners that celery is one of the very difficult crops—one to be attempted only if one had the assistance of an expert gardener. From the foregoing instructions it will be understood, I trust, that celery-growing is a comparatively simple matter after all, and there is no doubt that the home-grown fresh product amply repays the little care expended upon it.



Nearly every grower of celery has his own pet system of blanching the stalks. Boards, standing upon edge on either side of the rows, sloping somewhat towards the plants and held in position by cleats nailed across the top\_at intervals, form probably the most satisfactory method



"LYNDANWALT," THE COUNTRY HOME OF MR. W. I AT G



W. I AT GERMANTOWN, PA. Oswald C. Hering, architect supply with all its water The thatching was done by a lately arrived Irishman



Lyndanwalt is a splendid example of forehanded planting. Vines were started almost before the carpenters left and as a result the five-year-old house is thoroughly blended with its site. Oswald C. Hering, architect

# "Lyndanwalt"

AN AMERICAN ADAPTATION OF AN ENGLISH FARM-A COUNTRY HOME NEAR GER-MANTOWN, PA., THAT WAS NOT CONSIDERED FINISHED WHEN THE BUILDERS LEFT

BY OSWALD C. HERING

Photographs by R. T. Jeffcott

ceedings merely laid the foundation of what can, if judiciously handled, eventually be made into all that the word home

We must as a people grasp the idea that the mere piling up of bricks and mortar of stone masonry and woodwork does not make the home, any more than the reading of the lines makes the play.

Just as a comely and clever woman accentuates her loveliness by dressing in a manner becoming to her individual style, and is seen to the best advantage in surroundings reflecting her personality, so a house should have a suitable environment and a becoming dress of foliage

IT is an unfortunate thing for the general appearance of our in order to appear to best advantage. To the "atmosphere" American countryside that the majority of people feel-when surrounding any object is largely due the charm of the impresthey have built a house—that one of their great tasks in life is sions received of the object itself. A painting or a piece of finished. As a matter of fact they have at that stage of the pro-sculpture may be an admirable work of art, but the full force

of its beauty will be felt only in an appropriate situation. In the Rijks Museum an entire wall is allotted to each of the three great Rembrandts; the light is trained upon the canvases in such a manner that none competes with the others and the observer's attention is thus fixed and held spellbound by the genius of the Dutch mas-

Lyndanwalt, the country home of Mr. W. E. Hering, illustrates the point I wish to make. The house crowns the summit of one of the hills overlooking Huntington Valley, its broad terrace on the south side commanding a wonderful panorama of the gently



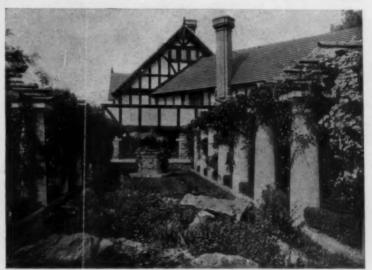
Unlike nearly all half-timber work in this country Lyndanwalt has been built with solid beams rather than the usual strip imitation







While the small cuttings of English Ivy were making their slow growth the broad surfaces of new masonry were temporarily covered with Virginia Creeper and Japanese Ivy which were gradually removed



In the double pergola extending out from one end of the main house a dozen kinds of flowering vines are represented, giving from spring to fall intermittent flares of color against the dense foliage

rolling meadow and woodland of Eastern Pennsylvania. A thick grove of oaks, chestnuts, and spruces—all splendid oldgrowth specimens—forms a magnificent background for the house to the north, sheltering its main entrance.

Lyndanwalt reflects clearly the personality of its owner. It portrays the home of a typical American gentleman who has fought and won the battles of business and purposes to devote his remaining years to the full enjoyment of his rural possessions. To be sure, it has cost a small fortune to achieve the result, but money alone could never

have made Lyndanwalt. There is here something more than a mere house. Compare it, for instance, with some of the great country places of wealthy Americans where unlimited means have resulted merely in cold palaces or forbidding castle-like



As the plan shows, the service wing is carried back at an angle from the main body of the house, leaving for the main rooms an uninterrupted view over the valley

strongholds that are anything but inviting, anything but homes suited to their environ-

While the owner and architect agree that, were the problem to be solved anew, improvements could be made, there yet is about this offspring of the Elizabethan farmhouse an atmosphere that charms and that can be directly traced to the owner's enthusiastic efforts to give the building a setting both appropriate and harmonious, and that will enhance what merit the architecture itself may have. It is only by this unceasing personal

care in every detail, this indefinitely continued home-making, that a country home of distinction can be produced,—and, incidentally, that is just where all the keenest pleasure in home-building comes in.



In the billiard room the frieze, painted by a well known portrait painter, represents the games, starting at the left with chess



The carved stone fireplace, beamed and molded plaster ceiling, and the dark oak wainscoting make a consistent English dining-room



The ideal rock-garden is a shaded ravine with plenty of rocks, a brook if possible, and a light, sandy soil impregnated with decomposed limestone

# Rock-gardens and How to Make Them

BY G. A. WOOLSON

Photographs by H. H. Swift, M. D.

THE successful rock-garden is one in which its maker simulates natural environment so far as he can. The ideal rock-garden is a shaded ravine, replete with rocks and a brook. Glades of this sort however, whether natural or artificial, are for the favored minority only. The majority has to content itself with far simpler gardens; but a small rock-garden, if judiciously placed, will afford more pleasure in proportion to time spent and space occupied than one can obtain from almost any other sort.

Partial shade is imperative. In the absence of trees or shrubbery, a shaded retreat may be effected with vines alone; and for this purpose there is nothing better than the Virginia Creeper (Ampelopsis quinquefolia). An alcove formed by buildings that cut off the brunt of the sunshine may answer very well in lieu of tree or vine.

In the selection of rocks, most of us have to take what we can get; given a choice, sandstone and calcareous rocks are preferable. Freshly quarried stone of any kind should never be used; the



Ferns, of course, belong unmistakably to the rock-garden, and violets too



Is your garden soil full of large stones? Rake them out and construct a rock-garden

more weather-beaten the better for the place assigned. Nothing can surpass the picturesque quality of a bit of old limestone in process of disintegration. Occasionally one sees a giant cobblestone landed high and dry on a pretentious lawn—just a bald impenetrable mass without seam or depression wherein any kind of plant-life could gain a foothold. Rocks which are of no possible use and are devoid of beauty are out of place on any lawn. Rock-plants in general require light, sandy soil, impregnated

with decomposed limestone. If this is not at hand, a mixture of old mortar or brick rubbish will answer. Certain species, however, thrive best in leaf-mold, black and beautiful.

Whatever form is adopted for a rock-garden see to it that there is a soil connection through every pocket and crevice with the earth

beneath, and that the top soil is firmed down to it, otherwise capillary attraction will have no better chance of keeping the earth damp than in an undrained flowerpot. This is a fundamental principle on which successful rock-work depends.



Give the delicate Foam Flower a corner in the rock-garden's base



By all means have some Maidenhair Spleenwort ferns, and keep them watered

Happily, the round stone-wall abomination with dry pockets in which no respectable plant ever long survived, is of the past.

A shady corner allures the fern-grower and affords scope for a bewildering confusion of rock and fern. Individual grouping, as we often see in the open, has its merits, but an artistic sectional arrangement is better

for limited space and may be as informal and picturesque as the ingenuity of the builder may suggest. Whatever the outline of the mass may be, unless in a very sheltered nook, the height should never exceed two and a half feet. No great expectations need be indulged for growth even at this height, for none of the large ferns which grow from a central crown can withstand the winds if isolated and elevated.

In building rock-work, it matters little what sort of soil is used for a foundation: if taken from stony waysides it need not be freed from minor cobbles; if from a rubbish heap, decaying vegetable matter must be removed, else the ultimate settling of the soil will

cause trouble. In the construction of small rockeries part of the ground tier of stones may be laid and the filling piled high in the center, and either tamped or thoroughly wet down with the hose before the inside stones are placed-both are advisable.

Careful selection of stones gives varied outline; a curved slab of calcareous rock is highly valued, as decomposition is so far advanced that layers are easily sprung and rock-loving fern-roots inserted with perfect ease. The photograph of the structural foundation of a corner rockgarden, shaded by lilac shrubbery, draped with the American Woodbine on

one side and by an eight-foot wire screen on the other, with a wire frieze across the front, both vine-laden, is shown here. The larger part of the rockwork is composed of an interesting lot of sand-rock or pudding-stone, which is strongly impregnated with lime. Quartz conglomerates are in the foreground. As this was an especially dry corner, after the ground was cleared the hose was turned on and the water allowed to play for hours before any fill-



When there is a definite architectural reason for rock-work, the addition of the proper growing things makes the ideal rock-garden

points. Visible joints were quickly dusted over with coarse sand and pebbles inserted. Careful selection and grouping of material are necessary, for there is a difference in color, and wave of sandstone; an equally lovely stone may look like a new patch on an old garment and spoil the beauty of the whole. Room is left for massing tall ferns outside the walls. The large pockets are designed for vigorous growers, and this whole formation is full of snug retreats.

The successful culturist observes closely and follows Nature's lead. Failures are often due to deep planting, whereas the crowns should be carried above the surface. Another common mis-

take is in selecting plants from deep woods for a sunny location on the lawn. Many species have so wide a range that individual plants may be found growing in the same exposure to which they are to be subjected in cultivation.

Do not forget the Maidenhair fern to form a back-

ing was put in; this in turn was wet down in

installments which thoroughly settled the

soil and checked evaporation. The side

slabs diverge from a beautiful central

upright, and to insure the right slope the

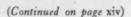
earth was piled much higher in the rear.

Foundation stones were laid under the main divisions and cement used in a few

ground for the wild flower

In rock-gardens variety of foliage is often more effective than color; even Jack-in-the-Pulpit (Arisama triphyllum) may preach its gospel of good effect by contrast. Violets, white and blue, are wonderfully pretty with ferns, either as a footnote or shyly peering over the tip of the highest rock. A mass of the Foam Flower (Tiarella cordifolia) is especially

pleasing. The rock-loving Columbine (Aquilegia Canadensis) loses none of its beauty if transplanted from Nature's rock-garden to ours. But the ideal accessory of ferns in rock-gardens is the Bluebell, Harebell or Bellflower (Campanula rotundi-folia). Like a rare trait in a rough character they grace the rocks on which they grow. Just a foothold and the chance to swing and sway in the wind are all this flower of the air





A rock-border of trillium along the shady side of a house will give you a mass of white bloom a house will give you a mass of where it will be fully appreciated



A formation for an artificial rock-garden, ready for the plants. Use only weather-beaten or disintegrating stone

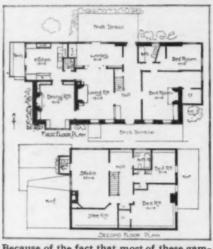


Mr. Gurd bought one of the comparatively few old Dutch Colonial stone houses in Northern New Jersey and is gradually remodeling it to conform to his needs

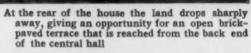


A view from the living-room into the central hall.

At the right the partition is carried up only part
way between the structural members, giving
greater spaciousness to the interior



Because of the fact that most of these gambrel-roof houses were rather deficient in space on the second floor two of the bedrooms are located at one end of first floor





There is not much of the old-fashioned character retained in the kitchen, with its modern plumbing, heating, glazed built-in cupboard and even the electric bell annunciator



The front bedroom on the first floor has a fireplace faced with a beautiful white-painted mantel and a closet adjoining one jamb



In the living-room the large fireplace has a plastered facing without any mantel. The old structural ceiling beams, painted white, remain

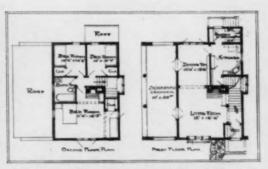
THE HOME OF MR. JOHN A. GURD, ARCHITECT, RIVER EDGE, N. J.



All plaster houses have a great advantage over wooden ones in that the walls need not be painted. The vine coverings need never be disturbed



The main entrance is at one corner, marked by a simple hood and a small porch



The plans indicate how a spacious interior has been gained by having few rooms—the absolute essentials. One chimney serves the furnace and two fireplaces, gas being used for cooking



A covered veranda extends the whole length of one side, its roof supported by rough treetrunk posts



Looking from the dining-room into the living-room. The leaded glass windows are very effective; on the outside these are protected by casements as shown above



Moldings and carved woodwork are conspicuous by their absence; instead, dark plain-surface woodwork is employed throughout to accent structural features

THE HOME OF MR. LAWRENCE BUCK, ARCHITECT, ROGERS PARK, CHICAGO, ILL.



A typical American woodlot badly in need of attention. Some of the weaklings should be cut out

# Home Forestry in a Woodlot

BY J. J. LEVISON, M. F.,

Arboriculturist, Brooklyn Park Department

Photographs by U. S. Forest Service and others

DID you ever realize how easily you can transform your woodlot from that neglected bit of wilderness to a thriving piece of natural forest that will add a charm to your country life and an increased value to your property?

To get a true idea of the conditions on your wood-lot, it is quite essential that you look at it from the forester's point of view and you will then find a crowded mass of small, decrepit specimens unable to de-

velop into beautiful stately trees for lack of light and space. A few trees might have grown to large size, but these are probably overtopping the rest, suppressing their growth and finally entirely destroying them. With a little more effort you will be sure to find some dead and dying trees, trees infested with injurious insects and fungi and any number of diseased stumps and branches.

As time goes on, the woodlot deteriorates more and more. The dead trees become breeding places for insects and disease; the insects in the dying trees multiply and the disease spreads from tree to tree. The number of suppressed trees increases and the dominant or better trees, suffering for lack of growing space, become more lanky and thin, so that they are unable to stand upright if deprived of the support of their immediate neighbors.

You will now readily see that such woodlots require immediate attention. The remedies are simple and in general consist of two processes—intelligent cutting and proper planting.

### IMPROVEMENT BY CUTTING

The cutting should include the removal of all the undesirable trees, leaving a clean stand of well selected specimens to thrive under the favorable influence of more light and growing space. Now this does not entail any of the expensive treatments often resorted to in the care of ornamental trees. This is merely a case of intelligent cutting. It might be advisable to have an expert mark the trees which are to be removed. But once the trees are marked, the rest is mechanical and success will then depend on the care with which the trees are removed, so as not to hurt the young trees that may be growing underneath the older ones. The marking can best be done in summer when the dead and live trees can be most easily distinguished from a distance and when the requisite growing space for each tree can be better judged from the density of the crowns. The cutting, however, can be done most advantageously in winter.

Immediately after cutting, the diseased and infested wood should be destroyed. The sound wood may be utilized for various purposes. The bigger logs may be sold to the local lumber dealers and the smaller material may be used for firewood. The remaining brush should be withdrawn from the woodlot to prevent fire from

setting in during the dry summer months. But at no time should the leaf-mold be removed from the ground. These leaves improve the physical condition of the soil and after remaining on the ground for about five years, decompose and through the soil return to the trees some of the most important ingredients essential to forest vegetation.

In marking trees for removal, there are a number of considerations to bear in mind besides the elimina-



cie

wa

dis

pla

for

sp

ga

co

me

up

of

ap

see

A well kept forest of spruce in Austria-Hungary. Your woodlot may need planting as well as cutting

tion of dead, diseased and suppressed trees. When the marker gets among the crowding trees of equal height, he must select those that are most likely to grow into fine specimen trees and cut out all those that interfere with them. The selection must also favor trees which are best adapted to the local soil and climatic conditions and those which will add to the beauty of the place. In this respect the method of marking will be different from that used in practical forestry where the aim is to net the greatest profit from the timber. In pure forestry practice, one sees no value in such species as dogwood, ironwood, juneberry, sumac and sassafras, and will therefore never allow these to grow up in abundance and crowd out other trees of a higher market value. But in private work of this sort, such species add wonderful color and attractiveness to the forest scene, especially along the roads and paths, and should be favored as much as the other hardier trees. One must not mark too severely in one spot in order not to cause the soil to dry out from exposure to sun and wind. When the gaps between the trees are too large, the trees will grow slower and the trunks will become covered with numerous shoots or suckers which deprive the crowns of their necessary food and cause them to "die back." Where the trees are tall and slim or on short and steep hillsides, it is also important to be conservative in the marking in order not to expose the stand to the dangers of windfall. No fast rule can be laid down as to what would constitute a conservative percentage of trees to cut down. This depends entirely on the local conditions and on the exposure of the wood-But in general it is not well to remove more than twentyper cent of the stand nor to repeat the cutting on the same spot oftener than once in five or six years. The first cutting will, of course, be the heaviest and all subsequent cuttings will become lighter and lighter until the woodlot is put in good growing condition.

### IMPROVEMENT BY PLANTING

But even where the trees are in good growing condition they cannot last forever, and provision must be made to have others take their place when they are dead. The majority of our woodlots are not provided with a sufficient undergrowth of desirable trees

(Continued on page xv)

# Garden Watering

YEAR before last during a prolonged drought we watered our garden every night by hose sprinkling, but as the garden is a large one we found, the next year, that our plants

thrived much better and revived more quickly when we thoroughly watered a single section of it one evening and another section the next. In this way we demonstrated to our satisfaction that it is better to give every plant a sufficient satisfying drink once every so often than to give every plant merely a half watering every night. We are little more than beginners in gardening, but this hint may prove of service to other beginners.

W. P.

# Flower Holders

AN excellent substitute for the Japanese flower holders for keeping iris, narcissi, daffodils and other bulb flowers upright in a shallow earthenware dish may be had by taking flat ribbons of lead about an inch wide which your plumber can supply and twisting them



Buy some strip lead from your plumber, and twist it into such forms as these for convenient flower holders

into shapes to hold the stems. The weight of the lead will hold these forms in place when they are laid edge down. Here is a diagram sketch to show how they may be bent.

F. T

### The Garden Herbarium

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

# Ingenious Devices

Labor-saving Schemes and Short Cuts in the House and in the Garden



Here is an automatic chicken-feeder to save corn. The hopper drops kernels when the chickens peck at the hanging dummy

pamphlet case, you will see that I had an invaluable record of my flower-garden. Indeed my neighbors have consulted it freely in planning this winter for next season's gardens, and perhaps some of HOUSE & GARDEN'S subscribers would like to try something like it themselves.

M. S. J.

# A Handy Remedy for Rattling Windows

Do not allow yourself to be made wakeful and nervous by rattling windows or doors when the comb on your dresser makes a perfect wedge, easily inserted and as easily removed. Especially annoying are such noises in hotels or other strange bedrooms, but even there the comb is at hand and equal to all sizes of cracks.

L. McC.

### Plan for Hotbed Growth

I HAVE often observed that beginners plant in hotbeds with little reference to the heights of various plants. When I start my hotbed planting I

	9	ď	5		9 1			4	C	. 6	0:	5	m.	0	) =	5		3		4		6"	0	2	1
	9	e		-		(	3	35	st	C	Y	•	E	e	35	31	7	5		2		3	*		1
	2					2	. 1		Z	i	n	n	i	8	5		. 4			. 9	2	4	3		. 5
	-		73		-				-	5	to	0		5	5	2	100	2	9		A		~		9
•	2		4	1			5	Y	Ye	ce	ct		N	IL	.L	11	A	M	-	9		9		×	0
4		b. 1		, 7		2	F	0	rs	9	et	t-	m	8	-1	X	71	3	,			9 1			
	. 1				0			C	2	Br	20	1	17	ti	1	f-	t		. 1			9 1		. 1	

In sowing seeds in the hotbed, plan to have the taller-growing plants at the higher end of the bed

always make a diagram of the seed positions. In this way there can be no mistake, and tall seedlings will not push up against the low front top of the sash nor low seedlings become lost in their shade at the back of the bed. The following diagram will indicate what is meant.

W. T.

# Testing Seed Germination

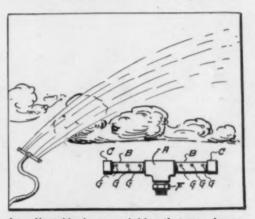
A HOME-MADE seed tester may be made by taking a couple of soup-plates, some sand and two sheets of blotting-paper the size of the plates. Put sand in each plate to the

level of its edge, wet till thoroughly saturated, place one sheet of blotting paper over it. Then a dozen or more seeds are placed on top of the blotting paper and the second cover put over them with a little sand sprinkled over that and the whole carefully covered with the second plate. Keep at a temperature of 50° to 60° day and 40° to 50° night temperature for tests of cabbage, beet, pea, onion, and radish seed; and 70° to 80° day and 60° to 70° night temperature for corn, bean, pepper, and cucumber seeds.

E. D. R.

# A Home-made Lawn Sprinkler

THE accompanying diagram illustrates the essential points of a lawn sprinkler that not only is cheap, but economical in water besides, and you can



An adjustable lawn sprinkler that can be approached and moved about without turning off the water

make it from a few pipe fittings in no time.

In the diagram A indicates a ½ or ¾ in. gas pipe tee, according to the size of hose used; B, nipples of gas pipe 6 in. long; C, cup for gas pipe; F, hose coupling; G, air holes, drilled into the nipples BB, three in each, and not more than I-16 in. in diameter.

In putting this together do not screw the nipples BB very tight into the tee A—this allows the row of holes to be turned at any angle. Likewise with the cups C, as the holes may become clogged and need cleaning. You will notice that you can easily get the necessary fittings at any plumbing shop and in most places of this kind they will drill the holes for you; other than this there is no labor. You will also note how one can walk right up behind the spray and move it from place to place. I have used two of these devices for the past two years and they work splendidly.



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

# Colonial Bedroom Fittings

THERE is this season a decided interest manifested in the fittings for Colonial bed-chambers. Some charming examples of the quaintly figured papers, chintzes and cotton prints of that period are prominently displayed in some of the leading shops. A number of these shops specialize on assembling wall covering, drapery materials, furniture and floor coverings which will be used together, thus giving the most inexperienced customer a comprehensive idea of the completed room.

A particularly interesting effect is shown where the strong blue and white of the hand-woven bedcover of Colonial times is made the color motif for the decorative scheme of the room. Here for the wall covering a striped paper in two tones of oyster white is exhibited, divided in large panels by a conventional border of blue leaves on white ground. Glazed chintz showing similar design and color, is used for pillows and slip cover for the large wing chair which is a feature of the room.

The mahogany furniture consists of reproductions along correct Sheraton lines and the floor covering shown is a closely woven blue-and-white rag rug of the "hit-and-miss" pattern. The woodwork of the room is purely white, as is the ceiling and the tamboured muslin curtains. The effect is fresh and dainty and sufficiently unusual to be interesting.

Other papers suggested for Colonial bedrooms show on a glazed background a small all-over pattern of closely set dots, intersected at intervals by a tiny yellow rose and single leaf. This design also comes in pink and a deeper rose as well.

Others, carrying a suggestion of French Colonial, show formal baskets of flowers or garlands held by bow knots of ribbon. With such papers plain-colored draperies of linen, chambray, dimity, or thin silk

are advised. Except in the last-named fabric a border or corner motif, showing the same design and color as the wall paper, may be appliqued to give a decorative touch. One often finds even in such inexpensive materials as art ticking—which sells for 25 cents a yard—lovely effects for this purpose. This material frequently shows two floral stripes alternating, and when cut apart will supply borders for curtains, belcovers, etc., for two belrooms.

### Colonial Lamps

WILL House & Garden give me a suggestion for the proper style of lamp to use in the living-room of a Colonial house? I know that it is very necessary to select the correct thing, and will be very much obliged for any suggestions you may offer.

The photograph here reproduced will show you lamps of Colonial type. The shades are particularly good and can be used on lamps less high than the ones shown in the photograph. Also they are frequently used where the crystal prisms decorate the stand of the lamp.



For the living-room furnished along Colonial lines there are modern lamps made for using electricity, gas and oil

### Desk Sets

SOME of the shops are showing very attractive desk sets, all of the pieces covered with quaint brocade and finished with a narrow dull galloon. These sets include the pad, the letter-rack, the hand blotter, the letter scale, the pen tray—glass lined, and several smaller pieces, and sell for \$25.

To complete a desk in a room furnished in Colonial or French style, these find their proper setting, or if they are made from a Venetian brocade of two tones in dull mulberry red, Gobelin blue, or yellow, the set will be appropriate in a library where the paneling is of oak and the furniture on Italian or Jacobean lines, wherein the more delicate brocades above referred to would be wholly out of place.

### Curtains for Casement Windows

WILL you give me some directions as to the proper way to make and hang curtains for casement windows? These windows swing in and I find the question difficult to work out for myself.

The brass rods holding the net curtains for casement windows should be set on either side of the window frame so that the curtains will swing with the window. These curtains should be run on the brass rod by a narrow casing at the top, without frill, and finish in exact line with the window frame. For over-draperies an extension rod can be used, set on the window trim at the outer edge. On this the heavier material-silk, casement cloth, or whatever goods is selected-may run. These curtains should extend to the sill line, and finish with a 21-inch hem. A valance may be used if the window is very wide and the room is suitably furnished for this treatment; the valance should not be more than eight inches in depth.





# Porch Furnishing

IT is interesting to note the growing enthusiasm of Americans as a nation for out-of-door living. While this is a comparatively recent development, it has evidently come to stay. The conditions which prevail to-day are in striking contrast with those of a few years ago when the narrow and restricted porch, which was all that the average house afforded, held during the summer months two or more weather-beaten and uninviting looking chairs which were rarely occupied.

Now even the simplest and smallest house has its porch and veranda of generous dimensions. These are often screened and fitted as living-room or dining-room for the summer months, and upper porches, even during the cold weather, are frequently arranged as sleeping-rooms.

Therefore to find the right furniture for the porch is a matter of interest, and the manufacturers are meeting these recent requirements with some attractive and well built wicker furniture. (See Miss Birdsall's article on another page.)

Rugs are an essential part of porch furnishing, and these may show stronger colors and coarser weaves than those used in the house. The woven grass or matting rug is very satisfactory for porch use. Well cushioned canvas hammocks or swinging seats are delightful and desirable adjuncts to such furnishing.

Awnings or the split bamboo curtains which roll readily will be required where the porch is to be used as a living-room, as at some hour of the day it will be found necessary to shut out the too strong rays of the sun. Fern balls and hanging baskets, as well as growing ferns and palms, can be decoratively introduced.

# Protecting Enamel Tubs

THE new porcelain enameled bath tubs which one finds so much used these days usually have a nickel-plated soap dish attached to them by two

flexible bands. This allows them to be removed for But cleaning. the use of a dish so equipped leaves a mark from the bands on the enameled surface. I prevented this by the use of ordinary rubber bands. We also had a seat for use in the bathtub, and here again the metal rods used in its construction rubbed the enameled surface, until I obtained some rubber tubing



For the porch floor woven grass or matting rugs are very serviceable Stronger colors and patterns will be needed outdoors

and easily and quickly covered them. C. K. F

# A Formal Room Problem

HOUSE & GARDEN has previously helped me in solving a difficult problem in fitting up my dining-room; now I need help in my parlor. This room is really a parlor and not a living-room, as it is chiefly used on formal occasions, but it looks so appallingly formal that I cannot bear to sit in it. I thought when I furnished it I wanted it in tones of grav, and bought an upper-third wall covering (the lower wall is paneled with wood), a scenic paper showing a line of gray trees with a roadway stretching between them. I had the woodwork given a coat of gray paint, and this is one great trouble. In tone it is yellow more than gray and the paper is bluish gray. My curtains are on the shades of the paper and the fabric is twotone linen and silk damask. Unfortunately the net curtains, now that they are in place, seem almost tan in color. The carpet is blue and dark green with a little black, very small figures. The furniture is old mahogany of good

form covered in black haircloth. The table has a marble top. Now what can I do to make this room more cheerful and inviting, as it is anything but that at present?

The first change to make is in your woodwork. This should be given a finish of white enamel—purely white, not blue white or ivory. In tone you will find this will bring out the best qualities in the color scheme. The ceiling should be the same shade

of white and the curtains next the glass also white. White point d'esprit net would look well for this. You might leave the straight chairs in your room with seats covered with the black haircloth, but for the other pieces we would advise a covering of tapestry, showing dull blue, green and smoke gray tones. A table cover cut exactly the size and shape of your marble top could be made from a good piece of brocade with blue and old rose shades predominating, the edge to be finished with a narrow gold galloon. A wing chair covered with blue cut velvet would make a good spot of color in the room and such a chair is always useful and ornamental. We think with these changes you will find that while the room is still formal, it will be attractive and livable.

### Mosquito Netting

FEW people know, when buying wire netting for mosquito frames, that it is sold with different sizes of mesh. The writer finds now that some is sold with such a large mesh that the small mosquitoes can enter through it. Look out for this when purchasing. C. K. F.

# A Splendid Polish For Wood Or Iron

A CHEAP but most excellent polish for stained floors, furniture, or woodwork of any kind, and also for stoves or iron fixtures, is a mixture of linseed oil and benzine in equal parts. Put it on with a soft cloth, and rub dry immediately with another soft cloth. It not only polishes but cleanses and removes spots.

A quart of this mixture costs but ten cents, and the oftener it is used upon a stained floor the better. It made my old grate seem like new, and left a rusty stove quite presentable. Upon fine furniture but little should be used at a time and that rubbed in immediately, though there is nothing harmful about it. Remember that the mixture is inflammable.

L. McC.



The new type of canvas hammocks or swinging seats help to furnish a porch







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

# May Time

THIS is the month of the poets, the Queen of the Calendar. is none the less the month which brings happiness and inspiration to the practical as well. Nature, dear old nurse to many of our happiest hours, has brought us to the threshold of Summer's hospitable mansion, and whispers to us of all the unfolding beauties that heaven is to spread before us. The orchards will be pink and white with a thousand fragrant temptations for the tuneful birds and the buzzing bees, the Iris will be unfurling its bannerets of royal purple, snow white and golden yellow, and at last we shall forget that Jack Frost ever tried our patience with his wintry pranks.

### Things to Remember in May

Be prepared against late frosts but do not rush the season, though you should plan not to be behindhand with anything. When all danger from frost is past transplant your tender flowers and vegetables from hotbed to garden.

The Iris will be unfurling its bannerets

Look out for cut-worms that will be appearing in your garden soon. Dig them up and kill them as soon as you find any of your young plants dying without any apparent reason. Cut-worms are probably chewing at the roots.

This is a good time to think about flower-boxes for porch and windows.

Carnations may be taken from the greenhouse for outdoor planting the latter part of the month.

Plant Sunflowers, if only for the sake of such useful birds as the Goldfinch and Nuthatch.

Now is the time to plant hardy border plants, Alpines, Climbers, and especially Gladioli, Gaillardias, Pyrethrums (cut back for late flowering), Delphiniums (cut back for late flowering), Geraniums, Chrysanthemums, Hollyhocks, Clematises, Ivies, Passion Flowers, Dahlias, Calceolarias, Phloxes, Pentstemons, Cannas. Also Potatoes, Broccoli, Brussels Sprouts, Celery and Lettuce.

Remember to spray your orchard trees as soon as the petals fall from the blossoms.

The middle of the month is the time to spray your rose bushes with whale-oil soap, and the last week in May they should receive liquid manurial stimulant.

Mulch your strawberries just before they bloom.

Now is the time to sow everything required for succession, late Peas, Beans, Cabbage for late use, Cucumber, Radish, late Broccoli, Winter Kale, Vegetable Marrow, Brussels Sprouts, Horn Carrot and Main Crop Carrots, Spinach, Turnip, Beet, Parsley, Colewort, Onion, Lettuce, Cauliflower, Parsnip, Ridge Cucumber. Also Phlox Drummondii, Marigold, Calceolaria, Ten-week Stock, Cineraria, Primula, Ornamental Grasses, Grass Seed and Aster.

Sow all hardy annuals and transplant such as you have had started in coldframes in March, which have been hardened off. It is not too late to sow tender annuals in coldframes for later transplanting.

Shift perennials, and rearrange border plants. This can be done with safety by the end of the month.

Gladioli planted this month will bloom in August.

# When Small Fruits and Trees Bear

HOW long should it take the Blackberry, Currant, Gooseberry, Raspberry, Quince, Plum and Strawberry plants I set out last season to bear?

Blackberries, Currants, Gooseberries, Raspberries, and Strawberries should yield fruit one year from setting, and bear good crops in from two to three. It will take the Quince two years, and the Plum three years from setting to bear.



The Eggplant (Solanum Melongena)



Tomato vines trained against the house, wall, or trellis yield fine fruit

# Tomato Culture

IF you have only a small space in your garden for Tomatoes plan to place them where they may be grown against an upright trellis, a wall, a fence or against posts. This new mode of culture is more productive to each plant than any other.

# Eggplant

L AST year I had no success in my attempts to raise Eggplant, and I shall be greatly obliged if House & Garden can give me some hints on setting out, soil, fertilizing, culture, etc. As our plants were insect ridden will you also tell me what precautionary measures should be taken against a reoccurrence of this.

As the Eggplant (Solanum Melongena) is an extremely tender annual, it is seldom cultivated north of Philadelphia, and must be started under glass except in the South. Dwarf varieties are to be recommended for short seasons. A drained, loose sandy loam, very rich and quick, and a sunny exposure are required for satisfactory results. Two or three fruits to each vine form a good yield. Plant out, when a foot or more in height and well hardened off, the second week in June, three feet apart in hills into each of which compost, and a fertilizer of four per cent nitrogen, eight per cent phosphoric acid, ten per cent potash have been forked. After setting, fertilize further by the application of a liquid manurial stimulant. The chief diseases to which the Eggplant is subject are leaf-blight and blight-fungus. It is difficult to meet this, but with the former destroy any infection - carrying insects and spray with Bordeaux mixture, and with the latter disease destroy affected plants before they spread their contagion. Against Aphis spray with kerosene emul-

# Window Light

WE have just moved into a three-story house and as there are large bay windows on the southern and western sides of the house we are anxious to try our luck at window-gardening. Which of the windows should we choose? We wish to confine our house-plants to one room.

The southern window is an ideal position, although you should anticipate the glare of even winter's mid-day suns by planning for adjustable shades. Although an abundance of light is necessary to success with most house-plants, the midday sun may prove too strong for "resting" plants. Palms and ferns will require such protection when the sun is high.

# Number of Plants Required

WILL you please tell me how one may know the number of plants required to the acre?

Multiply the distance apart (in feet, or fractions thereof) at which a plant is to be placed from each of two other plants at right angles to it, and divide the number of square feet an acre contains (43,560) by the product thereof. Thus, if Strawberry plants were to be placed two feet apart each way your problem would be  $43,560 \div (2 \times 2) = 10,890$  plants required; or if they were planted two feet apart in rows three feet apart your problem would be  $43,560 \div (2 \times 3) = 7,260$  plants.

# Tar Paper

I HAVE been told that tar paper is good to wrap around the trunks of insect-infested trees to keep pests away. How should I go about this?

If tar paper is used at all it must not be fitted *tightly* around tree-trunks, and in any event it should be removed before warm weather. Though it is sometimes



Plant Sunflowers that their seed may divert birds from garden fruits

recommended for use to prevent the attack of such insects as the borer, one should dispense with it when possible, as it also is extremely liable to injure the trees it is supposed to protect.

Remember that just after they finish blooming is the time to prune all spring-flowering shrubs.

# Protecting Small Fruits

L AST year we lost a great many berries from our bushes through depredations of birds. This year we want to anticipate the nuisance. Can you suggest a way to prevent it?

One of the simplest solutions to the problem of bird invasions is to cover the bushes with mosquito-netting. It will not prove expensive where the garden owner has but a few bushes of small fruits.



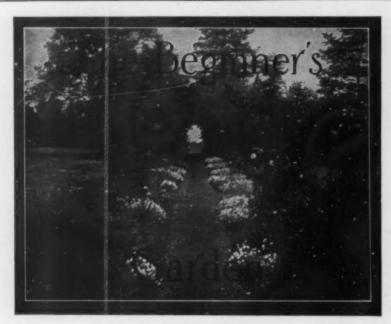
The common Lupin (Lupinis perennis) makes a lovely flowering border for indifferent soils

IT is astonishing that such a measure of good luck attends the guesses which most of us make at supplying the needs of the soil-or to be more exact, the needs of the plants which grow in the soil-because very few really know anything about it. But of course the makers of com-mercial fertilizers have have helped us greatly, and there are many scientifically compounded and of real value, upon the market, every pound accompanied with directions for its application to the soil. What these compounds do, however, and why they do it, and why it needs doing are details of the matter that even very advanced gardeners do not trouble to concern themselves with— at least not often. The general idea is to make the soil "rich," and if one thing doesn't produce a crop luxuriant enough to indicate that this has been accomplished, something else is tried-something that is hit upon somehow, somewhere, that somebody says is good because it has benefited some other garden.

Of course everybody knows that the growth of a plant requires food just as much as the growth of a child or a bird or anything else in creation requires food. But the ideas about this food are very vague; "what plants eat" is an untold tale, mysterious, almost chimerical to the practical mind accustomed to seeing before believing. Let us see if we can't straighten this out a little and come to a real comprehension of plant feeding; then fertilizers will not seem so deadly dull and uninteresting and incomprehensible.

The food of plants consists of thirteen "chemical elements." Nine of these are taken by the plant directly from the soil—these are the pure mineral plant foods, three are taken from water and from air, and the thirteenth and last is taken principally from decaying organic matter in the soil.

In order to understand this quite clearly let us stop just here long enough to take a look at the second classification of soil as mentioned in a preceding instalment of the Beginner's Garden-that is, the chemical classification. Soil is made up of mineral matter and organic mattertwo forms that are of course widely different - and to get at this composition of it in the simplest way possible we will follow the suggestion of one of the Department of Agriculture experts and magnify a cubic inch of soil, in the imagination, to a cubic mile-and then look it over. It becomes very vivid, and the processes going on in it are plainly revealed, under such examination.



Fertilizers

The purpose of this page is to set forth in the most direct, non-technical form the fundamental principles of amateur gardening. Unlike the great mass of garden literature, it presupposes no knowledge of the subject, aiming to satisfy those who now for the first time want to know how to make things grow. The Editor will welcome any questions from beginners and will print in these columns the experience of contributors when they seem to have a wide appeal.

It will look like a mass of rocks and stones varying from the size of a pea to boulders several feet in diameter. These are the mineral particles—in common parlance the "dirt"—which predominate and form the foundation of all soil. Among these rocks and stones, in many of their large and small interstices, will be decaying pieces of plant roots and stems and other organic matter which appear very much like logs and pieces of logs' rotting among masses of rock and gravel. All of this organic substance will be dripping with water like a soaked sponge, while all the stones and rocks have a layer of water over their surfaces. And finally, in all the spaces where there is nothing else, there is air - indeed nearly half the volume of the whole cubic mile

A plant root coming down into this magnified cubic inch of soil would be of course an enormous thing, pushing its way among the rocks and stones and decaying matter with agreat, tireless, steady, resistless pressure that would move the biggest of them. Near the tip of this ever-extending and down-reaching growth, small hollow tubes—root hairs—would be seen reaching out and feeling this way and that, sucking the water from the surfaces of the rocks and from the dripping, spongy masses among them by drawing it through their thin and delicate walls.

In this water is the mineral food, discolved off in the minutest particles from the "rocks"—and it is somewhat staggering to note, by the way, that in

order to produce one pound of growth in dry matter—that is in branch and leaf, flower and fruit—from 300 to 800 pounds of water must be taken in by a plant's roots, drawn up through its stalks and branches, and discharged or "transpired" by its leaves! Think of the stupendous work being carried on by all the silent green things that we give scarce a thought to in the long, drowsy summer days.

All fertilizers present, in different forms, three essentials-phosphoric acid, potash and nitrogen. The latter is the last of those thirteen chemical elements mentioned which feed vegetation-the one which comes principally from decaying organic matter in the soil-and in some respects it is the most important of all. Unfortunately it is the one most easily lost through washing out, nitrates being very soluble, or exhausted in other ways; therefore it is the one which should be applied only in sufficient quantity for the immediate use of the plants to be

grown, and just at the proper time for their needs. It is usually well to wait until they are above the ground.

Surplus phosphoric acid and potash, on the contrary, will usually remain in the soil until succeeding crops use them up, so it does not matter so much if these are applied in excess. They are not wasted.

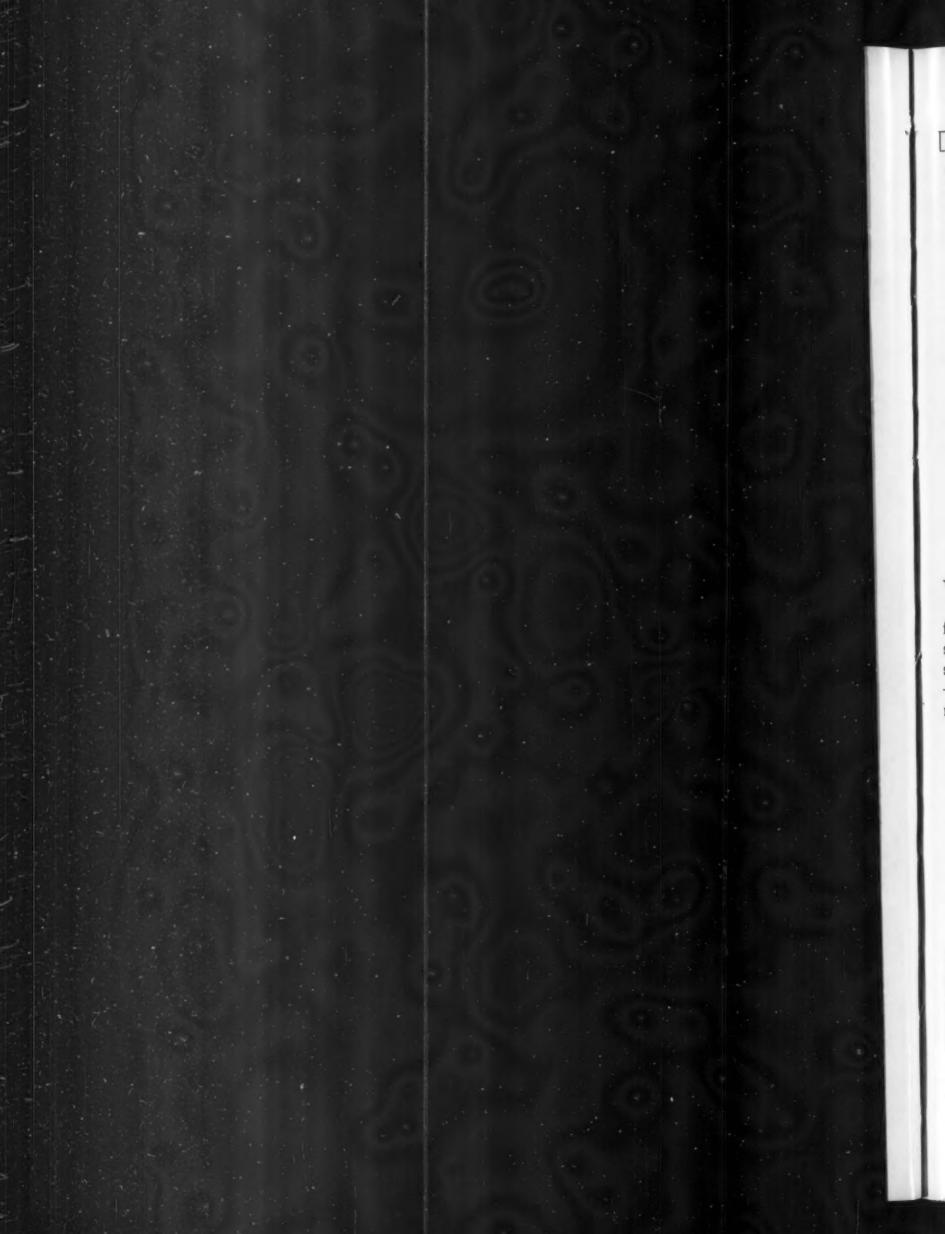
What is known as a complete fertilizer is a combination of these three in the proportion generally of one part nitrogen, two parts phosphoric acid and two and one-half to three parts potash. Such a fertilizer will meet all the requirements of the average garden, especially if the soil is treated as directed in a previous number, with lime first. Lime is not a fertilizer in the strictest sense, but it sweetens the soil as well as helps to bring about physical and other changes that make plant food available.

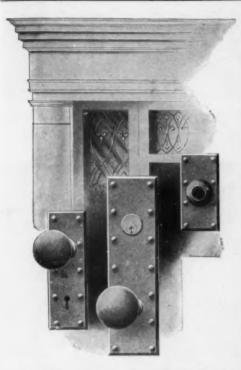
The sources of each of these three fertilizer ingredients are important to know and remember, for even though a complete commercial product that just suits one's garden is found, it is well to have an intelligent understanding of its composition. Many times the application of one of the three is all that is needed and where this is the case it is much better to use only the one—for gorging the soil is as bad as starving it.

Nitrogen is supplied by nitrate of soda, sulphate of ammonia, cotton-seed meal, high-grade dried blood, or green manuring (a leguminous crop such as cow peas, clover of all kinds, soy beans and others, grown and plowed under), and by stable

(Continued on page xvii)







# "Everything in Builders' Hardware."

WHATEVER it is in the line of hardware—whether for doors, windows, cupboards, swinging or sliding doors, screen doors or cellar windows—the kind to last and give maximum efficiency is



# **HARDWARE**

MANUFACTURED BY

P. & F. CORBIN

MAKERS OF

# "Everything in Builders' Hardware"

N. W. Cor. Eighth & Arch Sts., - Philadelphia
106-108-110 Lafayette St., - New York
39 West 38th St., - - New York
104-106 Lake St., - - Chicago

Main Offices and Factories: NEW BRITAIN, CONN.

Descriptive Literature on request

# Ask the agent: "How heated?"

People are fast learning the difference between a house equipped with old fashioned heating methods or inferior apparatus and the homemaking qualities of a house fitted with ideal heating. They shun one and seek the other. The living, renting and sales value of any building, large or small, is vastly increased by



Look into the Heating Question before you rent or buy.

# AMERICAN & DEAL BOILERS

The several hundred thousands of these outfits installed all over America and Europe are so comfortably, economically, cleanly and healthfully warming the occupants of all classes of buildings that buyers and renters are now insistently demanding them. These outfits of IDEAL

Boilers and AMERICAN Radiators save so much in coal and cleaning, in time and temper, in health and happiness, and without rusting or repairs, that they quickly repay their cost. In all the world they have no equal—hence the wide use by and high endorsement of all eminent engineers and architects in every civilized country where heating is needed.

ADVANTAGE 16: The phenomenal success of IDEAL Boilers is also largely due to the fact that they are made in sections so that even their largest parts can be carried through an ordinary size doorway. For this reason they can be quickly put in old buildings without disturbing the occupants. In fact,

in unmodernized or old types of houses they can be erected, including the necessary piping and radiators, without the necessity of removing the stoves or hot-air furnace until the new heating outfit is ready to fire up. They can be quickly erected in wintry weather when the old, crude heaters get badly worn or collapse. Ask for catalog "Ideal Heating" which tells all the advantages.



A No. 28 IDEAL Boller and 240 ft. of 38-in. AMERICAN Radiators, costing the owner \$115, were used to Hot-Water heat this cottage.



A No. C-241 IDEAL Boiler and 556 ft. of 38-in. AMERICAN Radiators, costing the owner \$260, were used to Hot-Water heat this cottage.

At these prices the goods can be bought of any reputable, competent fitte This did not include cost of labor, pipe, valves, freight, etc., which install tion is extra and varies according to climatic and other conditions. Prices are now so attractive that no one can longer afford to put up with the nuisance or run the risks of old-fashioned heating methods. Tell us kind of building you wish to heat—old or new—farm or city—inquiries cordially welcomed—and put you under no obligation to buy. Every prominent architect and every heating engineer recommend exclusively the IDEAL Boiler and AMERICAN Radiator. They cost no more than inferior apparatus. Accept no substitute.



DEAL Boilers and AMERICAN Radiators keep a new house new and cause an old house to have its life and

Showrooms in a large cities

# AMERICAN RADIATOR COMPANY

Write to Dept. CHICAGO

# 

# **OPEN FIREPLACE FIXTURES**

Andirons, Fenders, Firetools, Fire Screens and Smokeless Gas Logs.

We display a large selection of Period Andirons; also an assortment of reproductions in Old Colonial Andirons, Hob Grates and English Settee Fenders in Brass, Bronze and Wrought Iron.

Frank H. Graf Mfg. Co. Factory and Show Room 323 Seventh Ave., Cor. 28th St., New York

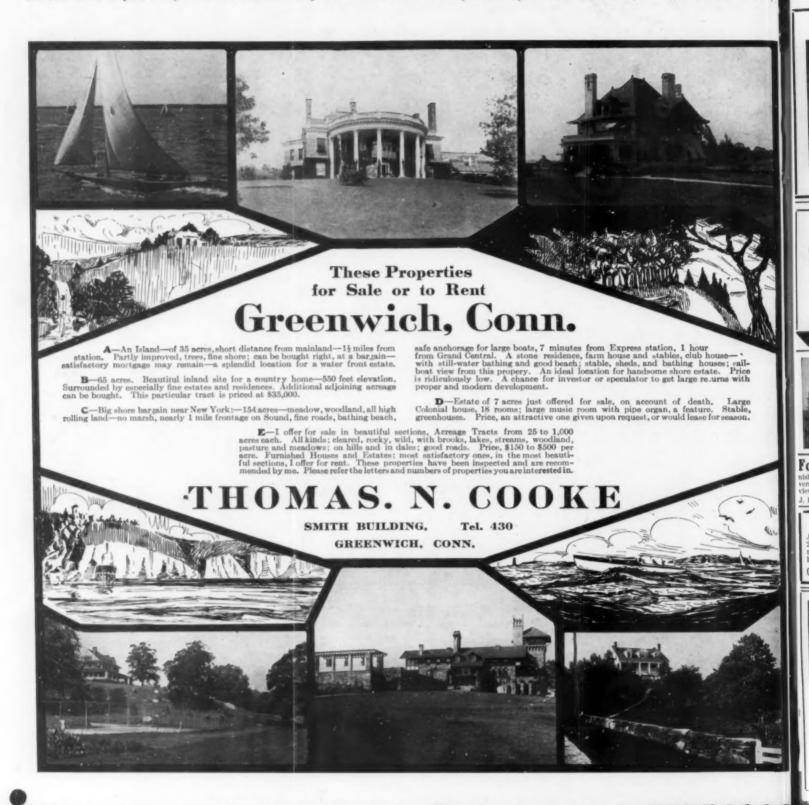
## **Bungalows and American Homes**



Design No. 2. Built in California and Iowa—Cost \$2800
Our Handsome 112 page, 8x11 book of Bungalows, Mission, Colonial, English timbered and Concrete houses for 1916 shows interiors, exteriors, and floor plans and actual cost to build, ranging from \$1,000 to \$10,000. These designs are photos of structures we have built throughout the country—not theoretical pen pictures. Special specifications and details of construction made to suit any climate. Price of book \$1.00 prepaid. Sample leaves free \$ROWR \$803. Architects, \$17 Sacurity Bank Sidg., Cedar Rapids, lows

# Gountry's for Salar

The Real Estate Department of House & Garden will be glad to advise its readers in regard to the purchase, sale or rental of country and suburban real



# r) ropert

estate in all parts of the country. This service is given without charge. Address Real Estate Department, House & Garden, 449 Fourth Avenue, New York City.



F YOU want a beautiful and modern country home surrounded by a lovely park, and only six miles from Boston, it will pay you to investigate this property.

H. A. BARKER

311 West 43d St., New York City

# FORE!

Furnished houses for the summer at Garden City, L. I., near both the Salisbury Links and Garden City Golf Club.

Other houses at Hempstead, L. I., one mile from the Golf courses. Houses for sale or rent on Long Island.

Let us know your requirements

J. K. VAN VRANKEN & CO.,

Country Dept.

8 W. 40th St., New York City.

### COME TO

### GREENWICH, CONN.

nd enjoy living on the water during the hot sum

months.

I have for season's rental a large number of exceptionally desirable furnished summer homes and cottages on and near the shore.

Also houses, acreage, farms, building locations, etc., for sale.

Patronage solicited and personal attention given in showing all properties

Wm. R. Ferguson

mith Bldg. Tel. 981 Greenwich, Conn.



# Seashore Home for Sale, Rehoboth Beach, Del.

House situated on bluffs; property covers one full ocean front block. Most desirable situation on Delaware coast. Nine bedrooms; sun parlor; bathrooms, fresh and salt water; also servants' bedrooms in separate building; pumping house, absolutely pure water from driven wells; also bowling alleys and shuffle boards in special building.

ROBERT P. HOOPER

For further information apply to PER, 509 Arch Street, Philadelphia

# For Rent for Summer Season Modern 8-room cottage, furnished. Hot and cold water, laundry, bath, fireplace, large venada. Fine grounds, fruit. Excellent location, commanding view country and Sound. Convenient to trolley. Route 37.

### AT BEDFORD

Adjoining estates Clarence Whitman and Col. Wm. Jay, 26½ acres, fine views to west, extensive orchards, 1½ miles to station, just the piace for gentleman's country home. \$25,000.

COOLEY & WEST, Inc., Depot Sq., WHITE PLAINS, N. Y.



### "Edgemont Estate" at Scaradale Station

The ideal realization of out of town living. A delightful home community, for all year residence, protected social environment, the charn of the country, all city improvements. Immediately at station; only 19 miles, on Harlem Elec. Div. N. Y. Cent. R. R.

Scarsdale Company, owners J. WARREN THAVER, PRES.

503 5th Ave., N. Y.

Corner 42d St.



# This Shore Home

Located at Sea Girt, N. J., in the most beautiful and healthful section of the New Jersey Coast convenient to both New York and Philadelphia, is offered at

### Reduced Price for Quick Sale

House is brand new, eight large rooms and two baths, fine cellar with heating plant, etc. It is built right. Near ocean bathing beach, station and trolley, also select Country Club, golf, tennis, etc. Sea Girl has the combined climatic advantages of Atlantic City, Lakewood and Asbury Park. It is "in the pines at the ocean." For photos, floor plans and full particulars of this house, or of any other property at Sea Girt, apply to

SEA GIRT COMPANY

Suite 1606, 115 Broadway

New York



# Along the Sound

Country places and summer homes furnished and unfurnished for Sale or Rent. Courteous attention.

STEWART C. SCHENCK

503 Fifth Avenue New York City



# Elmdorf, Scarsdale, N. Y.

A site for "House and Garden" in New York's most attractive suburb. The finest old lawn in Scaredale will be sold in half acre or larger plots every building site will have beautiful trees. This is a small development and will only provide for a few. Location within walking distance of Scaredale Station, in a very choice locality. Send for booklet.

W. J. REED

7 E. 42d Street, New York



The Real Estate Department of House & Garden will be glad to advise its readers in regard to the purchase, sale or rental of country and suburban real

### CHEROOKE LODGE

On Gilpin Bay

Upper Saranac Lake



# One of the most complete and attractive Camps in the Adirondacks

in the Adirondacks
consisting of about 100 acres of first
growth timber land, with a frontage
of about 1,300 feet on the lake; main
dwelling has 11 rooms and two baths;
another five rooms, bath and separate
laundry; another, three rooms and
bath; another four rooms, bath and
kitchen; separate building with dining-room, butler's pantry, kitchen and
servants, dining-room; guide's house,
with two rooms and bath; amusement hall, containing pool table and
piano; boathouse, with library or
sitting-room; launch house, icehouse
and other necessary outbuildings; full
supply of linen, silver and bedding;
there are three launches, a full supply
of ice and wood. For sale or rent
on attractive terms. For photographs
and full particulars see

FRED'K ZITTEL & SONS Broadway and 79th Street New York



Westchester County ouse 15 rooms, 3 baths, ter, sewerage. 5 acres AT SCARSDALE Modern improved property: house 15 rooms, 3 baths, open fireplaces, electric light, water, sewerage. 5 acres gardens and improved lawns, facing small lake. In center of Heathoute Association Properties, best country-side and residential section of Scarsdale.

Brursdale Company, Agents

A summer home and farm of 105 acres ready for use. Desirable property—will sell on very favorable terms to close estate. House of 18 rooms, including of Delaware River, New York State, 2,000 feet elevation. Express trains to New York. Fine climate, mountain air, no river fogs, beautiful scenery.

J. L. GREENLEAF, Executor

# Summer Homes

in Beautiful Maine.

By Ocean, Lake and Stream.

Camps, Farms and Village Dwellings.

## MAINE REALTY BUREAU

W. M. PENNELL, Manager

Portland, Maine

WRITE FOR ILLUSTRATED CATALOG



Morristown, N. J.

acres, beautiful garden, stone and stucco house, attrac-ide and out, containing six masters', several servants' is, 2 baths, steam heat, electric light and all improve-Stable with four stalls and three men's rooms; ice tc. For sale at \$25,000. Full particulars of Country Department,

PEASE & ELLIMAN, INC

### **FARMS**

Large and small properties with stock and tools, all equipped for business. Handsome catalogue upon request.

H. L. REED COMPANY AMSTERDAM NEW YORK



To Let or For Sale-This desirable place with front river acres of lawn; or whole property of 78 acres at Scar-on-Hudson. Address Smith Realty Co., 9 E. 30th St.

# FOR SALE OR RENT

Fine farm in Carroll County, Maryland-Fine farm in Carroll County, Maryland—208 acres—large modern house—acetylene gas—good water—all improvements—about 600 feet above sea—no mosquitoes—all farm buildings—good roads—60 acres meadow—well watered—plenty timber. Near Liberty Turnpike—23 miles from Baltimore—40 from Washington—5 miles from station—Sykesville on B. and O. R. R. Apply to A. P. Gordon-Cumming, 1707 De Sales Street, Washington, D. C. Washington, D. C.

Price \$14,000



# Manchester by-the-sea IDEAL SMALL ESTATE ON WATER FOR SALE

Stucco house, 14 rooms, 3 baths, stable, garage, poultry house and gardener's cottage; 2 acres land; only 40 minutes' ride from Boston on the exclusive North Shore of Massachusetts. An unusual opportunity. Price \$35,000. Full particulars of all property for sale or rent on the North Shore.

GEORGE B. POOLE Real Estate 70 Hilby St., Boston

# THE RIGHT NAME

For Your Country Seat List of original names submitted free of charge. Send

description to THE NOMENCLATOR, Plainfield, New Jersey

# IDEAL BUNGALOW SITE

Hill commanding fine lake views and covered with big pines and oaks. Over thousand feet road frontage on a curve. Near a State Road, 1½ miles to station, 33 miles out; plenty of tillable soil. 35 acres for \$5500.

COOLEY & WEST, Inc. Depot Sq. WHITE PLAINS, N. Y.

### A BEAUTIFUL COLONIAL HOME

In Hanover County, 20 miles to Richmond, Va., 250 acres, gopen and cultivated, balance in woodland. Colonial brick welling of 10 large rooms with spacious halls, and porches with ranite columns. 3 miles to a station on two roads. Daily rains to the North and West, 8 hours to New York. Price, 10,000. Terms. Virginia Farms, Colonial Homes, Summer Homes, Stock Farms, and Maryland and Virginia Water Front Properties in the best sections. Write me your wants.

C. H. HARRISON, Fredericksburg, Va.

# ry roperty

estate in all parts of the country. This service is given without charge. Address Real Estate Department, House & Garden, 449 Fourth Avenue, New York City.



unty aths, acres enter e and

ork City

arm of Desir-on very estate. luding waters n. Ex-air, no

tor

sea

TER

ns, 3 coul-ner's only Bos-orth

An

sale

ion

Send

rsey

rE big

N. Y.

ME

### MINGO LODGE, SKANEATELES LAKE

for sale. Connected with Syracuse and Auburn by trolley. House 40 x 60, located on eminence amid beautiful trees, overlooking lake—3 bath rooms, electric lights, city water and sewer. Lot 150 feet on lake running back to highway about 800 feet—adjoins Roosevelt property—worth \$45,000—price \$15,000.

HOWARD P. DENISON

641 Onandaga Bank Bldg., Syracuse, N. Y.

# SPECIALISTS IN NORTH JERSEY and MONTCLAIR BENNET H. FISHLER, Inc.

UPPER MONTCLAIR Opp. Erie Station Opp. Lackawanna Station 35 Nassau St., New York City

A CHOICE PLANTATION of 1142 acres near the State University of North Carolina in high-class neighborhood, with best social and educational advantages. 28 miles of Raleigh and 11 miles of Durham, N. C. Fine Macadam roads, 500 acres cultivated, 500 in fertile low grounds, balance in woodland. The dwelling contains 10 large rooms, 2 baths. Located in a grove of about 8 acres which could be made a beautiful park. The Country Club of Chapel Hill adjoin this property and have golf links and tennis courts. Would make an ideal winter resort, sanitarium or hunting preserve. Full details sent on application. Price, \$40,000. Terms easy.

C. H. HARRISON, FREDERICKSBUEG, VA.

### For Rent on Lake Champlain

Spacious bungalow, beautifully situated on Robinson's Point, Chazy Landing, N. Y., three miles by macadam road to Chazy railroad station; telephone; rural free delivery; good fishing; boating and bathing and automobiling. New; furnished; large veranda; bath room; fireplace. Photos sent. Five Hundred Dollars for season. Address

W. H. ROBINSON, West Chazy, N. Y.

# OLD COLONIAL HOMESTEAD



Only 150 ft.
from Harlior
on Long Island
Sound,
House of 12
large rooms, all
modern improvements.
About 14 acres
of lawn with
shade and fruit
trees, shrubs
and rose bushes, etc.

J. S. PECKHAM, 41 Park Row, N. Y.



This beautiful country home at a bargain. House has 12 large rooms and bath; also open attic convertible into 2 good sized sleeping rooms. Large living and dining room, summer kitchen and laundry. Stable and windmill as shown. Lot about 220 x 420 ft. Fine grove in rear of house. A very desirable property for summer home, convenient to Great South Bay \$\frac{1}{2} \text{ \$\frac{1}{2} Price, \$8000—\$5000 can remain on mortgage. Apply to

E. W. KING, Bay Shore, Long Island, N. Y.

# South Shore of Long Island

Residence Properties, Farms and Acreage for Sale. Choice summer homes near the Bay

to Rent for season Write or call for particular Tel. 22J. JEREMIAH ROBBINS, Babylon, L. I.

# Summer Homes, Cottages and Bungalows

You will find no better medium through which to rent or sell your summer home than the Real Estate Department of

### House & Garden

Our big Summer Home Number in June affords an exceptionally fine opportunity to reach a large number of people who will buy this issue because of its specially featured articles on summer home life. We also place your property before a new and live constituency of nearly 30,000 subscribers.

### Rent or Sell Your Home

through this department before the season opens

### Space \$5.00 per Inch, single column

For examples:
A 2-inch advertisement the size of Scarsdale Co. on opposite page costs
A 3-inch advertisement the size of Louis Starr, Jr., on this page costs
A 4-inch advertisement the size of Island Cities Real Estate Co. on page iii costs
\$20.00

We make half-tone engravings to accompany advertisements in this department without additional charge.

### June forms close May 12th June published May 25th

Full information given to those desiring to buy or rent a summer home cottage or bungalow. Address

Real Estate Department

# **HOUSE & GARDEN**

449 Fourth Avenue

New York City



For sale at Tenafly, N. J., within commuting distance of New York, near station. Property of \( \frac{3}{2} \) of an acre, garage, house. First floor: living room, dlning room, den, pantry and kitchen, ice chest and store closet, two open freplaces. Second floor: four master's bed rooms, two baths, two open freplaces. Third floor: two servant's rooms, bath, toilet, store closet; cellar, R. & B. best furnace, servant's toilet and store closet; shades, copper screens and lighting fixtures for entire house. House new; completed September 1st, 1999; not built for speculation. Apply owner

L. STARR Tenaily or 345 Broadway

New York City

# Have you AIKEN?

Have you a WINTER HOME?

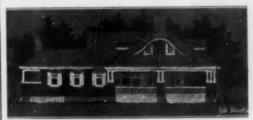
IF NOT-I can sell you Deodora Cottage, and some others renting for \$2000. I can suit you—let me

TRY JOHN LAIRD, AIKEN, S. C.

# Mt. Kisco-Chappaqua

A woodland site on the main road-9 acres, easy of access yet secluded. Good view, best neighborhood, I mile from station.

Alfred Busselle, Architect, 1133 Broadway



Do you want our Book of

# BUNGALOWS AND

LOW-COST HOUSES?

Send 25 cents to

Suburban Architectural Association

Equitable Building, Wilmington, Del.



Caring for Motherless Chicks FOR the first twelve hours after hatching the chicks should remain in the nursery of the incubator. As they are yet subsisting upon the recently absorbed yolk of the egg, they do not immediately require food or water.

In the meanwhile the brooder should be ready, its tank filled and the lamp

of felt or cotton flannel, slashed at inter-

vals to give the young chicks ready access

to the warm chamber. (When soiled

these curtains must be changed.) Over

lighted that the hover may be warm. The essentials of a good brooder are even warmth beneath a hover separated from an outer compartment by a curtain





# For Laying Qualities

igh all changes of winter weather great intrinsic value of the

Buff Orpingtons the best utility bird and nothing fancier

ey are beautiful beyond descrip-with their pure red ears, pinkish-fesh and legs, and color of s merging into golden red; a are to consider in the landscape

As a table fowl there are none better

owth means tender juicy broils ature from 9 to 10 pounds.



South Norwalk, Connecticut R. F. D. 37 116 East 28th St.

New York Catalog with actual photos on requi

SPRINGER'S JERSEY STRAIN

WHITE PLYMOUTH ROCKS

PEKIN DUCKS SQUABBING PIGEONS

PAUL O. SPRINGER,

R. D. 4 H. Bridgeton, N. J.

# "World's Best White Wyandottes"



We ship stock and eggs all over the world.

SEND 10c. for our new catalog. 50 pages of poul-try lore, beautifully illustrated, that will appeal to every lover of poultry.

Has been our motto for

We have bred fancy poultry all our lifetime, but years ago the superi-ority of the White Wyan-dotte caused us to devote ourselves exclusively to this magnificent breed.

J. C. FISHEL & SON, Box G, Hope, Ind.

"Count and pay for your chickens after they are hatched"

SIGN OF TRED FEATHER

ROSE COMB RHODE ISLAND RELS.

A practical fowl for practical people. "No Chicks, No Pay" my original way of selling eggs for hatching explained in free booklet. "Red Feather Reasons".

THE RED FEATHER, Box 2794, Bridgeville, Pa.

# White Wyandottes Columbian Wyandottes

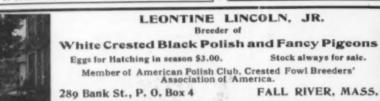
Winners at our largest Shows

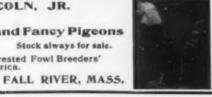
Excellent layers, splendid table fowls and most beautiful. Eggs from prize Matings \$3.00 per 15, \$5.00 per 30, \$7.00 per 45. Send for Mating List.

Stock always for sale.

A. G. WARNER,

New York Mills, N. Y.









# Smith's Light Brahmas

Won First Cockerel at 1909
First Hen at St. Louis. They are
the cream of utility and show
quality, and raised on the blue
grass. Stock and eggs for sale.
Catalogue Free.

Frank L. Smith

the water is usually at one side. If the hover is so wide that the chicks pack themselves in beyond the fresh air supply, they will smother, hence a long narrow hover with an outer compartment on either side will induce the chicks to dis-

Keep the hover separated from an outer com-partment by a slashed curtain of felt

this chamber the tank of warm water should be located. The lamp which heats

tribute themselves.

The floor of the brooder must be cleaned daily and sprinkled with clean coarse sand. It is unwise to allow young chicks upon the ground the first week after hatching. The indoor brooders do not give much room for exercise and the chicks should be allowed to run upon the clean, dry, sun-warmed floor of the poultry house. An inclined run should connect this floor with the brooder and to facilitate their climbing, small strips should be tacked at intervals upon its inclined surface. Clean litter such as cut straw should be scattered upon the floor that the chicks may indulge their scratching propensity. Coarse sand supplies the necessary grit for young chicks.

Mashes or sloppy foods are unfit for poultry under five weeks. They will thrive upon oatmeal, millet seed and wheat. An excellent diet for the first week consists of oat-meal and millet seed in the morning, chopped cooked egg and cracked corn at noon, and equal parts of wheat and chopped green clover at night. Young clover is available in May and is prepared by passing it through a vegetable chopper. The quantity of food given at one time should be about one

pint to one hundred chicks.

# DON'T BUILD

DON'T KILL

T. F. POTTER & CO., Box 77. Downers Grove, Illinois



In writing to advertisers please mention House and Garden.

During the second week beef scrap may be substituted for the cooked egg but should be fed in smaller proportion. About one-fifth of beef scrap to fourfifths of grain once a day is right.

At the end of the second week of growth the coarse wing feathers begin to appear-a tax upon the vitality of the chicks if conditions are not right. Bran and linseed meal are aids to feather production and should be given in the night rations in the proportion of two-thirds bran or linseed meal to one-third of wheat.

Fresh drinking water must be always accessible. A convenient fountain which at a glance indicates the supply may be improvised by inverting a thick glass tumbler of water over a saucer letting the water rise to the saucer's edge. Small chicks will not break the glass and there are no poisonous metallic properties to injure the birds.

Feeding troughs should be of smooth, hard, non-absorbent material and cleansed frequently.

The heat in the brooder must be reduced as the weather grows warmer and the chicks increase in size.

Incubator chickens should not have lice, but if your brooder house has been previously inhabited by poultry and has not been disinfected the young chicks may become infested. Drooping wings, peevishness and a general air of misery are indications of lice. If examination proves them present, a good insect powder non-poisonous to chicks should be puffed through the feathers with small

To fumigate an infested house, close the ventilator and all other openings and banish every living thing of value. Set an iron pot or pan half full of stones in the middle of the room and upon this lay a generous piece of paper. Pour thereon one pound of flour of sulphur, touch a lighted match to the edges of the paper and as the thin blue vapor arises from the paper, withdraw, closing the door tightly. The building should be left to the effects of the fumes for twenty-four hours. After airing, the inner walls of the building should be coated with whitewash.

When the chicks are five weeks old, they may be given other quarters. Small coops with low perches are suitable shelter and these should open into grassgrown runs. When worms and grubs are to be had it is unnecessary to provide meat scrap.

After the chicks are six weeks of age, bran moistened with skimmed milk may be fed once a day with excellent results.

Provision should be made for a change of pens when the chicks have devoured all the green food in sight. A pen sown with clover will grow a second crop when vacated, if the birds are removed when they have merely eaten the foliage.

Disease should not occur where chicks are housed and quartered under sanitary conditions, and little can be done for ailing birds besides isolating them.

M. ROBERTS CONOVER

# WHAT ARE YOUR TREES WORTH?

What is that big one worth to you in dollars and cents? In pleasure? In comfort? Or those trees along the street or drive-way?
You cannot replace them in your life-time,—can you afford to neglect them?
Have you an Orchard that does not bear as it should? This can be remedied
We can give you honest, intelligent and scientific work without over-charging you.
Write for particulars and references.

C. E. PERSONS & COMPANY Architects & Engineers,

2029 E. 40th Street, Cleveland, Ohio

LANDSCAPE GARDENERS TREE SURGEONS ORCHARD EXPERTS

1012 State Street, Erie, Penna.

# Gentleman's Country Estate

on the South Shore of Martha's Vineyard, Mass. Over forty acres fine land with half mile frontage on shore of Great Tisbury Pond—a magnificent lagoon opening into the ocean, affording safe sailing, splendid surf and still-water bathing. Good fishing and shooting.

Large modern house recently built. Twelve rooms including bath. Open plumbing, hot water heating system, hardwood floors, excellent water. Large stable and boat house.

### Bargain at \$20,000

For terms, photographs, plans and any additional formation address

F. B. STOKES,

515 West End Ave., New York City

# A Building Manual

If homebuilding has any appeal to you—if you have in prospect building operations of any description—you simply must not be without the

Great January 1910 Building Number of House & Garden.

50 Pages of Distinctive Homes—Colonial—Half Timber—Cement—Remodeled Farmhouses—Bun-galows—Summer Camps. A limited number of this superb issue are on hand. Write for a copy and see if it doesn't crystal-ize your ideas. Sent by return mail on receipt of 25 cents.

McBride, Winston & Co., 449 Fourth Ave., New York

WHITE LEGHORNS
AND
PEKIN DUCKS

Island Reds and the genuine Bronze turkeys and Japanese breed of Pekin ducks and their eggs for sale at all times. Correspondence solicited. Satisfaction guaranteed. Largest plant in vicinity of New Insulators 10,000 eggs capacity. Cypher's authorized solicited. Satisfaction guaranteed. Largest plant in vicinity 'York City. Incubators 10,000 eggs capacity. Cypher's authagents. The only large successful plant near New York City

BONNIE BRAE POULTRY FARM Box 52 New Rochelle, N. Y.



SINGLE COMB Rhode Island Reds White Leghorns

150 acres devoted to the betterment of this strain

Hatching Eggs-\$2.00 per 15 \$8.00 per 100 \$70.00 per 1000

Wilson Farm Morristown, N.J.

# EGGS FOR HATCHING

Rhode Island Reds

WHITE CRESTED BLACK POLISH

"From the kinds that win Prices \$2 for fifteen Satisfaction guaranteed

117 DILLAYE BLOG.

J. P. MILLER, JR. Care of Salt Town Farms SYRACUSE, N. Y.



The maximum of Winter Egg production, prime table qualities and beauty of form and feather is found combined to the greatest extent in

# Buff Wyandottes "The Ideal Family Fowl"

A few surplus birds for sale at attractive prices

J. R. CLANCY 249 N. Salina St., Syracuse, N. Y.

### Hill Crest Farms. Oakford, Pa.

Barred, Partridge, Silver Penciled and

Columbian Plymouth Rocks

Winners at Madison Square Garden

Free Catalogue 300 Prizes

Eggs \$3.00 and \$5.00 per Setting

Can Furnish Utility Stock for Country Homes

### MT. PLEASANT LEGHORNS

are of exceptional vigor and quality, and are intelligently bred for high egg production.

We make a specialty of supplying the best and strongest Day Old Chicks possible to ship.

Hatching Eggs from free-range stock. Guaranteed 90% fertile.

250 acres devoted to breeding the best in Leghorns. Circular on request.

# MT. PLEASANT FARM

Box H.

Havre de Grace, Md.

# QUALITY FEEDS PRODUCE RESULTS

EATON'S Life Saver Little Chick Food. Climax Grain Mixture. Perfection Mash Mixture. High Grade Pigeon Food.

Your dealer can furnish our products.

R. D. EATON GRAIN & FEED CO.

NORWICH NEW YORK

PRIZE POULTRY, PIGEONS, HARES

20 eggs \$1.00. Leading varieties. Booklet Free. Send 10 ets. for my large illustrated and descriptive catalogue. Address PROGRESSIVE POULTRY YARDS WILE, Prop. TELFORD, PA. F. G. WILE, Prop.



# "Faultless" Houdans

the great winter layers of turkey sized snow-white eggs. These birds have won every first prize at New York, Boston and Chicago shows for years. Stock and eggs for sale. Send 10 cents for the largest illustrated Houdan book ever is Houdan book ever is-sued. They are the most beautiful fowl bred and average 250 eggs a year.

K. F. McAVOY, Secy. Houdan Club

In writing to advertisers please mention House and Garden.

hot

old

ceo rice

> litt DIC

wil

hat

str

du

co

do

pe

es

P





# KENNEL DEPARTMENT

purpose of this department is to give advice to those interested dogs. All inquiries will receive careful attention. Address unel Department" and enclose a self-stamped envelope.





# Walescott Kennels

### **Scottish Terriers**

Have at present the best collection to be found in any kennel in the world.

Pupples from \$35 for females to \$250 for Males

Airedale in color, Fox Terrier in size. Large enough for watch dog, small enough for the house. Game little companions. Pupples from \$25 for females to \$75 for Males BERNARDSVILLE, N. J.



# Ruddington Kennels

**CHOW CHOWS** 

For Sale and at Stud

Address JOHN A. McVICKAR Mamaroneck, New York



# CHANG FONG

# Brindle and White Boston Terriers

from the best stock obtainable. Prices \$25 and \$75. Two Pure White Bull Terrier bitches from Championship stock, \$50. All dogs registered with the American Kennel Club. Satisfaction guaranteed. Address J. P. Miller, Jr., care of Salt Town Kennels, 117 Dillaye Bldg., Syracuse, N. Y.

# Airedale Farm Kennels

SPRING VALLEY, NEW YORK
30 miles from New York City, Eine R. R.
MR. HOWARD KEELER, Owner
Mr. HOWARD KEELER, Owner
Mr. Howard Keeler, Owner is probably the largest and finest farm home for edsic Terriers in America. THE BEST CHUM FOR CHILDREN most intelligent, affectionate and useful dog

ONLY THE BEST REGISTERED STOCK FOR SALE.
The man who owns an Airedale has at least one loyal friend



### FOR COCKER SPANIELS

Write to the "Old Reliable" HANDSOME BROOK KENNEL Franklin, Del. Co., N. Y.

Franklin, Bel. Ce., N. I.
Nearly 30 years' experience handling and breeding Cockers for every class of buyers for house or field. I ship at my risk. State wants clearly. Satisfaction guaranteed.

### POMERANIANS

Pets for Ladies.—As a pet for wife or daughter there is no dog the equal of the sprightly little "Pom." We have males and female six months to two years, \$45.00 up. "THE SHADOW POMS" 1421 Elk St., Franklin, Pa.

### ENGLISH BLOODHOUNDS



# Chinese Chows

Puppies and grown stock for sale. By Celebrated Champion Chinese Chum, and other well-known sires. Blue Dragon Kennels, - Great Neck, Long Island

14 miles from New York City

Address JOHN DOBSON, Manager

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

Mrs. G. C. Rohds,

Ann Arbor, Mich.

Welsh Terriers



# GREAT DANES

When you buy a dog, buy a good one.

FOR SALE, the fine, golden brindle to months old puppy, IDLEY ROLAND II. Awarded first prize and medal for bout reat Dane Puppy at last New York Show.

New litter of finest champion stock of the country expected May. Orders booked now.

V. ANGERER.

Ridley Park, Penna.



# THE COCKROFT KENNELS

Bayside, L. I., New York

Write us before buying

# "Cheltenham" Collie Kennels

"Cheltenham" Collie Kennels
Have For Sale
Scotch Collie Puppies bred from prize-winning, registered pedigree stock, possessing
that rare beauty, intelligence and loyalty
not equaled by any other breed. A staunch
friend and delightful companion. Excellent guard and playmate for children.
Their capacity for almost human intelligence has made them universal favorities.
Surely a beautiful addition.



If You Have a Dog

### You Should Read FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Specia Trial Subscription Offer on application FIELD AND FANCY, 14 Church St., New York City

Send your name and address to-day, for a FREE SAMPLE COPY OF DOGDOM

### the oldest, largest and only high-class **EXCLUSIVE DOG MAGAZINE**

published. Fully illustrated. Printed on enamel paper. Beautiful original cover designs. Over fifty pages of dog advertisements each issue.

Price \$1.00 a year which includes three premium pictures 12 x 16 inches, nice enough to frame and suitable for den or study —Address

DOGDOM PUBLISHING CO.

Battle Creek

Michigan

# The Rearing of Puppies

BY FRANK T. CARLTON

Mr. Carlton will gladly answer queries pertaining to individual problems connected with the care and training of dogs. Address "Kennel Department," and when an immediate reply is desired, please enclose a self-addressed stamped envelope.

IT would be impossible in the course of an article of this length to include more than a collection of practical hints suitable for the general guidance of the average man that owns the average dog.

In the first place, if you have a puppy which you know to be well bred it is advisable that you buy a book treating specially of that breed, so that from the first your care and treatment shall be along the right lines. Even in puppy-hood all breeds cannot be prescribed for on one line. The smaller breeds pass out of the puppy stage much earlier than the larger; for instance, a Terrier, or a Toy Dog is often a parent while a Great Dane or St. Bernard is still in the nursery and only half developed. The larger breeds are not fully matured under eighteen months or two years; while the smaller dogs complete the process in half the time.

For the amateur the wisest policy perhaps is to buy his dog at about the age of nine months, when he will have passed (as a general rule) through his infantile troubles of teething, and even distemper. It must not be thought, however, that a puppy, or yet a grown dog, must necessarily have distemper. As a matter of fact, if you house or kennel your pet snugly, without coddling, and keep him from all contagion (for distemper is not spontaneous) there is no reason in the world why he should ever have it. Add to this that you keep his general health and condition well keyed up; otherwise he would be a likely prey for the distemper germ.

About six weeks from birth the mother of a litter of puppies, unless you have previously anticipated her in some measure, will take steps to make her offspring forage for themselves, and then theirand your-troubles begin. It will be so much time gained if, before the mother starts in to wean in her own drastic way, you have (say at three weeks old) accustomed the puppies to lick milk from your fingers, and lap from a saucer. The break in their young lives will not then be so hard for them to bear, and their condition will deteriorate but little. The milk must be boiled, sweetened and lukewarm.

Puppies under six months should be fed at least three times daily-indeed every few hours when very young. You must be guided by the breed of your pet in the matter of quantity. Little harm will follow if you let a puppy eat to satiety to that stage when he looks fat and comfortable. After a good meal he is usually ready for a "nap," being awfully human in some of his weaknesses.

Watch the puppy while he eats, and remove the dish the moment he begins to nose aimlessly about the vessel. If there be any "leavings" do not let them remain for him to return to. Do not give him of

le

ts

e

3.

is

g

e

e

ıt

e

e

d

n

e

n

hot food at any time. Up to six months old let his diet be almost solely farinaceous. He likes milk puddings, boiled rice, puppy biscuits, etc.; and they are good for him. Up to that age he needs little or no flesh meat, yet as he approaches it a few dainty table scraps will give zest to his appetite and do no

As the weeks go by, keep varying and strengthening the diet judiciously, introducing, for instance, a few vegetables and a little meat broth into the boiled rice or cornmeal. Usually, however, the average dog thrives on just such things as come his way from the family table.

After six months, or in the adolescent period, don't hesitate to give your dog, especially if anything larger than a "Toy" (such as Toy Spaniels, Poms, Pugs, Poodles, etc.), a bit of raw meat occasionally. Meat gives strength and makes bone. The only danger of the meat diet is its tendency to encourage worms; still that must be risked. Clean, lean meat plays a conspicuous part in the canine menu, especially in the case of the big fellows. It would be fatal to keep a young St. Bernard, for instance, on "short common." short commons" or non-nourishing diet.

Kennel owners usually give their adult dogs a light morning meal and a good substantial repast towards evening. But the ordinary house pet needs no such military regimen.

Let the puppy exercise to his full bent in the open air. Accustom him from about the fourth month to go on the lead, and never fail to give him a walk or romp before retiring—this will encourage cleanliness of habits. Be on the watch for worm trouble. Balking at food, listlessness, or any unusual distress in the puppy, are all suspicious indications. It is safe, on general principles, to give one or other of the advertised vermifuges or worm expellers every six or eight weeks during your pet's infancy, beginning with the weaning process itself. Any obstinate or sustained sickness is best referred to a veterinarian.

Here are a few "don'ts:"

Don't give chicken bones to your puppy-nor to your dog at any time. They are dangerous.

Don't neglect to give him a large bone to gnaw at. It helps the teething pro-

Don't forget salt in his food. Worms dislike it.

Don't let him sleep in a draught. Don't confuse him with too many orders, or let him do to-day what you

forbade him yesterday. Don't coddle him unless he is a "Toy." Then Don't.

Don't restrain him from eating all the grass he wants. It is his medicine.

Don't forget that the first three months of his growth are vital, hence feed frequently.

Don't forget that, in everything, the puppy is father to the dog.

MAY 18TH TO MAY 25TH, 1910

# REAL ESTATE AND **IDEAL HOMES SHOW**

Madison Square Garden

New York

THE "Real Estate" of the various investment and development companies will be displayed by means of photographs, diagrams and models in sand and clay together with reproductions of their respective properties by means of artificial groves, lakes, lawns, etc., affording an opportunity for a demonstration of the topographical conditions, the transit facilities and the extent of the improvement of the respective properties and affording patrons of the Show an opportunity to secure an intelligent and comprehensive knowledge of the exact condition and environment of the various properties with a minimum expenditure of time for the owner and proposed purchaser.

THE "Ideal Homes" part of the exposition will be strongly featured, including a display of bungalows, portable houses and the representation of interiors of Ideal Homes, together with all of the latest and best devices for the comfort and convenience of the home; providing an opportunity for a very unique and attractive display. It will include not only all of the latest and best ideas for the construction of the home, but the arts and crafts will be represented, including all of the latest and best in decorations, floor and wall covering, tapestries, hangings, cabinet trim, bath room and kitchen fixtures, heating devices, etc., etc.

Our Beautiful Booklet is Yours for the Asking.

Reservations of space now being made

President: A. MIDDLETON SLAUGHTER

Real Estate Editor N. Y. Commercial

Vice-President: TIMOTHY C. HURST
Industrial and Amusement Promoter

Real Estate Editor N. Y. Commercial Industria
Secretary: EDWARD E. HASKELL

Formerly with Lawyers' Title Insurance & Trust Co.

"REAL ESTATE HOME AND EXPOSITION COMPANY" Metropolitan Building 1 Madison Ave., New York



# Low Cost Suburban Homes

Plans, illustrations and descriptions of nearly 100 houses which have been built at costs ranging from \$1000 to \$10,000. In most cases the cost is given.

Many of the houses have been built as suburban residences—others as

many of the houses have been built as suburban residences—others as small country homes or as bungalows or mountain camps. Houses of brick, stone, frame, shingle, cement and stucco are included.

All are distinctive and full of suggestion for anyone interested in building beautiful but low cost homes anywhere.

62 pages, beautifully illustrated and printed on coated paper with art paper cover. Price 25 cents, postpaid.

McBride, Winston & Co.,449 Fourth Ave., New York

ENGLISH SETTER PUPPIES, \$25. Beautiful Setter Puppies containing the blood of the world's greatest champions. We have a beautiful litter of bright, healthy youngsters, containing the blood, close up, of such famous dogs as Champion Mallwyd Sirdar, Champion Deodora Prince, Champion Cincinnatus Pride, Lanark Lad, Oakley Hill, Tony Boy, etc. These are beautifully marked and now ready to ship. Price \$25 each. Older puppies by such sires as Count Whitestone and Champion Jessie Rodfield's Count Gladstone at \$35 to \$75 each.

ELMHURST FARM KENNELS, KANSAS CITY, Mo, Fifty-ninth and Jackson Avenue.

"DOGS IN AMERICA"
(Illustrated)

This bi-monthly caters to Fancier and Novice alike. Special articles and typical dogs exemplified. Full reviews of shows. The one dog man a particularly welcome subscriber.

ANNUAL SUBSCRIPTION \$2.00

Address "DOGS IN AMERICA"

406 World Building

SHETLAND PONIES



BELLE MEADE FARM

red Dogs, Singing Canaries, Talking Parrots, Angora Kittens, Gold Fish, Aquariums and Pigs and Rabbits. Send for catalogue. 35 N. Ninth St.,

RABBITS AND PET STOCK
Unrvalled Clemish Giant, Angora, Tan and Polish
Rabbits—Peruvian and Smooth Cavies for fancy or
Pour Story For Sale \$1.00 up.
ELM COVE RABBITRY. Great Neck, L. I.



# Distinctive Homes of Moderate Cost

EDITED BY HENRY H. SAYLOR

# A Book for House-Builders and Home-Makers

We publish this book in response to an ever-increasing demand for a volume of pictures, plans and descriptions of the most charming homes in this country-not the great estates and show places, but the sort of places that most of us can look forward to building, ranging in cost from \$3,000 to \$20,000.

The illustrations, of which there are more than three hundred, both of the exteriors of houses and their garden settings, and of the principal rooms inside, are all from photographs of houses already built, reproduced in superb half-tone engravings, with line drawings of the floor plans.

The carefully selected contents includes country homes, seashore cottages, alluring bungalows, inexpensively remodeled farmhouses, etc. All the desirable architectural styles are represented: Colonial, English Half-timber, Stucco, Cement, Dutch Colonial (the gambrel roof type), Swiss Chalet, etc. Chapters written by authorities cover all sides of the fascinating problem of house-building, interior decoration and furnishing. The relations between the home-builder and his architect, the matter of plans, specifications, contracts, the puzzling problem of extras and how to avoid them—all these subjects are clarified in a most comprehensive and interesting way. Throughout the text are many pages of pictures illustrating constructive, decorative and furnishing details—entrance doorways, bay windows, outside shutters, chimneys, stairways, dormer windows, built-in china-cupboards, consistently furnished interiors, porches—all grouped so that the reader may, at a glance, compare all the best types.

# Important Subjects Covered

The chapter headings indicate the general scope of the text matter in Part I of the book, which is followed in the same volume by the finest collection of moderate-sized homes in good taste that has ever been brought together.

I. The Home-builder and the Architect
II. Building Materials: Their Respective Merits,
Defects and Costs
III. Constructive Details: the Roof, the Cellar, Windows
IV. The Porch, the Terrace, Enclosed Porches and Sleeping Porches
V. The Fireplace
V. The Fireplace
VI. Heating Systems and Water Supply

Chapter VII. Lighting Systems and Lighting Fixtures
VIII. Built-in Conveniences, Wainscoting and Book-cases
IX. Floors and Floor Coverings
X. Wall Coverings, Portieres and Window Draperies
XII. Furnishing and Decorating the Bedroom
XII. Furniture
XIII. Picture Hanging and Ornaments
XIV. The Garage

"Distinctive Homes of Moderate Cost" is the most complete and authoritative volume on the subject yet published. It is a sumptuous book, size 10 x 12\frac{3}{4} inches, superbly printed on plate paper, tastefully bound. Price \$2.00 net. By mail, postage 25c.

McBRIDE, WINSTON & CO., Publishers, 449 Fourth Avenue, New York

Please send me DISTINCTIVE HOMES OF MODERATE Cost, postpaid, for which I enclose \$2.25

Name.....

McBride, Winston & Co.

Publishers

149 Fourth Avenue, New York





The Garden Primer will tell you the whole art of starting flowers and vegetables in the hotbed and coldframe



Have you any desire to go out into the garden before break-fast and gather dew-wet vege-tables such as money cannot



With the aid of the Garden Primer you simply cannot fail to have a garden like

Now Ready

# The Garden Primer

By Grace Tabor and Gardner Teall

# An Indispensable Book for every Garden-Maker

The Garden Primer, as its title indicates, is a hand-book of practical gardening information for the beginner, covering every branch of the subject from preparing the soil to the gathering of the fruit and flowers. In it is set forth, without any confusing technicalities, just the information that will enable the amateur to grasp quickly the essentials of garden-making. The authors, in preparing this book, have drawn from their long experience, and in writing it assume on the part of the reader no knowledge of the subject, in order that it may be of the greatest value to the beginner. There has been great need of a book of this kind, yet, so far as we know, no volume has ever been published that treats the subject in this charmingly simple way. While dealing with first principles this volume has an equal interest for the advanced gardener, who will find much of value in the experiences of the authors, and in a fresh presentation of a subject which always abounds in new methods and discoveries.

Every branch of gardening is treated in a delightfully practical way—the growing of vegetables and flowers the use of fertilizers, pruning, cultivating, spraying and the thousand-and-one things that every successful garden-maker needs to know. A profusion of illustrations, many of them of the most practical sort in explaining the various garden operations, make the text especially clear.

The matter is supplemented by carefully prepared planting tables, an invaluable guide to the beginner in gardening. The whole contents is carefully indexed, greatly simplifying it for reference; thus information on any subject contained in the book is instantly accessible.

# The Whole Subject of Gardening Covered

A glance at the seventeen chapter headings will indicate the field covered.

- I. Introductory
- Sorts of Plants
- III. The Soil



IV. Nomenclature

V. Seeds and Sowing

VI. Seedlings and Transplanting

VII. Plants and Cultivation

VIII. Fertilizers

IX. Hotbeds and Coldframes

X. Pruning

XI. Garden Pests and Spraying

XII. Garden Tools

XIII. The Flower Garden

XIV. Flower Planting Tables XV. The Vegetable Garden

XVI. Vegetable Planting Tables XVII. Calendar of Garden Operations

The Garden Primer is a beautiful 16mo volume with many half-tone illustrations. Bound in dark green cloth, tastefully decorated, with an inlaid illustration of an exquisite garden scene done in full color. I

### McBRIDE, WINSTON & CO., Publishers 449 Fourth Ave., New York

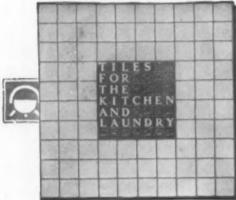
Please send me postpaid THE GARDEN PRIMER, for which I enclose \$1.06.

Name.....

Address,....

..........

H. & G.-May.



# The Kitchen and the Laundry

are the important workrooms of the house. They get the greatest amount of wear, the greatest amount of exposure to dampness, grease and other things that destroy all ordinary kinds of wall and floor treatments, so that the use of tile is necessary. Just how necessary and how comparatively inexpensive tile is, you can learn by reading the book, "Tiles for the Kitchen and Laundry," which is sent free to all who are interested.

Also three other books: "Tiles on the Porch Floor, "Tiles for Fireplaces," "Tile for the Bathroom."

THE ASSOCIATED TILE MANUFACTURERS, Room 2-Reeves Bldg., BEAVER FALLS, PA.



# Country House Heating



ce Mt. Kisco, N. Y Charles A. Platt, Architect-New York

KELSEY EFFICIENCY, ECONOMY AND HEALTHFULNESS HAVE BEEN DEMON-STRATED IN OVER 36,000 HOMES.

Send for "Reason Why" booklet and book "OPINIONS"—Free

Here is one of the thousands of large, fine country homes with from twenty to fifty rooms, in high altitudes and exposed to high winds, satisfactorily and healthfully heated by the

# Kelsey Warm Air Generator System

Fresh air and an abundance of it properly warmed and evenly distributed to every room, with a com-plete change of air all through the house every ten minutes, if so desired, is what Kelsey Heating accomplishes.

Country house owners like Kelsey Heating because there are no pipes and radiators to freeze up, and burst or leak and cause damage and vexatious delay to repair; and because the whole house can be warmed quickly at any time, and the Kelsey is always ready for business.

### KELSEY HEATING CO.

New York Office: 66 E. Fayette, Syracuse, N.Y. 154 C Fifth Ave.



Much of the charm of the old Colonial room was due to the prismatic rays of the cut crystals together with the soft rays of the candle or lamp. This same quality, in a lamp of this kind, is just as valuable to-day when lighted with the more

## THE ENOS COMPANY

Makers of Lighting Fixtures

ice and Factory: Salesrooms:
7th Ave. and 16th St. 38 Wes Office and Factory: 36 West 37th St. NEW YORK

NEW YORK

Baltimore: 519 North Charles St. San Francisco: 334 Sutter
St. Toronto: 94 King St., West. Pittsburgh: The Norton
Company, Century Building. Chicago: The A. Neilson Company, 139 Michigan Avenue. Spokane: Cutter & Plummer,
Inc. St. Louis: N. O. Nelson Mfg. Co. Boston: H. F. Esterbrook, Inc., 9 Park St. Fortland: J. C. English Company, 128
Park St. Birmingham: R. W. Knight & Company. Los
Angeles: Brooks Decorating Company, 696 South Alvarado St.

# VENETIAN BLINDS

Imported from Sweden **ERICSSON** 



lilustrating Automatic Arrangement of Regulating Devices

### Note These Ten Reasons Why They Are Being Universally Installed

1-It has stood its test all over Europe for over 60

1—It has stood its test all over Europe for over 60 years

2—Nothing but the highest grade of material and workmanship used throughout its construction.

3—It does away with all the bad features of the common blind, lasting several times as long, can be held in a rigid position by our patent fasteners on the bottom lath.

4—It obviates the unsightly outside and expensive inside shutters, replaces the shade and awning. Absolute control of light by our simple and new device.

5—Overcomes the clumsiness of the common Venetian Blind by making the laths thin and of light material but still retaining the strength accomplished by secret process known only to us.

6—Occupies about one-half the space and weighs one-third less than the domestic blind, consequently reduces wear on material.

7—Only one combined pulley-head and turning lath resting in iron hooks not exposed to the slightest wear.

8—Cords run in glass hoops which prevent them from wearing out. Pulling up and regulating the blinds are conveniently conducted, as the pulling cords can be drawn in any direction.

9—Can be taken down as easily as a shade roller, without aid of any tools, which is of great advantage when cleaning the blind and windows.

10—Practically indestructible, simplest, and nothing like it on the American market.

Send tor More Information

Swedish Venetian Blind Co. 1123 Broadway, New York, N. Y.



Style W. Quarter Grand In Figured Mahogany Length, 5 ft. 5 in. \$700

These illustrations of Messrs.

Chickering & Sons' most recent triumphs offer new evidence of the fact that

# -OChickering)

ably represent the latest developments in the art of modern pianoforte construction, without sacrificing in the least their rare tonal power.

Style H. Upright, In Figured Mahogany, \$550



Chickering Pianos may be bought of any Chickering representative at Boston prices with added cost of freight and delivery. Our literature will be sent free upon request.

Made Solely by CHICKERING & SONS

(Etablished 1823)

Boston, Mass.

HOLLEY

M

ieris Woo

row-

tifol are'

Shie

spin

nale

stici

Bra

\*Et

ron

Fra Clif Bee

Rec

(Pe

obti vul

> $V^*$ ma

> fer

in

de

# HOCCSON BYILDING METHOD



F YOU contemplate an undertaking which involves building, remodeling, decorating, or furnishing, investigate the Hoggson Building Method.

This single contract method, originated by us, has been thoroughly tested for ten years with unqualified success—a success shared as fully by our clients as by ourselves.

We build anywhere. We are now carrying out contracts in fifteen different states.

THIS method is equally advantageous to the owner who builds a new residence complete and to the owner who remodels. Its logical force is felt as strongly in decoration and furnishing as in planning and construction

By a single contract with us, you place the entire responsibility for your work, both architectural and constructive, upon our

When we name cost figures to you, you know they will not be exceeded. When we specify certain materials and workmanship, you get them. When we promise a date of completion, you may count upon it. Not a step is taken without your approval, but every step is taken in its proper order without lost motion. Other work in

hand never takes us from your work; it is under our daily supervision from beginning to end.

This and much more we guarantee you, will secure that guarantee by a bond. Marked economy is effected by concentra-tion of all duties in one responsible organi-It costs less to build by the Hoggson Building Method than by any other.

A brochure fully illustrating and describing our method will be forwarded on receipt of ten cents.



# HOCCSON SEVEN EAST FORTY-FOURTH STREET NEW YORK CITY



Wm. M. Clark, Archt., Grand Rapids

Twenty-five years of Reputation stands back of

# DEXTER BROTHERS' ENGLISH SHINGLE STAINS

Preserve your shingles. Beautify your house. The cost is 50% less than paint and the result 100%more satisfactory.

Let us send you our catalogue.

DEXTER BROTHERS' COMPANY Branch Office: 542 Fifth Avenue, New York 105 Broad Street, Boston

AGENTS—H. M. Hooker Co., Chicago; J. D. S. Potts, 218 Race Philadelphia; F. H. McDonald, Grand Rapids; F. T. Crowe & Seattle, Spokane, Tacoma, Wash., and Portland, Ore; F. S. Cool Halifax, N. S.; M. D. Francis, Atlanta, Ga., Carolins Portland Cer Co., New Orleans, La., Jacksonville, Fia., Charleston, S. C., Birm ham and Montgomery, Ala.

# The Part Flowers Play in Garden and Landscape

(Continued from page 187)

one of a garden's chiefest-that exquisite mellowing, like fine wine, under the lapse of time.

And certainly the mixing of hardy perennials and annuals is not advisable, though there is no objection to a few seeds of some favorite among the latter being scattered in a vacancy or sparsely filled spot in a hardy border. There is always room for a little more, even in a well filled planting, and that is the chance which the quick-growing annual may take advantage of; but as a class, annuals should be kept by themselves.

Certain borders can be given up to them, such as the space above the early, spring-flowering bulbs. After these have bloomed is plenty of time to sow the seed, and neither kind of plant suffers by reason of the other's presence.

A turf margin should always divide borders from a walk, drive or path, while an edging of some one, low-growing white flower or a dwarf, ornamental grass is an advantage in all other locations except, of course, the absolutely informal and very wild.

# Rock-gardens and How to Make Them

(Continued from page 195)

requires. Ferns growing in shallow pockets in the rocks themselves need frequent watering in hot weather; otherwise a well built rock-garden takes care of itself. Winter protection is effected in the late fall by packing deciduous fronds over their own rootstocks and allowing some of the dead leaves which have been blown in among the ferns to remain. These are held in place by evergreens which afford further protection. Discretion must be used in removing the boughs, for spring winds are disastrous to delicate species in exposed positions; in a sheltered situation there is little danger of being too previous in the spring clean-This is not strictly in accordance with Nature, but an instance of the adaptability of wildings to conventional

Nearly all our wild flowers and wild ferns have come into commerce so that plants and seeds of these may be purchased almost as readily as those of the standard garden annuals and perennials. Indeed there is an almost endless variety to choose from-Spring Adonis, Anemone, Aster (A. Novæ-Angliæ) Bluebell, Bloodroot, Columbine, Cranesbill, Primrose, Rock Cress (Arabis albida), Saxifrage, Trillium, Hepatica, Violet, Jack-in-the-Pulpit, and many others from which one may select to suit his fancy.

Among the ferns the following may be recommended: For tall growth and massing-Ostrich Fern Onoclea Struthiopteris), Royal Fern (Osmunda regalis), Wood Fern (Dryopteris Goldieona), Narrow-leaved Spleenwort (Asplenium augustifolium). Those ferns of medium height are: Maidenhair (Adiatuni pedatum), Shield Fern (Aspidium spinulosum, A. spinulosum var. inter-medium, A. marginale), Christmas Fern (Palystichum acrostichoides and P. acrostichoides var. Braunii); those of still lower growth,—\*Ebony Speenwort (Asplenium platyneuron) Bladder Fern (Cystopteris bulbifera), Fragile Bladder Fern (C. fragilis),\*Purple Cliff Brake (Pellæa atropurpurea), Broad Beech Fern (P. polypodioides), Polypody (Polypodium vulgare), \*Woodsia (Woodsia obtusa), Hart's-tongue (Scolopen Trium vulgare); low growers—\*Maidenhair Spleenwort (Asplenium trichomanes), \*Wall Rue (A. Ruta-muraria) and Rusty \*Woodsia (Woodsia Ilvensis). Those marked with an asterisk are sun-loving ferns.

# Home Forestry in a Woodlot

(Continued from page 198)

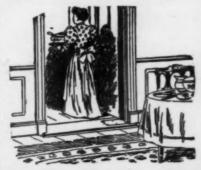
to take the place of the older ones. The open gaps, too, must be covered with trees to prevent the soil from deteriorating

The usual idea that it costs a great deal to plant several thousand young trees is erroneous, and the ordinary woodlot could be stocked with a well selected number of young trees at a cost less than the price generally paid for a dozen good specimen trees on the front lawn. It is not necessary to underplant the woodlot with big trees. The existing big trees are there to give character to the forest and the new planting should be done principally as a future investment and as a means of perpetuating the life of the woodlot.

The young plants should be two to three years old and may be bought from well known reputable dealers who specialize in raising seedlings and selling them at the low cost of three to five dol-lars per thousand. In applying this idea to municipal park management, the writer set out last spring 40,000 seedlings, from two or three years old, at a cost of a little over one cent per tree, including the labor of planting. Young trees are even more desirable for such planting than the older and more expensive ones. The young trees will adapt themselves to the local soil and climatic conditions more easily than the older plants. Their demand for food and moisture is more easily satisfied, and because of their small cost, one can even afford to lose a large percentage of them after planting.

Great care must be taken to select the species most suitable for the particular soil, climatic and light conditions of the woodlot. The species of trees which are native to the locality and are found thriftily growing on the woodlot, are the ones





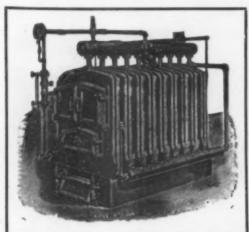
# A Butler's Pantry Door

should swing both ways; should close gently and without noise and stop at once at the centre without vibrating. The only way to accomplish this is to use the "BARDSLEY" CHECKING HINGE. It goes in the floor under the door and there are no ugly projections on the door.

JOSEPH BARDSLEY

147-151 Baxter Street

New York City



Mercer Boiler for Steam and Hot Water Heating

# Our Heating Boilers and Radiators

are made for the home where the Architect and Owner demand uniform heat in all weather.

The efficiency of our apparatus makes this always possible.

MILLS SAFETY BOILERS

# THE H. B. SMITH CO.

Factory, Westfield, Mass.

1225 Arch St., Philadelphia

# Stanley's Ball-Bearing Hinges

Nothing equals them for hanging doors either in

Big Public Buildings or Private Dwellings

Two will frequently take the place of three ordinary hinges, and their action is noiseless and perfect. ¶Made in Wrought Bronze and Steel.

# THE STANLEY WORKS

Myrtle Street, New Britain, Conn. New York Oflice: 79 Chambers Street that have proven their adaptibility to the local conditions and should therefore be the principal ones to be favored for underplanting. A list from which to select the main stock would, therefore, comprise the usual hardy trees like the red, pin and scarlet oaks, the red, sugar and Norway maples, the tulip, sycamore, sweet gum and locust among the deciduous trees and the white, Austrian, red, pitch and Scotch pines among the conifers.

With the main stock well selected one can then add a number of species that will enrich the woodland scene with pleasing colors at all seasons. The brilliant tints of the autumnal leaves of the sassafras, pepperidge, viburnum, juneberry and sumac will produce this effect. The flowering dogwoods along the drives and paths will add a charm in June and an occasional group of white birch will have the same effect among a lot of evergreens.

Two or three years' growth will raise these plants above all grass and low vegetation and then a liberal sprinkling of native wild flowers and ferns as a ground cover will put the finishing touches to the forest scene.

# Grow Your Own Vegetables

(Continued from page 181)

Broccoli, Brussels Sprouts, Cauliflower, Kale and Lettuce will want a thorough working, both between the rows and around the plants, At the second hoeing draw the earth up well around all of these, except the lettuce. As the little heads of Broccoli and Cauliflower begin to form, keep the leaves, or thin paper tied over them, in order that the "heads" may be kept white and tender. Immediately before the second hoeing will be a good time to give them a light dressing of nitrate (see April article).

Celery, Endive, Leek, Parsley and second sowings of Cabbage, Cauliflower, Lettuce and other succession crops (see April article) which have been made in the seed-bed should be kept at all times perfectly clear of weeds, and thinned out as soon as well up, in order to get sturdy, well-developed plants for transplanting as soon as possible.

Cucumber, Muskmelon, Pumpkins and Squashes will require hand weeding in the hills, and should be watched daily for the appearance of striped beetle and squash bug. Cover the hills and plants with land plaster or sifted coal ashes, and pick off the intruders. If you can, have made bottomless boxes two feet square by eight inches deep, covered with cheese cloth or fine mosquito netting, and keep these over the hills. As soon as the third or fourth leaf appears, thin out to three or four plants in each hill. Don't let the weeds between the hills get a start. It is easier to kill them now than later, and besides they will be stealing water and plant food.

In the next article we will take up succession crops and fighting drouth and insect pests.



THE BEST SASH CORD MADE



"SILVER LAKE A"

# SPEAR'S

New Cooking Range New Warm Air Distributors

Open Grates and Stoves for Wood and Coal

Special Stoves for Laundry, Stable, Greenhouse, Etc.

Steam and Hot Water Heating Systems

There are many reasons why you should have only Spear's Heating and Cooking Appliances—the most modern, efficient, and economical

IN YOUR COUNTRY HOME.

Write to-day for further information and estimates.

Hotels and Institutions receive special attention.

James Spear Stove and Heating Co.

1014-16 Market Street - Philadelphia, Pa.

### Write for Our Free Book on Home Refrigeration

This book tells how to select the home Refrigerator, how to know the poor from the good, how to keep down ice bills, how to keep a Refrigerator sanitary and sweet—lots of things you should know before buying ANY Refrigerator. It also tells all about the "Monroe." the Refrigerator with inner walls



instant by sunya, "It's like "washing dishes," for the "Monnoe lain dish inside.

The high death rate among children in the summer months could be greatly reduced if the Monroe Refrigerator was used in every home where there are little folks.

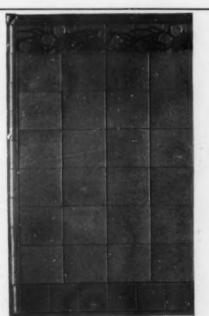
The "Monroe" is installed in the best flats and apartments, occupled by people who CARE—and is found today in a large majority of the VERY BEST homes in the United States. The largest and best hospitals use it exclusively. The health of the whole family is eafeguarded by the use of a Monroe Refrigerator.

When you have carefully read the book and know all about Home Refrigeration, you will know WHY and will realize how important it is to select carefully. Please write for book today.



YOUR own individual rug, different from all other rugs, and in a high class wool fabric adapted to your own decorations. If the rugs in stock colors do not suit your requirements, we will make one that will, either plain, self-tone or contrast. All sizes up to twelve feet wide, any length. Seamless, wool weft, reversible heavy and durable. Sold by best shops, or write for color line and price list to ARNOLD, CONSTABLE & CO., NEW YORE.

THREAD & THRUM WORKSHOP, Auburn, N. Y.



ROOKWOOD FAIENCE WAINSCOT with frieze in two colors, molding and sanitary base, all in the fine Mat Glazes of Rookwood.

ROOKWOOD POTTERY COMPANY
Cincinnati
Eastern Office 1 Madison Avenue, New York

### Fertilizers

(Continued from page 204)

manure. No fertilizer is better than the latter if properly handled and all fertilizers should be supplemented by it for the humus that it carries into the soil.

Potash is furnished by muriate and sulphate of potash-the latter is preferable as it can be used on all plants while the former cannot-by a crude German product called kainite, and by unleached wood ashes. These of course yield it in a much less degree for a given bulk, but they are invaluable as a fertilizer.

Phosphoric acid comes in "floats"that is in South Carolina rock from the phosphatic beds of that state, in what are known as superphosphates, and in the various kinds of plain bone meal and bone ash or ground bone "flours" that are on the market.

The work of these three elements is divided of course, but generally speaking nitrogen promotes luxuriant growth of leaf and branch, hence is the greatest stimulant to vegetables, especially those of which we eat the tops or leafy portions; potash builds up and strengthens wood and fruit; while phosphoric acid seems to be the especial food which flowering plants, whether shrubby or herbaceous, most appreciate.

Learn to watch your garden and find out from the plants and the way they grow just what it is that they need. Do not, for instance, give nitrogen when top growth is rank and luxuriant but fruit of poor quality and not abundant, for such a condition means that trees are starving for potash. Of course all the elements should be present in order to get the best results, but frequently it is necessary to supply only one in order to make the proportions right, as already mentioned. The trick is to find out which

It is largely a matter of common sense, once you know what is what - and without knowing this no amount of directions will be any real help. It is necessary to realize what is going on down in the ground where the roots are doing their work-how they are gathering up one substance and another in the tiniest and most minute particles—in order to realize that a very little too much of one thing or a very little deficiency of the other will actually work ill to a plant.

Finally, there is one other thing about the soil that I should like to mention, partly for the reason that it is so generally overlooked in all that is said or written about soil, good or bad; and partly because it is interesting. It is a phase of soil fertility that does not enter perhaps into the beginner's gardening; but who can tell what moment the beginner, inspired by success and other things, is going to branch out and become a real scientific agriculturist who wants to know everything? And then, besides, who can know too much, even though he is but a beginner?

Paint Plays An Important Part in Decoration





AMILIAR as everyone is with colors, the actual choice of tints for decorating the interior or exterior of the home

often proves a difficult task.

I But with the aid of our "Dutch Boy Paint Adviser No. 91 correct decision becomes merely a matter of selecting the particular arrangement you prefer from a group of color plates showing many different color schemes. It is free. Send for it.

¶ Having chosen the color scheme with care, choose your paint still more carefully; otherwise, the beautiful color-scheme may vanish in a few months. Insist that the paint be mixed for the job, using pure white lead ("Dutch Boy Painter" trade mark) and pure linseed oil. Then, and then only, will the color plan be carried out both durably and economically.

Our Pure White Lead ("Dutch Boy Painter" trade mark) is now packed in steel kegs, dark gun-metal finish, instead of in oak kegs as heretofore. Ask your dealer.

# National Lead Company

An office in each of the following cities:

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





Modern Sleeping Porch fitted with Wilson's Blinds

# WILSON'S VENETIANS

Blind and Awning Combined

for outside and inside of town and country houses; very durable, convenient and artistic



Special Outside Venetians for porches and windows, exclude the sun; admit the breeze. Mention House & Garden for descriptive pamphlet.

Orders should be placed now for early

JAS. G. WILSON MFG. CO. 3 and 5 West 29th St., New York Venetians, Porch V g Partitions, Rolling S urglar and Fireproof Wood Block Floors.

-----Iron Railings, Wire Fences and Entrance Gates of all designs and for all purposes. Correspondence solicited: Catalogs furnished.

# .................

Tennis Court Enclosures, Unclimbable Wire Mesh and Spiral Netting (Chain Link) Fences for Estate Boundaries and Industrial Properties—Lawn Furniture-Stable Fittings.

F. E. CARPENTER CO.,

253 Broady New York City New York City

# No **More Cost**

It costs no more to furnish your home properly with

# Crex Grass Furniture

than it does for other furniture of less style and inferior quality.

There is nothing, however, that furnishes a home more richly and insures more service than CREX—It is decidedly proper and blends beautifully with any other furniture in rooms furnished with odd pieces or, when used alone, makes a particularly attractive CREX ROOM.

# Natural Green and Baronial Brown

Two very popular shades.

Carried by all Best Furniture Shops Get "CREX-EASE" cushions Send for illustrations No. 247

PRAIRIE GRASS FURNITURE CO.

Sole Manufacturers

Glendale, Long Island

New York

It is only recently, comparatively, that investigators have been led to believe that plants give off certain organic substances during the processes of growth which, accumulating in the soil, are harmful to the successive growth of plants of the same kind. This may be the reason, or one of the reasons, why the benefits of crop rotation are so marked; the soil is freed from the toxic matter in the three or four years during which other crops are grown upon it. Sometimes-not often to be sure, but sometimes-poor and sterile soil may be poor and sterile because thus poisoned. But that is a big subject and such a condition will hardly occur even a very advanced beginner's garden.

# To Make Cement Work White and Waterproof

THE cause of the different shades of color in cement blocks, which range from a light to a very dark gray, is that some blocks are more porous than others and take up dampness quicker and retain it longer. The fact that cement blocks collect and retain dampness is one great drawback to their universal use, as it makes cellars and houses damp.

A solution has been discovered that overcomes every disadvantage of cement blocks for building purposes. It is a white fluid, that is applied to the outside of the cement work with a brush, like paint. It dries in a short time and leaves a finish that is snow white, similar to white marble. It unites with the cement, becomes as hard as granite and excludes dampness. The solution is as easily made as whitewash and costs but little more. All the ingredients can be procured in any locality.

To make the cement coating compound, take: Ground silica, 2 parts; hydrated lime, I part; portland cement, 1 part. Mix thoroughly by stirring all together and then sift through a closemesh sieve. Put the mixture into a suitable vessel and stir clear water into it until it has the consistency of thin fresh paint, or so that it will not leave brush marks when applied.

Carefully brush all the cement surface to be coated with a stiff broom or coarse brush and then apply a thin coat of the solution. After this has dried, apply a second coat, which may be slightly Large surfaces may be coated with a whitewash brush and smaller surfaces with a wide paint brush. The solution must be kept thoroughly mixed and stirred up from the bottom, and all brush marks carefully rubbed out when appearing. The ingredients are inclined to settle and thicken after mixing, and water may be added from time to time as becomes necessary. Mix only in quantities that can be used up at once, as it cannot be left standing. Best results are obtained by mixing in an ordinary gal-

# Watch it Course

# KALAKA The Wizard Lawn Producer

Takes the place of Seed and Fertilizer

How much better a green, well-kept lawn looks. You no longer need bother and wait, only to be re-warded by a few feeble, short-lived blades of grass. Sow your ground with

# Kalaka

and have a velvet lawn of permanent green. The most wonderful evolution of modern agricultural methods. Saves time—saves trouble—saves aves expense. All Kalaka needs is water. Choicest seeds obtainable, scientifically blended with just the proportion of rich pulverized dried animal manures required by nature to produce a turl of fine, hardy grass and a lawn of close, firm and lasting green. Lawns with shadyspots—wornspots—sun baked spots—spots of all kinds where the vegetation is scanty, can be immediately put in shape. Kalaka, the Wizard Lawn Producer, for "putting greens" on golf links can't be beat.

If your dealer cannot supply you, send us his name and mail us One Dollar(\$1.00) and we will send you, express prepaid, to any part of the United States a five pound package, enough to sow 1,000 square feet of new lawn or renew 2,000 square feet of new lawn or renew 2,000 square feet of old lawn. Costs less than common seed—goes further—and provides seed and fertilizer with one application. Used by the largest public park systems in the country.

Dormant Sod Company Dept. 7. Union Stock Yards, CHICAGO

# lves Patent Window Stop Adjuster



and cup, turn or bend in tightenis only by The H. B. IVES CO., Ne (Fifty-page Catalogue Mailed Free

# "AMERICAN" SASH PULLEYS



have combination groove for chain or cord. They are made of highgrade pressed steel.

The two sides of the wheel electrically welded together; the face plate and housing are electrically welded together-making a sash pulley that is true, smooth-running and handsome. No rivets, eyelets or other inadequate features.

Send for samples. Get our catalog which tells all about them.

THE AMERICAN PULLEY CO. Mam Office & Works Philadelphia, U.
Chicago Branch, 124 S. Clinton St.

vanized water pail, about one gallon of liquid each time.

A waterproofing solution for cement work is made of: Gasoline, I gallon; Paraffin wax, I pounds. Reduce the paraffin to shavings, then put it into the gasoline; warm to about 88 degrees and the paraffin will slowly dissolve. To warm it you can place the can in hot water, or, in hot weather, set it in the sun. When dissolved, it is ready for use. Apply with a brush. Very dry cement work should first be moistened with water before the waterproofing is put on as it will then take less of the solution and produce better results. It is important that all surfaces be thoroughly covered with waterproofing.

The solution penetrates the tiny pores of the cement, and fills them with paraffin, thus rendering the work permanently waterproof. Being carried into the pores, it does not show on the surface.

The can holding the solution should be kept tightly sealed to prevent evaporation. As gasoline is explosive it should not be used around fire or flame.

For cisterns, water reservoirs, etc., apply two or three coats of waterproofing. The solution should not be used very warm nor should it be applied to very warm work. Instead of gasoline, wood alcohol or denatured alcohol may be used, but gasoline is cheapest.

Louis A. Hemming.

# Southern Garden Operations for May

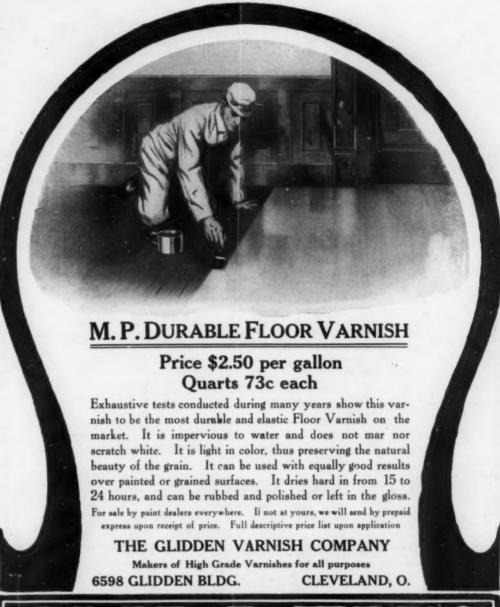
BY A. B. McKAY,

Professor of Horticulture, Agricultural College, Mississippi

IN the Southern garden May is a month of simultaneous sowing and reaping; a time when every fruit and vegetable in the list of garden crops is demanding its allotted area and its share of attention; a season of the year when every foot of ground should be occupied and the entire

garden looking its very best. May 1st finds us in the middle of strawberry harvest. Other small fruits are now ready or nearly ready for market. It is not unusual for strawberry picking to cover a period of sixty to eighty days. This is especially true within one to two hundred miles of the Gulf. While strawberries, dewberries, raspberries and blackberries follow in succession, the one overlapping harvest with the other, and together covering a period of three to four months, it is during the present month that the four fruits named may be had each day fresh from the garden. With care in the selection of varieties and with proper attention bestowed in the cultivation of these fruits no other portion of equal area in the garden yields such quantities of health-giving and delicious food. Near the Gulf the raspberry needs some petting. The other berries named are at home throughout the Southern States.

First plantings of English peas, tur-



# GREEN LABEL VARNISHES



### The Architects of this Charming Little House Were Good to the Owner

They made *all* the window casements opening *out* and equipped them with our Holdfast adjusters and Holdfast fasteners.

The windows **look** well and **work** well, being operated from inside without disturbing the screens or storm sash: he **says** so and we **know** so.

Our free booklet tells why. It's illustrated and worth five dollars to any one planning to build. Get it **now**.

CASEMENT HARDWARE COMPANY
154 Washington Street Chicago

Pli

po

th

pe

fo

pe

fr



# That Big Pin Oak Hicks Moved Here

The desired effect and shade were at once secured—an effect that it would have taken twenty years to obtain by waiting for small trees to grow up in the usual way.

Our business is the growing and the moving of big trees. At our Nursery are hundreds of trees of all sizes to select from. Come and pick out what you want from the Maples, Lindens, Ashes, Catalpas, Cedars, Pines and so on. They are guaranteed to grow normally.

Our catalog shows just what we mean by big trees and tells why we are successful in moving them. It is an unusual catalog, beautifully illustrated, beautifully printed. We will gladly send you one.

Isaac Hicks & Son
Westbury Long Island

# WILLOWGRAFT

is up-to-date in every particular and far excels reed or rattan furniture in its beauty, fine workmanship and durability.

Send direct to our factory for catalog of 150 designs and prices. We are the only manufacturers of Willow Furniture whose advertisement appears in this magazine.

THE WILLOWCRAFT SHOPS

Box C

NORTH CAMBRIDGE, MASS.



# Planning your future home.

Everyone expecting to build a home should begin now to gather ideas. I have just published an illustrated collection of 50 of my latest designs with floor plans, elevations, exteriors and interiors of

homes, costing from \$1,000 to \$20,000. The figures given are absolutely dependable. My designs are practical, backed by experience gained in building many million dollars worth of homes in the past twenty years.

I furnish full blue prints, working plans and specifications for any houses shown in my book at prices ranging from \$10.00 upward.

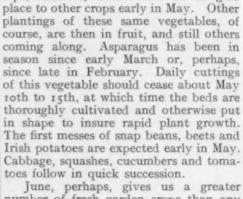
This book will give you many valuable suggestions whether you buy my plans or not. It will save you many times its cost.

Send \$1.00 to-day for my book. Money refunded if not satisfactory. Free circular and sample pages sent on request.

JOHN HENRY NEWSON

1234 Williamson Bldg.

Cleveland, Ohio



nips, radishes, lettuce and onions give

June, perhaps, gives us a greater number of fresh garden crops than any other month. May stands next in the list. During the latter month garden products which have graced the table for weeks past are still in season. With the prevailing pleasant weather coolnatured plants have not, as yet, suffered from heat. Such crops as pepper, okra and egg-plant, which refuse to grow until the advent of mild weather, are now growing rapidly and should give some fruit before the end of the month.

With us May is the month of months when the closest attention must be given to the details of cultivating, thinning, pruning and training, and to the work of combating insect pests and plant diseases. "A stitch in time" saves ninety and nine in garden work. The fewest number of even the better class of gardeners fully appreciate the importance of timely work in each and every detail in garden operations. Just here is the pivotal point over which failure and success must contend for the mastery.

# Pegging Down Roses

If one observes a wild Briar in bloom in the hedgerow, some growths will be found bent over almost rainbowfashion and smothered with flowers. This is exactly what the rosarian tries to imitate when the cultivated Rose is pegged down. In place of a lot of tall growths that never bloom, bend them over, some horizontally, others in the shape of a half moon; the sap being checked as it flies to the buds, or "eyes" as they are called, shoots then start out and are usually crowned with flower buds.

It follows that by such an arrangement as this economy is practised, for fever plants are required in a bed, and one may be certain of an even growth with an abundance of flowers. Suppose one has a bush say of Gloire de Dijon. Examine it and see the vigorous young growths that have been made in the season. Next April, instead of pruning such growths back, bend them over as horizontally as possible, although the half-moon shape will answer as well. This may be accomplished by driving wooden pegs into the soil, these pegs to have a notch in the end to which a piece of tarred twine is secured. The shoot is bent as described and the string tightened accordingly.

ve

of

in

US

re

ıt.

id

eı 1e n

le

h

d

il

le

IS

n

g,

ıt

es

ie

SS r-

e

11

S.

is

11

n

e

g

ıt

0.

T

d

h

se

1.

g

h

n

e

h

d

Pliable growths are necessary and they should be selected as close to the base as

Where old plants exist and they are too rigid for pegging down, cut them level with the ground in February and then peg the new growths as they become long enough. Roses may be partially pegged, that is peg one long growth and let the others develop in upright bush form. As soon as the flowering is over, the pegged growths should be cut away, as by this time new shoots will be springing from the center of the plant which will be pegged the following season. This pegging down may be used as a means of propagation. If the growth is of sufficient length, layer it as one would a carnation. Take the growth in the left hand and cut a slit in one side one inch in length and fifteen inches from the end. Make a niche in the soil and bend the shoot into it; with the cut portion placed at the bottom of the niche, and the end of the growth sticking out two or three inches. Press the soil firmly and leave the shoot to form roots, which it will do in about twelve months.

While thus bent, flowers will appear ust the same as though not layered. Place a little sharp sand in the niche near the cut slit. Plant the roses about six feet apart and peg the growths, north, south, east or west, whichever seems best for the individual plants.

W. R. GILBERT.

# A Neat and Luxuriant Window Garden

A SK your tinner to make a tray of galvanized iron the length of the outside window-sill, width fourteen inches, depth two inches. There must be a loop of the heavy wire used in the binding at the upper back corner of each end through which to pass a screw into the window casing after you have settled the tray on the projecting edge of the sill. Fasten a strip of iron, one inch wide and eighteen inches ,long on each end of the tray two inches from the front with a bolt. The other end of the strip must have in it a hole through which to pass ? screw into the window casing. This tray will accommodate two rows of gallon tin cans which you will have painted dust color, the same as the tray. Do not forget to perforate the bottoms of the cans almost to the point of demolition. In the bottom of each can place a layer of small stones, then fill with thoroughly rotted compost mixed with some sand.

Ûse Aspidistra and Rubber Plant for the dignity of the jungle you are to grow; Wandering Jew of all shades, Asparagus Sprengeri for your tangle, with Sword Fern for your blender. Periwinkle or Trailing Myrtle will give emphasis to your garden. If you wish color, Coleus will help you, though the shades in the Wandering Jew accomplish pleasing effects in that line.

# OTT'S PLUMBIN

in the KITCHEN and PANTRY



POR the kitchen, pantry and laundry, we make a complete line of plumbing fixtures, including the most improved styles of scullery and vegetable sinks, and wash tubs. The materials used are white metal (illustrated above); German silver, copper, Imperial solid porcelain, (shown below); and enameled iron.



# MODERN PLUMBING

is a booklet of 80 pages. It illustrates, describes and prices the latest types of fixtures for both bathroom and kitchen. It shows 24 model interiors ranging in cost from \$74 to \$3000, with valuable hints on tiling and decoration. Sent on request, with 4c. to cover postage.

THE J. L. MOTT IRON WORKS

BRANCHES: Boston, Chicago, Philadelphia, Detroit. Minneapolis. Washington, St. Louis, New Orleans, San Francisco, San Antonio, Allanta, Seattle, Indianapolis and Pittsburgh.

FIFTH AVE., AND SEVENTEENTH ST., NEW YORK

TO MAKE SURE THAT YOU ARE SOURE THAT YOU ARE LOOK FOR THE MOTT LABEL ON EACH PIECE

GETTING GENUINE MOTT WARE,

# PRINGS



THE NEW HOMESTEAD

IRGINIAHOT 2,500 feet elevation. Open all the year

Waters, Baths, Hotels and Scenery nowhere equalled

Rheumatism, gout and nervous diseases cured. Complete hydrotherapeutic apparatus. Japanese Tea Room, Golf, Swimming Pool, fine livery and all outdoor pastimes.

The Chesapeake & Ohio Railway Famed for its Beautiful Scenery

allows stop-over at Covington., Va., on through tickets for side trip to Virginia Hot Springs. Excursion tickets at offices C. & O. Ry. and connecting lines.

FRED STERRY, Manager. Hot Springs, Va.,



# Whittall Arabic Rugs

C Combining all the poetry and charm of the East in its design, without the crudities of certain Orientals, the WHITTALL ARABIC RUG is offered for the adornment of the artistic home.

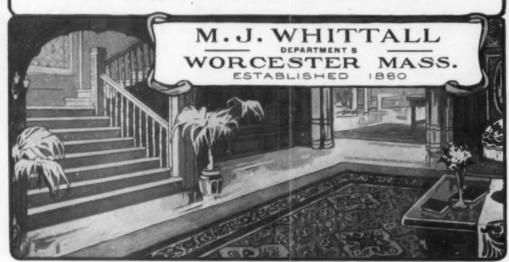
Whittall Rugs are superior to any made in America—their colorings are just as delicate as the Oriental—far more permanent—and they are moderately priced.

C. The raw wool is shipped direct to us from the Far Eastern countries. It has the peculiar lustre, strength and firmness found only in the wool of hardy mountain sheep. Our designs are faithful reproductions of priceless Oriental Art treasures.

I. The Whittall products are many and varied. There is a floor covering for every scheme of decorative treatment, and for every conceivable purpose.

C, Ask your dealer to show you Whittall Rugs, but be sure the name "WHITTALL'S" is woven in the back. It is your guarantee of color, quality, good taste and satisfaction.

Meanwhile, send for our Booklet, "The Mark of Quality." It's free and full of suggestions. Ask for it now while you think of it.





An abundant application of sunshine and water will give you a tropical foliage that will be a delight to your neighbors and an unfailing pleasure as you look from within.

When the frosts come re-pot your plants, bring your tray inside and continue to enjoy your luxuriant window garden. Try this and you will never again tolerate a clumsy woden box filled with dirt.

MIRA TROTH.

# Experimenting in the Garden

EXPERIMENTING in the garden has always the element of fun in it that makes even an occasional failure make up for itself. You love the old rose bush that never fails to yield its crop of pink blossoms, yet the stick that you hopefully purchased from a traveling tree-man is very often the object that claims your warmest interest. He said it would be a rose bush, so, enjoying the excitement of the experiment, you will watch it with never-failing interest until it proves itself either a rose or a shameful substitute.

Indeed, one misses a great deal who plants a garden without experimenting more or less with unfamiliar things. It certainly adds greatly to one's gardening joys to have unusual, unrecognizable things popping up out of the ground. Here again one finds the bulb tribe useful, for it furnishes a large number of out-of-the-ordinary plants.

Do you know the grape hyacinth that blooms in tiny bells of white and blue? Although in nowise showy, it is a blossom that children always love because of its peculiar daintiness and diminutiveness. They suspect that it was made for little people. Do you know the flaunting Crown-Imperial that comes in red and yellow and rivals the Tulip in brilliancy? Do you know the curiously spotted Fritillaria with its hanging bells, the Star of Bethlehem that comes so unobtrusively that it is in full blossom before you realize that it is on the way, the lovely little blue and white Puschkinia that is almost fairy-like in its peculiar tinting

All these and many other curious and more or less beautiful blossoms grow easily from bulbs. These, of course, do not take the place of the better known and deservedly popular plants, yet when one has learned to know just what to expect of one's Hyacinths, one's Daffodils, one's Tulips and one's Crocuses, it is certainly great fun to surprise one's self and one's family by quietly planting some strange, unfamiliar bulb. But to far too many children, unfortunately, all garden bulbs are strange and unfamiliar. This is a pity, for the child that grows up amid blossoms is a sweeter child for the association.

F. H. SWEET.

0

ine

iage

ors

ook

our

con-

low

Ver

lled

n

has

it

ure

old

its

hat

ing

hat

aid

the

will ntil

ful

ho

ing

ing

ble

nd.

ul.

ut-

nat

1e?

its SS. tle

ng

nd

y?

ed

he

b-

re

he

nia

ar

nđ

WC se,

vn en

to

af-

it

e's

ng

to

il-

at

T.

### What to Do with Ashes

A FTER burning collected refuse, save the ash heaps.

Instead of leaving the ash on the ground to soak through the soil, wash down into it and so be lost, gather it up carefully while it is light and dry, and sift it over your garden beds. It gives the plants greater vitality, as you will soon discover. I use ashes in many ways about my garden and never let a particle of ash get away from serving a good purpose. The berry patches like it and it can be used largely for a fall mulch, to be removed in the spring.

The soot from the chimney flues I scatter over the vegetable garden just before spading, because it is very oily and heating in its nature, and helps to kill grubs and insects that would otherwise injure the plants. One should pay strict attention to such economies, as it is the backbone of every principle pertaining to both house and garden. C. B. H.

# Roses from Cuttings

A YEAR ago, last October, I took cuttings, well seasoned shoots from the rose bushes in a friend's garden, leaving the "heel" upon the shoot. I placed these one inch deep in the shaded moist soil of a flower bed, along the garden wall, open only to the morning sun, and inverted above them glass jars; they grew well during the fall and winter, bursting into leaf in the spring.

In February, a friend returning from the South, brought me some additional rose cuttings. As an experiment I placed them in small earthen pots filled with good garden soil, sunk them in the flower bed along the wall, and also placed glass jars above them. They grew as well as the others. In May I removed the jars in a wet season, and the little bushes began to luxuriate, forming buds, which I promptly nipped away. In June I gently upturned the pots, and the plants were free with the dirt securely packed about the roots, the others were removed carefully by trowel, retaining the soil about the plants; while it was raining I transplanted carefully into my nicely prepared rose garden. Many buds were formed, and the few that were allowed to mature, were among the loveliest roses I ever saw. I felt that I was scarcely less a wizard than Luther Burbank.

This past October, filled with the pride of success, I placed other cuttings, not along the damp shady wall, but in the rose garden where the soil is adapted to the nurture of perfect roses. Absolute failure was the result, the position being too dry, the cuttings requiring more shade and moisture. Waterings were of no avail, for the October sun quickly dried the rich, well-worked soil—life was burned from my cuttings.

# REECO WATER SYSTEM

(Water supplies installed complete and ready for use)

We do the work, you turn the faucet. Our system relieves a customer of every detail. We install any kind of water-supply complete and ready for use. No matter where you live, if it be near a well, a spring, or running brook, and you feel that you could enjoy some of those comforts and conveniences which a bath and running water give in a home, but are in doubt as to the expense involved,



write us and we will tell you exactly the cost, and in case you purchase, we will take complete charge of the work, relieving you of every detail of installation, thus giving you a water-supply all ready for the turning of the faucet. Our business life covers an experience of seventy years. During this period we have been able to adopt the best of such inventions and improvements as have from time to time become available, until our system of watersupply is the very best obtainable, being indorsed and in use by various departments of the U. S. Government and, to the number of over 40,000, is working in all countries throughout the world to-day. Our pumps are operated by electricity or hot air, as may best suit the location or convenience of the purchaser.

Write to our nearest office for catalogue K and let us tell you the cost of a water-supply all ready for use.

# RIDER-ERICSSON ENGINE CO.

35 Warren Street, New York 239 Franklin Street, Boston

40 Dearborn Street, Chicago 40 North 7th Street, Philadelphia

234 West Craig Street, Montreal, P. Q. 22 Pitt Street, Sydney, N. S. W.

"If a man can write a better book, preach a better sermon, or make a better rat-trap than his neighbor: though he build his house in the woods, the world will make a beaten path to his door "-EMERSON

Established 1844

# FRENCH'S CROWN PAINT

"Quality and Economy"

SAMUEL H. FRENCH & CO.

Paint and Varnish Manufacturers PHILADELPHIA, U. S. A.

# INTERIOR DECORATORS

Color Schemes Planned and Executed Stencil Work and Applique Work Samples and Estimates on Request

**BOWDOIN & MANLEY** 

546 Fifth Avenue

New York

### Civil Engineer and Landscape Architect EUGENE PITOU, Jr

Designs and estimates for improving and constructing the grounds of city and suburban properties.

Ornamental Fixtures Furnished
229 Broadway, New York
Telephone, 6064 Barclay



Our Iron Pence 35c. a ft. and Up Sales more than equal any other five combined makers in Chicago. Low prices and guaranteed satisfaction brought, these results. We are the only firm in Chicago who carry fron fence in stock, and can make delivery in one day after order is placed. Send for 72 page Catalogue No. 90, nothing but fencing, over 200 styles in iron and wire.

J. L. Bondy Iron Works Company, 11th floor, Nartford, Bldg., 140 Searborn St., Chicago

# McClellan's Quequechan Bed Hammock



Made of heavy White Sail Duck Khaki Color

\$10.00

FREIGHT CHARGES PREPAID

72 inches long, 30 inches wide. Excelsior Soft Top Mattress. Mattress Cover—Green, Red or Khaki Color. With Ropes and Hooks ready for banging. All Hammocks are fitted with Wind Shield

CHAS. P. McCLELLAN, Fall River, Mass.

# Aids to Cleanliness - - 14 \$5.00

The Imperial Sanitary Table
Made with our composition top, smooth as
glass, stainless and not affected by heat. Does away
with foul-smelling unsanitary oil-cloth. Frame of
hard wood, white enameled.

The Imperial Floor

Is germ-proof, fire-proof, water-proof and practically
wear-proof. It can be laid over any old or new floor
without expensive preparation and presents a smooth,
warm, non-slipping surface without cracks or crevices
to collect dirt or germs.
The ideal flooring for private houses and public buildings. Samples FREE, Reliable agents wanted.

THE IMPERIAL FLOOR CO.
Mill and Furnace Sts., ROCHESTER, N. Y.

In writing to advertisers please mention House and Garden.

Delivered East of

the Mississipple



# A Garden Fire

N the spring while the garden rubbish is burning, remember there are some things you do not want to have burn. The house and its contents. And if it should burn, are you protected? You have a fire insurance policy, no doubt, but do you know anything about the company you expect to pay the loss?

The Hartford Fire Insurance Company is the best known fire insurance company in America. For a century it has promptly paid every loss, the aggregate now amounting to over One Hundred and Thirty Millions. Its reputation for fairness in unexcelled. Its resources are never in danger from the hidden rocks of stock speculations, because always invested in the safest securities. One hundred years of life and growth have demonstrated its able management and unshaken stability. Not only in the spring, but in every season of the year, when policies expire, is the time to

ASK FOR THE HARTFORD

Any Agent or Broker can get you a Hartford Policy Statement January 1st, 1910

Capital,				-	\$ 2,000,000.00
Liabilities	-				14,321,953.11
Assets,					23,035,700.61
Surplus fo	or Poli	cy-Ho	lders		8,713,747,50



# Landscape Gardening



deners taught by Prof. Craig and Prof. Batchelor, of Cornell University,

date methods and practice are in denand for the best positions

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

250 page Catalogue free. Write to-day. THE HOME CORRESPONDENCE SCHOOL Dept. 226, Springfield, Mass

The path of success is obvious: keep your rose cuttings in a naturally shaded, damp soil, until well rooted. Then transplant in rainy weather (with plenty of soil about roots), in rich, well prepared earth; cultivate and gather roses for yourself and friends the second summer. If given proper treatment I am convinced by experiment that cuttings may be started during any month of the year.

ELIZABETH KNOX TARKINGTON.

# Hardy Annuals for Autumn's Outlook

THE importance of keeping in mind the autumn outlook, when sowing the flower seeds, is deeply impressed on the amateur's mind, after he has made the mistake of sowing beds of tender annuals in sight of the house windows. Their forlorn appearance, after the first frost, and the bareness of the beds when the withered plants are cleared away, will set him to studying the late-blooming hardy annuals, with the intention of pro-viding himself, in all future seasons, with the sight of their fresh foliage and bright flowers, long after the tender sorts are faded and gone.

Even though the bloom of the less hardy kinds might be prolonged by constant care and protection, the unsightliness of the coverings, and the anxiety and labor would place all the advantage in favor of the frost-defying sorts, which will be gay with bloom, after frost has bitten through even a carpet covering. There is sufficient variety among plants of this type to satisfy the most exacting flower lover.

The best location to choose for such flower beds is a spot that looks particularly cheerless as the autumn days approach, and if in full sight of the windows, so much the better.

Among those plants that will be found to pass the frost test successfully are: Aster, Sweet Alyssum, Calendula, Cornflower, Everlastings, Delphinium, Mignonette, Phlox, Pansy, Petunia, Verbena, Wall-flower, Godetia, and Salpiglossus.

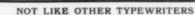
hardy Chrysanthemum, old stand-by of every garden, should not be left out, though not in the annual class. The experience of other gardeners has added to this list the following: Forget-Me-Nots, Sweet Peas, Marigold, Cosmos, Snapdragon, Salvia, Anemones many others.

SOME EXTRACTS FROM OUR NOTE BOOKS

The hardiness of some of these apparently fragile plants is remarkable. Facts noted during several seasons seem to prove that they can be relied on to survive a great degree of cold.

"Oct. 26: Heavy frost that penetrated carpet coverings. The following flowers escaped, without protection: Cornflower, Pansy, Sweet Alyssum, Everlasting.





# THE ROYAL



is in a class by itself-unique, different, better in Must be seen, and used, to be every respect. appreciated.

ROYAL TYPEWRITER CO.

Royal Typewriter Bldg.



**Grow Mushrooms** free. JACKSON MUSHROOM FARM, 5620 N. Western Ave. Chicago, Ili



very interesting pamphlet just issued by us on the Per-can be had free on request. Ask for catalogue P-27. HARTMANN-SANDERS CO.

Elston and Webster Avenues, Chicago, Ill. East. office, 1123 Broadway, New York City.

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS Suitable for Pergolas, porches and interior use.

We also publish catalogues P-29 of sun-dials and P-40 of wood columns.

#### Does Rustic Work Appeal to You?



Can you realize the beautiful effect a rustic umbrella would create on your lawn? If you will tell us your requirements we will furnish you with sketches and upon request will send our new catalog—just out.

#### Give the Birds a Home in a RUSTIC BIRD HOUSE

They are a very pretty addition to the grounds and you can ace them anywhere, in the branches of a tree or on a pole.

ONE-ROOM HOUSE \$2.00

TWO-ROOM HOUSE \$3.00



**RUSTIC CONSTRUCTION WORKS New York City** 

Hardy Plants that Bloom at Once Southworth Brothers BEVERLY, MASS.



# Dry Clothes Indoors

O matter what the weather, you can dry your clothes as white and sweet as a day in June, with the "Chicago" or "Chicago Francis" combined dryer and laundry stove. It costs nothing to operate as the laundry stove you use to boil clothes and heat irons supplies the heat which you now waste. Stove for wood, coal or gas.

This household necessity is within the reach

of every owner of a modern home.

We build Dryers of any desired size, suitable for Residences, Apartment Buildings, Hotels or Institutions. Write today for full description, illustrations and price.

Address nearest office
CHICAGO DRYER CO. DRYER DRYER MFG. CO.

OF D206 East 26th Street
New York City D385 Wabash Avenue Chicago, Ill.

"Oct. 28: Thermometer stood at twenty-four degrees. Ice in water pails as late as 11.30 A. M. Still blooming in spite of these facts: Mignonette, Corn-

flower, Pansy, Verbena."

"Nov. 2: Twenty-eight degrees at 7
A. M. Tender plants all killed. The following hardy sorts wilted and transparent, but later thawed and revived: Pansy, Petunia, Aster, Cornflower, Everlastings, Sweet Alyssum, annual Larkspur (Delphinium,) Verbena, annual Phlox.

Nov. 11: Twenty-one degrees, at 7 A. M., reaching forty-eight degrees at noon. Ice nearly half an inch thick on water pail, in sunshine. Hardy annuals still unharmed."

"Nov. 17: After four mornings at twenty-six degrees Godetia still uniniured.

These temperatures were taken, during various seasons, on a piazza that faced the north, and was open to east and west.

COOL WEATHER A POSITIVE BENEFIT TO SOME VARIETIES

Aside from the valuable quality of resisting the frost, some of these plants actually produce finer flowers in the cool fall weather than at any other time of year. Cosmos, Mignonette, Salvia and Asters belong to this class. The colors represented in these frost-proof plants are: white, pink, purple, lemon, orange, blue, red, and lavender. With the variations given by streaks and stripes they will supply enough variety to equip the most ambitious flower garden.

I. M. ANGELL.

#### Growing Soft-Wood Cuttings or Slips

MANY greenhouse plants, such as the Geranium, Rose, Carnation, Fuchsia, Begonias and the like are easily propagated from cuttings of new or present season's growth, called "slips." These herbaceous cuttings may be made from either the leaf or stem. The Begonia is an example of plants having thick fleshy leaf, and these may be propagated from the leaf or even part of a leaf. A box filled with clean sand and crushed gravel is the best bed for growing leaf cuttings. Soil containing much organic matter or clay is not desirable. The stems should be stuck in the sand which should be kept moist till a mass of roots appear, when the plant may be transplanted. Stem cuttings of Geranium, Rose, Coleus, etc., strike root easily, and the bed for their propagation should be about like those for stem cuttings-clean gravel overlaid with two inches of sand. I have rooted the Oleander by taking a stem cutting six inches long and inserting one end in a pint bottle of clear water. Other plants may be rooted in the same manner. A little cotton wrapped about the end that is placed in the bottle is thought to hasten the formation of roots. plant should be removed from the bottle



# should have our Booklet

If you own or expect to own a farm or country estate - you should know of the absolutely unique work we are doing along agricultural lines. You should know about our splendid organization composed of men recognized as experts on lands, tarming, stock raising-in fact, all that pertains to farms or country places in any way. And you know just wherein the services we give affect you.

We act as your

# **Agricultural Counselors**

We examine your lands, the soil and conditions-and then furnish a plan for you or your superintendent to follow out.

This plan treats on every detail in connection with the efficient and economical management of your place-tells what crops, fruit trees, live stock, etc., can best be raised on it-how and when to do it-and how country places can be laid out most beautifully. This plan saves you time, money and labor by starting you right-or by righting a wrong start.

States, as well as experienced individual farmers have engaged us in changing and making more profitable their agricultural methods and pursuits. And you will be astonished at the many ways in which we can help

Right now crop cultivation-control of insects, fungous blights and diseases of crops, fruit trees, etc.-and the laying out of new plantings and trees-should receive first attention. Do you know how to do these things?

Our fees are nominal-insignificant compared with the value of our services. Let us counsel you.

In sending for free booklet state whether you own a farm or country estate. Write today.

# The Agricultural Experts Ass'n, Dept. A.

George T. Powell, President.

5 and 7 East 42d St., New York.

# Stop the Caterpillars with Strokum Bind It Around Your Trees

Oit now,don't wait un-til they have crawled up and spun their webs in the trees, and increased by the thousands. It is easier to prevent their going up than it is to burn them out after they are up.

Don't wait till they are dropping down by their silken threads, to spin their cocoons for another crop— stop the progress of the first crop by banding your trees with **Strokum** now.

Anvone can put Strokum on, and once on it remains effective through the entire



Caterpillars or tussock moths can't crawl under it and won't crawl over it. and won't crawl over it.
Better than burlap, cotton
or fly paper. Does not disfigure the tree. Does not
dry up and stick to the bark
as do the smeared-on tar
preparations. Strokum is
entirely harmless. Endorsed
by the leading horticulturists and tree experts.

Send \$3.00 at once for a sample package of fifteen pounds, which is enough to band fifteen trees three feet around. Express paid East of the Mississippi; 50c extra West of it.

Send for our illustrated booklet.

# George Stratford Oakum Co.

166 Cornelison Avenue, Jersey City, N. J.



WHEN IN BOSTON STAY AT THE

### COPLEY SQUARE HOTEL

HUNTINGTON AVE., EXETER AND BLAGDEN STS.

AMOS H. WHIPPLE, PROPRIETOR.

#### THE LAWNS OF OLD ENGLAND

Are famous for their wonderful perfection and durability. Such lawns may be produced in our country if

#### IMPORTED ENGLISH LAWN GRASS SEED

No weed seeds or coarse grasses. Hardy and beautiful in color and texture. Send for directions-"How to Seed and Keep a Lawn."

#### Blatchford's Calf Meal Factory Madison and Sands Sts., Waukegan, Ill.

Established at Leicester, England, in 1800.





A NEW CATALOGUE BEAUTIFULLY ILLUSTRATED

### HARDY NATIVE PLANTS

From the High Carolina Mountains. (4000 to 6000 ft. elevation). No others so Hardy-so Beautiful.

Rhododendrons, Azaleas, Leucothoes, Andromedas Kalmias, Ground-cover Plants, Etc.

#### HARLAN P. KELSEY, Owner

Highlands Nursery, N. C., and Salem Branch Nursery

Salem, Mass.



pane of glass may be placed over the box. A simple method is to invert glass fruit jars over the cuttings. One may be moderately successful by placing the cuttings in open ground and inverting a fruit jar over them, keeping the soil moist in the meantime. When cuttings are made for propagation a part of the leaves should be pinched off reducing the leaf

to make this impossible. A large mouth bottle or jar with a handful of gravel in

the bottom has also been used with satisfactory results where only a few plants

A confined atmosphere over the tops is desirable especially for such plants as

have thin leaves liable to wilt easily and for those which require a long time to

root. If the cuttings are set in a box a

were needed.

area and consequently the evaporation. H. F. GRINSTEAD.

#### How to Have Healthy Fern Balls

IT is so seldom that really luxuriant I fern balls are seen growing in the house that I feel considerable pride when I see how well my own turn out each year. They are really good examples of what fern balls should be. I have a little conservatory attached to my house and in this I grow the ferns. For a long time I had great difficulty with the string that bound the moss, as it frequently rotted and allowed the ball to fall apart. To remedy this I had a couple of wire hemispheres made and into these hinged and wired together I put the fern balls, with great success.

The great essential in growing fern balls is to nourish them properly, and this I do with a solution of liquid manure. I use a cheese-cloth bag for this purpose, and, after filling it with manure, allow it to soak in a pail of water. Into this water I put the fern ball; when it has grown too large to be put in the pail I pour the liquid on it until it is thoroughly soaked. It is useless to try to grow these plants without the liquid manure feeding. They will not properly mature and will be one-sided affairs. It is a good idea when you first get your fern ball in the fall to bury it for a month or so before starting it in to grow.

JOSEPH ELLIOTT.

## Lighting the Country Home

(Continued from page 173)

costs, in the 5-horsepower size, about \$850; a 10-horsepower plant about \$1100; and a 20-horsepower plant about \$1750. A 10-horsepower plant will operate 100 lights, and for every horsepower added, ten more 16-candlepower lamps can be

Using what is known as 68-degree gasoline, which is even better for the purpose than a more refined grade, and which costs from eight to ten cents a gallon in barrels, the cost per 16-candlepower light

(Continued on page xxviii)



### Plant Evergreens Now.

Stand at your windows and note where evergreens would improve the view next

A bleak outlook may be softened by interposing a group of Hemlock or Spruce. An unsightly adjoining building screened by firs or pines. A bare driveway or front lawn transformed by the bright and delicate tints of retinospora. Evergreen shrubs possess heavy brilliant green leaf

masses during winter and most of them bloom mag-nificently in summer.

nificently in summer.

Our assortment of evergreens ranges from the dwarf plants, similar to those used by the Japanese to full grown specimens twenty feet high. Practically all evergreens and evergreen shrubs are illustrated, described, and priced in our catalogue: "Moon's Hardy Trees and Shrubs for Every Place and Purpose." For the purchaser it contains valuable points on climate, soil and planting arrangements. Sent on request.

The William H. Moon Company **Makefield Place** Morrisville, Pa.



#### A Substitute for Bordeaux Mixture

10-gal. keg, making 1,500 gallons Spray, delivered at any R, R. station in U. S. for \$12.50. Prompt shipments. Write to-day for full information

B.G. PRATT CO., Mfg. Chemists

50 Church St., New York City

MAULE'S SEEDS Once grown always grown Gatalogue sent free upon reques 1763 Filbert Street Philadelphia



a

e

0:

0. 00

d.

be

in

ht

#### WHAT A DELIGHT!

Running Water

In every sleeping room

Without Plumbing VITREOUS WARE

\$10.00 \$12.50 \$15.00

Write us

Rowe Pedestal Lavatory Co. Buffalo, N. Y.



You simply turn the faucet and The "Richmond" Suds-Maker delivers thick hot suds. It does not in any way interfere with the hot water faucet and can be easily attached to it. It gives you instead, two faucets—one for clean, hot water—the other for thick, hot suds.



Think of the dozens of ways this ingenious device will cut down the work in the kitchen! Learn what it means to save hundreds of steps every day—to always have thick creamy soap suds on tap. The "Richmond" Suds Maker gives you any quantity of soap and water thoroughly mixed in scientific proportion—it is always ready to meet your instant needs. It puts an end to the drudgery of dish washing—simply place dishes, silver, glassware under its creamy suds for an instant, then just rinse and wipe. It puts an instant automatic end to waste, to unsightly soap dishes, to the nuisance of using up the odds and ends of soap. Use any kind of soap.

Just send your name and address together with the name and address of Suds-Maker. Use it ten days—then if you think you can spare it, return it at our expense. This is your chance to learn about the greatest convenience, money and time saver you can install in your kitchen. Write to-day.

THE McCRUM-HOWELL CO.

223 Terminal Building

#### THE MODEL PLANT SUPPORT

for Tomatoes, Peonies, Dahlias, Golden Glow, Chrysanthemums, etc.

will give you more and better vegetables and flowers, besides making your garden one of neatness and beauty.

Your tomatoes will mature more quickly and give you more perfect fruit; your peonies, dahlias and other heavy-blossomed plants will be far more luxuriant where the MODEL SUPPORT is used; your garden will never be scraggly nor untidy.

MODEL PLANT SUPPORTS cost little, can be used over and over again and repay their cost many times in a single season.

Made of heavy galvanized wire, they are strong, light and will not rust.

PRICES: Per dozen Per 50 Per 100 \$ 1.75 7.50 12.50

Send for catalogue of our full line of flower supports.

IGOE BROTHERS BROOKLYN, N. Y. 67-71 Metropolitan Ave.,





## Cabot's Shingle Stains

-FOR-HOUSES BARNS STABLES SHEDS **FENCES** 

and all exterior wood-work, especially shingles. They are softer and richer in color, easier and quicker to apply, wear bet-ter, look better, and are fifty per cent. cheaper than paint. Creosote, the chief ingredient, is the best wood preservative known.

Samples of Stained Wood, with Chart of Color Combinations, sent on application

# "Quilt"—The Warmest Sheathing

Wind and Frost Proof

NOT a mere felt or paper, but a matted lining that keeps out the cold as a bird's feathers do. Incomparably warmer than building papers, and warmer and cheaper than back-plaster. Costs less than ic. a foot. Keeps warm rooms warm and cool rooms cool. "It is cheaper to build warm houses than to heat cold ones."

SAMUEL CABOT, Inc., Boston, Mass.

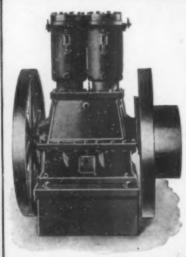
1133 Broadway, N. Y. 350 Dearborn Ave., Chicago

Agents at all Central Points



Send for a sample and catalogue (free) of Cabot's Sheathing Quilt

In writing to advertisers please mention House and Garden.



# THE NASH GAS ENGINE

is especially adapted for all power requirements in the country home. It affords a simple, reliable and economical electric lighting plant.

This engine can also be used for pumping water for all ordinary domestic requirements, also for fire-protection. Operates on gas, gasoline and producer gas—sizes 3 to 300 H. P. We have specialized for the past 25 years in the equipment of country homes with the most suitable engines. Can we advise you? Send for catalogue "H."

# 84 CHAMBERS ST. NEW YORK

CHICAGO, BOSTON, CINCINNATI, PITTSBURG, LOS ANGELES



### Don't You Want a Water Supply

that is unfailing, economical and abundant? That requires no care, no attention and no repairs? This is what you can have if you install a

CORCORAN WINDMILL,

an automatic pumping equipment that costs nothing to operate, is never out of order and supplies an abundance of water at all rimes.

Imagine if you can a piece of machinery requiring no more care than the tree which grows in the adjacent lot, working silently and effectively, causing its owner to forget all about his water supply yet affording an abundance of water equal to that of city homes.

We build windmills to harmonize with any architectural scheme. The housing for the windmill frame can be built as an annex to the house to contain servants' quarters, bachelors' rooms, billiard room, etc.

SEND FOR CATALOGUE C

A. J. CORCORAN, 17 John St., **NEW YORK** 





Garden and Borch Furniture Send for catalogue

North Shore Ferneries Co., Beverly, Mass.



#### COUNTRY HOMES

ay enjoy city comforts and conveniences at a cost than kerosene, electricity or acetylene, ith None of their dangers, by using

#### **Economy Gas Machine**

Produces gas for light and kitchen fuel. May be lighted the same as electric light, without batteries or wires. Call or write for list of

Economy Gas Machine Co., 437 Main Street Rochester, N. Y.



#### ELECTRIC LIGHTING FOR THE COUNTRY HOME

With the tungsten lamp electric light is the most economical and most perfect of all lighting systems. This new incandescent lamp, universally replacing the carbon incandescent lamp, gives the whitest and most pleasing artificial light known—the nearest approach to sunlight—and consumes less than half the current of the latter.

The plants we make are complete with gasoline engine, electric generator, switch-board, batteries, wiring, lamps, etc. They take up little space, are easily installed, require no attention other than starting the engine (even lubricating is done automatically) and the expense of operation is trifling. The cost per 16 candle-power lamp is only about 1/10 of a cent per hour, which means that light from ten 16-candle-power lamps costs but one cent per hour.

When the engine is not in use generating current for lighting it may be used for pumping water, saw-

er lamps costs but one cent per hour.
ee engine is not in use generating curren
it may be used for pumping water, saw

#### Complete Plants \$262

and up. according to the number of lights desired.

The Richardson Engineering Co.,



Send for our illustrated Catalogue B

# FURNITURE

TOGNARELLI & VOIGT COMPANY

23O2 Chestnut Street.

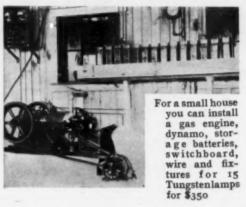
Philadelphia, Pa.

#### Lighting the Country Home

(Continued from page xxvi)

per hour is about one-tenth of a cent. This means that every seven to ten oldstyle carbon incandescent lamps can be operated for an hour for one cent, or it means that an individual power plant operating one hundred 16-candlepower lights costs ten cents an hour (figuring the gasoline at eight cents per gallon). It is claimed that the Tungsten lamp, which is rapidly replacing the old-style carbon incandescent lamp, is about forty per cent cheaper in operation.

One advantage of the electric equipment run by a gas or gasoline engine lies in the fact that the engine can be uncoupled from the dynamo and used for



pumping water. The 5-horsepower engine will pump 3600 gallons 200 feet in height at a cost of five cents per hour.

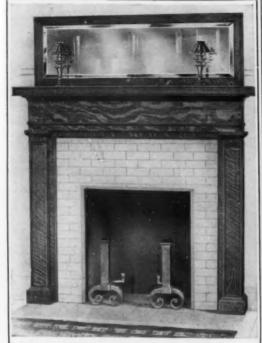
By installing storage batteries the engine can be run for as long as needed to charge these for a day's supply of current, then shut down.

For small homes there are on the market electric generator plants as low as 2-horsepower, with switchboard; storage batteries (with a capacity of burning eight 16-candlepower Tungsten lamps-27 volts—for eight hours, or eleven lamps for five hours); fifteen Tungsten lamps, wire and fixtures for a house of say 20 x 40 ft. in size, of two stories, all at a lump sum of \$350. With ordinary use, this system would need recharging by running its engine and dynamo but twice a week in winter and once a week through the summer months. A similar plant of double the capacity costs \$425.

#### GASOLINE VAPOR

Perhaps you have been accustomed to using ordinary illuminating gas in a city home and would prefer to continue to use a similar illuminant even though there are no public service mains available near your country place. The solution of your problem is to install a miniature gas plant in your cellar. Such a plant consists of an air pump actuated by water pressure, a tank for the storage of air under a fixed pressure, a supply tank of gasoline located underground at a distance from

(Continued on page xxx)



## No Room is Complete Without a Mantel

It helps to furnish as nothing else can. A Hardwood Mantel, finished like the woodwork of the room, is always in perfect harmony with the decorations and combines beauty with utility. Wood Mantels are made in all styles and at all prices, from the plain and severely simple, suited for the modest cottage, to the most elaborate and richly carved—in all the popular hardwoods,—also in Colonial style finished in flat or enamel white.

#### "Why Wood Mantels?"

—a beautifully illustrated booklet, showing many styles of Wood Mantels—will be sent to anyone thinking of building, remodeling or decorating. Address

WOOD MANTEL MANUFACTURERS' ASSOCIATION

H. T. BENNETT, Secretary

Room 1225, State Life Bldg., Indianapolis, Ind.

# Sharpen Your Lawn Mower

20 times for 35c

#### Eureka Sharpener

A new device to attach to the stationary bar of any mower.

curate edge in a few minutes. Anyon can attach it to stationary bar. (See il lustration.) No filing, no work. Simply push the mower on sidewalk with Eurek

automatically. Sold by all dealers, 35c., or sent prepaid or receipt of 40c., stamps or coin. Specify width of mower—12 in.

EUREKA SHARPENER CO.

1382 24th St., Detroit Mich

# **BUNGALOWS**

Portable and Permanent
Any Number of Rooms and Any Size



This is a picture of the largest Portable Bungalow ever built, being 100' x 100', garden in center 50' x 50', manufactured in our Long Island Shops and erected by us at Ormond Beach, Fla.

We make and erect all sizes and kinds of Bungalows, Garages and Farm Buildings.

Send for booklet, photographs and floor plans

BILLINGS-STEVENS COMPANY
4 EAST 42nd ST., NEW YORK CITY



AN ATTRACTIVE HARDY GARDEN

## Herbaceous Perennials

for the Hardy Garden or Border

#### Roses

All the hardy Bush and Climbers. We have an unequalled collection

### Hardy Ferns and Flowers

for rock gardens and shady places

#### Evergreens

in great variety; many rare sorts; transplanted plants

#### Rhododendrons

Hardy Natives and the best Hybrids in colors; budded plants

# Trees, Shrubs and Vines for planting the Home Grounds

Catalog and price list free

THE BAY STATE NURSERIES
North Abington, Mass.

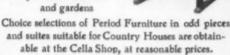


# THE DOGE'S CHAIR

Correct replica of a famous original at the Doges' Palace in Venice. Carved wood is in antique powder gold.

Makes an impressive hall chair, or appropriate for an important corner of the library.

We are showing Italian Terra Cottas and Marbles in large and small pieces for interiors



HE (ELLAS CASSIC SHOP

ANTIQUES-REPRODUCTIONS

1 East 46th Street

New York City

D. A. CELLA



#### Antique Furniture and Period Reproductions.

Andirons, Fire Screens, Mirrors, Lamps and Bric-a-Brac.

Wedding Gifts of Distinc-tion. Different from those seen in other stores.

Write for Cuts and Prices

Roadiz Antique Shop 219 So. 11th St., Phila., Pa.

# Sun Dial Shop

Antiques Interior Decoration



MRS. HERBERT NELSON CURTIS NEW YORK CITY

# ANTIQUE FURNITURE

Rare China, Pewter,

Old Lamps, Andirons, Etc. NO REPRODUCTIONS HENRY V. WEIL

698 Lexington Avenue

Cor. 57th Street

A. D. VAN DYKE



ANTIQUE STOCK m Your Old New England Homesteads

Tall Hall Clocks, Banjo Clocks, Old Mahogany Furniture, Rare Old China, Secretaries, Gilt Mirrors, High Boys, Tables, Chairs, Bureaus, Desks, Bedsteads, Warming Pans, and Candleaticks.

Pewters of All Kinds, Old Franklin Stoves, Etc., Bought and Sold Booklet and Prices on request

332 Pleasant Street

Worcester, Mass.

Reproductions of old New England furniture in the natural wood, or finished to suit the individual

WM. LEAVENS & CO., 32 Canal Street,

New York

## The Corner Shop

GREAT BARRINGTON, MASS

Colonial Furniture and Historical China Sheffield Plate and Pewter Richard H. Maunder

#### I RANSACK 1000 ATTICS ANNUALLY

**ANTIQUES** 

From the oldest and best New England homes. Furniture, China, Brass, Copper, Fireplace and cookery utensils. Books, prints, etc. Send for photos, lists and descriptions.

HAND BRAIDED RUGS made by the housewives of Old New England, in all colors and from new material. Send for Rug list and photos.

RALPH WARREN BURNHAM.

Ipswich in Massachusetts

#### Lighting the Country Home

(Continued from page xxviii)

the house, and a carbureter in which the air is forced through an absorbent material holding gasoline, vaporizing the latter and carrying it into the pipe system to be burned at the regular gas outlets. The gas is generated only as it is required, automatically, and as soon as the fixtures are turned off the surplus gasoline runs back into the supply tank underground.

It is claimed that with this vaporized gasoline system of lighting a flame of 25-candlepower can be kept burning forty hours at a cost of five cents. A house containing from ten to fifteen rooms would require, say, 25 lights, which could be adequately supplied by a plant

costing about \$200 to install.

#### Collecting Miniatures

A FEW years ago one seldom encountered portrait-miniatures in antique shops; - that was because it had not come to be generally appreciated that portraits of someone else's ancestors could have any interest to anyone but the descendants; as though a portrait of an unknown man by Albrecht Durer would not be almost as highly esteemed as it would if its identity were known. And so it is more or less with the matter of miniatures,--if they are well painted, and works of art in consequence, they are worth collecting.

Aside from their esthetic value, they also have another interest, even they are not what one would call just beautiful; that is, they depict the fashions of the age in which they were painted and for that reason have an especial interest to students of the history of costumes. Perhaps we have no truer records of the dress of the Colonial period in America than are to be found in portrait-minia-

tures.

#### SQUIER'S WEED KILLER

Will clear your drives and walks of all vegetation quickly, efficiently and enduring than by any other way. U. S. Goment uses SQUIER'S. Avoid Substitutes. Send for circ K. HARRISON MFG. CO., RAHWAY, N. J.

DAHLIAS

20 kinds (my selection) \$1. Satisfaction guaranteed. Write for full particulars both Pan-American and St. Louis Expositions.

H. F. BURT

Taunton, Mass.

#### Palisades' Popular Perennials Field grown or in pots for late planting



These pot grown plants will save a season as they will flower this year. They will produce an effect like this in your garden.

Hardy Ferns Wild Flowers

or charming rock gardens which every-Send for our 1910 catalogue of perennials and ints which we grow Exclusively by the acre.

PALISADES NURSERIES, Inc.

# HEELOCK RUST PROOF

FENCE, FLOWER BED GUARD

FENCE—Wires used are heavier than in any other fence.

Are all straight, with no bends or twists to weaken or break. Heavily galvanized after weaving. Absolutely rust-proof.

Constructed with close mesh, and unclimbable. constructed guard.



TRELLIS. TREE PROTECTORS Etc.

FLOWER BED GUARDS—Embodies all Good WHEELOCK features. A protection for your flower beds. crawl through this closely.

Will not rust out. Readily removed and replaced without injuring vines.

TRELLIS -- A permanent investment. TREE PROTECTORS - Save your trees from accident. Applied easily and quickly. Ornamental. Will not rust. Need no painting.



ok for the WHEELOCK FENCE CLAMP, the distinctive feature of all genuin WHEELOCK products, a guarantee of quality in every respect. If you insist on "WHEELOCK RUST-PROOF" you will be guaranteed the above features. Send for our Art Catalogue.

WHEELOCK "RUST-PROOF" FENCE CO., Slater Building, Worcester, Mass.



"HOME-CRAFT FURNITURE"



made in beautiful pure Mission styles. We send you the parts of each piece smoothly dressed, accurately cut, ready to put together with all the necessary material for finishing—screws, glue, stains, etc., and complete instructions. You save more than 50% on the finished product and have the added pleasure of possessing an article that is largely of your own handicraft.

craft.
Distinctive things in "Home-Craft" include, besides the staple articles as chairs, tables, and desks, such charming pieces as Plate charming pieces as Plate Racks, Magazine Racks, China Cabinets, Roan Skin Screens, Mission Lamps, Can-dlesticks, Porch Swings, etc.

fing Dish Buffet Our new book, beautifully illustrated with "Home-Craft" furniture, contains prices and full details. Mailed to any address upon receipt of two 2c stamps to cover postage. Send for it today.

**Home-Craft Corporation** 406 Caswell Block Milwaukee, Wis.

## ORNAMENTAL FIXTURES FOR COUNTRY GROUNDS



Catalogues on application

Railings and Entrance Gates Lawn and Park Fountains Electric Light Posts for Driveways Flower Vases in Cast Iron or Bronze Statuary for Sunken and Italian Gardens Settees, Chairs and Tree Guards

Stable and Cow House Fittings Drinking Fountains for Parks and Public Squares

We solicit correspondence from Architects and Owners of Country Estates

Address Ornamental Dept.

THE J. L. MOTT IRON WORKS, Fifth Ave. and 17th St., NEW YORK







It is logical that a magazine like House & Garden should carry in it a directory of manufacturers of equipment that forms so large a part of the enjoym if a motor boat is not a part of its recreative outfit. But it is important when purchasing a motor boat to be sure of securing a well built craft and a relia years of successful operation. The readers of House & Garden may well feel assured, when dealing with these advertisers, of fair treatment and reliable served. the Motor Boat Department, House & Garden, 449 Fourth Ave., New York.

Judge an Engine and Boat By its History

Don't buy an engine or boat on promises.

Don't listen to talk about what the engine will do. Find out what it has done.
Compare the actual History of the engine and

you thought best with that of the

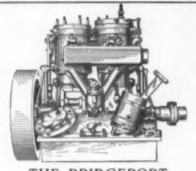
#### Rochester Engine and Boats



Rochester Gas Engine Co.

685 Driving Park Ave.

1928 Broadway N. Y. City



#### THE BRIDGEPORT

The Motor that Motes.

The only marine gasoline motor, in which the working parts are all removable without complete disassembling. Practical construction—equal to the inest. One of the oldest, most refined, and best-known marine motors on the market.

Satisfaction g THE BRIDGEPORT MOTOR CO., Inc.

THE STANDARD ENGINE



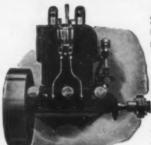
" Ask the man who runs one" THE SUPREME "SYRACUSE"

For Speed, Pleasure Boats. 4 to 120 H. P. 1 to 6 Cyl. High Quality-Low Price

SYRACUSE GAS ENGINE CO., SYRACUSE, N. Y., U.S.A.

# \$75.00 Upward for the Best

## Lackawanna Motors



New "Double"
Balances Expl New ANTI CRANKING Feature

Simplest, Most Efficient, Valveless

to Six Cylinders 2½ o 45 H. P. for All Boats We originated the Valve-less Motor. We originated both the Practical Three-Port Design and Constru tion as well as Simplific Improvements made from

time to time. Complete Boat Outfits. Write for ogue of the "Silvered Cylinders." Not Price Alone-Better Quality.

LACKAWANNA MFG. CO. 30 Coldwell Street, Newburgh, N. Y. 126 Liberty Street, New York, N. Y.

We have done away with the old-**Tuttle Marine Engines** nd have adopted an up-to-date elling plan which enables us to ame the users of gasolene engines very attractive price. Write for all particulars. It will pay you. TUTTLE MOTOR COMPANY B. M. TUTTLE CO 17 State Street Canastets, N. Y. Metropolitan Office: City Island, N. Y. Boston Office: 70 Long Wharf

#### STANDARD MARINE ENGINES **CHAMPION IN 1909**

Winner of all the Star Competitive Events of the year.

New York—Bermuda Ocean Race—Won by "Heather" 40-59 HP. STANDARD. Seattle-Vancouver Race—Won by "Soya" 25-32 HP. STANDARD.

Lake Ontario Long Distance Race -Won by "Satanita" 40-50 HP, STANDARD.

New York—Marblehead Ocean Race—Won by "Elmo II" 12-15 HP. STANDARD. II" 12-15 HP. STANDARD. The winning of the Long Distance Championship of the Pacific and Atlantic Coasts and the Great Lakes for 1998 completely demonstrates the superiority of con-struction and dependability of the STANDARD Marin Engine. Insist upon the BUILDER of your yacht of launch installing the STANDARD Engine. There are court expectations.

The STANDARD only will make STANDARD MOTOR CONSTRUCTION CO.

174 WHITON STREET PERSEY CITY, N. J., U. S. A.

#### Selecting the Engine

shall b

n it in

ciatio

efficie

asting

les of

attain

at b

precar

Bearin

tions.

naring

icipal

vity"

and

or Boa

esenti

Local

Fede

atives

anizat

meil c

ociatio

tinguis

ness i

shall

s. ]

powe latio

n of s

te-pres

at As

n that

e mei

ntry

ideal

its

all

any

tions. retical

MANY persons in buying a monoton boat pay much attention to lines and finish of the hull and v little to the engine. The experien yachtsman gives to the motor powe much thought and attention as to a other part of the equipment-perha more. And this is right, because v a worthless engine the boat is of no and yields, instead of pleasure recreation, worry and endless c The construction lines of a boat may bad, but this will but detract from speed; the finish crude, but this will offend the eye, whereas an engine cheap construction or of poor mecha cal design will render the craft at lutely useless.

In purchasing a motor boat, th our advice, borne of long experien ether ' and painful experience too, is: Sel the engine with the greatest ca There are many "ready-made" bo on the market offered at attracti et its prices that look like service, but let say again 'ware of the engine. few boat builders manufacture engir and all reliable ones will install particular make desired by the propertive owner. Therefore it is an ea matter to secure the proper kind equipment. Boat building and engi making are as diverse as north a south and each is a distinct industr so when you want to go a-boati secure your equipment from specialis

Let not the foregoing discourage amateur with the idea that most man motors are bad, for that is not the fact most of them are good. I am simple forewarning the amateur in the mat of the selection of the most importa part of the motor driven craft.

If you have no experienced friend to advise you in the selection of right style and type of engine to fit yo requirements and have not a practi book on marine motor construction hand, which probably you will not have send to the engine manufacturers their catalogues and study the questi out for yourself, which won't, in dentally, be an unpleasant task.

B. M. TREB

#### Local Sections of the America Power Boat Association

BY H. T. KOERNER, PRESIDENT

IT was a wise and far-seeing acti which the Council of the America Power Boat Association took last ye

(XXXII)

best inall n of the C nts o a (

tion o ed in nati ed ( e n e nee

reme Gre At ught

act

nt o ythin to y.







to summer home by the water. A country house with a situation, whether it be by lake, river or sea, is far from taking advantage of its opportunities upine. In this Motor Boat Section appear announcements of only reliable boat and engine manufacturers. Their product has become standardized through shall be very glad to advise any of our readers in regard to the purchase or equipment of a motor boat or engine. Address correspondence on this subject to

en it incorporated in the Articles of ciation, the formation of Local tions. It is difficult to conceive, oretically, a more comprehensive efficient plan to produce positive lasting results. That section of the riend icles of Association paves the way attainment of the hopes and aims tat best have had but a sporadic

ne

i to

nd v

OWe to:

perh

se w

no

rom

vill o

echa

Sel

racti

let

all

an ea

cind

eng

th :

ciali

age

fac

sim

mat

oorta

frier

of

fit y

racti

tion

t hav

ers

uesti

, 11

REB

erica

ion

DENT

nerio

t ve

ca

precarious existence. Bearing on the formation of Local tions, it can be best described by ca paring it with Federal, State and nicipal activities; the "Municipal may tivity" representing the actual busis and social life of each individual tor Boat Club; the "State Activity" gine esenting these individual Clubs in Local Section of five or more Clubs; "Federal Activity" being the repre-tatives of these local Sections, erien ether with the officers of the parent anization, who, together, form the incil of the American Power Boat boa ociation. Each Local Section is to t its own officers, adopt its own tinguishing name and conduct its ness in its own manner. Each Seca shall be composed of five or more Each Local Sect on shall have e pro power to adopt such local rules and lations as it sees fit. The Chairof such Local Section becomes a e-president of the American Power at Association. It can be readily dustr that a Council of such representaooati men from every section of the try will very nearly approximate ideal condition. This Council will mari its collective power against any all assaults and speedily neutral-any detrimental efforts affecting

> inally each Vice-president as Chairof his Local Section will bring the Council the needs and requirents of his own particular Section, a clear understanding and appretion of what the motor boat users d in every part of the country naturally result. Sectional feeling, d on geographical location; can e no place in this arrangement. needs of the Middle West, the reements of the Coast, the desires of Great Lakes and the activities of Atlantic Seaboard, will all be ight to a common melting pot, and action of the Council thus constid will probably come nearer to a py, concrete result for the betterat of Motor Boating at large, than thing ever attempted in its whole tory.

best interests of all motor boat

# The GURNET DORY And CLIPPER LAUNCH Are SEA GOING MOTOR BOATS



SPEED BOATS TO ORDER-15 TO 30 MILES.

TO ENABLE SATISFACTORY REPLY, PLEASE STATE REQUIREMENTS. BOATS, D2. MOTORS, E2.

THE ATLANTIC COMPANY, AMESBURY, MASS.



CAILLE PERFECTION MOTOR CO

#### NOTICE



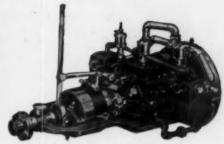
In the boating publica-tions we are bringing special attention to each of the leading features that culminate in the most efficient marine engine. We are doing this because we know how much experienced boatmen appreciate this.

can have this information by for our 1910 ENGINE

THE ROYAL ENGINE CO., BRIDGEPORT, CONN.

# SINTZ 2 and 4 CYL. OPPOSED MARINE MOTORS

ABSOLUTELY NO VIBRATION



Sizes 6 to 40 actual horse-power

The center of weight on our motors is lower than on any other type which increases the stability of your boat.

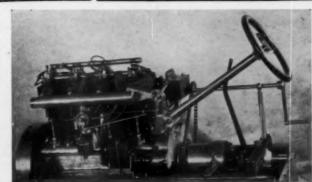
The motor can be placed under locker with control at steering post, giving the cleanest construction and the greatest amount of seating capacity. No noise but the ripple of the wheel.

Guaranteed for 2 years

GUY L. SINTZ CO.,

MARSHALL, MICH. Desk H,

# JENCICK=ONE MAN CONTROL



JENCICK MOTORS

Cruisers and Speed Boats

The Finest Motor Made

Ask any JENCICK user

JENCICK MOTOR MANUFACTURING COMPANY Port Chester, New York 351 No. Main Street,







It is logical that a magazine like House & Garden should carry in it a directory of manufacturers of equipment that forms so large a part of the enjoyment if a motor boat is not a part of its recreative outfit. But it is important when purchasing a motor boat to be sure of securing a well built craft and a reliable years of successful operation. The readers of House & Garden may well feel assured, when dealing with these advertisers, of fair treatment and reliable service. the Motor Boat Department, House & Garden, 449 Fourth Ave., New York.

Judge an Engine and Boat By its History

Don't buy an engine or boat on promises. Don't listen to talk about what the engine will do. Find out what it has done.

Compare the actual History of the engine and boat you thought best with that of the

#### Rochester Engine and Boats

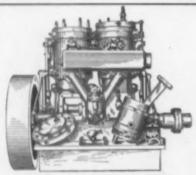


est this engine has entered it has

#### Rochester Gas Engine Co.

685 Driving Park Ave. Rochester, N. Y.

1928 Broadway N. Y. City



#### THE BRIDGEPORT

"The Motor that Motes."

by marine gasoline motor, in which the workrts are all removable without complete disling. Practical construction—equal to the
One of the oldest, most refined, and bestknown marine motors on the market.

THE BRIDGEPORT MOTOR CO., Inc. BRIDGEPORT, CONN.

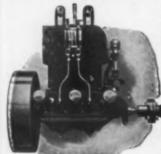


THE SUPREME "SYRACUSE"

For Speed, Pleasure Boats. 4 to 120 H. P. 1 to 6.Cyl. High Quality-Low Price

SYRACUSE GAS ENGINE CO., SYRACUSE, N. Y., U.S.A.

# \$75.00 Upward for the Best Lackawanna Motors

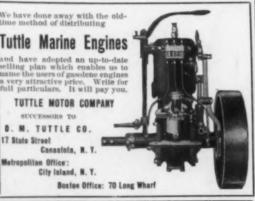


New ANTI CRANKING Feature Simplest, Most Efficient.

Valveless. One to Six Cylinders 21/ to 45 H. P. for All Boats We originated the Valve ss Motor. We originate oth the Practical Thre ort Design and Constru tion as well as Simplifie Improvements made from

time to time. Complete Boat Outfits. Write for "Silvered Cylinders." Not Price Alone-Better Quality.

LACKAWANNA MFG. CO. 30 Coldwell Street, Newburgh, N. Y 126 Liberty Street, New York, N. Y



#### STANDARD MARINE ENGINES **CHAMPION IN 1909**

of all the Star Competitive Events of the year. New York—Bermuda Ocean Race—Won by "Heather" 40-50 HP, STANDARD.

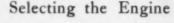
attle-Vancouver Race-Won by "Soya" 25-32 HP. STANDARD. Lake Ontario Long Distance Rad 40-50 HP, STANDARD,

New York—Marblehead Ocean Race—Won by "Elmo II" 12-15 HP, STANDARD.

II" 12-19 MP. STANDARD.

The winning of the Long Distance Championship-Pacific and Atlantic Coasts and the Great Lakes for completely demonstrates the superiority of concition and dependability of the STANDARD Maringine. Insist upon the BUILDER of your yacht onch installing the STANDARD Engine. There are expectations.

174 WHITON STREET TERSEY CITY, N. J., U. S. A.



engine. We shall

en it i

ociatio

ctions. enretica

Bearin

ctions.

mparin

unicipal

tivity'

ss and

otor Bo

present

e Local

ntatives

gether '

ganizat

uncil c

sociatio

ct its

stinguis

siness i

n shall

e power gulation

re men

its c

d all a

nts of

la cle

tion of

"Fede

Many persons in buying a motor boat pay much attention to the lines and finish of the hull and very ad effici yachtsman gives to the motor power a rticles of much thought and attention as to any r attair at at b other part of the equipment-perhaps And this is right, because with ad preca a worthless engine the boat is of no use and yields, instead of pleasure and recreation, worry and endless care, The construction lines of a boat may be bad, but this will but detract from its speed; the finish crude, but this will only offend the eye, whereas an engine of cheap construction or of poor mechanical design will render the craft absolutely useless.

In purchasing a motor boat, then, our advice, borne of long experience, and painful experience too, is: Select the engine with the greatest care. There are many "ready-made" boats on the market offered at attractive prices that look like service, but let me say again 'ware of the engine. Very few boat builders manufacture engines, and all reliable ones will install the ubs. particular make desired by the prospective owner. Therefore it is an easy matter to secure the proper kind of matter to secure the proper kind of in of sequipment. Boat building and engine ce-presimaking are as diverse as north and at Ass south and each is a distinct industry, en that so when you want to go a-boating secure your equipment from specialists.

Let not the foregoing discourage the intry amateur with the idea that most marine motors are bad, for that is not the factmost of them are good. I am simply of the selection of the most important part of the motor driven

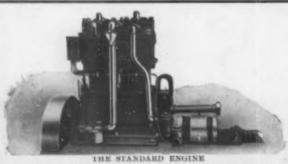
If you have no experienced friend in of to advise you in the selection of the the Co right style and type of engine to fit your requirements and have not a practical book on marine motor construction at hand, which probably you will not have send to the engine manufacturers for ed in their catalogues and study the question and acture their catalogues and study the question and acture the second study study the second study the second study study the second study study study the second study stu out for yourself, which won't, inc. dentally, be an unpleasant task.

B. M. TREBOR.

#### Local Sections of the American Atlan Power Boat Association

BY H. T. KOERNER, PRESIDENT

T was a wise and far-seeing action which the Council of the American Power Boat Association took last year



STANDARD MOTOR CONSTRUCTION CO.

(xxxii)

e no e need remen

Great ught t action ed will

ру, со nt of 1 thing







of a summer home by the water. A country house with a situation, whether it be by lake, river or sea, is far from taking advantage of its opportunities engine. In this Motor Boat Section appear announcements of only reliable boat and engine manufacturers. Their product has become standardized through We shall be very glad to advise any of our readers in regard to the purchase or equipment of a motor boat or engine. Address correspondence on this subject to

hen it incorporated in the Articles of sociation, the formation of Local ctions. It is difficult to conceive, eoretically, a more comprehensive d efficient plan to produce positive d lasting results. That section of the rticles of Association paves the way r attainment of the hopes and aims at at best have had but a sporadic d precarious existence.

Bearing on the formation of Local ctions, it can be best described by mparing it with Federal, State and unicipal activities; the "Municipal tivity" representing the actual busiss and social life of each individual otor Boat Club; the "State Activity" presenting these individual Clubs in e Local Section of five or more Clubs; e "Federal Activity" being the repre-ntatives of these local Sections, ice. gether with the officers of the parent lect ganization, who, together, form the uncil of the American Power Boat sociation. Each Local Section is to ive ct its own officers, adopt its own stinguishing name and conduct its siness in its own manner. Each Secthe ubs. Each Local Sect on shall have ros e power to adopt such local rules and asy gulations as it sees fit. The Chairan of such Local Section becomes a gine gine ce-president of the American Power and at Association. It can be readily try, en that a Council of such representating e men from every section of the ists untry will very nearly approximate ideal condition. This Council will rine its collective power against any e its collective power against any d all assaults and speedily neutralply tter best interests of all motor boat

me

ct-

vou

iend Finally each Vice-president as Chair-the n of his Local Section will bring the the Council the needs and requirents of his own particular Section, tical his of his own partial and appren at 1 a clear understanding and appre-ave tion of what the motor boat users for ed in every part of the country stim I naturally result. Sectional feeling, inc. sed on geographical location, can ve no place in this arrangement. BOR. e needs of the Middle West, the rerements of the Coast, the desires of Great Lakes and the activities of ican Atlantic Seaboard, will all be ught to a common melting pot, and n action of the Council thus consti-ed will probably come nearer to a ction py, concrete result for the better-rical at of Motor Boating at large, than thing ever attempted in its whole

The GURNET DORY
And CLIPPER LAUNCH
Are SEA GOING MOTOR BOATS



SPEED BOATS TO ORDER-15 TO 30 MILES.

TO ENABLE SATISFACTORY REPLY, PLEASE STATE REQUIREMENTS. BOATS, D2. MOTORS, E2.

THE ATLANTIC COMPANY, AMESBURY, MASS. BOSTON, MJ NAVERHILL ST. NEW YORK, 612-30 CHURCH ST.



IE CAILLE PERFECTION MOTOR CO. I Amsterdam Ave. Detroit, Mich.

#### NOTICE



In the boating publica-tions we are bringing special attention to each of the leading features that culminate in the most efficient marine engine. We are doing this be cause we know much experienced boatmen appreciate this.

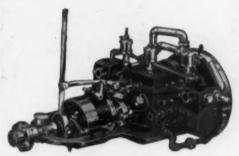
have this

information by for our 1910 ENGINE

THE ROYAL ENGINE CO., BRIDGEPORT, CONN.

# SINTZ 2 and 4 CYL, OPPOSED MARINE MOTORS

ABSOLUTELY NO VIBRATION



Sizes 6 to 40 actual horse-power

The center of weight on our motors is lower than on any other type which increases the stability of your boat.

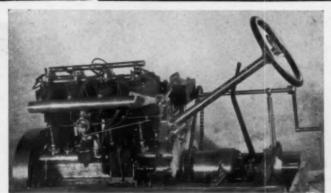
The motor can be placed under locker with control at steering post, giving the cleanest construction and the greatest amount of seating capacity. No noise but the ripple of the

Guaranteed for 2 years

GUY L. SINTZ CO.,

Desk H. MARSHALL, MICH.

# JENCICK=ONE MAN CONTROL



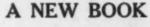
JENCICK MOTORS

Cruisers and Speed Boats

The Finest Motor Made

Ask any JENCICK user

ENCICK MOTOR MANUFACTURING COMPANY 351 No. Main Street, Port Chester, New York



By the Author of "The Bishop of Cottontown"

# Uncle Wash: His Stories

By JOHN TROTWOOD MOORE

Author of "A Summer Hymnal," "Songs and Stories of Tennessee," etc.

UNCLE WASH is an old-time negro body-servant who has retained his memory of the "quality" he condescended to serve "befo' de wah," and has passed through many amusing and exciting experiences in his long life with a quaint and humorous philosophy. It is the originality of his adventures and his entertaining way of telling them that fascinate the reader. Mr. Moore modestly states that he "merely wrote down" what Uncle Wash said. To those who do not know this gifted author we might add that the stories lose nothing in the transcribing.

Frontispiece in colors and four paintings by the well-known Southern artist, Charles H. Sykes. Cloth, 12mo, 329 pages.





ILLUSTRATION FROM "UNCLE WASH"

# **Great Pictures as Moral Teachers**

By HENRY E. JACKSON

THE author has selected twenty of the world's greatest pictures and sculptures and interpreted what the artist meant to express. He shows that when art is made to serve a moral purpose that its influence may be very great and inspiring. The book opens one's eyes to look at pictures with a new motive, and the result is a most stimulating volume. Each subject is represented by a fine engraving and the book is issued in holiday dress. Cloth, 12mo, 267 pages.





ILLUSTRATION FROM "GREAT PICTURES AS MORAL TEACHERS"

# The Old Cotton Gin

By JOHN TROTWOOD MOORE

Author of "Uncle Wash"

T HIS book is one of Mr. Moore's best known poems apostrophizing the South, and has been adopted by some states in an official way.

It is printed in two colors with lavish decorations and handlettered text, by Charles H. Sykes. A beautiful gift book.

Price, \$1.00

FOR SALE AT ALL BOOKSELLERS OR MAILED ON RECEIPT OF PRICE

THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia, Pa.