

JUL 23 1910



August  
1910

PLANT EVERGREENS NOW • STUCCO HOUSES  
A Greenhouse That You Can Afford  
Wild Flowers • Stenciling • Sundial Suggestions

25c.  
a Copy

# House & Garden



# A Postage Stamp

Puts the

## "RICHMOND" Suction Cleaner

### in Your Home



**Y**OU see here an Electric Suction Cleaner which weighs but *ten* pounds instead of sixty. The "RICHMOND" Suction Cleaner enables you now, for the first time, to clean by electricity, without lugging a sixty- or eighty-pound machine from room to room—up and down stairs. It represents as great an advance over heavy-weight vacuum cleaners as these cleaners represented over brooms. For it is the only really portable Suction Cleaner.

Manufactured Exclusively for the RICHMOND SALES CO. by  
**THE McCRUM-HOWELL Co.**  
 Park Ave. and Forty-first Street, New York

<p><b>FIVE FACTORIES</b>                  Two at Uniontown, Pennsylvania                  One at Norwich, Connecticut                  One at Racine, Wisconsin                  One at Chicago, Illinois</p>	<p><b>MANUFACTURERS OF</b>                  "RICHMOND" Boilers and Radiators                  "RICHMOND" Enameled Ware, Bath Tubs, Sinks, Lavatories                  "RICHMOND" Sude Makers                  "RICHMOND" Concealed Transom Lifts, and                  "RICHMOND" Stationary Vacuum Cleaning System</p>
---	---

## Anyone Who Can Afford Brooms Can Now Afford the Best Suction Cleaner Made

All that any Vacuum Cleaner or Suction Cleaner can do, the "RICHMOND" does. And it does, besides, some things which no *other* machine can do.

You can, for example, use the "RICHMOND" Suction Cleaner with or without hose. The hose attachment slides off and on with the same ease that your foot slides into an easy slipper.

Slip on the hose, and the ten-pound "RICHMOND" with its six special cleaning tools (all furnished without extra cost) cleans hangings, walls, books, bedding, upholstery, clothing, hats, underneath radiators, furniture, etc. It is also supplied with a special attachment for hair-drying, pillow-renovating, etc.

Slip off the hose, and you have a floor machine which weighs no more than a common carpet-sweeper. The everyday work of rug- and carpet-cleaning — of cleaning hard-wood floors, tile floors, hearths, bathrooms, porches, etc., can be done either with or without the hose.

**A POSTAGE STAMP THE ONLY COST** required to place this ten-pound cleaner in your home. Just send us your name and address, and we will have delivered to your door without one penny of expense to you—without any obligation of any kind a

## The Richmond Sales Co.

Sole Selling Agents  
 Dept. 15, 160 Broadway, New York City, N. Y.

"RICHMOND" Suction Cleaner. You can prove for yourself in your own home just what this will do for you. But write today, and we will include in our reply a handsome illustrated booklet.



**Fill out and Mail This Coupon Now**

**RICHMOND SALES CO.**  
 Dept. 15, 160 Broadway, New York

I would like to have a "RICHMOND" Electric Suction Cleaner demonstrated in my home, provided it places me under no obligations whatever.

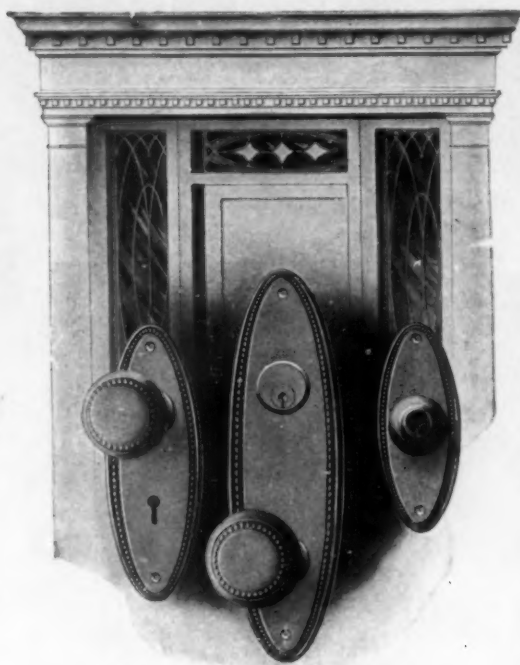
Name .....

Address .....

My Electric Light Co. is.....

.....





## QUALITY In Hardware

THERE is necessity for attention to details in hardware equipment if you would avoid petty annoyances from the use of unreliable goods. The item of "butts," for instance, brings forth this injunction from one writer: "Don't use cheap or inferior makes if you don't want your doors to sag."

Using goods that can be relied upon to give good and satisfactory service are cheaper in the end even if they cost a trifle more at first.

**It is QUALITY to which especial attention is paid in the manufacture of**



## HARDWARE

MANUFACTURED BY  
**P. & F. CORBIN**

MAKERS OF

**"Everything in Builders' Hardware"**

N. W. Cor. Eighth and 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.*

## First Steps in Heating Values



It has taken many, many careful steps in planning, manufacturing and testing to develop the marvelous heat-producing IDEAL Boilers and AMERICAN Radiators. They are the final steps in heating economy. They save heavily in fuel—save in care-taking, save furniture and decorations from ash-dust, save in doctor bills, save fire risk to building, save half the daily house-cleaning, save in time and temper.

## AMERICAN & IDEAL RADIATORS & BOILERS

are a high-class investment from every standpoint for any size or kind of building requiring heating.

The cost of IDEAL Boilers and AMERICAN Radiators will average the lowest annual outlay. For instance—an IDEAL-AMERICAN outfit costing \$200, and lasting 25 years, represents an outlay of \$8 only a year. As there is no reason why IDEAL Boilers and AMERICAN Radiators will not last as long as the building, say 50 years, the outlay would be \$4 only per year. The saving of a few tons of coal a year, which these outfits effect, will easily repay the first cost and then produce a handsome yearly profit on this ideal heating investment—to say nothing of the other savings, the comforts and the health protection. No one, therefore, can afford to continue the waste and nuisances of old-fashioned heating.



A No. 2-22-S IDEAL Boiler and 330 ft. of 38-in. AMERICAN Radiators, costing the owner \$180, were used to Steam heat this cottage.

At these prices the goods can be bought of any reputable competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which installation is extra and varies according to climatic and other conditions.

Do not wait to build a new home, but enjoy comfort and content in the present one. No tearing up partitions or floors, nor disturbing old heating equipment until ready to put fire in the new. Sizes for all classes of buildings—smallest to largest—in town or country. Our free book, "Ideal Heating Investments" tells much that it will pay you well to know. Take the first step *today* and tell us kind and size of building you wish to heat. *Prices are now most favorable.*

Showrooms in all large cities

## AMERICAN RADIATOR COMPANY

Write to Dept 10 Chicago



## DOMES of SILENCE The Invisible Castor Without Wheels

Give easy, noiseless movement to heaviest furniture—won't tear carpet or mark hardwood floors—slip easily over the edge of a rug. Nickel steel—guaranteed unbreakable. A few hammer taps adjust without nails or screws. Fit over old castor holes on any furniture. Use a set of 4. Also with feltoid centers 25c for 4. Sold by Hardware, Furniture, Housefurnishing and Department Stores. If not at your dealer's order direct.  
**HENRY W. PEABODY & CO.**  
12 State Street, New York  
See that Pat. No. 7325, '08, is stamped on inside of each dome. Local agents wanted—Reference required.



## 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



# Country for Sale

The Real Estate Department of House & Garden will be glad to advise its readers in regard  
This service is given without charge. Address Real Estate

## GREYCOURT



One of the most beautiful of Saratoga homes is offered for sale at an interesting figure. Constructed of white brick and marble on an attractive site 100 ft. x 300 ft. The house is of a distinctive type of architecture, elegantly decorated.

First floor: Large hall, drawing room, library, dining room, butler's pantry, kitchen, laundry, servants' dining room and lavatory.

Second floor: Four large sleeping rooms, large square hall, two bath rooms, two servants' sleeping rooms and servants' bath room.

Third floor: Can be conveniently finished off into several rooms.

FOR FURTHER PARTICULARS COMMUNICATE WITH  
C. FRED CLUETT, Troy, N. Y.



## At WHITE PLAINS, N. Y. AN IDEAL COUNTRY HOME, WITH ABOUT 2 ACRES, AT AN ATTRACTIVE PRICE

New 12 room House, 3 baths, 2 additional lavatories; living room, 15x40; parquet floors; several open fireplaces; the grounds are beautifully landscaped; plot frontages on two streets; water, sewer, gas and electricity.

BUILT BY A MOST RELIABLE CITY BUILDER.  
MUST BE SEEN TO BE APPRECIATED.

Garage will be built to suit. Decorations and lighting fixtures to be selected by the purchaser.

*Nelson Ehrhart*

7 East 42d St., N. Y. Tel. 4545 Murray Hill, and  
Depot Square, Tel. 759 White Plains, N. Y.

## A HILLTOP HOUSE

View unsurpassed in Westchester County. Best neighborhood. Mile and half from Chappaqua toward Mt. Kisco. House can be enlarged as desired.

ALFRED BUSSELLE, Architect  
1133 Broadway, New York City

## Great Neck, L. I.

Thirty acres for sale. High ground, beautiful view. Adjoining Vanderbilt Estate. Will divide

STEWART C. SCHENCK  
503 Fifth Avenue New York City

## FOR SALE

Roselle, N. J. Forty-five minutes from New York City. House. Twelve large rooms and bath. Near depot. Lot 100 x 200 feet. Shade and fruit trees. Too large for owner.

Apply for terms at 118 Chestnut St., Roselle, or 111 Broadway, New York City, nineteenth floor.  
E. C. BARLOW.

*Along the Sound*  
Estates and Country  
Places for Sale  
and Rent

Furnished or Unfurnished Houses  
in Westchester, Connecticut  
and Long Island

**REARDON**  
REALTY  
COMPANY

43 WEST 34<sup>TH</sup> ST NEW YORK

## Princeton "The Town Beautiful"

The ideal home town -- no manufacturing, no objectionable features. Handsome residences, beautiful landscape. Convenient to both New York and Philadelphia--fast trains. Rentals \$300 to \$6000 yearly. Furnished homes also for rent. Choice properties -- town and country -- furnished or unfurnished, for sale or rent, in other desirable localities.

WALTER B. HOWE, - - Princeton, N. J.  
New York Office, 56 Cedar Street

## HOUSES AND GARDENS PHOTOGRAPHED IN COLOR AUTOCHROME PROCESS

Write for Particulars

Eldred S. Bates,

115 Broadway, Room 1414  
NEW YORK

## GREENWICH, CONN.

If you contemplate renting or  
buying, consult

FRANKLIN EDSON, RAYMOND B. THOMSON CO.

Real Estate Agency  
SMITH BUILDING Telephone 729 GREENWICH, CONN.

Personal attention given all inquiries



EXCEPTIONAL SELECTION NOW  
TO BE HAD IN  
**DESIRABLE**  
RESIDENCES, ESTATES  
FARMS, ACREAGE, ETC., AT  
**Greenwich, Conn.**

Shore and Inland  
FOR SALE AT ALL PRICES  
Apply for all detailed particulars to  
**Laurence Timmons**  
Opp. R. R. Station, Tel. 456 Greenwich, Conn.

# Property and Rent

to the purchase, sale or rental of country and suburban real estate in all parts of the country.  
Department, House & Garden, 449 Fourth Avenue, New York City.

## Wm. R. Ferguson,

REALTY of all descriptions FOR SALE Tel. 981 Smith Bldg.  
Country Seats, Estates, Residences,  
Farms, Acreage, Building Sites.  
Furnished and Unfurnished Houses to Rent for 1910 Season at Special Prices

## Greenwich, Conn.



## HOLLIS PARK GARDENS

### A Charming Suburban Community

at Hollis, Long Island, twelve miles out on the Penn.-L. I. R. R. main line. 22 minutes from New York.

Hollis Park Gardens is not in the class of the typically developed suburb. Its homes are not of the stereotyped sort but are distinctive without being expensive. This gives the place a charm that is unique among suburban communities.

Hollis Park Gardens has every city convenience and improvement, all completed NOW. Situated on the ridge of Long Island it is high and dry with a cool ocean breeze tempering the mid-summer afternoons and evenings. A few residences ready June 1st for sale on convenient terms. As a home site Hollis Park Gardens is ideal; as an investment it is unexcelled.

Send for the book.  
ISLAND CITIES REAL ESTATE CO.  
585 Fulton Street Brooklyn, N. Y.

## New England Country Estates

IN RINDGE, N. H., the town of many lakes and hills with elevation of 1,000 ft., in the Mt. Monadnock District, only 60 or 70 miles from Boston, several desirable estates for sale, having grand views and picturesque surroundings. Farm of 60 acres 2 miles from station, on main road; 6-room house, barn, fruit, neighbors near. Price, \$1,250.

Also small village place, 5 minutes' walk to depot—\$1,250.  
Also new house of 12 rooms in village, 1 acre, shade and fruit trees—\$2,500.

IN PETERBORO, another beautiful town in the Monadnock District, one of the finest old estates to be found anywhere, is offered for sale. Old Colonial house of best type, 12 large rooms, hall from front to rear, 10 acres land, fine views, elevation 1200 ft. Price, \$2,500.

Also 120 acres on hilltop, finest possible location; adjoins estate owned by Harvard professor. House in good order. Price, \$3,000.

Also new bungalow in choice location and neighborhood. Price, \$2,000.

IN SHARON, in the Monadnock District of New Hampshire, farm of 65 acres, very elevated; price, \$2,600. Also farm of 150 acres, over 1,000 ft. elevation—\$3,000.

IN DUBLIN, another lovely Monadnock town, farm of 50 acres, \$2,000.

IN TAMWORTH, N. H., in the White Mountain District, hill farm of 200 acres with renovated farmhouse having 12 rooms and bath, fully furnished, large barn, etc. Price, \$12,000. Also farm of 140 acres, 9-room house, barn, etc., insured \$3,500. Price, \$5,000.

IN SUGAR HILL, N. H., 2,000 ft. elevation, farm of 240 acres, large new house, still incomplete. Price, \$7,500.

CAMP AT MOOSEHEAD LAKE, ME. Frame house and log cabin fully furnished. Beautifully situated. Send for photos and full details. Price, \$1,500.

For Sale by

**W. B. BLAKEMORE**  
141 Milk St., BOSTON, MASS.

## Little Neck Hills

LITTLE NECK, LONG ISLAND

Your social standing will be cared for here as in no other development in or about New York. The general character of all purchasers must be up to standard or we will not sell home sites to them.

There is no other property like this in the City of Greater New York. Its elevation is 240 feet. It is slightly dry and healthful; no malaria. Manhattan is in plain view on a clear day, also charming views in every direction, and at night the sight of Manhattan with its brilliant illuminations is enchanting.

Little Neck Hills is the summit of that locality, and is just far enough from the railroad station to eliminate many unpleasant features usually present about a station.

We shall be pleased to have you communicate with us regarding this charming property. Maps and full information mailed upon request.

Telephone, 5317 Murray Hill.

DWIGHT MURRAY REALTY CO.,

47 West 34th St.



## 109 ACRE FARM

An estate that must be sold. Hills and valley, river and woods, 60 acres tillable, balance woodland and pasture, grand views, 2 1/2 miles from station, 45 miles from New York. Fine large barns, and farmer's cottage, grand old homestead of 10 rooms, 1/2 hour's drive to city of 30,000. This would be a bargain at \$15,000, but \$9,000 will buy it.

THE J. B. LAWRENCE AGENCY  
15 SOUTH MAIN ST., NORWALK, CONN.

## 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 and Garden

50 Pages of Distinctive Homes—Colonial Half Timber—Cement—Remodeled Farmhouses—Bungalows—Summer Camps.

A limited number of this superb issue are on hand. Write for a copy and see if it doesn't crystallize your ideas.

Sent by return mail on receipt of 25 cents.

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

YOU are one of many who will read this advertisement.

Thousands consult this department monthly looking for desirable property for sale and rent.

If you desire to dispose of your property advertise here.

Special rates upon application.

Manager Real Estate Department

HOUSE & GARDEN

449 Fourth Ave., New York City, N.Y.

## Gentleman's Country Estate

on the South Shore of Martha's Vineyard, Mass. Over 140 acres fine land with 1 1/2 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 information address

**JAMES LOOK**  
Martha's Vineyard,

West Tisbury  
Mass.



### "Edgemont Estate" at Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm 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 Thayer, Pres.

Scarsdale, N. Y.  
Westchester Co.

503 5th Ave., N. Y.  
Corner 42d Street

In writing to advertisers please mention HOUSE AND GARDEN.



Scores of houses just as distinctive as this appear among the illustrations

# Distinctive Homes of Moderate Cost

EDITED BY HENRY H. SAYLOR

## A Book for House-Builders and Home-Makers

**C** 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.

**C** 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.

**C** 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

**C** 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.

- |   |   |
|---|---|
| <p>Chapter I. The Home-builder and the Architect</p> <p>II. Building Materials: Their Respective Merits, Defects and Costs</p> <p>III. Constructive Details: the Roof, the Cellar, Windows</p> <p>IV. The Porch, the Terrace, Enclosed Porches and Sleeping Porches</p> <p>V. The Fireplace</p> <p>VI. Heating Systems and Water Supply</p> | <p>Chapter VII. Lighting Systems and Lighting Fixtures</p> <p>VIII. Built-in Conveniences, Wainscoting and Book-cases</p> <p>IX. Floors and Floor Coverings</p> <p>X. Wall Coverings, Portieres and Window Draperies</p> <p>XI. Furnishing and Decorating the Bedroom</p> <p>XII. Furniture</p> <p>XIII. Picture Hanging and Ornaments</p> <p>XIV. The Garage</p> |
|---|---|

**C** "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 12½ inches, superbly printed on plate paper, tastefully bound. Price \$2.00 net. By mail, postage 25c.

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

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

Name.....

Address.....

**McBride, Winston & Co.**

Publishers

440 Fourth Avenue, New York





## A N N O U N C E M E N T



WE take great pleasure in announcing that we have taken over *The Travel Magazine*, which will be greatly enlarged and improved and continued as a monthly publication under our imprint. No greater opportunity ever existed for making a magazine of compelling interest and entertainment, as well as of educational value, than that before us. And we expect to take full advantage of our opportunity. Travel in every land will be the field we shall cover, and the illustrations will be the most beautiful and remarkable of any periodical because, after all, there is nothing more fascinating than an acquaintance with people, places and things throughout the world. Travel in our own country with its matchless natural beauty, in Europe with its picturesque peoples, its architectural splendors and its interesting life, as well as the curious places and people of the more remote corners of the earth—of China, India, Africa, the islands of the sea—each of these will have its share of attention.

Here then is to be a magazine that will conduct its readers through the beaten paths of the world and far afield as well, bringing them from continent to continent, visiting peoples barbarous and cultured. Those who have traveled will be brought face to face with old friends and new sights, while the stay-at-homes will enjoy vicariously the recreation and travel of the more fortunate ones who have leisure and means to gratify their wanderlust.

The first number under our direction is August, ready July 23rd. In it Mr. A. Radclyffe Dugmore, F. R. G. S., shows for the first time the interesting fact that Africa really is accessible to the traveler. The illustrations, of course, are wonderful, as Mr. Dugmore's pictures always are. This presentation of the subject is entirely new and different from anything heretofore published.

Mr. Arthur Bartlett Maurice, Editor of *The Bookman*, contributes a particularly interesting article entitled "A Literary Pilgrim in Paris," in which he seeks out the Paris of Hugo, of Dumas, of Du Maurier and other French writers, leading us through the haunts that they have immortalized.

"A Venetian Holiday" is the title of another article by Mr. Gardner Teall, who has seen Italy from every side, portraying graphically in text and picture the Lido, the Coney Island of Italy, with all its picturesque holiday making.

Mr. C. H. Claudy describes the wonderful caverns of Luray—that marvelous geological wonder of Virginia, more mysterious and magnificent than the Mammoth Cave of Kentucky. Many most extraordinary photographs are shown of the stalactite and stalagmite formations along the miles of subterranean passages in this little known cave.

Then there are articles on a climb of Mt. Popocatepetl in Mexico; our own Adirondack country; a Visit to Segesta, that bygone seat of culture in Sicily, with its superb Grecian ruins of a former architectural splendor; Home Life in Persia, and many other subjects no less interesting that will strike a responsive cord in the heart of every red-blooded man.

The appended coupon is for our friends who have confidence enough in us to believe that we will make a magazine as notable in the field of travel as we have in the field of country home making. Our friends the readers of *House & Garden*, whether they are on our subscription list or buy the magazine regularly on the newsstands, may become charter subscribers of the new *Travel Magazine* and secure it from *now until January, 1912*, for the regular yearly subscription price of \$1.50. But you must act promptly. The charter subscriber's list closes August 31st. The appended coupon is for your convenience. If it is not used your letter must state, in subscribing at this special rate, that you are a regular reader of *House & Garden*.

**McBRIDE, WINSTON & COMPANY, PUBLISHERS**

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

I am a regular reader of *House & Garden* and desire to take advantage of your charter subscribers' offer of the *Travel Magazine* from now until January, 1912, for \$1.50, which I enclose.

Name .....

Address .....





## KENNEL DEPARTMENT

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

## Walescott Kennels

### Scottish Terriers

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

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

### Welsh Terriers

Airedale in color, Fox Terrier in size. Large enough for watch dog, small enough for the house. Game little companions.

Puppies from \$25 for females to \$75 for Males

BERNARDSVILLE, N. J.



## KARBO III DIP

### SPECIALLY FOR DOGS

Is sure death to the Mange parasite and Fleas. Stimulates the Skin. Makes the coat silky. The Dog's best friend

USED IN THE LARGEST KENNELS. Send for Circular.

J. W. BARWELL,

Blatchford's Animal Food Works, Waukegan, Ill. Established at Leicester, England in 1800.

## CARTERET KENNELS

Property of Mrs. A. Ronalds Conkling

Have For Sale, most exquisite adult and young POMERANIANS, also English Toy Spaniels and Collies from the champion dogs winning premier honors at all the leading shows. Show specimens, and those suitable for Pets, for sale.

Morris Plains, N. J. Phone, 346 Morristown, N. J.

### Boston Terrier Puppies for Sale Both Sexes

fine pedigreed stock, best pet dogs living, prices \$20 to \$40. SEND FOR LIST.

GEO. K. KRESS, 937 Hamilton St., Allentown, Pa.

### ENGLISH BLOODHOUNDS

The most perfect family dog. Companionable, intelligent, affectionate. Natural man trailer, easily trained to find any member of the family or strangers; long registered pedigree; always winners on the show bench and on the trail.

I can now offer pups as fine as I ever bred, from three of my best pairs, not related. Also one imported litter, from the great bitch, "Queen of Hearts," sired by ch. Hordis Ajax the best dog of England for years. Illustrated book two stamps. Photograph 25c.

J. WINCHELL, FAIR HAVEN, VERMONT

## DUNDEE KENNELS, BULLDOGS AT STUD

KHARTOUM, CH. DUNDEE SWASHER, CH. ST. VINCENT, CH. LORD CHANCELLOR  
 FEE, \$25.00 FEE, \$25.00 FEE, 25.00 FEE, 25.00

Apply stud cards

G. G. ANDERSON, MANAGER,

HEWLETT, N. Y.

'Phone 1053 Far Rockaway

Grown Stock and Puppies for Sale

In writing to advertisers please mention HOUSE AND GARDEN.

## The Chow Chow

BY FRANK T. CARLTON.

THE Chow Chow dog is a native of China, and it is only in very recent years that he has become popular in this country and England. The vogue of the breed has been slow to develop, but the last two or three years has seen an advance that is amazing. The principal breeders in various parts of the United States all report an overflow of orders for puppies. So far, the Chow has enjoyed an exclusiveness of patronage somewhat akin to that of the French Bulldog. It is not a cheap dog, in the first place, and its singular or quaint appearance perhaps calls for a rather cultivated taste in dogs. At all events he has grown in the affections of the American dog-lover in the most permanent fashion, and many of the handsomest homes throughout the country boast these dogs as ornaments and guards.



The Chow is a good watch dog, with the commendable trait of not easily making friends

In connection with this last quality, the fact is that as a real guard or watch-dog, the Chow has no superior. He is not a very large dog, but he is muscular, hardy, of undeniable courage, and never fails to give warning of the presence of intruders. One commendable feature of his watching is that he is no mere alarmist. When a Chow gives tongue there is something going on, or somebody around, that his owner should be aware of. Added to this he has one of the greatest charms in any dog, namely, he does not make friends with strangers. This is his most noted mental characteristic, and binds his owner to him with bonds of steel.

The Chow Chow breeds true to type, therefore he must be accepted as a dog of high degree. Once at maturity, he is regarded as exceptionally hardy, and it is best to purchase a specimen when he is bordering on this stage. At the age of six months, or thereabouts, the tongue of the young Chow should have turned completely black. This is one of the essential physical characteristics of the breed.

### Have A Picture Of Your DOG, CAT OR HORSE

Mrs. H. V. Furness, the well known painter of animals, will make you a beautiful portrait in oils or water color. Miniatures on ivory or china a specialty. Will paint from life or photographs. A few choice Silver Angora Kittens for sale. MRS. HARRIET V. FURNESS 152 W. 131st St., NEW YORK CITY Tel. 2774 W. Morningside

### 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 POMES" 1427 Elk St., Franklin, Pa.

### POMERANIAN DOGS and PERSIAN CATS

The Argent Kennels have for disposal, exquisite toy pomeranians. All ages and colors; bred from noted winners, also prize winning, longhaired cats and kittens. Silvers and Whites.

### MRS. CHAMPION

Todd Hill Road, Richmond Township, West New Brighton, Staten Island. Tel. 975W West Brighton. Firefy, A.K.C. 133794

### MALTA PURA Pure TERRIERS

are the purest blood in the world. Only a few dollars more gives you a thoroughbred. Profitable Stud. Champion of Champions Sassy for sale - \$1500

MALTA PURA 61 1/2 East 124th Street, New York. Tel. 2419 Harlem

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

MRS. G. C. ROHDE, Ann Arbor, Mich.

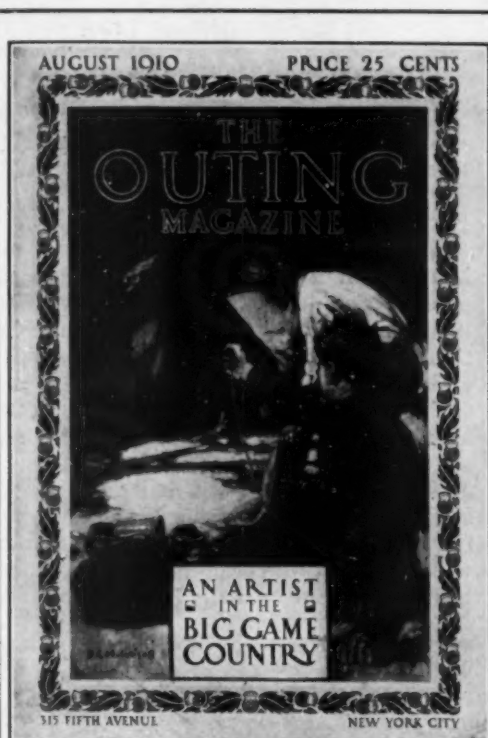
FOR SALE Choice Collie Pups from Imported Champion Stock. Sable and White. Full White Collars at low prices. Nothing better.

9 Walnut Street W. H. GRAY Brookville, Pa.

## COONHOUNDS

The Southern Farm Coonhound Kennels, Selmer, Tenn., have a few fine coon hounds for sale on trial. New book, "Coonhunting and Coonhounds," greatest on the subject ever published, together with our complete catalogue, illustrated, 64 pages, will be sent for 50 cents.





## AUGUST OUTING

Are insects devouring your plants? In **OUR RIVALS IN THE COUNTRY**, E. P. Powell discusses these troubles, and tells how to deal with them.

This same issue contains thirteen other well timed articles such as camp-fires, bass fishing, shooting, flying and exploration — besides outdoor fiction that fairly breathes of the open places.

To keep in touch with the great outdoor world — "Take an **OUTING**."

All news-stands 25 cents, \$3.00 a year. Send fifty cents in stamps today for three months trial subscription.

Liberal offer to local representatives. Write for terms.



### If You Have a Dog

You Should Read

## FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial Subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City

### "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

New York

The Chow has an under-coat, soft and woolly, topped by an outer coat of coarse texture—the more profuse, the better. This coat is whole-colored—red, black, shaded red, yellow, blue, and white. The colors most commonly seen in this country are the three first named. The deep red is most coveted by fanciers. The shaded reds are becoming increasingly popular, however, owing to their generous coats of the desirable straight, coarse texture.

The general appearance of the Chow is a lively, compact, muscular dog, with a well knit frame, and tail curled tightly over his short back. His skull should be flat and broad; muzzle broad from the eyes to the point (not pointed like the fox); nose black, large and wide; teeth strong and level; eyes, dark and small; ears small, pointed, and carried stiffly erect, and carried well forward over the eyes, giving the desirable "scowl"; the shoulders are muscular and sloping; forelegs, straight, massive and of moderate length; hocks on hindlegs well let down; feet small, round, and cat-like. Puppies of good breeding bring from \$50 to \$100.

The best evidence of the Chow's increasing popularity is the provision made for the breeds at all large dog shows. The classification is most liberal, and the owners of good specimens secure no insignificant returns in the way of cash prizes and trophies of value.

It is the way of doggy men when approaching a strange dog to handle him, to give him first the back of the hand to smell when, nine times in ten, the dog will suffer himself to be handled, or stroked. The dog always seems to demand this form of introduction from humans. Should he be so ill-mannered as to snap at your hand, do not withdraw it suddenly, or the flesh will be ripped, whereas if the hand be held firm the intelligent animal will scarcely sink a tooth into the flesh. As you grow nervous, dogs grow courageous. Great bluffers they are, in their way. Any dog you cannot manage, get rid of.

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

## AMERICAN KENNEL GAZETTE

The Breeders register in the Gazette has proved of great value, in view of the constant demand at the American Kennel Club for names and addresses of breeders. Write for rates.

### AMERICAN KENNEL CLUB

1 Liberty Street,

NEW YORK CITY

## Ruddington Kennels

CHOW CHOWS

For Sale and Stud



Address

JOHN A. McVICKAR

Mamaroneck, New York

CHANG FONG

## 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 MANAGER

## Airedale Farm Kennels

SPRING VALLEY, NEW YORK

30 miles from New York City, Erie R. R.

MR. HOWARD KEELER, Owner

This is probably the largest and finest farm home for

Airedale Terriers in America.

THE BEST CHUM FOR CHILDREN

The most intelligent, affectionate and useful dog

living.

ONLY THE BEST REGISTERED STOCK FOR SALE

The man who owns an Airedale has at least one loyal friend



### Airedale Puppies

by Champion Briars Masterpiece and Ch. Red Raven for sale. I have pairs and the highest class of show specimens. Prices from \$25 to \$200. Everything guaranteed as represented.

Address John Murray Briarcrest Kennels Eatontown, New Jersey.

**AIREDALE TERRIERS** A few choice puppies of the most fashionable breeding. Bred to win or will make fine COMPANIONS.

PRICE \$30.00

H. E. GATTENBY, Macksburg, Iowa

### AIREDALE TERRIERS and ENGLISH SETTERS

Sired by the greatest living Champions

We can sell you Airedale or Setter puppies of the world's greatest breeding at \$25 and up, according to quality.

We breed but a few and those the best. No catalogue. Please state your wants and we will guarantee to please you.

ELMHURST FARM KENNELS, Kansas City, Missouri. Fifty-ninth & Jackson Ave.



### Collie Puppies FOR SALE

Sable and tricolor puppies four (4) months, by Southport Blue Ben—Brandane Carmel. Also Blue Merles, Sables and tricolors by Nethermuir Blue-beard—3 months—\$25.00 and up. For particulars apply

NETHERMUIR COLLIE KENNELS MT. CARMEL, CONN.



### PET STOCK

## SHETLAND PONIES



An unobscured source of pleasure and robust health to children. Safe and ideal playmates. Inexpensive to keep. Highest type. Complete outfits. Satisfaction guaranteed. Illustrated catalogue.

BELLE MEADE FARM Box 19, Markham, Va.

### RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tan and Polish Rabbits — Peruvian and Smooth Cavies for fancy or pets.

Youngsters now for sale, \$1.00 up

ELM COVE RABBITRY, Great Neck, L. I.



## POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. All inquiries will receive careful attention. When an immediate reply is desired enclose a self-addressed, stamped envelope.

### "World's Best White Wyandottes"



Has been our motto for years.

We have bred fancy poultry all our lifetime, but years ago the superiority of the White Wyandotte caused us to devote ourselves exclusively to this magnificent breed.

*A Fishel Type* We ship stock and eggs all over the world.

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

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

### NUGGET BUFF PLYMOUTH ROCKS

America's leading strain of UTILITY and EXHIBITION birds. Bred everywhere, both for eggs and meat and for the show-room, they are the SUPREME ALL-AROUND fowl.

BUFF is the common-sense plumage for any location—town or farm. The PLYMOUTH ROCKS have been the favorite fowl in this country for decades. Consequently BUFF PLYMOUTH ROCKS have a large following. And the NUGGETS are the ORIGINAL STRAIN. 1000 old and young stock for sale.

Standard Plymouth Rock Farms, CONSTANTIA, N. Y.



QUEEN of the NUGGETS. The most valuable Buff Rock hen alive—herself a noted prize-winner and the dam of our 1st N. Y. cockerel and 2d. N. Y. cock.

### BUFF ORPINGTONS



**Breeding Stock for Sale—Bargains.**

The best utility bird and nothing fancier—a feature to consider in the landscape garden effect. As a table fowl there are none better.

**JOE-PYE**

Catalog with actual photos on request

South Norwalk, Conn., R. F. D. 37  
118 East 20th Street, New York

### Onondaga Minorca Poultry Yard



Excelsior Strain  
**S. C. Black Minorcas**

Prize winners at all the leading shows. A fine lot of stock for sale. Eggs at half price. Send for price list and matter for 1910.

**Joseph G. Krenn, Prop.**  
114 Beecher St., Syracuse, N. Y.



### LEGHORNS

150 acres devoted to standard bred S. C. W. Leghorns for Winter Egg Production.

1,500 Breeders for Sale  
1,000 Early Pullets for Sale  
WILSON FARM, Morristown, N. J.

### JUMBO SQUAB BREEDERS

Are Largest and Fastest Breeders. Every pair guaranteed mated and banded. Money-makers everywhere. If you wish to be successful, start with Our "JUMBO HOMERS." Send 4 cents in stamps for our large ILLUSTRATED BOOK "How to make MONEY with SQUABS" PROVIDENCE SQUAB Co., 772 Hope St., Providence, R. I.



### BEAUTIFUL WILD GAME FOWLS

Have lived in jungle till flesh rivals that of pheasant. Magnificent plumage. Superb form. Desperately game. Free illustrated circular describing many strains.

A. F. GRAHAM

Moultrie, Ga.

### G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

**G. D. TILLEY, Naturalist**  
DARIEN, CONNECTICUT

### The Moulting Hen

BY M. ROBERTS CONOVER

**A** FOWL moults during its second year, usually when from sixteen to eighteen months old, and once a year thereafter during the remainder of its life. The majority of fowls moult in late summer.

Many poultrymen do not keep their pullets beyond the moult, but sell them and procure others for laying. Although old hens are not profitable as layers, the hen that goes through her first moult quickly and is ready for business in the fall, may still be counted valuable enough by the average man to be held for one more season of laying.

Hens that make of it a deliberate process lasting for three months, during which they suspend their egg-laying functions, will not be profitable to their owners. Such birds are usually in a debilitated



After the moulting season give the flock a free range if possible

state, the system lacking the feather-producing elements.

A preliminary of moulting is the loss of feathers, caused by the diminution of nourishment to the old quill. The forming feather within the follicle crowds the old one out. In warm weather the shedding is not injurious to the bird, but the real tax upon the system is the formation of the new feathers. Vigor is, of course, conducive to a quick moult and a speedy return to egg-laying. Among normal fowls, there should not be undue raggedness of plumage, the new feathers soon replacing the old. The moulting should be completed in from four to six weeks. Its requisites are moderate exercise, right food, cleanliness and freedom from the weakness of inbreeding. There must exist the proper conditions for weeks beforehand, not a belated delving after rules for feed rations when the flock has assumed that distressing half-plucked appearance often seen among neglected flocks.

As soon as the feathers begin falling, confine the flock in a good-sized pen where there is a good stand of grass or clover. This will furnish the necessary green food. Stop working for eggs. Some hens will lay during the moult, but usually a hen does but one thing well at one time and in moulting time she should grow feathers. The aim is to get them through the process quickly by lessening all other drains. Fattening foods are not required. There must be nitrogenous material in plenty. Linseed meal, oat-

### DON'T BUILD

that new hen house or fix up the old one until you get our large new 100 pp. catalog (over 100 illustrations) telling all about the Potter Poultry House Fixtures, Perfection Feed Hoppers, Simplex Trap Nests, feeds and supplies of all kinds. Potter Fixtures have been on the market over 30 years and are used by thousands of poultry keepers. They are complete, convenient and sanitary; made in 3 styles and 12 sizes to fit any hen-house. We now make the complete line of PORTABLE (K. D.) HOUSES, BROOD COOPS, PIGEON LOFTS, etc., formerly made by the Morgan Sanitary House Co., of Lemont, Ill. These are made in so different styles and sizes, and if you want a complete, up-to-date and cheap house or coop of any kind you should not fail to send for large illustrated catalog telling all about these goods.

**DON'T KILL** or sell your laying hens: use the POTTER SYSTEM and pick out the layers from the losers and keep only healthy laying hens. The Potter System is the greatest discovery of the century in the poultry world and is used by over 25,000 poultry keepers. You can save dollars every year by using our system, because you keep only layers. Our new 100 pp. book entitled "Don't Kill the Laying Hen" is a revelation to poultry raisers on the subject of laying and non-laying hens and egg production. Potter Poultry Products are for Particular Poultry People, and if you are particular and want to make more money on your flock you will write today. Send two red stamps to cover postage on our large 100 page catalog and circulars.

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



meal, bran and whole wheat should be fed chiefly. Give the heaviest feed late in the day and let the birds have cool, airy sleeping quarters in which to assimilate the feather-making material of their last meal. It is well to vary their rations to a certain extent, feeding certain foods on alternate days. Below are two feed formulas which give the necessary elements in about the right proportion.

No. 1. Linseed meal... 1 part  
Whole wheat... 3 parts  
Bran ..... 1 part  
Corn ..... 1 part

All mixed thoroughly and fed dry. Feed enough to give each fowl a full crop.

No. 2. Oatmeal ..... 3 parts  
Meat scraps.... 1 part  
Whole wheat... 1 part  
Corn ..... 1 part

When No. 1 is fed, the morning feed may consist of clipped oats scattered about where the birds must hunt for it.

When No. 2 is fed, whole wheat may be fed in the morning.

During the second week omit the corn from feed No. 1 and increase the allowance of linseed meal to two parts. Omit the corn in feed No. 2 and increase the oatmeal to four parts. During the third week, feed as during the first; during the fourth week, feed as during the second.

An excess of linseed meal sometimes affects the bowels slightly. If such is the case omit it for four days and resume it gradually.

This feeding should bring the fowls around in first-class condition.

At the end of the fourth week examine the birds. Such as have fresh plumage and bodies free from forming feathers have finished the moult and may come down to ordinary rations. Those that have not may be fed the following on every other day:

Linseed meal .. 1 part  
Bran ..... 1 part  
Whole wheat .. 1 part

While on the intervening days the ration could be made up of equal parts of bran and wheat. This is fed in a moist, crumbly mash.

The dust bath of ashes or clean fine sand is vital to the fowls at this time and all precautionary measures against vermin are of the utmost importance.

Where there is no pen of grass or clover, such gleanings from the garden, as pea vines, the outer leaves of cabbage, overgrown lettuce, etc., are very much relished.

It is also well to mix with their food from time to time two or three tablespoonfuls of powdered charcoal.

If any birds sicken, isolate or annihilate them at once.

Give the fowls double the quantity of drinking water, as they need more and the evaporation is greater.

If coughing or sneezing is noticed among them, put a little kerosene in the drinking water—about one tablespoonful to every quart.

# The BEST SHORT STORIES

of the year are in the

## FICTION NUMBER

(AUGUST)

# SCRIBNER

**Richard Harding Davis** contributes a story of remarkable power and dramatic intensity—*A Question of Latitude*

**E. W. Hornung**, creator of the famous Raffles, tells a story of villainy and heroism in which a chauffeur plays a leading part—*The Man and the Wheel*

Stories by **Alice Brown** **Dorothy Canfield**  
**John R. Spears** **Gerald Chittenden**

**John Fox, Jr.**, author of "The Little Shepherd of Kingdom Come," describes a journey *On Horseback to Kingdom Come*—a region he had never before visited. It has all the charm and romantic color of his fiction

A very notable feature of this number will be

**GEORGE MEREDITH'S**  
*The Sentimentalists*—An Unfinished Comedy

**Maurice Hewlett's Rest Harrow**

## THEODORE ROOSEVELT'S

account of the great LION HUNT by Nandi spearmen is one of the most vivid and dramatic episodes among his African experiences

CHARLES SCRIBNER'S SONS

\$3.00 a year; 25 cents a number.

## 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

# Kelsey Fresh Air Heating



Residence of Hon. J. A. Howard, Wheeling, W. Va.  
Heated and Ventilated by the Kelsey Mechanical System

## FOR THAT NEW HOUSE OF YOURS

If you want FRESH AIR, GOOD VENTILATION, HEALTHFUL AND ECONOMICAL HEATING; and a heating plant that's easy to manage and is recommended by thousands of HOME OWNERS WHO INVESTIGATED AND INSTALLED IN PREFERENCE TO ANY OTHER SYSTEM without regard to the question of cost, you will give careful consideration to the

## KELSEY WARM AIR GENERATOR

No matter whether your house may have 5 rooms or 50 or more rooms, there's an abundance of evidence from the users that the KELSEY SYSTEM WILL HEAT EVERY ROOM EVENLY AND UNIFORMLY WITH FRESH AIR THAT HAS BEEN PROPERLY WARMED, AND WILL DO IT WITH LESS COST FOR FUEL, MANAGEMENT AND REPAIRS, THAN ANY OTHER SYSTEM.

FOR VERY LARGE RESIDENCES the Kelsey Mechanical (Fan) System effects a complete change of air all through the house every ten or fifteen minutes, if so desired.

**YOU WILL SOLVE THE HEATING QUESTION**

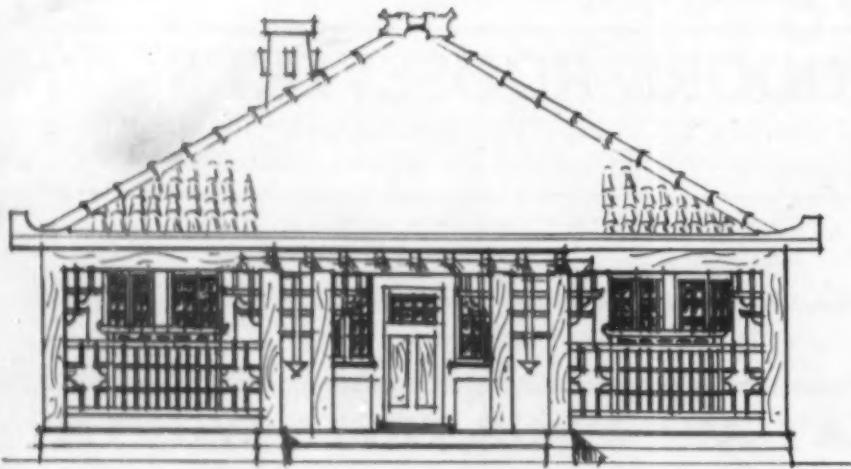
if you'll only INVESTIGATE and send for the free Kelsey booklets which clearly explain WHY Kelsey Heating gives the very best results, without the use of steam or hot water pipes and unsightly radiators which warm the same stagnant, unhealthful air over and over.

## KELSEY HEATING COMPANY

Main Office: 56 East Fayette St., SYRACUSE, N. Y.

New York Office: 164C FIFTH AVENUE

# BUNGALOWS, Portable and Sectional



This Six-Room Japanese Bungalow, just the kind you want this winter in the South. We can make any size.

We make and erect anywhere,  
any number of rooms

Japanese tea-house  
Bungalows  
Garages  
Chapels  
Stores

Of Unique Design and  
Materials

## Billings, Stevens Company

4 East Forty-Second Street

Send for Circular G.

New York City



## Contents, August, 1910

COVER DESIGN: A HOUSE AT WOODMERE, L. I., Charles Barton Keen, Architect  
*Photograph by H. H. S.*

CONTENTS DESIGN: 'CAT-TAILS'  
*Photograph by N. R. Graves*

FRONTISPIECE: THE COVERED TERRACE ON A HOUSE NEAR VILLA NOVA, PA.,  
 Charles Barton Keen, Architect  
*Photograph by Thomas W. Sears*

PLANT EVERGREENS NOW.....	77
<i>By Gardner Teall</i>	
THE SECRET OF DURABLE STUCCO.....	81
<i>By Albert Moyer</i>	
SUN-DIAL SUGGESTIONS .....	85
STENCILING FABRICS .....	86
<i>By Lucy Abbot Throop</i>	
THE RIGHT USE OF EVERGREENS.....	88
<i>By Grace Tabor</i>	
HOW RUSH SEATS ARE MADE.....	91
<i>By Louise Shrimpton</i>	
EVERYMAN'S GREENHOUSE .....	92
<i>By F. F. Rockwell</i>	
THE SERVICE END OF THE HOUSE.....	94
<i>By Russell Fisher</i>	
A COUNTRY ROAD (Double-page illustration).....	96
SOME EXPERIENCES WITH WILD FLOWERS.....	98
<i>By H. S. Adams</i>	
THE ARCHITECTURAL VALUE OF LATTICEWORK.....	100
<i>By Jared Stuyvesant</i>	
A GARDEN OF VISTAS.....	102
<i>By Charles Edward Hooper</i>	
THE AVAILABLE VIOLETS.....	104
<i>By F. L. Marble</i>	
INGENIOUS DEVICES FOR THE HOUSE AND GARDEN.....	105
THE HOME OF MR. E. D. MOENG, ROGERS PARK, CHICAGO, ILL.....	107
THE HOME OF MR. E. D. MOEING, ROGERS PARK, CHICAGO, ILL.....	107
<i>Lawrence Buck, Architect</i>	
INSIDE THE HOUSE.....	108
GARDEN SUGGESTIONS AND QUERIES.....	110
<i>Edited by Gardner Teall</i>	
THE BEGINNER'S GARDEN: PROPAGATION BY CUTTINGS.....	112

The Chow Chow  
 The Moulting Hen

Successful Fern Growing  
 Book Notes, etc.

Copyright, 1910, by McBride, Winston & Co.

HENRY H. SAYLOR, Editor

**McBRIDE, WINSTON & CO.**

**449 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.



**THE TERRACE OF A COUNTRY HOME NEAR VILLA NOVA, PA. Charles Barton Keen, architect**

With the need for more light in the rooms back of the ordinary covered porch, there has been developed the paved terrace, either open to the sky or sheltered by vine-covered rafters. In this combination of Germantown hood and pergola motive lies a charming solution of the problem

# House & Garden

VOLUME XVIII

August, 1910

NUMBER 2



There is nothing to compare with a Box hedge, but we are usually too impatient to wait for its growth



An interesting banking of Evergreens along the edge of a terrace and below. The Dogwood breaks the hard formality

## Plant Evergreens Now

WHY AUGUST IS THE BEST TIME TO SET THEM OUT—SPECIES FOR ALL PLACES AND PURPOSES—THEIR CHARACTERISTICS AND METHODS OF GROWTH

BY GARDNER TEALL

Photographs by Nathan R. Graves and others

THE best Evergreen planting month is August. This is because the soil conditions at this time are particularly suited to an Evergreen's especial requirements. The soil in August will not yet have suffered from summer droughts, and its mellow condition will permit the young roots of the Evergreen, eagerly seeking the soil of its new environment, to take hold firmly and to begin immediately the important function of furnishing moisture to the foliage of the plant. This month the soil will not be suffering from the effects of winter frosts, as it would in the early springtime, and September's planting will not have set in to take one's attention away from the care which must be given all newly planted Evergreens. Deciduous trees and shrubs, while requiring equal planting care, are different from Evergreens in the time required for their planting. Deciduous plants are put in the ground at "sleepy" times, and their vigor awakes with the awakening of nature. On the other hand,

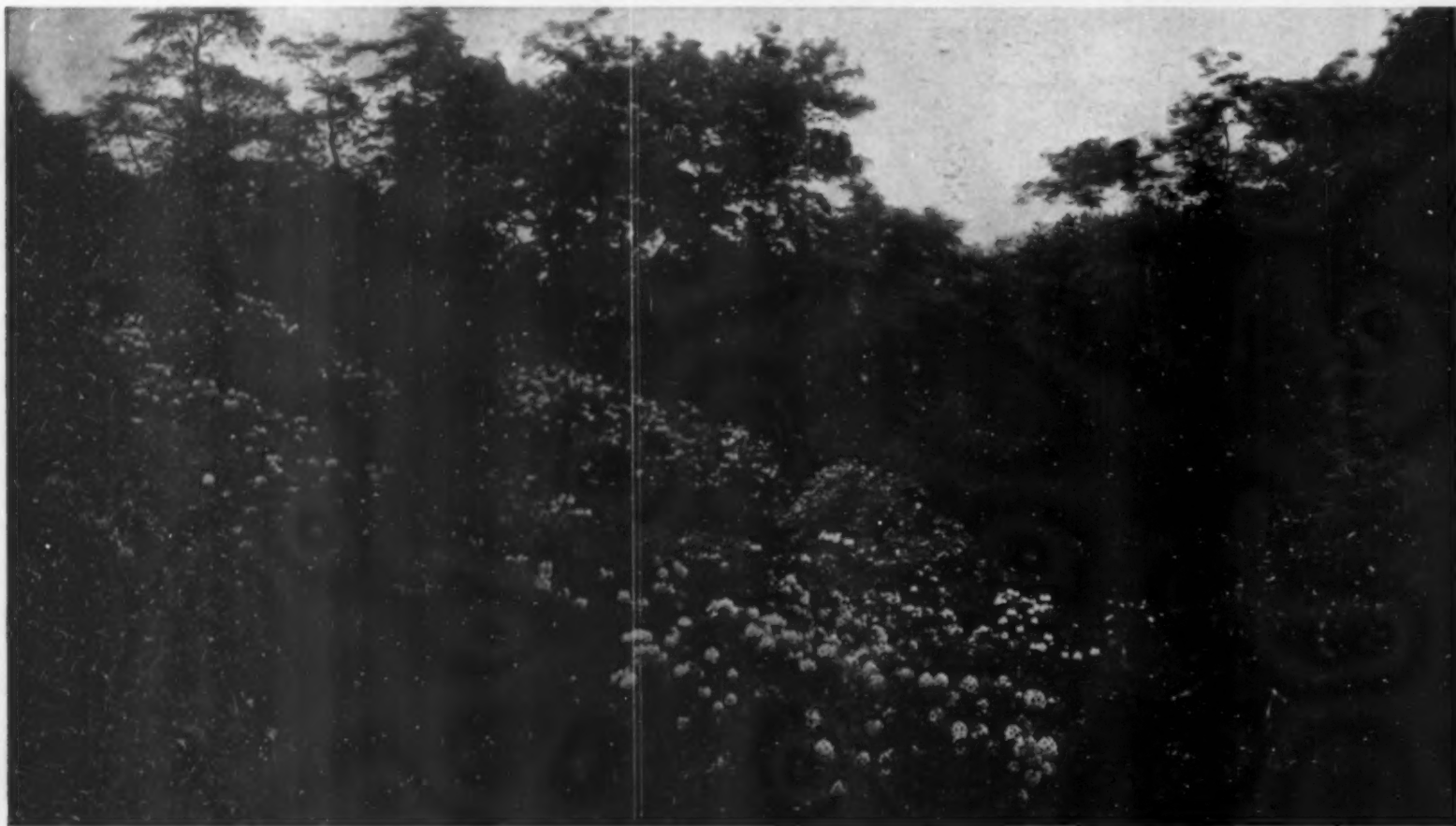
Evergreens want to be transplanted when and where their energetic constitutions may derive immediate nourishment for uninterrupted, vigorous growth. Otherwise they dwindle and die.



A storm-aged Cypress on the edge of Carmel Bay

There are two classes of Evergreens, (1) those among the *Conifers* (Pines, Spruces, Hemlocks, Cedars, etc.) and (2) *Broad-Leaved Evergreens* (Rhododendrons, Box, Holly, Mountain Laurel, etc.). While those of the first sort are familiar to everyone by the general name of Evergreens, there are many who do not know that the broad-leaved varieties are likewise true Evergreens, though different from Conifer Evergreens, in appearance, their leaves being more like those of foliage plants in general. There are, of course, a few Conifers which are deciduous and not evergreen (such as the Larch, the Bald Cypress, and the Ginkgo.)

The place too small to be made more beautiful by the introduction of Evergreens in the home landscape would be hard to



A generous planting of Rhododendrons. Do not neglect the Broad-leaved Evergreens in selecting your varieties for planting around the base of the house

find. There is hardly any other class of trees and shrubs that served so many decorative and useful purposes—for hedges, wind-breaks, winter effects, shading, edging, screening, etc. It would be almost impossible to construct a formal garden without evergreens, and we could not well get along without the beautiful, flowered broad-leaved varieties. Elsewhere in this number will be found an article especially devoted to a consideration of the place of Evergreens in landscape design.

Evergreens must be selected with reference to the position they are to occupy, the purpose they are to serve, and their relation to the place where they are to grow. One would not plant a Norway Spruce in a yard space of twelve feet square, nor expect a single specimen of the common Juniper to be discovered alone in the middle of an acre. As the catalogue of one nurseryman enumerates over two hundred varieties of Conifers alone, the suggestions that follow will probably be welcomed by those who wish to select certain Evergreens for certain purposes, but are not sure just what sorts to order. With the Holly it is always necessary to plant several specimens in a group to ensure cross fertilization and hence berries, as the flowers of a single tree are infertile in themselves.

Unlike deciduous trees and shrubs Evergreens show their character at once, and it is a comparatively easy matter, when they come from the nurseryman, to group them and to have an excellent idea of just how they are to look, which, of course, one cannot do with the leafless stemmed deciduous plants. Evergreens love company,

as in this way they form mutual protection against dry and chilling winds, from which winds all Evergreens are apt to suffer. Evergreens may be grouped with deciduous trees and shrubs to be planted at a later time.

If you are buying very large specimens, that is, large tree-sizes, it will be well to visit a nursery to consult about the matter and to examine the growing tree to see if it is all you would have it to be. Any small trees and shrubs can be bought by correspondence from any reliable dealer in Evergreens, and there are several who particularly specialize in trees and shrubs of this sort. Always demand plants of symmetrical form and those that have good roots.

These should be dug with a generous ball of earth clinging to them and plenty of feeding roots left around the main roots. Evergreens up to twenty or twenty-five feet may be shipped by rail with comparative safety. All Evergreens in the process of moving should have the root-ball wrapped in bagging, so the air will not come in contact with the moist roots and dry them before they can be planted. Evergreens are particularly sensitive to this. Don't permit the Evergreens you have bought to lie around for a minute in the hot sun unplanted.

You will find that Evergreens take spherical, cylindrical or pyramidal form, many of them, as they reach greater age, branching out irregularly.

Among the spherically formed are many of the Conifers in the early stages of growth, and occasionally older Evergreens assume an approximation of this



A magnificent wind-break of White Pines along the edge of an entrance drive





It is unfortunate that the great popularity of Privet has forced into the background such splendid hedges as those formed by Hemlock Spruce (on the left) and Arborvitæ, which latter, in the picture on the right, divides the vegetables from the old-fashioned flower garden

form, the Dwarf Japanese Yew, for instance, and again the Austrian Pine (*Pinus larico* var. *Austriaca*). Of the cylindrically formed Evergreen, the old American Arborvitæ (*Thuja occidentalis*); which was the most popular hedge plant before the advent of California Privet, is the most representative. Then among the pyramidal-formed Evergreens are the pyramidal Arborvitæ (*Thuja occidentalis* var. *pyramidalis*), and Red Cedar (*Juniperus Virginiana*), which has probably solved more landscape problems than any other Evergreen, so nearly reproducing the effect of the Cypresses to be found in every Italian garden. The Broad-leaved Evergreens are, almost without exception, found under the spherically formed class. They are indispensable for this reason, as architectural accessories, softening, as they do so admirably, the hard lines of the foundations of buildings.

It is rarely necessary when setting out Conifers to cart good soil especially for them, because, as the reader has undoubtedly remembered, nearly all of them are native to poor soils. On the other hand, good, fertile loam should always be used in preparing for the planting of Broad-leaved Evergreens.

First of all it will be well to note that the following varieties of Evergreens seldom prove thoroughly hardy north of the latitude of Philadelphia: the Cypresses, the true Cedars, the Yews, Oregon Cedar, Japanese Euonymus, Oriental Yew, Japanese Mahonia, Magnolia and Japanese Holly. However, if well protected in winter, many of these will thrive still farther north. The following are suggested for various exposures: *For shaded places*: Rhododendrons, Azaleas, Mountain Laurel, Drooping Andromeda, Daphne, Myrtle and Mahonia, all of which may be counted upon. *For seashore places*: There are few Evergreens for this purpose that excel the Red Cedar, Pitch Pine, Scotch Pine, Austrian Pine, Mugho Pine, Japanese Holly, English Holly, Japanese Euonymus and Myrica. *For coal-smoked places*: Austrian Pine, Mugho Pine, Colorado Blue Spruce, Canadian Yew, and the Scotch Pine; and, among the Broad-leaved Evergreens, the Leucothoe will, with some success, withstand contact with continually smoky atmospheres.



Box hedges in a very old garden on the Wye River, Maryland

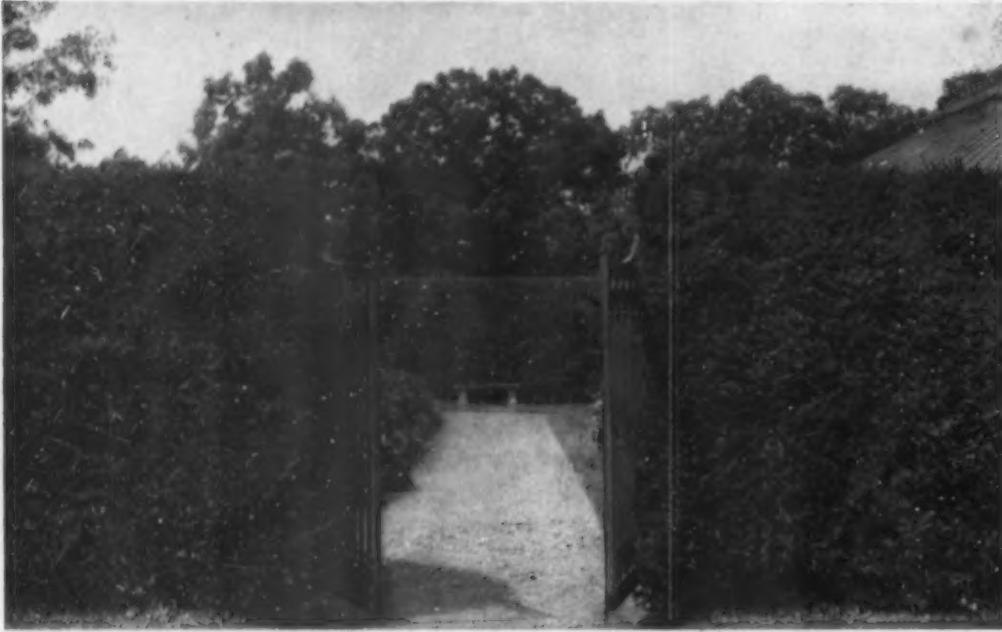
However, where the air is laden with soft coal smoke, as it is in Pittsburg, it is not expected that Evergreens will thrive.

The following list has been compiled with a view to aid in the selecting of various specimens that will enhance, year after year, the beauty of the lawn where they are intended as a single feature, more or less: Nordmann's Fir, Engleman's Colorado Spruce, Norway Spruce, Inverted Spruce, Eastern Spruce, Colorado Spruce, Colorado Blue Spruce, Austrian Pine, Mugho Pine, Bhotan Pine, Thread-branched Retinispora, Green Retinispora, Silver Retinispora, Golden Retinispora, America Arborvitæ and Hemlock Spruce.

The following Evergreens are especially adapted to peculiar soil conditions: *For dry and shallow soils*: Red Cedar, Norway Spruce, Scotch Pine, Ball Pine, Mugho Pine, Jack Pine, Colorado Spruce, Colorado Blue Spruce and Canadian Juniper. *For wet or moist soils*: American Arborvitæ, Hemlock Spruce,

Balsam Fir, European Silver Fir and Austrian Pine. *For hedges*: American Arborvitæ, Norway Spruce, Hemlock Spruce, Golden Retinispora, Green Retinispora, Silver Retinispora, Compact Arborvitæ, Hovey's Arborvitæ, Azalea, Box, White Spruce, Cedar (for tall hedges) and Cragæus (*C. Pyracantha*). *For screening*: Norway Spruce, Hemlock Spruce, American Arborvitæ, Green Retinispora and Golden Retinispora. *For windbreaks*: Norway Spruce, Hemlock Spruce, and the various pines. *For bed planting*: Arborvitæ, Retinispora, Dwarf White Pine, Mugho Pine, Swiss Stone Pine, Koster's Blue Spruce, Eastern Spruce, Juniper, Chinese Arborvitæ, Box, Azalea, Mahonia, Rhododendron and Mountain Laurel. *For dwarf growth*: Juniper, Arborvitæ (*Thuja Hoveyii*), Japanese Juniper, White Cedar, varieties of Retinispora, Canadian Yew (*Taxus Canadensis* var. *brevifolia*, also *T. Tardiva*, which is very hardy), Cotoneaster (*C. horizontalis*), and the Fragrant Olive (*Osmanthus Aquirolium*).

These Evergreens are of *rapid growth*: White Pine, Nordmann's Silver Fir, Norway Spruce, Red Pine, Scotch Pine, Arborvitæ, Pitch Pine, Colorado Spruce, Balm of Gilead Fir. Those Evergreens of *slow*



Spruce has been used for the hedge in front and Arborvitae for the one beyond. The former Evergreen is seen at its best in a very high hedge. Arborvitae is of comparatively rapid growth

growth are: the Mt. Atlas Cedar, English Yew, Red Cedar, Cephalotaxus, Common Juniper, Canadian Yew, and the Retinisporas.

Then it is well to remember that the following are: *Short-lived Evergreens*: White Spruce, Scotch Pine, Balm of Gilead Fir, Common Juniper, Austrian Pine, Cypress (*Cupressus macrocarpa*). *Long-lived Evergreens*: Colorado Spruce, Bull Pine, Scotch Pine, White Pine, Concolor Spruce, Englemann's Spruce, Douglas Spruce (among the tall species); and, among Evergreens of low growth, Mugho Pine, varieties of Retinispora, and a dwarf Spruce (*Picea nigra* var. *Doumettii*).

There are a number of dwarf Conifers that may be referred to as Dwarf Architectural Evergreens by reason of their adaptability to positions in tubs and window-boxes as decorative features, to enhance architectural effects. Among this number the following will be found especially useful: The Retinispora (*Chamaecyparis pisifera*, *C. plumosa*, *C. aurea*, *C. squarrosa*), White Pine (*Pinus Strobus* var. *brevifolia*), English Juniper, Chinese Juniper, and American Arborvitae. Then almost all of the Broad-leaved Evergreens may be considered as Architectural Evergreens.

As it occasionally happens that one wishes to establish a little forest of Evergreens, the following species (planted at a distance of about five feet apart), are suggested for the purpose: White Pine, Norway or Red Pine, Common Hemlock, Canadian Juniper, Norway Spruce. All these should thrive in the north. Canadian Juniper, it should be borne in mind, requires a dry position.

Certain Evergreens assume, more or less, weeping forms, such as the Hemlock (*Tsuga Canadensis* var. *pendula Sargentii*), Common



The Box-bordered walk to the garden from an old Long Island home

Juniper (*Juniperus communis* var. *oblonga*, and also var. *pendula*), Norway Spruce (*Picea excelsa*, var. *inverta*), and Retinispora (*Chamaecyparis pisifera*, var. *obtus pendula*).

There are few Conifers that equal the Junipers (*Juniperus Sabina*, *J. prostrata*, *J. communis prostrata*, and *J. Chinensis prostrata*) for this purpose. The Canadian Yew also lends itself to such positions. Nearly all the Broad-leaved varieties, from the low-growing Myrtle to the splendid and gorgeously flowered Rhododendron, fit into rock-work admirably.

As Evergreens vary in color, much depends, in selecting and in grouping them, on bearing this in mind. Therefore some of the species with marked color characteristics are given here to aid one in choosing according to color. *Light green*: Siberian Fir, Carolina Hemlock, Chinese Evergreen, Austrian Pine, Retinispora (*Chamaecyparis pisifera* var. *plumosa*), Box, Japanese Mahonia and Yucca. *Dark green*: Siberian Arborvitae, Pyramidal Arborvitae, White Cedar, Nordmann's Fir, Fraser's Balsam Fir, Trailing Juniper, *Pinus densiflora*, Norway Pine, Retinispora (*Chamaecyparis obtusa*, also var. *nana*), Japanese Yew, Oriental Spruce, Dwarf Japanese Yew, Spreading Yew, English Yew and Rhododendron. *Golden*: George Peabody Arborvitae, Golden Japan Cypress, Tiger-tail Spruce, Golden English Yew, Chinese Arborvitae (*Thuya orientalis*, var. *aurea*) and Golden Juniper. *Blue-green*: Blue-red Cedar, Blue Cedar, White Fir, Colorado Blue Spruce, Sub-Alpine Fir, Noble Fir, Scotch Pine,

(Continued on page 123)



We can best appreciate the real value of evergreens in the older and more fully established gardens such as this one at Camden, S. C., with its Olive hedges and fine old Cedar arches



The home of Mr. Voorhees at Oak Lane, Philadelphia, where stucco has been used on metal lath in an English type of house

## The Secret of Durable Stucco

SOME SUGGESTIONS ABOUT THE PROPER USE OF THE BUILDING MATERIAL THAT HAS IN THE PAST FEW YEARS WON ITS WAY TO POPULARITY

BY ALBERT MOYER

ASSOCIATE OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Photographs by Thomas W. Sears and others

THERE has been a tendency to discredit stucco, also called plaster, rough-cast and pebble-dash, for the simple reason that in some conspicuous instances it has proven unsatisfactory as a durable covering for the exterior of walls. The trouble has not been with the material itself, but with the ignorant methods by which it has been mixed and applied. Because we have come upon houses from the walls of which there were unsightly patches cracked or entirely fallen away from the support we have naturally been somewhat skeptical about the lasting qualities of this new-old wall covering.

With the rapidly increasing cost of wood, however, we have been forced, fortunately, to carry forward our experiments with other materials, until we have finally reached a point where the inherent merits of stucco have unmistakably asserted themselves, and the dependableness of the material been fully established when it is properly made, properly supported and properly applied.

The history of stuccoes does not furnish sufficient information and data to be of practical value in the manufacture of the present-day Portland cement stuccoes. There are records standing from the year: 350 B. C. of stuccoes made from vastly different material than are of economical use at the present time, and we find that such stuccoes were almost invariably used in warmer climates where the action of frost would not end to disintegrate the rather poor material which was then available.

There is every reason to believe that originally these stuccoes were intended to cover up and protect inferior building stone and sunburned straw brick. The archaeology of stucco would tend to show that from an artistic standpoint this method of decoration was a development of the wattled buildings, which were plastered with clay and different muds hardened by being baked in the heat of the sun. Therefore, in this instance, the use of clay plaster over wattled houses was to protect an inferior building material.

To-day stucco is used for a similar purpose, that of protection and pleasing surfaces. It would, therefore, seem advisable to recommend a material which would best serve the purpose of protection and artistic merit. Stucco or plaster should never be used as an imitation of other building material. "To cover brick with plaster and this plaster with fresco is perfectly legitimate—the plaster is gesso grounds on panel or canvas, but to cover brick with cement and to divide this cement into joints that it may look like stone, is to tell a falsehood, and is just as contemptible a procedure as the other is noble."

To secure a wall covering that fulfils all modern requirements it is advisable to use only Portland cement stucco for exteriors, as this is the only hydraulic material which will stand the action of the elements.

From the artistic side we would also recommend such surface



It is possible to secure dark stucco very easily, either by the use of colored aggregates or by the addition of mineral coloring matter



A house at Greenwich, Conn., that is of a type now being erected very widely in England with fairly smooth stucco walls



In contrast with the above a rough-surface stucco wall seems to show a more appropriate use of materials. Lawrence Buck, architect

finishes for stucco as will give both natural color and pleasing texture. It would be well, therefore, to expose to view the aggregates used and avoid as far as possible exposing the bonding material, Portland cement.

There is no artistic reason for allowing only the bonding material to be displayed to the eye. On very large wall areas the surface can be cleaned off by means of a sand blast, and on smaller jobs the surface may be cleaned so as to expose each grain of sand by means of muriatic acid in dilute solution, 1 part commercial muriatic acid to 4 or 5 parts clear water.

Where white aggregates (the gravel, marble chips or sand that is used with the cement) are used the surface may be cleaned off with a solution of sulphuric acid: 1 part acid, 4 to 5 parts clear water. The sulphuric acid leaves a white deposit and therefore should not be used excepting where the aggregates are white.

Another method is to scrub the surface while yet green, say within twenty-four hours, with a house scrubbing-brush and clear water. This is more difficult than the others, for the reason that if the stucco is allowed to remain too long before scrubbing, it will be too hard to remove the coat of neat cement from the outside of each particle of sand or other aggregates; while if scrubbed when it is too soft the surface may be damaged and difficult to repair.

If the character of the available aggregate will not present a pleasing surface when exposed, the following surface treatment may be used:

While the last coat is still thoroughly damp, apply a Portland cement paint, composed of 1 part Portland cement, 12 per cent. of the volume of the cement of well hydrated lime in pulverized form, and 1 part of fine white sand. Mix with water to the consistency of cream or the ordinary cold water paint. Stir constantly and apply by using a whisk broom, throwing the paint on with some force.

Keep this finish surface damp for at least six days, or longer if economy will permit. Do not allow it to dry out in any one place during the week. If necessary, protect by hanging tarpaulins and using a fine spray of water playing upon it several times during the day, by means of a hose. This will give a pleasing light gray color of excellent texture.

Stucco may be applied to various building materials. There is hardly any reason at the present time for stuccoing stone buildings; the procedure at best is difficult and hardly to be recommended unless the stone is of an inferior quality and color. Our building stone is usu-

ally an excellent material, however, and therefore does not require either protection or covering to produce pleasing effects.

New brick may be covered with stucco very successfully. The joints should be first raked out to a depth of half an inch. The brick must be saturated with water. It is always best to start stuccoing at the top of the wall and work down between the pilasters or corners, finishing a whole strip or whole side wall from top to bottom in one day. Thus no streaks or cracks are formed where one day's work ends and another begins. By this method the wall can be kept wet ahead of the work by means of a hose.

The second coat should be put on as soon as the first coat has stiffened sufficiently to hold in place and stand the pressure of the trowel. This second coat should be well scratched and the finish coat applied while the second coat is damp. The finish coat should then be kept wet, protected from the rays of the sun, and, as far as possible, from drying out. This can be done by hanging wet cloths over it. This rule of keeping each coat moist until the other coat is applied, and protecting the surface after applying the finish coat, must be observed in all forms of Portland cement stucco.

If the stucco is to be applied to metal lath or wire cloth the metal should be plastered on two sides so that the supporting mesh is entirely encased in mortar in order to avoid rusting. If this is impracticable, then the metal lath or wire cloth should be dipped in a paint made of equal parts of neat Portland cement and water. Immediately after dipping, the metal lath or wire cloth should be tacked upon the framework in the position it is intended to occupy. As soon as the neat Portland cement has hardened on the metal, apply the first coat of stucco. Hair should be added to the mortar to be applied on wire mesh or expanded metal. Use one bag of cement to one pound of hair.

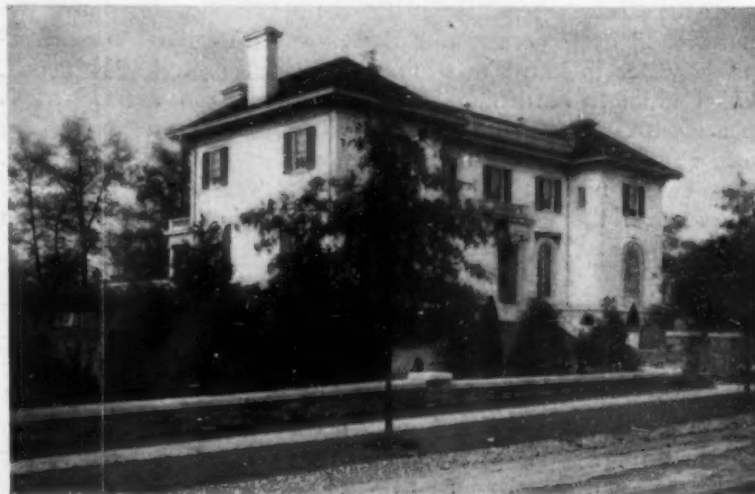
If plaster boards are used they should be nailed on the frame work of the building, leaving at least a quarter of an inch between each pair. This joint is to be filled in with lime putty, otherwise each plaster board will cause square cracks on the outside of the stucco the size of each board.

A convenient method of waterproofing plaster boards is easily available. The boards may be painted with two coats of any of the reputable bitumen waterproof paints to which plaster adheres. Then, about twenty-four hours after the bitumen paint has been applied, and within six days, apply the first coat of stucco.

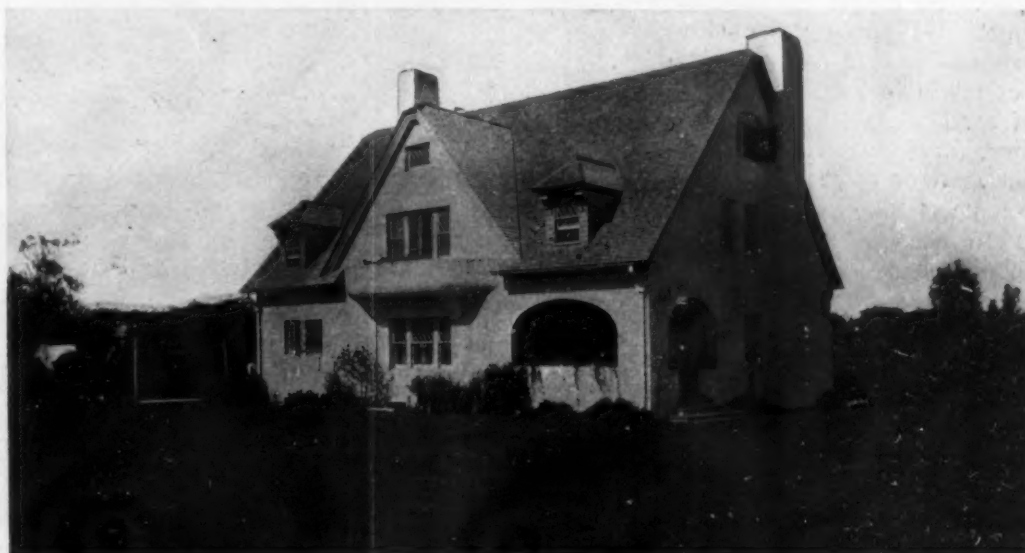
For stucco or terra-cotta blocks great care should be exercised in keeping the blocks thoroughly saturated with water,



Stucco is perhaps seen at its best in conjunction with other materials, such as the half-timber work and the patterned brick screen wall in this house at Garden City. Aymar Embury, II, architect



Stucco is fully as adaptable to the refined formality of the Renaissance types as to the picturesquely informal building



A house at Easthampton built with stucco on wire cloth upon a wood frame. There has been a serious attempt here to express in the design the character of the material used



The home of Mr. D. M. Murphy at Winchester, Mass., showing a very interesting combination of materials—this time of brick and timber paneling with the stucco. Robert Coit, architect

for if the blocks are not moist they will pull the water out of the mortar and it will crack and disintegrate. Portland cement requires water in its makeup until it has thoroughly hardened, which ultimate hardening usually requires from fourteen days to a month. It is not always necessary, of course, to play the hose on the wall for a month, although it would be advisable. The dews at night, the dampness in the atmosphere and the rain will furnish the necessary moisture, provided the material on which the mortar has been plastered has not too great an affinity for water.

In order to prevent the porous hollow terra-cotta tile from sucking the moisture from the stucco, and also to furnish waterproofing and an additional bond other than that which would be given by the key, it is good practice to paint the surface of the dry terra-cotta blocks after having been erected in the wall with two coats of first-class bituminous paint. It is important that the first coat of stucco be placed over this paint after twenty-four hours and within six days.

Proportions for a good stucco should be 1 part Portland cement,  $2\frac{1}{2}$  parts coarse clean sand (if coarse clean sand is not available use only 2 parts of sand). Add well hydrated lime, dry pulverized, equivalent to 10 or 15 per cent. of the volume of the cement.

In mixing stucco great care should be exercised to obtain the thorough incorporation of cement, sand and the other aggregates. The sand and cement should be mixed together dry until an even color results. This can be done by shoveling, and raking while shoveling. Water should then be added, being careful not to add too much water at a time and not to get the resulting mortar too

wet, so that more sand or cement has to be added. Be very careful to bring the resulting mortar *up to* the proper consistency for plastering.

It is advisable to add to the mortar from 10 to 15 per cent. of the volume of the cement of well hydrated lime. This should be mixed dry with the cement and sand before the water is added. The addition of hydrated lime tends to "fatten" the mortar, making it more adhesive and impervious.

Another specification which we believe will prove of considerable value provides for the addition of mineral oil to wet mortar. After the water is added and thoroughly mixed with the mortar add 15 per cent. of mineral oil and remix. If a light effect is to be produced use white oil. When the oil is to be mixed with the mortar it is always advisable to use hydrated lime, as we thus have a larger amount of emulsifying material.

If it is the desire of the owner or architect to use the exposed aggregate method, interesting natural colors can be obtained by using the following materials instead of sand, in the same proportions: Green, red, buff, black or white marble screenings, all passing a number 8 screen and all collected on a number 40 screen. These different colored marbles and different colored sands, where obtainable, can be used singly or in a combination. When exposed by scrubbing or by means of the acid treatment, very interesting results are obtained, the resulting color being limited only by the available sand or marble screenings; in each case the color will be the color of the aggregates. Or, an excellent green can be obtained by adding 8 per cent. of the weight of the cement of chromium oxide. This should be mixed dry with the sand, cement and hydrated lime.

Always keep in mind that the surface to which the mortar is to be applied must be thoroughly saturated with water, each coat of stucco must be kept moist and the final coat must remain moist for at least one week, and longer if economy will permit.

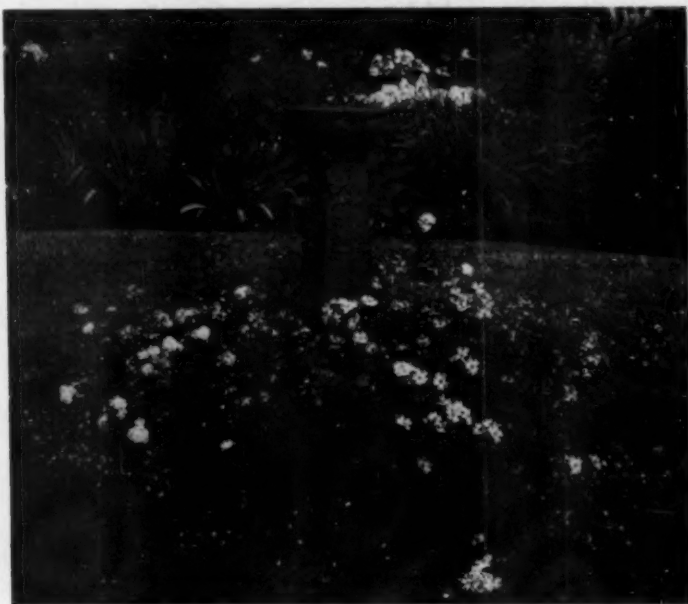
Stucco should not be troweled to a smooth surface. The artist  
(Continued on page 123.)



Particularly when stucco is used for the walls throughout is it advisable to secure in one of the many available ways a rough texture for the surface. "Renemedé," the home of Mr. H. J. Hardebergh, architect, Bernardville, N. J.



A sun-dial pedestal of terra-cotta—a material that is more frequently seen abroad than here



It is a mistake to allow planting of any kind to interfere with a close approach to the dial



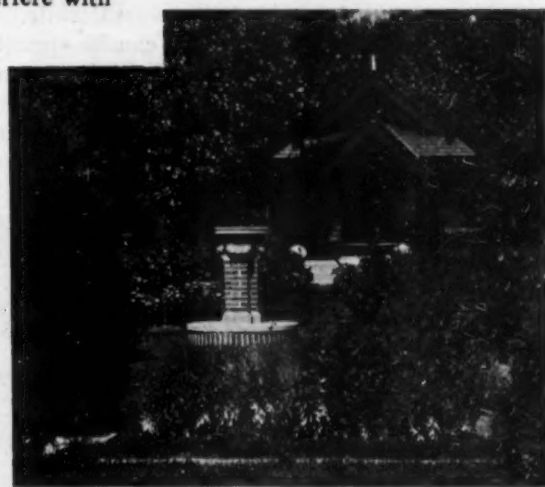
The limestone pedestal at "Airlie" near Warrenton, Pa., bearing an old iron dial face



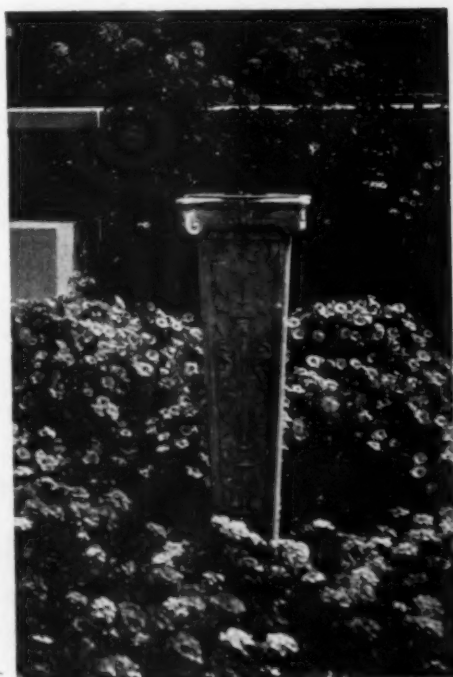
The remarkable dial of Broughton Castle where the hours are indicated by vari-colored plants



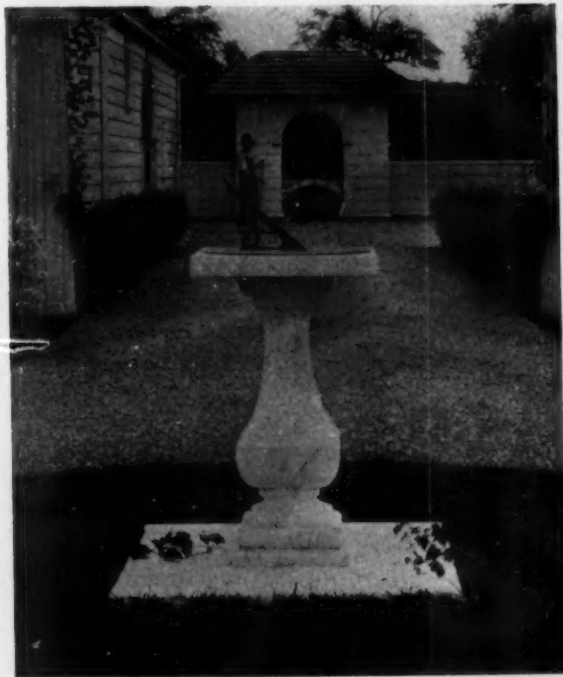
A pedestal of unglazed terra-cotta designed by Mrs. G. F. Watts



The sun-dial of "Woodleigh," Lake Forest, Ill., is of brick with a white stone cap and base



Pedestals of molded cement are durable and less expensive than carved stone



A stone pedestal designed by Wilson Eyre, architect, for "Ashford," Bellehaven, Conn.



A pedestal of stone-like terra-cotta with very old English gnomes

SUN-DIAL SUGGESTIONS



## Stenciling Fabrics

METHODS AND MATERIALS FOR STENCILING CURTAINS, COVERS AND SUCH THINGS FOR THE HOME—SUGGESTIONS FOR HARMONIOUS PATTERNS THAT MAY BE USED ALSO UPON THE WALLS

BY LUCY ABBOT THROOP

Illustrations by Louise Shrimpton and others



gether too much of the bad variety. A weak and banal border used as a frieze, the work of an unimaginative "decorator," will quite spoil what should be an attractive room, but interesting and artistic work is quite another matter.

Stenciling is such a simple and useful art that anyone can add it to his or her list of accomplishments, and what is more, do with it something that is really worth while. Everything from leather belts to house furnishings can be stenciled, and when the design is chosen with due regard as to its appropriateness and its beauty and also the beauty of the color scheme, and if the work be done with care and skill, the result is charming. It seems especially suited to the furnishing of country houses, and houses of the Craftsman and bungalow type that are growing so rapidly in favor. These houses with their beamed ceilings and stained woodwork, their casement windows and leaded glass, have more or less an informal charm that heavy brocades and beautiful lace would quite spoil, and to fill the need of something individual and appropriate stenciling is often called upon in the furnishing. By varying the material and the style of design it can be used in almost all circumstances.

Stenciling is not difficult to do, but it takes practice to achieve the best results. One should never begin a piece of work without trying the color to be used on a sample of the cloth, as materials differ in the way they take color, and one must experiment and learn from experience, and thus avoid disappointment.

Cutting the stencil is the hardest part of the process. If one does not care to do this there are many designs already cut for sale at art stores, and some of the large paint companies have good collections and send catalogues; and many of the magazines have charming cut stencils for sale. Some of the

designs are very good indeed, and some of them are too dreadful, but one can pick and choose, and if nothing suitable is found it is well to have some clever designer make one that is appropriate. A design does not have to be elaborate to be effective; in fact it is most important that the design one chooses should be broad and simple in construction, so that the effect will be good without a mass of detail.

To cut a stencil one must first transfer the chosen design to stencil board by slipping a piece of carbon paper face downward under the design and fastening them to a board with thumb-tacks, then tracing carefully the outline of the design with a sharp pencil. Stencil board is sold at paint shops for fifteen cents a sheet. When the tracing is done the design must be cut out with a sharp knife, and one must be very careful not to cut the connecting sections.

There are special knives made, but a penknife is satisfactory, in fact is what most people use. Cut the stencil on an old table or drawing-board, and it is a good plan to put a piece of glass under it. This gives a clean, sharp edge but rapidly dulls the knife. To protect the forefinger while cutting wear the finger of a stout old glove. Leave at least an inch of plain board around the design and be sure the centre of the design is at right angles with the bottom edge. This helps to keep it straight in repeating.

Prepare the material by carefully marking the places for the repeat. If the design is a unit to be repeated several times the cloth must be divided into halves, quarters, or fifths, or whatever division one may wish, and the design put in the exact centre of each space. If the unit is to be grouped in sets the measurements must first be carefully made. A running design must have the repeat clearly marked upon it.

The material should be stretched over a piece of clean blotting paper and the stencil pinned in place with thumb-tacks. Have each color mixed



A blue-and-white scheme for border and valance in the home of Mr. E. E. Calkins, Elmsford, N. Y.





The simplest kind of summer curtains—fine cheesecloth hemmed and stenciled in pink and green

in a separate saucer before beginning work, with a separate brush for each color. The brushes are stubby little bristle affairs and cost from five cents up, according to size. Dip the brush in the color, press out as much as possible and wipe on a piece of blotting paper, so there will be no possibility of any excess of color, and then apply to the cloth. Hold the brush at right angles to the material and tap it up and down until the color is well rubbed

stencil decoration, and one in a country house could be made very charming by having the walls tinted cream color with a rose stencil design done in a panel effect in soft pinks and greens, and a rose border stenciled on scrim or muslin for curtains, with the some design repeated on the bed-cover, cushions, and bureau scarf. The side curtains and rug might be either plain soft pink or green. This same idea could be carried out in any color, and the design used could be varied to suit the taste of the occupant of the room.



A simple poppy stencil on the same cheesecloth in red and green. Two pairs were made and stenciled in one day

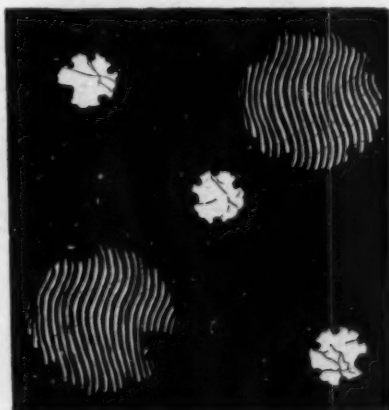
in. Put the brush down first in the centre of each portion of the design, as this lessens the danger of the color running. When the stencil is moved it must be carefully wiped before putting down again.

There are many different preparations to use for stenciling. Oil colors thinned to the consistency of cream with turpentine, or benzine, or one of the thinning fluids that come for the purpose, are very satisfactory, and with them one can get beautiful colors. There are also some very good and simple dyes that come in tubes and have only to be mixed with hot water to be ready for use, and the colors are soft and attractive. There are also crayons that have a very interesting effect when used on coarse crash or linen; in fact they look more like block printing than stenciling. A good many of the color preparations need fixing with heat after the work is otherwise completed. One must try the color with great care on pieces of the material to be sure the consistency and color scheme are right. Do not use very many colors in one design, as it makes the work harder and takes away the simplicity and often the charm.

If these directions are carefully followed a little practice is all that is needed to bring success and most gratifying results.

When using stenciling for the decoration of rooms there should be dignity and beauty in the design, and the color and treatment should harmonize with the style of room. The subject of the appropriateness of the design is an important one, and it should, of course, always be in keeping with the room. The plain, heavy lines of a Mission interior, for instance, call for corresponding strength in the decorative scheme. I have seen a Mission living-room quite spoiled by a poor weak little Empire wreath used as a border—at least it had a family likeness to the Empire, but it certainly was a poor relation. It was entirely out of scale and style with the room. A single motif repeated at intervals about the room above the wainscot, or a more solid design, or one that gives the feeling of paneling, are all good. They should be done in soft tones that harmonize with the wall and furnishings.

Bedrooms lend themselves especially well to



From an old Japanese stencil such as can be bought in antique shops

In a bathroom a design of waves and fishes done in cool greens and green blues, stenciled just above the tiles, is attractive. The design should be adapted for use on the linen or scrim curtains.

There are many charming designs for nursery walls. Children certainly appreciate their walls treated in this way, and there is a wide opportunity to have an individual and delightful room for them. A Noah's ark or barn-yard procession, or fairy tale or Mother Goose rhyme people, give a wide enough choice. The frieze should be placed low, about three feet from the floor, or the children will not notice it.

If stenciling is to be used in halls, living-rooms or dining-rooms, the designs should have a more conventional feeling than those used in the bedrooms.

Stenciling can be done on rough finished plaster walls, the natural color of which makes a beautiful keynote for a scheme of decoration. A design of old Dutch tiles done in blue on the plain plaster, just above a wainscot of weathered oak, with blue side curtains over white muslin, would make a very pleasant and cool looking room on the sunny side of a house. Also if one has a plain wall paper that is a trifle shabby and care-worn looking, a little stenciling applied judiciously but not too freely will freshen it enough to give it a new lease of life.

Stenciled curtains can be made of scrim cheesecloth, linen, Russian crash, raw silk, pongee, arras cloth, velours—in fact the list is too long to mention all the possibilities, as nearly all fabrics can be used, as well as leather. Velours takes dye extremely well, giving a soft and charming effect. Very beautiful sofa pillows, curtains, and portières, can be made of it. Chair and sofa cushions of linen, silk, or arras cloth, can all be stenciled to match any scheme. Piazza cushions are very attractive done in this way. Matting rugs for the piazza can also have a bit of stenciling done on them in neutral colors with good effect.

A very beautiful screen can be made for  
(Continued on page 123.)

# The Right Use of Evergreens

STRIKING THE MOST POWERFUL NOTE IN LANDSCAPE PLANTING — ARRANGING GROUPS TO AVOID ARTIFICIALITY — THE ADVANTAGES OF THE GOOD OLD ESTABLISHED SORTS

BY GRACE TABOR

Photographs by Nathan R. Graves and others

[The tenth 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.); "The Part Flowers Play in Garden and Landscape" (May); and "Blending Architecture and Nature by Planting" (July). Questions relating to further details and planting information will be gladly answered.—EDITOR.]



We in America can hope only to approximate the grandeur of the Cypresses of Italy



Closely associated with the best old American gardens is the rambling hedge of Box

elemental stirs the heart when the voices of all this great whispering tribe breathe their mysteries into human ears; equally certain it is that Evergreens always have struck and always will strike the supreme note in a landscape—a note that lifts the imagination to splendid heights.

But it is all too seldom that they are planted with reference to this. In modern gardening they are too apt to be "specimens," such as the glaucous-foliaged Spruces or golden Arborvitæ, or else they are relegated to the merely utilitarian and planted as shelter belts for something that stands before them and focuses the attention; in either of which cases the real and lofty grandeur of the order is overlooked and hopelessly dimmed if not altogether obscured.

To be sure the question of purpose must be kept in mind quite as much here as in all other phases of gardening, for a reason for planting must exist, else there can be no excuse for planting—but this reason need not altogether lack an esthetic side. Precise, straight rows of Hemlocks or Spruce will shelter from the wind and will hide a view that is

LEGEND has it that the piñon was the first tree to rise from the bare, brown bosom of the earth and certain it is that something deep and

objectionable, but it is such planting, utterly devoid of imagination and feeling and resulting in a forbidding gloom, that is largely the cause of the prejudice which some cherish towards evergreens as a class. It is quite as possible to group effectively and still secure protection or shut out objectionable features as it is to plant in rows to do so—and in the former case a definite interest is created, a bit of true landscape is formed so that the utilitarian is lost sight of completely in the end; nevertheless the reason for planting existed and continues to exist, though it is not apparent to the observer.

Fancy varieties of a tree are seldom worth while, whether evergreens or deciduous—and this can never be emphasized too much. With evergreens particularly the temptation to indulge in some of the many novelties is constantly before the unwary buyer and the standard natural forms are almost lost sight of. Horticultural forms may be interesting in themselves, but it takes something with a greater claim to consideration than "interest" to build up a beautiful picture—and the quality that makes them interesting when they are a novelty is usually the very thing that makes them tiresome when the novelty has worn off. So on the



A well arranged group of Hemlocks at the edge of a lawn, the beauty of which winter can only accentuate

whole it is the ordinary and accustomed variety which wisdom will select.

Nothing is more beautiful than the familiar White Pine which is native over such an extended area of the United States and which will grow practically everywhere, so what excuse is there for using a novelty in place of it? No novelty can have withstood the test of generations as the native has—if it had it would no longer be a novelty—and the weaknesses it may develop can not even be conjectured. The changes which age will bring to it are likewise all a matter of guesswork and with evergreens,

where we are planting for all time, these are very important.

For there are two distinct forms in the life of the majority of the cone-bearers; the first—the youthful—is regular, pyramidal and somewhat formal; the last—the mature—is rugged and irregular and altogether quite different from anything to be imagined, judging from the earlier.

The period of transition from symmetry to irregularity comes at about the twentieth to the twenty-fifth year in some up to the fortieth or fiftieth in others, hence it is apparent that not until a variety has been grown for fifty years in a given soil and climate can it be said positively whether or no it is a success under those particular conditions.

Fifty years hence seems a long way off in this day and age of haste—and of course it is a long way off—but building a landscape is not the task of to-day or this year; indeed it is not a task that the builder can much more than begin. Even with wisdom and industry beyond price at his command he still must wait on Time.

And Time goes straight ahead if the builder's work is ill, quite as bent on finishing it as though it were well, and quite as determinedly laying emphasis on every point where emphasis can be made to lodge. This is the thought that ought always to be before us—this is the thought that, centuries back, guided the builders whose work now remains in the wonderful old gardens of the Old World.



For the most harmonious grouping along a border the greatest depth in plan occurs at the point of greatest height

even greater force to the "golden-leaved" and "silver-tipped" conifers so much in use at present. Bear in mind constantly that it is always a question whether any tree or shrub with abnormal foliage—and variegated foliage is, with one or two exceptions, always abnormal—is in good taste; and the doubt makes it safer to draw the line quite this side of planting them, altogether. No artist would dream of planting them unless many were grouped in such a way as to give them the meaning and force which unity might express.

This is the test which will ultimately decide the merit of any garden work; no planting can be regarded as a complete success if it does not offer finally a subject worthy canvas and paints and brushes—and a cultivated eye and trained hand to use them. Certainly a solitary Blue Spruce in the middle of a lawn will hardly permit even its fondest admirers to hope or expect this for it.

Generally speaking, the grouping of evergreens follows the same lines as the grouping of deciduous trees, but fewer will ordinarily be planted because of their stronger individuality and dominating qualities. They may be combined with deciduous trees or planted by themselves, either one; in combination with the former they should occupy the prominent positions and should be in either a *decided* majority or minority. Never use an equal or nearly equal number of both kinds.

Usually one variety of



Cedars, Pines, Spruces, Firs and Hemlocks were moved here to screen a service court



A newly set clump of Mugho Pines at the corner of a drive. *P. Montana* is a good dwarf form and will stand shade

evergreen will be found repeated more or less often, in any patch of woods or within any special area, just as we have noted previously that one variety of deciduous tree is to be found dominating nearly always in a similar growth. The reason of course lies in the fact that all the conditions are exactly suited to give to that variety a little advantage, and though other trees may not be crowded out altogether they do not multiply as rapidly as the favored one. This leads to a "mass effect" quite in line with what Nature continually offers—and furnishes the best example possible of ideal planting, from the practical as well as the esthetic side, being in the last analysis a survival of the fittest.

Learn what evergreens are best suited to a place before planting any, by ascertaining what are native to the region, to the immediate territory; then make use of these or their nearest relatives in all broad scale planting, governing the selections, of course, by the soil conditions of the particular piece of land to be planted. A tree that may thrive on a mountain side will not tolerate the moist valley at the mountain's feet very often, hence the caution to judge from those trees found growing in the *immediate* territory.



In planting evergreens allow one or two kinds to predominate

Pines do not like close, heavy, clay soil, nor will they do well on shallow soil because they have a long tap root. Loose sandy earth suits them best, and because they have this tap root that reaches deep for moisture, they can endure dry soil. The White Pine is not so particular as the rest of the family, however, and will adapt itself to uncongenial places very cheerfully. Pines are very intolerant of shade, but the latter will make the best of a certain amount of this, too.

Cedars are at home on wet, even swampy, soils, though as a matter of fact they will do better where it is dry. They will stand some shade.

Spruces are shallow-rooted trees, which always means adapted to soil that is moist—and they thrive in extreme cold, being natives of high altitudes. They mind shade less than either of the two first named.

Firs are trees of high regions too, and some can not endure a dry, hot climate at all, unless shaded and given the coolest spots.

Hemlocks are not exacting and will grow in almost any kind of soil providing it is moist. Hemlocks and White Pines, by the way, are one of Nature's combinations and may often be found growing together in large forests, which is a hint toward group-



Five-hundred-years-old Cypresses around the pool at the Villa Falconieri, Italy. We can approximate the grandeur of this effect with our Junipers

ing. Hemlocks stand shade well and are good for hedge service.

Of the native Pines, *Pinus Strobus*, *Pinus resinosa* and *Pinus rigida* are the best; *Juniperus Virginiana* is the choice among cedars. The White and the Red Spruce (*Picea Canadensis* and *Picea rubens*), respectively, and the Douglas Spruce, which after all is not a true Spruce (*Pseudotsuga mucronata*) are preëminent among their kind. The native Firs do not do well "in captivity," but *Abies Nordmanniana*, which is an importation from the Caucasus mountains, is a splendid tree that may be planted with confidence in its good behavior. *Tsuga Canadensis* is the fine native Hemlock, one of the most satisfactory evergreens in the world, while *Thuja plicata*—the giant Arborvitæ, very little known as yet but rapid-growing and beautiful and deserving great popularity, closes the list of the nine very best—a list from which a selection to suit any locality may be made.

The use of two or three varieties of a species is not to be

(Continued on page 114)

# How Rush Seats Are Made

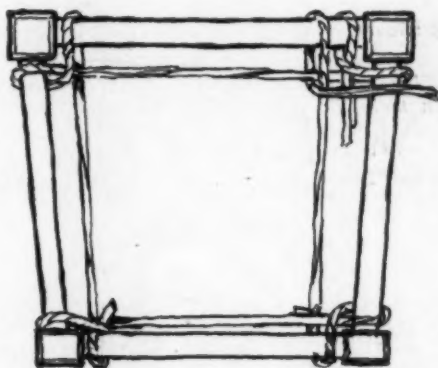
GATHERING AND DRYING THE RUSHES, TWISTING AND WEAVING THEM INTO A CHAIR SEAT THAT IS AS DURABLE AS LEATHER—A PROCESS THAT BAFFLES THE MACHINE

BY LOUISE SHRIMPTON

**T**HE adoption of machinery in the manufacture of nearly every article of household furnishing has not extended to the making of rush seats. This is for the excellent reason that it is impossible to weave rush by machinery, as it is too uneven in length and in thickness to admit of being fed to even the most diabolically clever of machines. Weaving as well as harvesting must be done by hand, now as in the early days of the flag-bottomed chair. Enterprising manufacturers at one time made a spurious rush of paper, weaving it by machinery into imitation rush seats, but paper chairs proved unacceptable even to the humbug-loving American public, and our rush seats are still made of rush, preserving by necessity a very interesting hand craft.

The increasing demand for this style of chair seats during the past six or seven years is probably due to the revival of interest in old Colonial furniture and its reproductions and to the growing preference for a simple type of modern chair, for which rush is eminently suitable. As a result of this demand it is now comparatively easy to find new rush seat chairs, or men capable of mending old ones. The weaving is in the hands of a few workmen scattered throughout the country, most of them of foreign parentage. It is usually a home industry, though in some factories small groups of rush weavers are seen, surrounded by machines and their attendant workmen, the primitive and the modern in vivid contrast. While simple in its technique, rush-weaving requires strength of arm and hand, and expert work needs much practice.

Home workers usually gather their own rush. The common bulrush or cat-tail, sometimes called flag, is used. Growing on marshy lands, it is of no value to farmers, who are glad to sell



Starting at the lower left-hand corner, a continuous line of spliced rushes is woven from the outside towards the centre

for a small sum the privilege of cutting it. In the latter part of August, when the cat-tails turn a velvety brown color, is the time for harvesting the slender blue-green leaves used for chair seats. Some of the workmen spend a week or so in the marshes at this season, camping out in tents if their homes are at a distance. The cutting is done with a sickle, the men standing for hours at a time in the water, which is sometimes knee-deep where the rushes grow thickest. After the sun has thoroughly dried them, the rushes are gathered into sheaves and stored in a hay-loft or in some place that is dry and warm. A few days before they are needed they are placed in water for about

ten minutes, when they are taken out, covered with cloths, and left to soften. If the rush is too wet it is spoiled for use, but it must be dampened thoroughly to render it pliable. The last step in its preparation is called "snapping the flag," and consists in running it through a clothes-wringer. The interior of a rush leaf is filled with tiny compartments of a sponge-like character, which make the rush inflexible and hard to manage. When run through the wringer, the air is forcibly expelled from this system of compartments with a report like a pistol shot. Some workmen snap the flag over a wooden peg, but this method is hard on the hands. A hundred years ago when rush seating for Colonial chairs was a flourishing industry, big wooden rollers were used in some localities for this part of the work.

The rush is now soft and pliable, ready for use in weaving. The home worker sits in a strong light, usually in the family kitchen or living-room. On the floor in front of him is an iron standard with a frame top on which the chair to be seated is fast-

(Continued on page 115)



The rushes are gathered from the swamps when the cat-tails have turned brown—usually late in August



There is no chair seat that seems so completely at home with Colonial furniture as does the durable rush



With the chair fastened upon a swivel post the weaver moistens his rushes and works around the frame

# Everyman's Greenhouse

PRACTICAL SUGGESTIONS AND ALL THE DATA FOR BUILDING A GREENHOUSE WITHIN THE MEANS OF EVERY HOME OWNER—THE COST IN DETAIL

BY F. F. ROCKWELL

Illustrations by the author and others

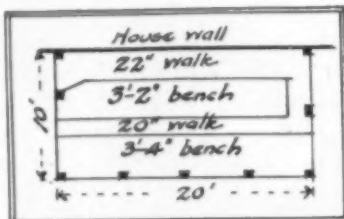
[It is not surprising that there are very few small greenhouses, for a little investigation will reveal the fact that even a house of very small size, when built to order in the most approved modern methods, will cost a considerable amount. Mr. Rockwell has built greenhouses for himself and knows how it can be done well and at little expense. A second article will take up the details of heating and general management.—EDITOR.]

**H**AVE you ever stepped from the chill and dreariness of a windy winter day, when it seemed as if the very life of all things glad and growing were shrunk to absolute desolation, into the welcome warmth and light and fragrance, the beauty and joy of a glass house full of green and blossoming plants? No matter how small it was, even though you had to stoop to enter the door, and mind your elbows as you went along, what a good, glad comfortable feeling flooded in to you with the captive sunlight! What a world of difference was made by that sheet of glass between you and the outer bitterness and blankness. Doubtless such an experience has been yours. Doubtless, too, you wished vaguely that you could have some such little corner to escape to, a stronghold to fly to when old Winter lays waste the countryside, and spreads the white tents of his regiments within the very heart of your garden. But April came with birds, and May with flowers, and months before the first dark, shivery days of the following autumn, you had forgotten that another winter would come on, with weeks of cheerless, uncomfortable weather. Or possibly you did not forget, until you had investigated the matter of greenhouse building and found that even a very small house, built to order, was far beyond your means.

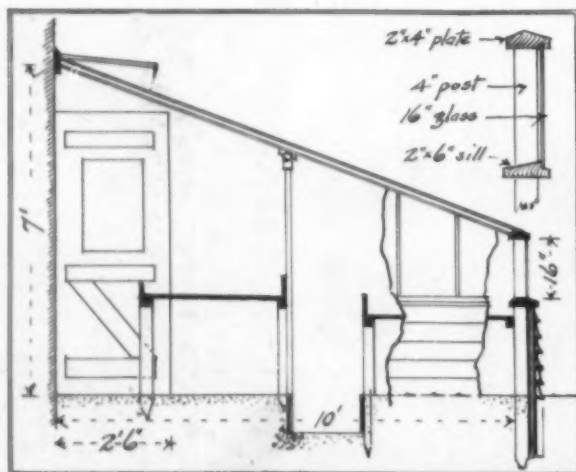
Do not misunderstand me as disparaging the construction companies: they do excellent work—and get excellent prices. You may not be able to afford an Italian garden, with hundreds of dollars worth of rare plants, but that does not prevent your having a more modest garden spot, in which you have planned and worked yourself. Just so, though one of these beautiful glass structures may be beyond your purse, you may yet have



Most people, when thinking of greenhouses, picture only the large isolated ones that are expensive to build and heat. There is another kind, within the reach of every home-owner



The plan of the lean-to type shown in section below



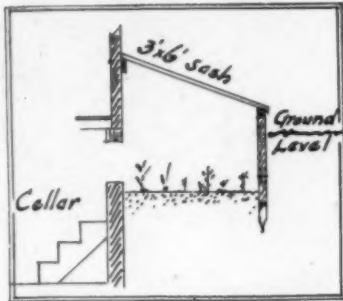
A sectional view of our two-bench, 10 x 20 ft. house built against the dwelling wall. If possible it would be well to gain a steeper slope for the glass and better headroom

one that will serve your purpose just as practically. The fact of the matter is, you can have a small house at a very small outlay, which will pay a very good interest on the investment. With it you will be able to have flowers all the year round, set both your flower and vegetable garden weeks ahead in the spring, save many cherished plants from the garden, and have fresh green vegetables, such as lettuce, radishes, tomatoes and cucumbers that can readily be grown under glass. And you will be surprised, if you can give the work some personal attention, or, better still,

have the fun of doing a little of the actual building yourself, at how small an outlay you can put up a substantial structure of practical size, say 20 feet by 10—of the "lean to" form.

Let us "get down to brass tacks" and by way of illustration see what the material for such a house would cost, and how to erect it. Almost every dwelling house has some sheltered corner or wall where a small glass "lean-to" could easily be added, and the shape and dimensions can be made to suit the special advantages offered. We will consider a simple house of the lean-to type, requiring a wall, to begin with, 20 feet long and 7 feet high, down to the ground, or a foot or so below it, if you can dig out. Below is listed the material such a house would require. With modern patented framing methods such a house has been estimated by greenhouse building companies to cost, for the material only, from \$325 to \$400. Yet you can have a wooden house that will serve your purpose at a cost for materials of \$61 and, if you do not care to put it together yourself, a labor cost of, say, one-third more.

As our north wall is already in place, we have only four surfaces to

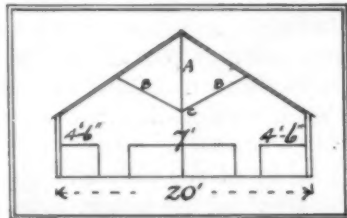


A still simpler type of house entered from the cellar

board and sheathing wall to the same height, and for the balance, sash-bars and glass. The required openings will be a door or doors, and three ventilators, to give a sufficient supply of fresh air.

For these the material required will be:

10 ft. of 2 in. x 4 in. ridge.....	\$ 0.80
13 10-ft. drip bars.....	3.25
2 10-in. end bars.....	1.00
20 ft. 1-in. second-hand iron pipe.....	1.00
5 6-ft. x 1 1/4-in. second-hand pipe posts.....	.50
4 1 1/4 in. x 1 in. clamps.....	.50
20 ft. 2 in. x 4 in. eaves plate.....	1.60
20 ft. 2 in. x 6 in. sill.....	2.20
15 1-in. pipe straps.....	.50
18 ft. 2 in. x 4 in. sill, for gables.....	1.50



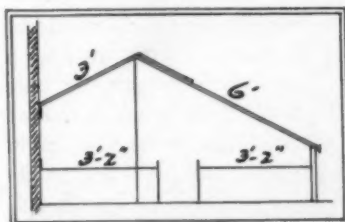
The standard type of isolated house with pipe bracing, B B, joining the central uprights in a socket fitting

All of the above will have to come from a greenhouse material supply company, and the prices given do not include freight charges. The following items may probably be bought more economically in your immediate vicinity, and the prices will vary in different sections of the country:—

Total of items listed above.....	\$46.50
240 ft. rough 1-in. boards.....	7.50
6 posts, 4 in. thick, 6 ft. long, planed on one side.....	3.00
2 posts, 4 in. thick, 8 ft. long, planed on one side.....	
1000 shingles.....	4.00

Total cost of materials.....	\$61.00
Estimate of labor.....	20.00

Total cost of greenhouse.....\$81.00



With a double roof and two wide benches. The roof valley would need draining

consider, as the accompanying diagram shows—namely, south wall, gable ends, roof and openings. For the roof we will require a ridge against the wall of the dwelling house, sash-bars running at right angles to same, and a "purlin," or support, midway of these, and a sill for the lower ends. For the south wall we will need posts, one row of glass and boards and "sheathing." For the gable ends, a

40 ft. side bars, random lengths, for gables...	1.00
3 ventilating sash for 3 24 in. x 16 in. lights..	3.00
9 16 in. headers for ventilators .....	.40
6 hinges with screws for ventilators .....	.75
1 roll tar paper, single-ply	2.00
6 boxes 24 in. x 16 in. glass, B double thick.	24.00
75 lbs. good greenhouse putty .....	2.50

Level off a place about 22 x 12 feet, and set in the posts as indicated in the plan on page 92, taking care to get the lines for the ends of the house perfectly square with the wall, and exact in length. This is best done by laying out your lines first with stout string, and making your measurements accurately on these. Then put in the posts

for sides and ends, setting these about three feet into the ground, or, better still, in concrete. Put in the two corner posts which should be square first. Next saw off all posts level at the proper height, and put in place the 2 x 4 in. eaves plate on top of these, and the 2 x 6 in. sill just far enough below to take a 16 x 24 in. light of glass, with its upper edge snug in the groove in lower side of plate, as shown in detail

of section on page 92. Fit the 2 x 6 in. sill about the posts so that the mortise on same will just clear the outside of posts. Then put on the siding on sides and ends—a layer of rough inch-boards, a layer, single or double, of tar paper, and a second layer of boards, covering on the outside with shingles, clapboards or roofing paper. The five 7 ft. x 1 1/4 in. pipe posts may now be placed loose in their holes, and a walk dug out of sufficient depth to allow passage through the middle of the house. Rough boards, nailed to stakes driven into the ground, will hold the earth sides of this in place.

Next, after having it sawed in two perpendicularly (thus making 20 ft.), screw the ridge securely to side of house at proper height, giving a thick coat of white lead at top to insure a tight joint with house. Now put one of the end bars in place, taking care to get it exactly at right angles with ridge, and then lay down the sash-bars, enough more than 16 in. apart to allow the glass to slip into place readily. Take a light of glass and try it between every fourth and fifth bar put into position, at both ridge and eave, as this is much easier than trying to remedy an

(Continued on page 114)



A hot-water boiler from a passenger coach. The system heats 550 sq. ft. of greenhouse with a half-ton of soft coal and cost \$25 to instal



The home-made greenhouse of which the heating plant is shown above. It would be better to have a line of glass in the vertical walls just under the eaves



A planting of shrubs and a lattice screen shuts off the service entrance at the rear end, giving the back an unobstructed view



The laundry drying yard is well tied into the whole design by means of the extension wall and posts of stucco

## The Service End of the House

A MARKED CHANGE THAT HAS BEEN BROUGHT ABOUT IN THE APPEARANCE OF BACK DOORS AND LAUNDRY YARDS, DUE TO A NEW MODE OF LIFE

BY RUSSELL FISHER

Photographs by Thomas W. Sears and others

THE stupendous development in suburban living that has been evident throughout America for the past decade has wrought many changes in the character of our homes. Among other things it has abolished the back alley and uplifted the back door.

In the larger cities, where the houses were necessarily set cheek by jowl along the streets, an alleyway along the backs of these, serving the rear ends of the houses upon two parallel streets, was the simplest and most effective way through which to bring supplies for the household and to remove ashes and garbage. The element of beauty did not enter into the matter to any appreciable extent. The term "back yard" became one of reproach, and the gardens consisted of a long-suffering shrub or two and perhaps a bed of geraniums and coleus set in the middle of a moth-eaten lawn bounded by the high board fence.

Then people began to realize that they were moving countrywards in order to get away from just that sort of thing. An expanse of lawn came to be appreciated to such an extent that just now we are in the midst of a period of development when perhaps most of us favor the abolition of all boundary lines between building-lots, so that the eye can roam over our neighbor's plots as well as our own. The high board fence has gone, the back alley has gone and we find that from our gardens our own and our neighbor's back doors are about the most conspicuous elements in the landscape.

So the time has come when we must meet and solve this problem of making our back doors

and our laundry yards either as attractive as possible or as inconspicuous as possible. We find, too, that with the greater freedom given us for design and planning upon a larger plot of ground, the service portion of the house is as likely to find itself at one end or even at one side of the *front* as in its time-honored place at the rear.

Indeed, since the back alley is a thing of the past and our grocer's wagon now drives up to the front of the house, it becomes evident that a service entrance at one end in most cases will permit the necessities of life to be brought in with the least amount of disturbance and effort. Now that we have attained that sanity of mind that reserves the greater privacy of the rear for our gardens and our porch or paved terrace, we must find a less important and less conspicuous place for our service portion of the house.

I remember well with what astonishment and ridicule a house, designed on a perfectly rational basis such as this was received by neighboring owners some six or eight years ago. The wing containing the kitchen and service portion projected to the front of one side of the house where it had to be passed by everyone approaching the front door. Such was the skill in design, however, in locating the service door at the far end, just around the corner, and in having high horizontal windows in the kitchen front, with no openings on the side next the front door, that the house was not only beautifully adapted to its site but crowned with distinction among its commonplace neighbors.

There are two mai-



A typical suburban home where the service end is concealed by a well designed lattice reached from a branch path





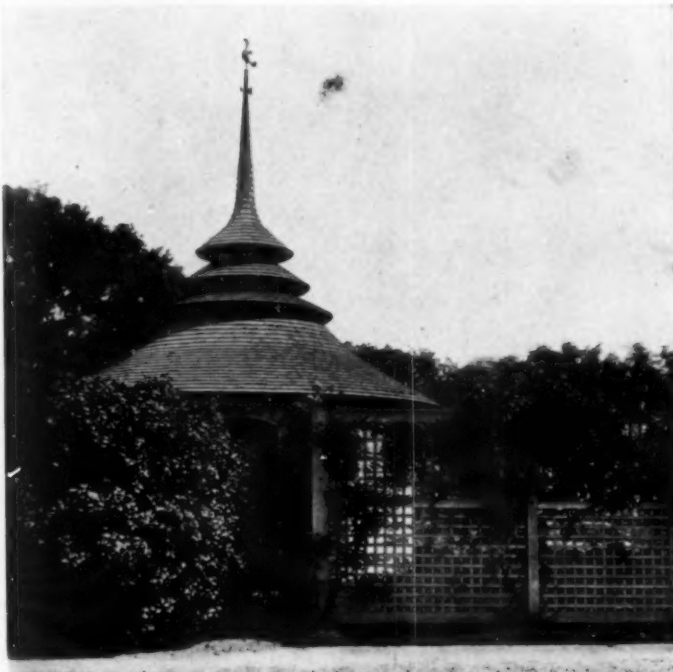
A Lake Forest, Ill., home where the stable and service wing are at the front, leaving the entire water front unobstructed



The lattice screen at the far end serves not only to conceal the clothes-line but increases the apparent length of the building

elements to be kept in mind when arranging the service portion for its exterior appearance. One is the necessary but too frequently unsightly laundry drying yard, and the other is a suitable provision for those necessary evils that, as far as we can see, must always be with us—the ash barrel and the garbage pail.

Each of these can very easily, and at slight expense, be made unobtrusive from every point of view. A wood lattice, about seven or eight feet high, covered with vines, will hide the fluttering lines of drying garments and may even add to the architectural appearance of the house. As for the other unsightly utilities, it is the simplest thing in the world to build under or adjacent to the service porch a compartment in which these may be kept under cover. It really is astonishing,



A laundry-yard lattice will often tie to the main building a minor structure such as this tool-house

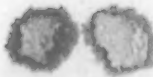
however, in spite of the simplicity of the means, how few houses are built with this compartment as an integral part of the plans. Just jog your architect's memory on this point, for it is one of those things that seem never to be added if it is not built in at the start.

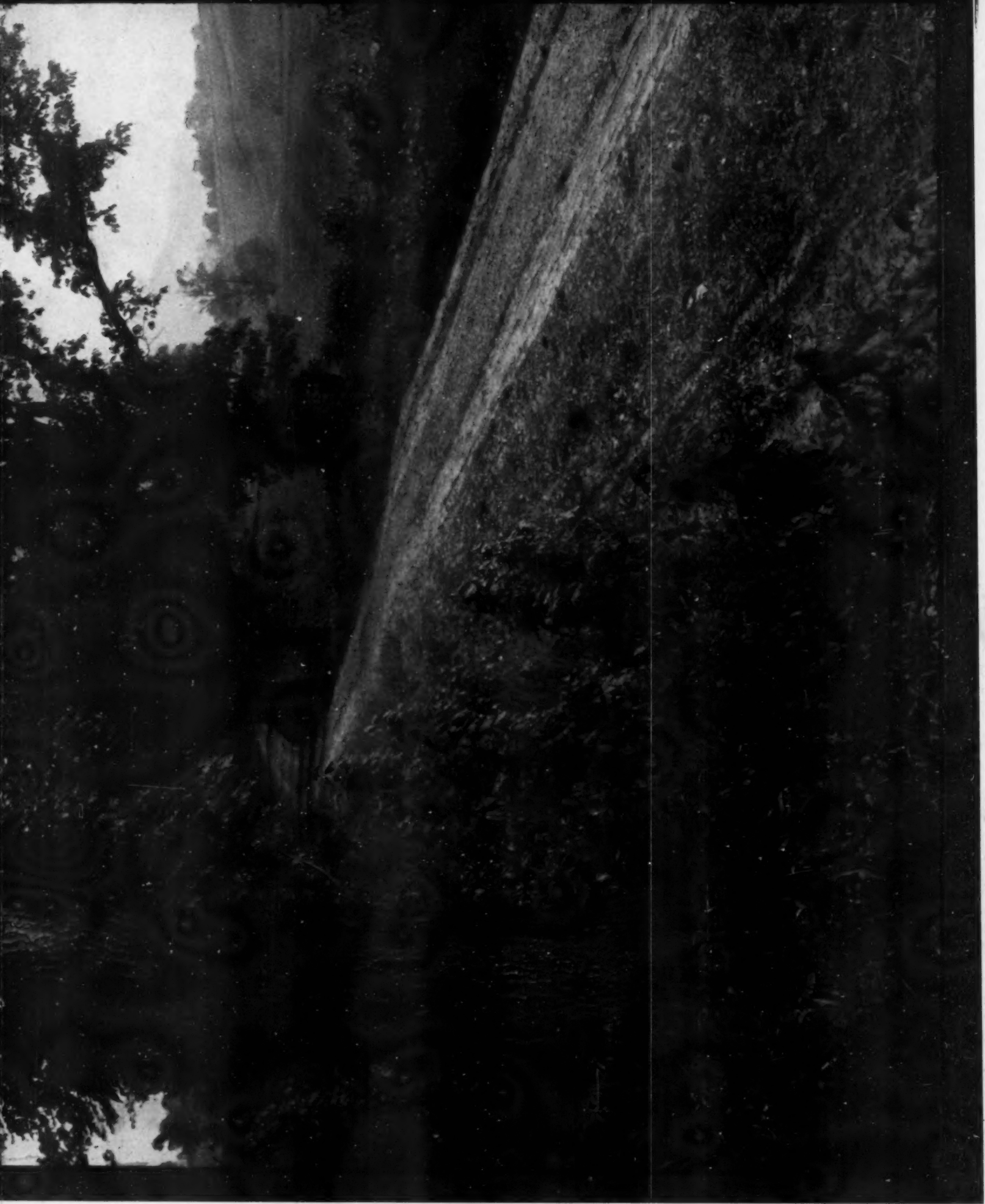
And another convenience that you will do well not to overlook is an outside door for the ice supply. One does not have to build in a specially designed refrigerator in order to have the ice put in directly from the outside—though a refrigerator built in to order is a source of endless comfort. A small door in the outside wall, let in above the spot where your refrigerator is to stand, with a couple of steps leading up to within reach of it from the ground level, will save a lot of dragging of ice over the service porch or through the kitchen.



The side of a Pottsville, Pa., home, from front and back. The arched screen is not only an attractive feature of the garden, but it helps to hide the stable yard and the well designed compartment for unsightly utilities. The ice door is just above it

HOUSE AND GARDEN





Copyright, 1907, by Detroit Publishing Co.

CHOOSE, THEN, BETWEEN THE MASTERPIECE OF GARDENING AND THE WORK OF NATURE; BETWEEN WHAT IS CONVENTIONALLY BEAUTIFUL, AND WHAT IS BEAUTIFUL WITHOUT RULE.—VICTOR HUGO



The Plume Poppy deserves a place for its rapid-growing proclivities. Foam Flower resembles it on a small scale



Dutchman's Breeches (*Dicentra cucullaria*) makes an eminently satisfactory ground cover



Great Burnet is common enough in some places, with its white flowers and attractive dark foliage

## Some Experiences With Wild Flowers

BRINGING IN SOME OF THE MORE INTERESTING AND BEAUTIFUL NATIVE PLANTS—WHAT TO TAKE AND HOW THEY THRIVE UNDER CULTIVATION

BY H. S. ADAMS

Photographs by the author, F. A. Walter and others

FROM the time that I was a youngster I have been in the habit of occasionally bringing home a few wild plants to see how they would accommodate themselves to more or less tame circumstances. I confess that I like the fun of the thing, if I may so express what I really take quite seriously, and I presume that the habit will remain an occasional one with me the rest of my days.

I remember that I began with the Columbine (*Aquilegia Canadensis*). Hitherto, the walks and drives in the course of which I took my early lessons in nature study had been to the woods, meadows and uplands to the east and the south, but now my way had led to the rocky ridge to the westward, where alone for miles around grew the Columbine and, though I did not know it then, a still choicer wild flower. Doubtless it was the novelty of the thing; at any rate I carried home a few plants of the abundant Columbine and made for them a little bed by the side of the house, in partial shade. Although this is now more than thirty years ago, I well recall that these plants alone of all that I have brought home from the wild showed any marked tendency to "improve" under cultivation. I let the seed ripen, and the next spring had a flourishing crop of youngsters that I installed in a border of their own on the north side of the house, and a year later, when they flowered profusely, I was astonished to find that the second generation was fully three times as tall as the first. As the blossoms had lost correspondingly in brilliancy of color, the departure from normal did not strike me as particularly desirable. I have since brought the wild Columbine from real mountains, but I think there will never be any quite so beautiful as those first ones from the little ridge two miles to the westward of home.

It is a striking commentary on the proverbial neglect of things close at hand that it was not until I had been to Europe three times, as well as to all four points of the compass in this country, that for the first time in my life I went to the top of the said ridge to get the view of the valley lying beyond. To a scenic revelation well worth while I added a delightful botanical discovery—coming across the veritable Harebell of the poets—*Campanula rotundifolia*—here and there on or near the top of the ridge. Now a Harebell, tucking itself between bits of rocks, is not easy to dig up with a penknife; but I succeeded in getting two plants that August afternoon, making sure that I did not overlook the part of the roots with the true leaves. I placed the plants in a corner of a border, with a small stone by them to make them feel at home, and rather feared that the spring would show no trace of such tiny things. But they came along vigorously and, instead of flowering in June and July, according to Wood, they straggled along until it was the November frosts that saw the last of my "blue bells of Scotland." The smallest of all the Campanulas that I am familiar with, they are also the daintiest; and if these do not stay by me more shall come in from the wild.

Another pleasant surprise of a summer walk came to me in the great meadow a few years ago. I never thought that those vast reaches of grass held any secrets from me, but one day I saw something very white, very fuzzy and very erect, rising above the lush green. I went over to the stranger. It was too big for my knife, so I left it for the next trip—only to find that the mowers had gone over the ground and, without the white flowers as a guide, it was useless to try and find the plant. The next summer I watched out for the blossoming, located the plant and with a



You can dig up bulbs of the Wood Lily and have it bloom in your garden the next season

heavy trowel cut away part of it, leaving the rest for nature's renewal of her stock. What I took home I divided into six pieces and put them in my little nursery, where each had made a strong plant by spring. Then five of them went into my border and one into a neighbor's. Great Burnet (*Poterium Canadensis*) the tall white stranger proved to be. Of the two I think the dark foliage is more attractive than the flowers, but the plant is a very good acquisition to the border.

up with a pen-knife and had it bloom the next summer; but I can not recommend the pen-knife, often as it has been my salvation in such circumstances. Both of these lilies are excellent for the home grounds, the *Philadelphicum* preferably in partial shade.

I think, though, that on the whole Asters have been the most satisfactory things that I have brought home in my hands from the wild. The New England Aster (*A. Novae Angliae*) I began with, it being one of those



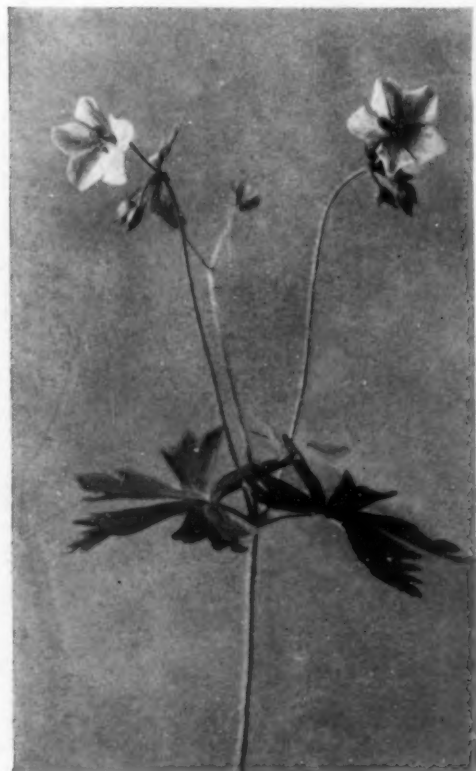
New England Asters are among the most satisfactory flowers to bring in from the wild

As a matter of fact it was cultivated in gardens in days gone by. In the wild it is plentiful enough in some places. Where I ran across it Burnet had never been seen before in my time, however, and the chances are that the seed came down the river in the spring flood.

Meadow Lilies, as we call *Lilium Canadense*, I have taken from the same locality with the aid of a trowel. It is no light task to dig the bulbs thus, but it is also no light task to lug a spade four miles of a hot summer day. The Wood Lily (*Lilium Philadelphicum*), which shuns our part of the state, I have dug

nearest at hand, and in the more favorable garden conditions it has made splendid clumps that give a fine note of purple when it is most needed. From another state I have introduced the Smooth-leaved Aster (*A. levigatus*) with equally happy results; its blue flowers are extremely showy. These are only two of a dozen or so kinds of wild Asters that have succeeded well in my garden; a few of them altogether too well, as, unless closely watched, some of the taller ones will take possession of all the space within reach.

(Continued on page 119)



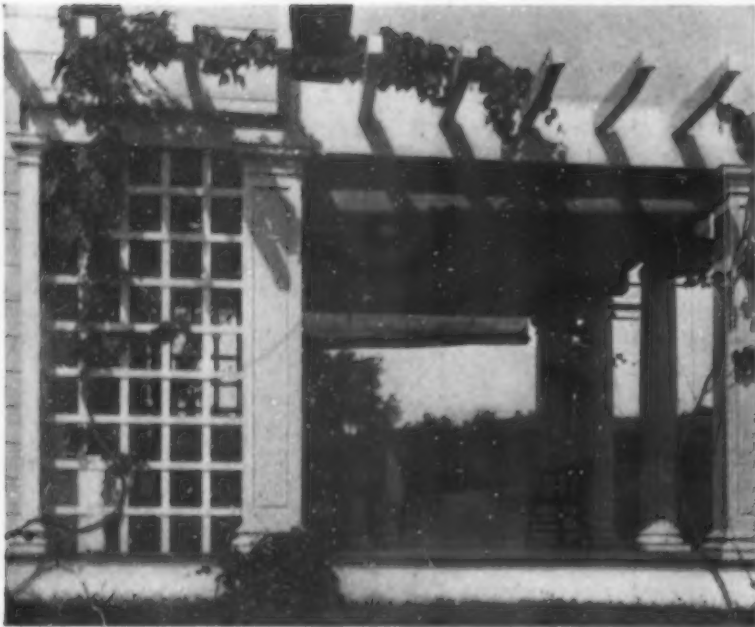
The Cranesbill (*Geranium maculatum*) has stood by me through thirty years



Columbine transplanted to the home rock garden will produce much larger flowers



The Harebell of the poets—*Campanula rotundifolia*—a rare find on a hill ridge



A home in New Hampshire, where a simple lattice serves to give just the right amount of privacy to the porch



Why is it that the use of a lattice as a porch awning is not more frequently seen? Designed by Charles R. Lamb

## The Architectural Value of Latticework

THE PASSING OF CHICKEN WIRE AND STRING SUPPORTS FOR THE VINES THAT GROW UPON AND ABOUT THE HOUSE—WHAT WOOD LATTICE WILL DO

BY JARED STUYVESANT

Photographs by T. B. Temple and others

A MAN who is just completing the plans for his new home put this question to me: "Is this wood latticework, that seems to be more and more frequently used, merely a fad like so many other little 'kinks' of architectural design that one sees nowadays, or has it come to stay?" In the first place wood lattice as applied to house architecture is not a new thing, and I venture to predict that it will not prove to be merely a fad.

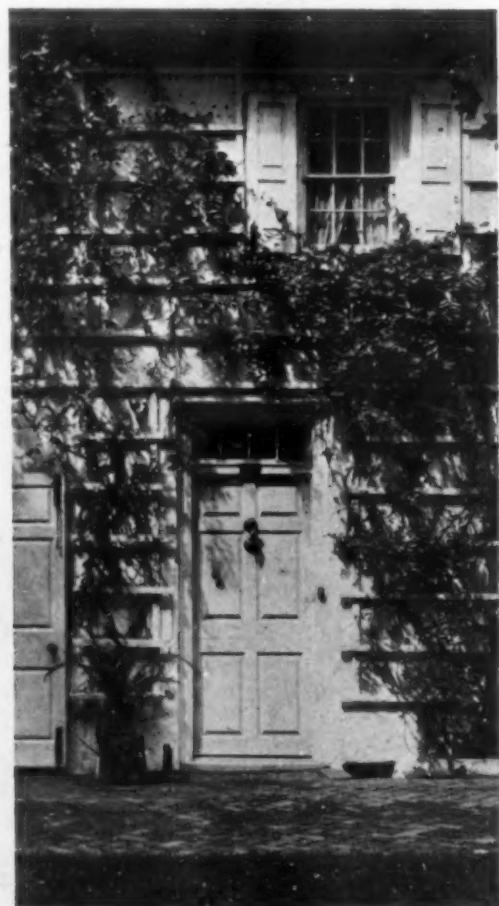
Wood latticework as a frank and rational support for vines is by no means a modern device. As long ago as 1700



The stable at "Fairacres," Jenkintown, Pa., where the vines climb over a roof before reaching the framework



Although most latticework is painted white it is sometimes felt that a green contrasts better with a white background



"Wyck," a Germantown home built about 1690, has one whole side covered with latticework against the white plaster



A beautifully detailed rose lattice on a modern Colonial house at Litchfield, Conn.



Even for interiors, when of an informal character such as a billiard room or conservatory, latticework may be effectively used as a wall decoration



The green-painted lattice filling between the pergola arches relieves the white woodwork

it appears on "Wyck," one of the finest old homes in Germantown, Pa., where it covers the entire lawn side of the white plaster house, giving, with its burden, a wonderfully beautiful chiaroscuro in green and white.

The recent popularity of lattices among the architects who are designing country and suburban homes is based on intrinsic merit rather than upon any merely temporary appeal to their decorative sense.

An architectural fad may readily be marked as such from its inception, the acid test for it being, "Is it based on an actual need and does it fulfil its function in a straightforward rational manner?" If an architectural form or detail can measure up to that test it is no more a fad than is a rain-conductor.

Now to get down to details. A lattice framework should have substantial supporting members—vertical or horizontal, or both,

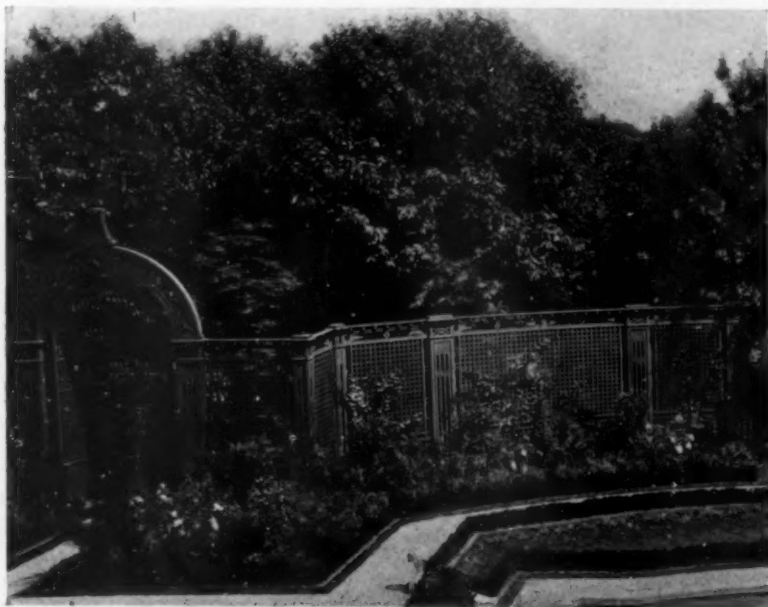
depending upon whether these lead up from the ground or are merely applied to the building horizontally—and this framework will bear the lath-like strips to which the vines cling. For these strips ordinary rough laths will serve well enough if they are sound, free from knots, and if they are painted with a good lead-and-oil mixture. The rough surface of a common lath is undoubtedly a more acceptable support, from the vine's point of view, than any smoothly planed strips.

Although I have never seen it done, there seems to be a very excellent reason for attaching the main framework to blocks on the wall by means of removable bolts.

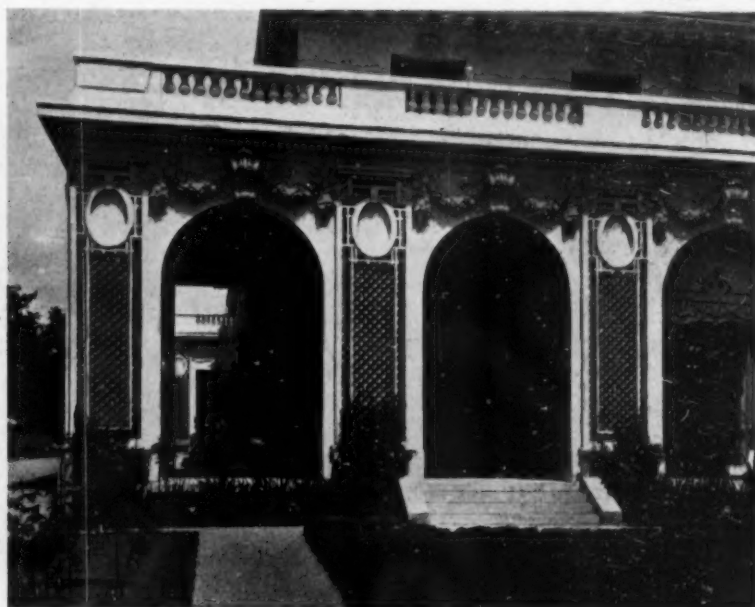
(Continued on page 121)



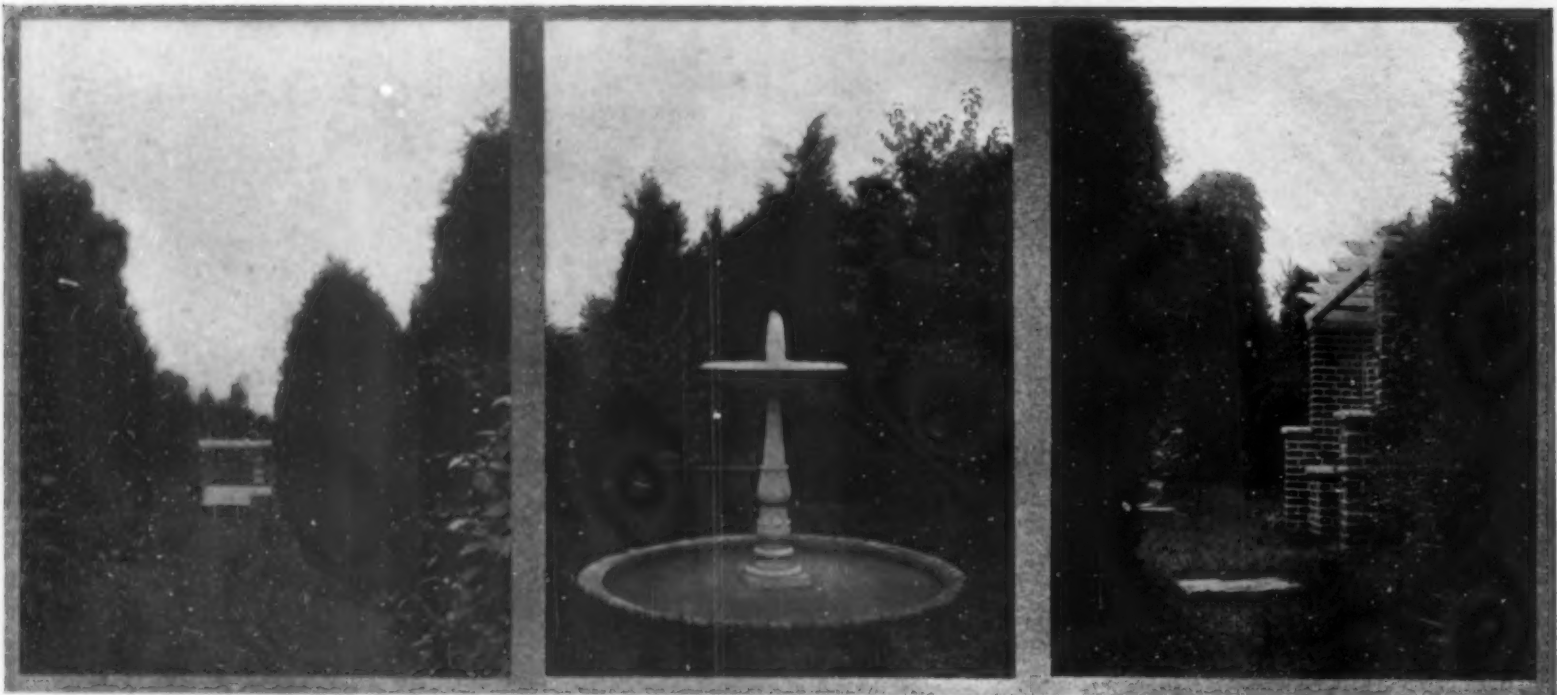
Latticework is effectively introduced to give more apparent strength to the supports in the home of A. W. Lord, architect



For use as garden walls or to separate the various parts of an estate latticework has great possibilities



Even on the more elaborate architectural types latticework may be effectively introduced. Carrere & Hastings, architects



The whole scheme of the garden is to secure vistas back and forth along the zig-zag path through the growth of cedars. At the end of each vista there is some architectural feature such as the seat or the fountain shown

## A Garden of Vistas

A STRIKING EXAMPLE OF WHAT MAY BE SECURED VERY INFORMALLY BY THE JUDICIOUS CUTTING OF PATHS THROUGH A SMALL GROVE OF EVERGREENS

BY CHARLES EDWARD HOOPER

Photographs by the author

THE informal garden began with Eden. Later, when man had become an independent and self-satisfied unit, he perpetrated the Japanese, Italian, English and other artificial gardens.

The little Jap bowed down to nature and said, "Most Honorable Mother, I will make my garden in thy image." And because of this and because both nature and the artificial details were a part of his religion and meant something to him, he has done far better than the rest of humanity.

The Italian hypnotized nature and produced by artifice a beautiful thing, as cold and colorless as the marble with which he overloaded it. To-day it is bearable and often pleasing, but only from the fact that nature and time have in a measure reclaimed it.

When the Englishman made his garden, he reached for an axe and started in to reform the dame. When he had hacked a rooster out of one tree, a hatbox out of another and constructed an avenue flanked by numerous strings of sausage standing on end, he rested. "See; is it not beautiful?" And his kin said, "Magnificent!"

The ordinary garden is composed of bits stolen from nature and in their ad-

justment more or less defiled. But why steal—why defile? The old lady is naturally wild—but friendly.

Cultivate her friendship; learn her ways and whims and when she has gotten confidence enough to come and eat out of your hand, don't clap a dog collar on her and tie her up to a clothes-post in the yard. Don't try to tame her; let the relationship be one of friendship if you expect her to exert her individuality and help. Tame her, and she loses the former and is less than useless for the latter. If you expect to drive nature, you've got a balky horse, and if you want your load pulled, you'll pull it yourself, which is not what you are after. The Japanese understand this well; hence their relation is one of partnership, with nature always senior. To illustrate the point still further, let us take some old houses, abandoned, fallen to decay. Many of these old houses when new were very ugly in design. We make this assertion boldly, knowing it to be so—but, let it be never so bad and commonplace, when turned over to the master hand of Dame Nature, what happens? The ungainly detail loses its prominence; the jarring outline loses its rigidity. Gradually the thing

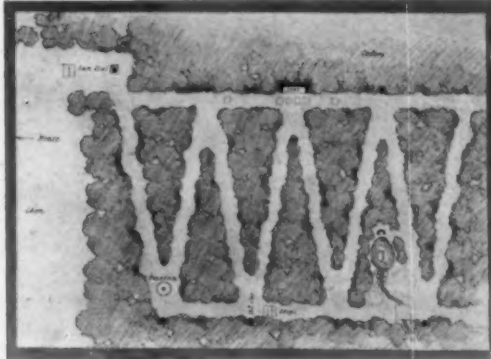


The shortest vista of all is across the little pond towards a white marble seat, set like a gem against the evergreens





A fountain looms up at the end of the first vista after one turns into the grove



There is a very practical suggestion in this zig-zag vista treatment for every place that can boast a grove of evergreens



Close by a short flight of stone steps stands an Italian oil jar

is transformed and the crime of man becomes a masterpiece.

The foregoing is merely to set forth a principle; now for the example: It was several years ago that the writer vis-

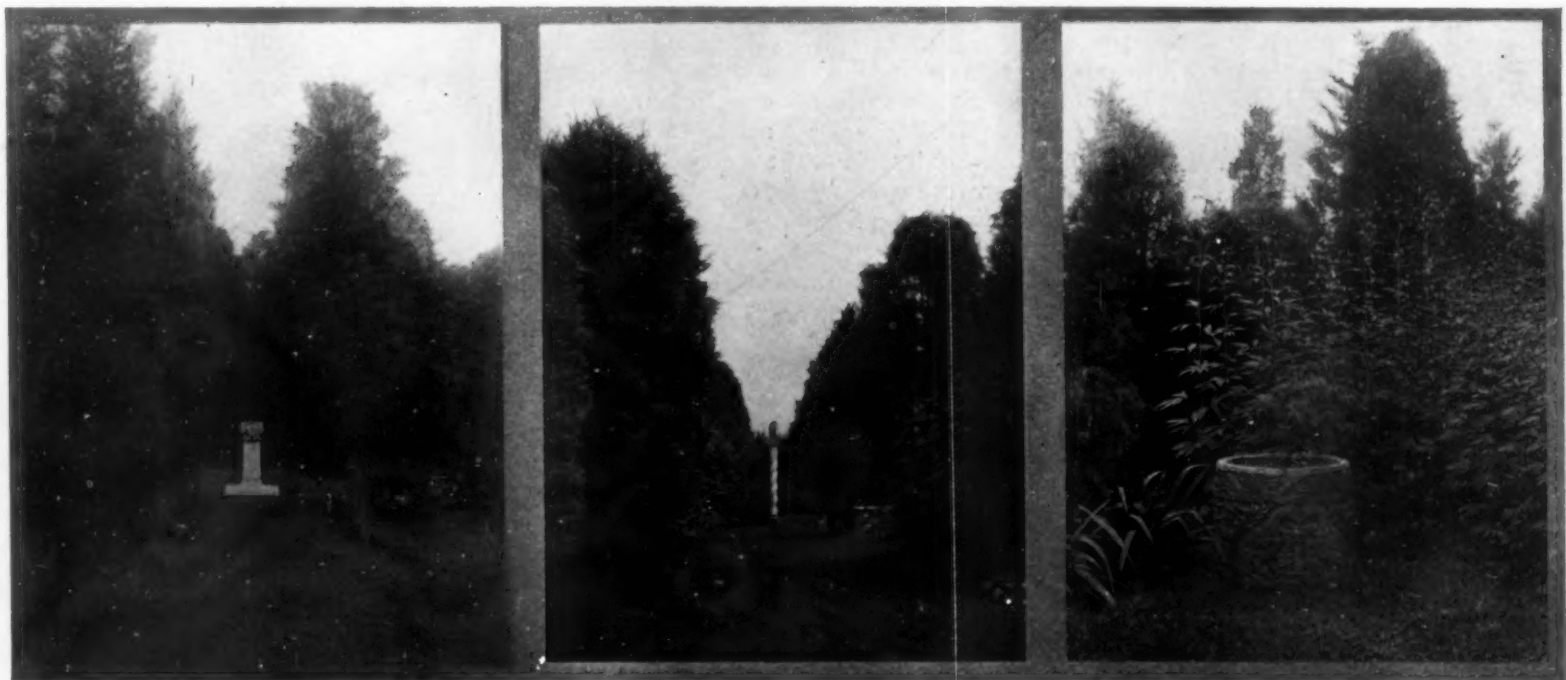
its end you become aware of a pathway through the cedars to the right, at the end of which is a simple fountain. Another step and a long vista opens up to the left. This is

ited the Stevens garden at Bernardsville, N. J., and his only records are photographic and a very pleasant memory. The plan here shown is probably not accurate in every detail, but it is truthful in the main and shows clearly the scheme and general intention. As a matter of fact there never was a plan made. The landscape architect, Mr. Daniel Langton, took off his coat, rolled up his sleeves and waded into the problem with a gang of Italians. Of course there was some sort of scheme in mind, but the details were problems to deal with as they were met.

In the beginning it was but a comparatively compact cedar grove on a gentle slope, in view of the house and separated from it by a commodious lawn. Were you to ask for it, you would be shown an opening in the trees, which, owing to their color, is barely noticeable. Closer investigation would reveal a marble sun-dial at the end of a short avenue. Following this to

the scheme—a series of vistas slightly varied, with some slight artifice at their terminals. There is no general effect, but rather a score or so of pleasant surprises. Everywhere has nature been consulted. Such trees as by their character or size demanded attention were respected, even if they encroached upon the straight lines of the path. Undesirable specimens were cut out and their place as well as other natural voids were planted with flowers of a simple and half wild character—Golden Glow, Iris, Phlox, Tiger Lilies, Rhododendrons, Honeysuckle, single Roses, Ferns and the like. This apparent effort at straightening does not effect this end; on the contrary it tends to emphasize the irregularity. A look at the plan suggests formality at once, but the thing itself conveys a far different impression.

Here and there one finds accidental effects such as scattered  
(Continued on page 121)



There is an interesting variety in the character of the terra-cotta and marble fragments that have been chosen to mark focal points at the end of the vistas



The Sweet-scented or English Violet, which is double in cultivation, will thrive as a border plant if given a light winter protection of leaves

## The Available Violets

THOSE OF THE ONE HUNDRED FIFTY SPECIES THAT DESERVE A PLACE IN THE HOME GARDEN—GATHER THE SEEDS NOW FOR NEXT YEAR'S BLOOM

BY F. L. MARBLE

Photographs by the author

IT is stated that there are 150 species of Violets, of which 40 are native of North America north of Mexico. More than twenty of them can be purchased in the horticultural market. These that I mention below are all growing in my garden. They can be purchased of a dealer, if not otherwise obtainable, though people who frequent the country can gather seeds, or slips, for themselves.

The Sweet-scented Violet, which is double in cultivation, is undoubtedly the best known. It is sometimes called the English Violet, but the florists know it by its botanical name—*Viola odorata*. It will grow as a border plant in a hardy garden, but it needs a light covering of leaves in the fall to withstand the rigor of a northern winter. Its flowers are very fragrant, grown in this manner, but the stems are short and the flowers hide under the leaves. It does better in a coldframe.

This being the case, I turned to our common Blue Violet (*Viola palmata*, variety *cucullata*), for my thriftiest border plant. It improves wonderfully under cultivation.

The flowers are large and brilliant, growing on long stems. The leaves stand a foot high by midsummer and become rich, dark green. The cleistogamous flowers ripen their seed in August, when the white seed-pods that have been hiding under ground are raised on stout stems to crack open and distribute their burden. So August is the time to gather the seed. It can be planted at once, though it may be kept if necessary until the following spring.

Another variety of the same Blue Violet has streaks of white down the deep blue petals. It is called variety *striata*. It has grown in my garden near the plain blue Violet for fifteen years, and both varieties have remained true. It also has cleistogamous flowers maturing in August. Both varieties adapt themselves to the hardy border. They multiply so fast by means of the widely distributed seeds that we give away hundreds of plants each year.

The Bird's-foot Violet (*Viola pedata*) grows less lustily in my garden, for it is not native to our immediate vicinity. I am mak-

(Continued on page

122)



The Downy Yellow Violet produces flowers sparingly all summer



Variety *striata* of the Blue Violet has white streaks on its long-stemmed deep blue petals



The White Violet should be grown in colonies to be fully appreciated

## INGENIOUS DEVICES

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

### To Save Streaks on Walls

**T**O clean or varnish the woodwork of a room without marring the walls, hold a strip of pasteboard flat against the wall with one hand while working with the other, sliding the strip along as the work progresses. Even better than the pasteboard is a good flat dustpan, for its handle enables it to be more easily held in place and moved on.

This is a simple device, yet for want of it I have made many an ugly streak on papered walls (especially when cleaning baseboards), in spite of my best efforts to keep the varnish brush, the dampened cloth or the oiled rag from touching them.

By means of it I have just stained the molding around my room to match the new wall paper, doing it easily without making the slightest spot on the paper.

L. McC.

### A Home-made Floor Wax

**I**N about an ounce of common turpentine put a thimbleful of shaved beeswax. Melt this over a very slow fire (the tiniest burner of the gas stove, turned low, will do it), taking care to keep it from catching fire. When melted, apply to the well cleaned floor with a soft cloth and rub in well. It takes on a splendid and lasting polish.

This amount will answer for around a rug 9 x 12 in an ordinary size room, although the first time applied it takes more than it does afterward. It is very inexpensive and much more satisfactory than many that cost more and require more labor.

L. McC.

### Durable Garden Labels

**A** DURABLE label is very desirable in the garden for preserving the names and history of trees and plants. The one in common use, the little pine tag of the nursery people, does pretty well for the first season and then discolors and is hard to read and is never easily written on. Paper does not last through a single season. The result is that people generally do not use tags or labels and forget when things are planted, the names, and many other useful particulars.

But there is a better way, for we can have labels cheap, permanent, easy to read and easy to write upon with the common lead pencil. So permanent in fact that the record is as easily read five years after it

was made as it was when first written on.

All you need is a lead pencil and sheet zinc. Common sheet zinc, even old stove board or other old zinc answers as well as new. An old pair of shears will answer for cutting it up, and with a wire nail a hole can be made in the end to take a bit of wire by which it is fastened in place. An inch wide and three inches long is a good size for single names. But in cutting up old scrap all sorts of sizes and shapes will be found convenient. Sometimes one wishes to record dates and particulars and then some space is desirable and larger pieces are useful. The tinsmith or stoveman will probably be glad to furnish pieces of scrap zinc cut to sizes for a small sum.

Marks made upon zinc with a soft black lead pencil are indelible and are even clearer after a year's exposure to the weather than when first made. The weathering of the zinc gives a matt surface upon which the pencil marks stand out with beautiful distinctness. There is apparently some chemical reaction between the graphite and the zinc. Just how long the markings will remain distinct cannot be stated. The observed period covers several years. The probability is that they will last as long as the zinc.

W. E. P.

### How to Root Cape Jasmines

**F**ILL a bottle half full of sand, then fill up with water. Into this put a nice spray of jasmine, and place in the hot sun. No further care need be taken of it except to see that the bottle is filled up occasionally, emptying none of the water that is in it. When plenty of roots are growing, break the bottle, to save injuring these delicate fibres by drawing them through the neck, and plant in good, rich soil.

In the Southern States we leave this beautiful plant outdoors all winter, giving it some protection; but in colder climates it needs a sunny place inside the house. Certainly no plant has more beautiful evergreen foliage, or waxier, more fragrant blossoms.

L. McC.

### A Better Way to Sun-dry Fruit

**I**F we cannot have the evaporator proper, trays and a scaffold may be made that will be a great improvement over spreading the fruit on the housetop. The best trays are made of eight pieces of lumber, an inch and a half thick and as wide, making the four sides double; the bottom of the tray is made of galvanized wire cloth of No. 2 to 3 mesh; that is the wires are half or a third of an inch apart. The wire cloth comes in different widths, probably the most convenient size for the trays being thirty inches wide and three feet long, which will hold half a bushel or more. The wire cloth is nailed between the two sets of side and end pieces so that the tray may be used either side up, and the bottom well

secured. To make the tray still more substantial put a piece of wood across at the center. The best scaffold for holding these trays is a high trestle so that it is out of reach of the poultry. This trestle is made like a carpenter's "horse," with a strip nailed from one leg to the other on each side for holding the trays. A permanent scaffold may be made by setting four posts in the ground and nailing strips of lumber from one to the other for the trays to rest on. In either case the air passes up through the fruit as well as above, causing it to dry more uniformly and quicker. To protect the half-dried fruit from dew or rain, stack the trays one on top of another and cover with a piece of oilcloth; or the trays may be taken down and carried into the house without misplacing the fruit.

H. F. GRINSTEAD

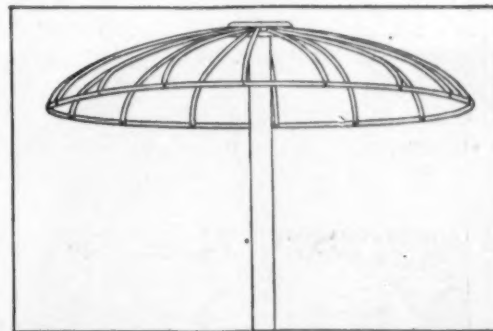
### A Trolley Line for the Dog

**I**T is often necessary in a city or suburb to keep a dog chained, and the poor creature suffers intensely from his limited amount of exercise, the galling collar, and the wrapping of his ropes, or chains. This may be remedied by getting a six-foot rope for him, fastening it by a slip noose to the wire clothes-line, and attaching the other end to the dog's collar. This allows him to race back and forth the full length of the wire, with detours of many feet. He cannot get tangled up in it.

L. McC.

### A New Use for Old Umbrellas

**A**N old umbrella frame, opened wide and suspended by the tip, is a good form for a vine to run on. A fine wire



In England these umbrella forms, made of wood, are obtainable for climbing roses and vines. An old umbrella will serve, with its handle planted firmly in the ground

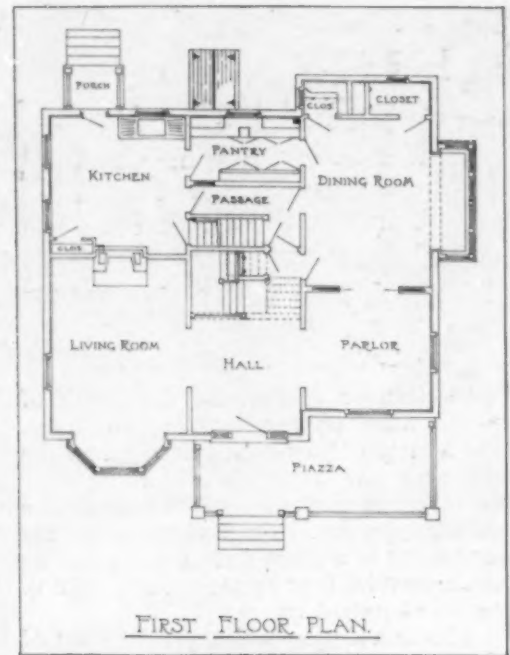
should be run through the tip of each rib, and wound around each once, to hold the ribs an equal distance apart. When covered with the green vines, the whole presents a most attractive appearance.

Another way is to push the umbrella frame into the ground by its handle, planting sweet peas or trailing nasturtiums around the edge. They will run up the ribs, making pretty circular patches of bloom.

G. C. R.



The Flemish-bond brickwork, dark stained shingles, the plaster-and-timber gable ends, and the white trim of the windows give a broad variety of materials that needs careful handling to be effective

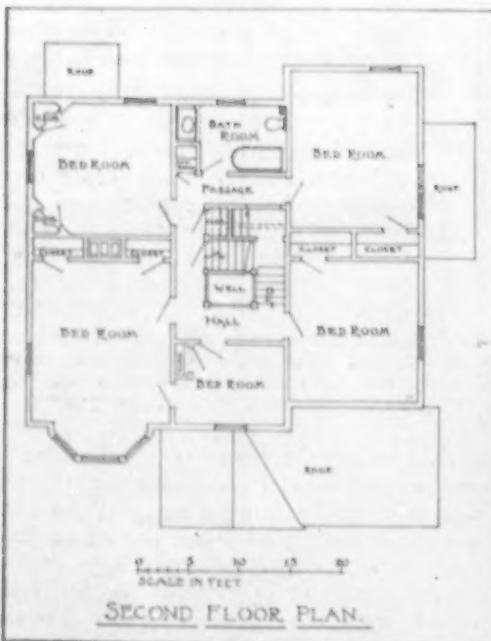


FIRST FLOOR PLAN.

An ingenious arrangement of central staircase, rear stairs and passageway, by which the maid can reach the front door without passing through any room, is the most instructive feature of the first story plan.

*Joseph W. Northrop*  
Architect

THE HOME OF  
MR. JOSEPH W. NORTHROP  
Bridgeport, Conn.



SECOND FLOOR PLAN.

The rear stairs join the main flight upon a landing somewhat below the second floor. A central stairway and hall, if it can be satisfactorily lighted, usually provides the most economical arrangement of space for the bedrooms



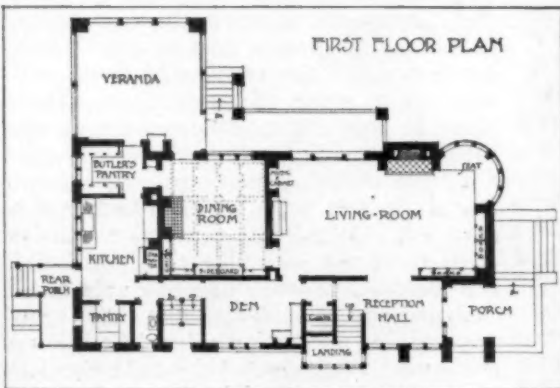
An attractive variety of mass is gained for the nearly square house by the stepped back gables in the roof and the echo of these marking the front door



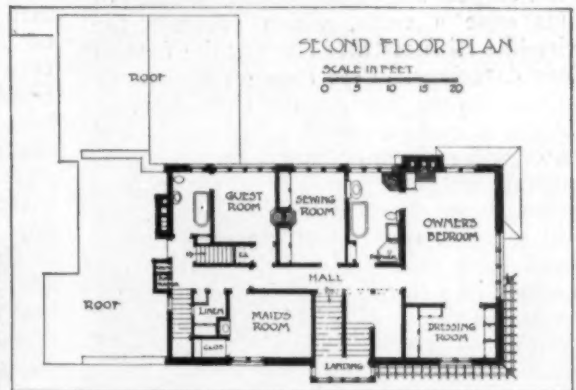
Looking along the side towards the front porch. The projecting piers carry the window-boxes



The entrance porch. Small cobblestones, laid in approximately horizontal courses give the unusual and interesting wall texture



The plan indicates the Gothic spirit in which the structure has been carried out—substantial piers joined by thin curtain walls. Everything possible has been built-in—bookcases, sideboard, china and glass cabinets, and even a cigar cupboard in a corner of the den



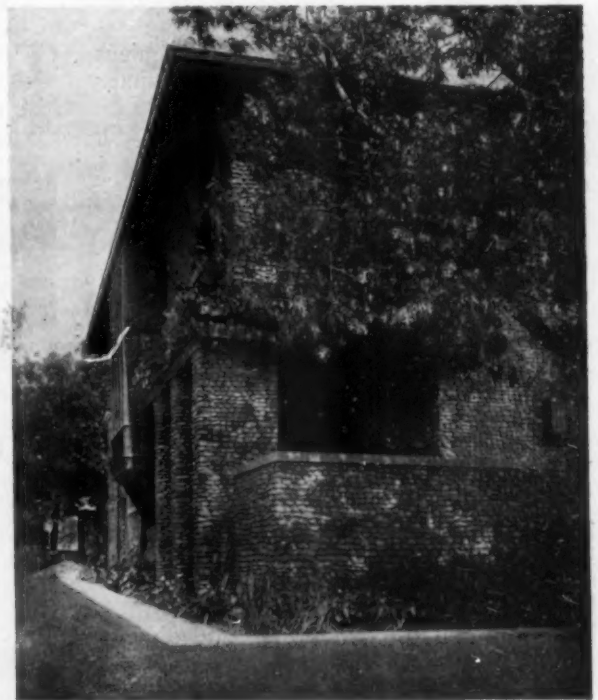
Upstairs the owner's suite is particularly complete in its equipment of dressing-room and bath. A shower and a small fireplace are found in the latter, while in the bedroom itself a fireplace and built-in seat are welcome accessories



The veranda at the side of the house is screened and, as the first floor plan shows, is conveniently accessible from dining-room and butler's pantry

THE HOME  
OF  
MR. E. D. MOENG  
Rogers Park  
Chicago  
Ill.

Lawrence Buck  
Architect



The entrance porch corner. An effective bay, covered by the broad overhang of the roof, takes in the landing of the main stairway



Inside the House  
 Time's Suggestions and  
 Answers to Correspondents



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

### Care of Rugs and Carpets

**A** SURPRISINGLY large proportion of persons who own fine rugs and carpets do not give a thought to their care and preservation, beyond a hard sweeping (which rugs should never have), or a hard beating (which rugs seldom survive). Dip the broom with which your good carpets are to be swept in clean, hot suds once a week, which prevents the wire-like stiffness that tears at the face of floor coverings. Beat rugs on the *wrong* face and sweep them on the right face. A sponge dipped in oxgall, or ammonia and water will remove ordinary spots, if carefully applied, and you will find that slightly moistened bran will probably restore dull spots in rugs or in carpets. Sometimes damp soot is blown down from the chimney in a storm. If it falls on the carpet, cover the spots thickly with salt, and then brush up immediately. This will cause no injury to the carpet or rug.

### A Portable Cretonne Wardrobe

**A** VERY attractive and convenient portable wardrobe for a summer room that has no closet may be made by having a frame constructed six feet high, three feet wide and two feet (or less) deep in measurement. Around the back and sides cretonne should be fastened at top, bottom and sides, so it will not blow with a breeze coming in at a window. Along the top hang a valance, and inside from side to side run a bar across on which dress and coat frames may be suspended.

### New Willow Things

**V**ERY attractive serving-trays in willow-ware, with cretonne bottoms, protected by a plate of glass are becoming popular for the breakfast service. These seem especially in place in Colonial dining-rooms and in the country. They may be had in round, oval, square and oblong shapes, all having handles.

Willow baskets of various shapes, sizes and for various uses decorated in relief are one of the season's novelties.

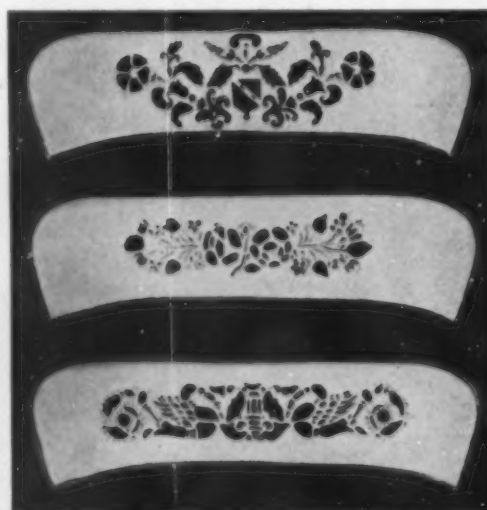
These reliefs are festoons of flowers, and of fruits, some of which are gilded and others are carried out in color like colored Florentine carvings of the Renaissance.

### About Window-shades

**T**HERE are a few little things that everyone should know about window-shades. In the first place too much care cannot be exercised in putting them up properly. If the shades are not cut true to a square they will grow wobbly. Shades too short for their fixtures are the bane of the dweller's life, as also are shades that are really too short for their place. Indeed, every window-shade should extend some eight inches below the window-sill. If the shade roller is too small in diameter, the spring will break eventually, because it will not be sufficiently heavy to control the weight of the cloth. Cheap shades are seldom profitable, especially in dark colors, and one should put in those of good quality when possible.

### Colonial Chair-backs

**T**HE late Colonial chair-backs, of which a large quantity have survived, furnish an interesting number of examples of the furniture decoration of the time, which



Anyone carrying out a thoroughly consistent Colonial interior should not overlook the quaint stenciled chair-backs

may prove suggestive to anyone reproducing these old patterns. Of course these stencils were, for the most part, in black, red and gold against yellow varnished wood, or in gold and colors against black wooden backgrounds.

### Proportion

**O**NE cannot do better, when becoming interested in any matters pertaining to interior decoration than to make a personal study of the relation of their problems to a sense of proportion. There must be line correspondence throughout the house. High-ceilinged rooms must not have stubby, squatty furniture, large rooms be left bare, small rooms overcrowded. Windows against expansive walls must not look like tiny port-holes, nor windows in walls of small area be so designed and of such size that they throw the sense of proportion askew the minute one enters the room. Of course there is much flexibility possible, but good taste will always dictate that.

### Curtains for the Bungalow

**F**OLLOWING the skill shown by the Russian and Norwegian peasants in needlework on heavy crash linen, it will be found in most admirable taste to adopt their scheme of decoration in making the curtains and other wall hangings for the summer bungalow home.

If one has not the time nor patience to elaborate with the needle all those beautiful cross-stitch patterns in clear blues and reds on linen crash, one may at least arrive at a happy color combination and very admirable effect by choosing some gay cretonne and cutting it into narrow bands using these bands as a paneling or as a simple border, set back a few inches from the edge of the curtain. For very long curtains the bands should run across the curtain eight inches from the top and the same from the bottom. For short curtains upright bands will give a more agreeable effect. The Russian linen crash can be had in very wide or in quite narrow widths. Some of those old English cotton prints, with tiny roses, or the Japanese

crepe in small patterns of one color on white are best adapted to this purpose.

Where it is necessary to combine the curtain and window-shade in one, the use of a light-weight India printed cotton has been found excellent for the purpose.

A very delicate Persian pattern printed in black on a white ground with a mere suggestion of Rose color in the outline of a flower, was chosen for a living-room where the windows were of small panes and moderate size. I. D. B.

### Mats for Kitchen and Bath

SOMETHING new in the way of kitchen and bath mats has appeared as a result of the ingenuity of manufacturers of things for the house. These kitchen and bath mats are woven from trimmings of new table oilcloths in much the same manner as the rag rug is woven, and when placed before the kitchen sink, table, stove, etc., save the linoleum or floor underneath. These mats have only to be wiped up when soiled, thus saving the labor of the cleaning necessary to many other sorts of kitchen floor coverings. For use in bathrooms it is said they are both sanitary and cleanly in appearance and do not hold dampness.

The mats come in pretty stripe and mottled effects, in dark colors on a brown warp for kitchen use and in dainty shades of blue, green, and lavender on a white warp for bath use. Moreover, they are comparatively inexpensive.

### A Wistaria Bedroom

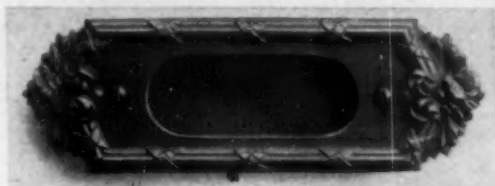
IT is now possible to obtain harmonious decorations throughout in wistaria colors and patterns for wistaria bedrooms. Very lovely new wall papers, chintzes,



Wistaria bedroom papers are now obtainable to carry out an effective scheme

printed linens, rugs and screens are at one's command for carrying out such a decorative scheme. One of the rugs now shown in New York shops has a gray ground with an all-around pattern of lavender wistaria flowers, and makes a most effective floor covering.

T. S.



How much distinction can be added to a room in a period style by consistent hardware even down to the window lifts

### Bungalow Candlesticks

ONE of the newest things in candlesticks consists in an adaptation of the Japanese floor-lanterns. These stand from one to three feet high, or even higher, for floor or table, and are lacquered supports, Japanesque in shape and vermilion in color, with brass mountings to hold the candle and graceful, deep globes to prevent the wind from blowing out the candle flames. They are designed for large candles, and, thus protected from air currents, burn with a fairly strong steady light for a long while. They are just the thing for the summer cottage, bungalow or camp, taking the place of hot lamps.

### Color-scheme for Maple Woodwork

I HAVE two adjoining bedrooms. The woodwork in one is bird's-eye maple and in the other light maple. Will you kindly suggest a color scheme for the decoration? The light maple room will be tinted, but the other must be papered, as it has been papered before. This room is now pink, but I have grown very tired of it. The casement windows in both rooms are very attractive and have window-seats. The floors are hard wood, and I am willing to buy new rugs. The rugs I have for both rooms are rag rugs, white with brown borders. I have one set of deep ivory tinted enamel furniture. The rooms are lighted by gas. The chandeliers are very good in pattern, but as they are wrought iron, the one in the pink room has always seemed too black. Do you send samples to your subscribers?

N. E. E.

Chose a soft whitish gray ingrain paper for your bird's-eye maple bedroom. Tint the ceilings a deep cream. Select pale poppy-green over curtains, and valance for same for your windows, and upholster the window-seat with the same. Your sash curtains may be the color of the ceiling. Some well selected color-prints (especially Japanese prints with blue, rose and brick-red tones) framed in very narrow (half-inch) black frames will be just the thing for the walls. Do not use gilt frames. Unless your furniture in use now is to stand in the re-decorated room you may find that it is not right for it. However, the white furniture can be retained, in which case the sash curtains should be white. The muslin chiffoniere and bureau covers should be lined with deep green, which, coming through the muslin, will be the tone of the pale green curtains. Nat-

ural wood furniture with a dull gray-green stain, would be best for the room. Your rugs can be of the same sort that you have had, but should be in poppy green with cream-colored borders and cream-colored warp fringe. Your second room may have walls tinted in light canary color, pale lemon-colored sash curtains with brown over-curtains valanced as in the other room. The window-seat may be upholstered in yellow. Tint the ceiling a very pale yellow. Use your deep tinted ivory furniture for this room. We are always glad to send samples of the materials and colors suggested and to refer our subscribers to reliable dealers when they request it.

### Consistent Interior Hardware

NOW that so much more attention is being paid to consistent interior decoration, the matter of hardware fixtures and trimmings, such as door-knobs,

key plates, handles, window catches, etc., are coming to be selected for their appropriateness to the plan of the whole decorative scheme. For instance, a period room in Empire style should have well designed Empire fixtures; a room in Louis XV style, fixtures to suit, and so on. Rooms in other styles, Colonial, Craftsman, etc., may be fitted without difficulty with the proper sort of architectural hardware, and every person planning a



For your Louis XVI reception room or library

house, particularly a small house where such matters are more often apt to receive less attention than pretentious dwellings, will have no difficulty in finding the suitable things for the place in mind.

The two illustrations shown herewith—the window-sash lift and the escutcheon—are of the Louis XVI School, evident in French art from 1774 to 1792. Hardware of this sort is obtainable in cast brass or cast bronze, and in finishes known as "old brass," imitation gold, oxidized silver and in genuine gold plate.

## Garden Suggestions and Queries



Edited  
By  
Gardner  
Teall

*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.*

### The Garden for August

**T**HIS is a good month for potting Easter Lilies which are intended for forcing. Keep them in a cool, dark place until they are thoroughly rooted.

Such Carnations as you may have bedded outside must now be brought indoors. It will hardly be safe to leave them out longer.

If you sow Perennials at this time it will be well to sow them in coldframes so the late rains of fall will not wash them away.

Top-dress the Asparagus bed with sheep manure, and keep the bed free from weeds. Because a bed has ceased its immediate service to the table is no reason its care should be neglected. The future has always to be borne in mind.

Don't forget that your Squashes must be gathered before a frost. Store them in

warm, airy places to cure. In this connection, however, the longer they remain on the vines *before frost*, the harder the shells will become, and the firmer the vegetables; therefore the longer they will keep.

Mulch the Strawberry plants you set out this month as soon as they are planted.

Tar-concrete garden walks, drains, etc., may be made this month, as they are best made during hot weather.

Hedge pruning may be done this month for the last time.

Transplant (in the same ground or elsewhere) bulbs that were not dug up in the spring.

Hypericum calycinum, Wichuriana Roses, Cotoneaster microphylla, are recommended by an English correspondent as excellent for planting on very steep banks which with difficulty are kept tidy.

Look carefully into the matter of the maturing Tomato plants. Arrangements for their support (racks, etc.), must be in good shape.

There may be some necessary spraying this month in the vegetable garden—Potatoes for blight and rot, and Cabbages for aphides.

Your very late crop of Celery can be provided for by setting out Celery plants at this time. They will need thorough cultivation.

Harvest all crops of vegetables as fast as they appear, and clean up the old litter. Otherwise your garden may become a breeding-place for insect and fungous pests which will do great damage next year.

Sow seeds of French Marigold, Japanese Morning Glory, Drummond Phlox, etc., now for transplanting, later, to indoor window boxes.

Pick off the seed-pods of Pansies and Violas from time to time as this will ensure a longer blooming season, and the flowers will be superior in size and color.

A plant cannot nourish seed and blossom at one and the same time successfully.

Cut out any old canes from your Currant bushes at this season, and canes of Blackberries may be pinched now to induce side growth for compactness.

You may still sow Lettuce for a late crop, and this is a bit of gardening you will not regret having attended to.

### Potting Ferns

**T**HERE are many lovely Ferns growing in the woods back of our pasture lot, and when the time comes I should like to take some of them up. Will you please give me directions for potting them?

Pot Ferns firmly, but remember that they dislike hard potting and will not thrive under it, or when the potting soil fills the pot up to the brim. Instead the top of the Fern root-ball should be placed



This shows what a little rockwork planned now will do for springtime effect



Square flags laid in this manner make attractive garden paths through shrubbery



low enough to ensure it receiving plenty of water. A 5-inch pot, for instance, must have three-fourths of an inch depression as a water basin. Use small pots for small Ferns. They will then be forced ahead with careful attention, and in the course of this should be shifted to larger pots from time to time. Water gently at first, but thoroughly. Because the top soil of potted Ferns is moist is no indication that the roots may be. Indeed many Ferns suffer or perish from the lack of water reaching their roots.

### Destroying Water Rats in Ponds

**W**E have read with interest your article on Water Gardens in the June HOUSE & GARDEN, and perhaps you can help us with a problem that confronts us. We have a lovely garden pond, but water-rats are destroying the aquatic plants. What shall we do? We cannot use poison, as the pond is stocked with Goldfish.

Fortunately water-rats are easier to be rid of than stable-rats. While very destructive to plants in water gardens they do not seem to be harmful otherwise. Trapping seems to be the only solution of the problem, unless some member of your family is a good rifle shot.

**I**F you look around your vegetable garden you will probably find that the upright or Cos varieties of Lettuce you have planted are running to seed. Learn from this experience that the Cabbage headed varieties are the ones to depend upon for withstanding heat and drought and furnishing you with late salad heads.

### Flowers by Mail

**W**HEN garden flowers are shipped by mail, as now so often they are, they should be picked very early in the morning while the dew is still upon them. Then place them in water in a cool, dark cellar until night. The flowers will then have drawn up a great deal of moisture to serve them on their journey, and only a little damp Fern, Moss or Grass need to be put around their stems to ensure their freshness upon their arrival.

### Fertilizing Lupins

**I** NOTICE in a recent number of HOUSE & GARDEN a photograph of a border of Lupins. I have grown these flowers for some years but for the past two years have been troubled with the blossoms falling off as the stems were touched. There did not seem to be any plant disease and I am wondering if you can tell me what has been the trouble.

Your soil probably does not furnish the plants with the ingredients they require for their nourishment. Try watering them several times with a solution of nitrate of soda and mulch the roots with a mulch of well rotted stable manure. A little lime may be necessary to insure a sweet soil.



The Everlasting or Straw-flower (*Helichrysum bracteatum*) is coming into favor again for its decorative value in flower holders

### Caterpillars on the Euonymus

**T**HE Euonymus hedge, which surrounds part of our garden enclosure, has been attacked by black and white caterpillars. What, besides picking them off, will drive them away? The hedge does not look as healthy as it should.

Try syringing the hedge with strong lime-water. This should rid it of the caterpillars and will do the plants no harm. Earth up the roots of the hedge occasionally with well rotted manure to bring the plants to better condition.

If you would get a season's start on Strawberries procure potted plants immediately, instead of waiting until next



Rosa Rugosa is a rugged shrubby Rose. It is hardy for seaside planting

spring for setting out smaller plants. If you have not already established a little Strawberry bed it's worth thinking about.

Order bulbs for fall planting now, especially Madonna Lily (*Lilium candidum*), Nankeen Lily (*Lilium excelsum*), Spanish Irises, Bermuda Lilies and Cape Bulbs (Freesia, Oxalis, etc.), for the greenhouse, and autumn Crocuses, such as *Crocus autumnale*, *C. speciosus*, *C. zonatus* and *C. sativus*.

Biennials and perennials may be sown up to the middle of August in the open ground, though sowing them in cold-frames instead is recommended, because better care can be taken of them in their earliest growth in this way. Pansies and English Daisies should be started this way; also Foxgloves, Canterbury Bells, and the Iceland Poppy.

### Drying Bulbs

**W**ILL HOUSE & GARDEN kindly give me directions for drying the Hyacinth, Tulip and Daffodil bulbs I wish to take up and store, for our garden is to be made over this autumn?

Shake the soil from your bulbs and place them in dry, shallow boxes or wooden trays. Set aside in some airy place where the sun does not reach them. It is always better to procure fresh bulbs if you would depend on them for garden effects.

### Rosa Rugosa

**T**HE showy heps of the *Rosa Rugosa* will be bright from now onwards. For a shrubby this is the ideal Rose, the hardiest and freest from insect pests. If you do not find it in your gardens and on your lawns this year, a sight of this Rose on your neighbor's premises will probably convince you that it is worth planning for next year. As a plant taking kindly to indifferent soils *Rosa Rugosa* has won an especial place for itself in favor.

### Scum on Lily Ponds

**A**N article on Water Gardens in HOUSE & GARDEN leads me to ask you how I can prevent scum from accumulating in my little concrete water garden. I do not see why it should collect as the water is constantly running into it.

Spray the surface of the water with a solution of sulphate of copper. This destroys the spores of the scum or Blanket-weed. The amount of sulphate will depend upon the approximate number of gallons of water in the tank. To determine this multiply length, breadth and depth of the pond to find the cubic feet of water, and as there are about six and one-fourth gallons to the cubic foot you can easily determine the contents of the tank. Use about two grains of the sulphate to every fifty gallons of water in the pond.



### Propagation by Cuttings

**C**UTTINGS are very much like layers, but differ from them in that they are separated from the parent plant before any roots are formed, and the whole process of root formation has therefore to be carried on independently. For this reason that are not so simple an undertaking for the beginner as layers; the latter can and, indeed, must be left alone, while cuttings require care and must, under some circumstances, be watched very closely.

They may be made from both ripened and green wood and they may be taken from the root, stem or leaf of the plant. They are designated accordingly as hard or ripe and green; and as cuttings—meaning sections of the stem, root cuttings and leaf cuttings.

Green cuttings are made sometimes from the soft wood—that is, the succulent and tender, most recent growth; or from the hardened growing wood—that is, the growth that is hard, but not yet fully ripened or turned into actual wood fibre. Ripe cuttings are made from the fully matured and ripened wood.

The best authorities agree that hard-wood or ripe cuttings will practically always root, though it takes longer and they are not always the finest plants when they finally "take hold" and grow; but cuttings of green or soft wood are a doubtful undertaking and are very apt to die before they have had a chance to root—therefore they are likely to be a very discouraging failure to the beginner.

Geraniums are the one great old standby that everyone has at one time or another rooted or seen rooted from "slips," and geraniums may be depended upon to live and thrive ninety-nine times out of a hundred. Commonly they are rooted by being thrust into a bottle of water, but the professional way is to use a coarse sand in flats to set them into. This is mentioned as the most familiar example to illustrate propagation by this method, rather than because directions seem necessary for increasing the number of geraniums in the world.

The practical value of cuttings lies in the possibility which they offer of turning one currant bush into a dozen in a single season, or making twenty grape vines grow where only one grew before, with

absolutely no outlay. Ornamental shrubs and perennials may, of course, be multiplied in this way, though the latter are usually increased in a simpler way by division of the root clumps every two or three years.

#### WHEN TO TAKE CUTTINGS

Cuttings of hard wood may be taken at any time when the plants are dormant, though it is usual to prepare them after the leaves fall in the autumn and let them lie through the winter to callus. This callus is very necessary, and unless it forms no roots will appear. It is occasioned by the swelling of the inner bark at the severed end or base of the cutting; this gradually rolls out and over the entire raw surface, covering it with new tissue in practically the same way that the wound left on a tree, by pruning off a branch, is covered. Usually this process takes from two to three months, and cuttings are sometimes prepared thus, long before they are to be set into the ground. On the other hand, they may be taken from the parent plant in the fall and set immediately out of doors, unless the climate is exceptionally severe.

Ripe cuttings should be 6 to 8 inches long and should contain never less than two buds or two pairs of buds—and there is no harm in having a dozen. The cut at the bottom does not have to be made immediately below a bud, though it is well to have it come at such a spot. It should slant in order to furnish as broad a diameter as possible for the sending forth of roots. Rub off all except the upper bud or pair of buds and plant with a dibble just as a seedling is planted. Never thrust a cutting into the sand simply because it is easy to do so—they should be set carefully and treated quite the same as a rooted plant in this respect. Place them two inches apart and set them deep into the ground so that only the remaining upper bud or pair is just above the surface. Firm them by tramping and mulch them heavily before cold weather sets in.

#### STARTING PLANTS INDOORS

Ordinarily attempts to start cuttings in flats indoors in winter are not advisable for the beginner. It is extremely difficult to make a success of these without a place especially prepared—and failure is such an arduous cooler that it is well not to invite it by rash experimenting. During the summer, however, when temperature takes care of itself, there is less risk—so there will be no harm in explaining the method of going about this indoor propagation, while we are on the subject.

Flat boxes, four inches deep—the regulation "flats," such as are used for starting seed indoors—are suitable for cuttings indoors, or under glass, as it is termed; but instead of the fine, rich earth which seeds require, they must be filled with clean, sharp, well packed sand. For a cutting has no need of organic nourishment until it is provided with roots to take up this nourishment, and any enriching of the soil

is likely to result in death to it; it will rot at the base and be destroyed by what, under other circumstances of growth, is its food.

Bore holes six inches apart in the bottom of the flat for drainage; over these lay pieces of broken pots or clam shells to keep the sand from sifting through, then cover with a layer of sphagnum moss or excelsior to aid in retaining moisture. Onto this spread the sand, up even with the top of the box; water freely to firm it and it is ready for the cuttings to take up their residence.

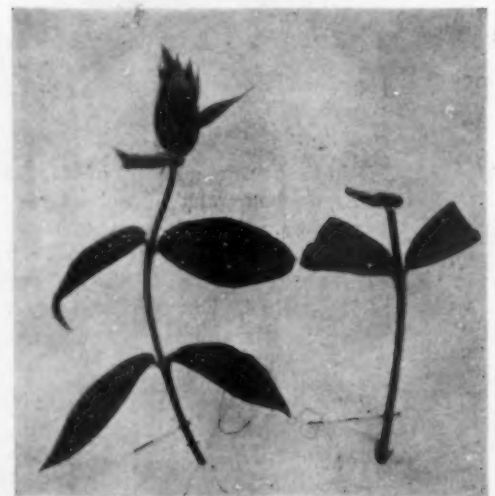
Hardened cuttings—that is cuttings of growing wood which is old enough to be hard without being actually turned to wood fibre—of spireas, lilacs, hydrangeas and a good many other shrubs which there is not space to name individually here, may be taken in late July or early August and rooted indoors in such flats before cold weather usually. They are more likely to live and thrive, however, if they are carried over the winter indoors than if set outside as soon as rooted.

It is most important to remember that all cuttings must be protected from strong sunlight when kept under glass—indeed, they must be shaded completely for a few days after setting; and the sand in the boxes must be kept constantly saturated with moisture. They need ventilation and pure air, too, but must be protected from wind and cool air.

#### CARRYING CUTTINGS THROUGH THE WINTER

Cuttings that are to lay over for the winter to callus are tied in a bundle with tarred string—"varmints" hate the tar and will avoid it—and buried a foot and a half deep, upside down, in a sandy, thoroughly drained and protected place outdoors—and then well mulched; or they may be buried in moist sand or moss in a cool cellar. When spring comes they are planted outdoors, just as directed above for those which are planted immediately after cutting, or indoors in the flat in sand. In either case they are ready to go into their

(Continued on page 123.)



To prepare the cutting for planting, take off the lower leaves and buds, cut off the stem just below this point, pick out the top and trim the leaves.



State Road, Watertown, Mass., Built With Tarvia X

## Adding to the Life of Macadam

Ordinary macadam belongs to the past. It is not adequate to meet the demands of modern automobile traffic.

It must be discarded or *tarviated*.

A tarviated road costs a little more than ordinary macadam but lasts so much longer that the addition of the Tarvia is more than paid for in the reduction of maintenance.

Moreover, the elimination of the dust nuisance is in itself a great boon.

Tarvia makes a firm elastic matrix around the stone, filling all voids, excluding water, and resisting pulverization of the surface.

For an old road that cannot be rebuilt or resurfaced, the "sprinkling" or "surface" treatment known as "Tarvia B" treatment is highly effective. One treatment will give excellent results for a season, or even longer, depending upon the amount of traffic. This treatment is quite inexpensive.

Tarvia gets at the original causes of road waste and disintegration. Oils and other devices simply make the dust too heavy to rise. They have little or no bonding or preservative properties.

Tarvia is made in three grades:—

Tarvia X for road construction.

Tarvia A, for use in resurfacing old roads and keeping them dustless.

Tarvia B, for dust suppression on old roads.

Road Engineers, road authorities, automobile owners and residents along macadam roads are invited to send for our booklet covering the treatment in detail. Address nearest office.

BARRETT MANUFACTURING CO.,

New York, Chicago, Philadelphia, Boston, Cleveland, Cincinnati, St. Louis, Pittsburg, Kansas City, New Orleans, Minneapolis, London, Eng.





## This is the Time of the Year to Plant Hicks Evergreens

We have quantities of Douglas Spruce (a blue tree from Colorado) of this size; perfect specimens and every one of them root pruned. How many will you want?

Why make that old mistake of putting it off till spring, when your results are every bit as good if it is done now? Besides you have the benefit of their green effect all this winter and the trees have a chance to grow a good lot of roots in August and September so that next spring they will develop vigorously and rapidly.

But when you do buy evergreens, buy Hicks. We have given all our attention just to growing trees and our soil is of a nature that grows ideal roots for transplanting. We dig trenches around the evergreens and root prune them. The roots then branch out and make a net work of fine fibers. These are saved in the ball of earth which supports the tree in transit and while it is becoming established in its new home.

Every one of our evergreens is guaranteed to thrive whether shipped ten or five hundred miles. You take no risk, and our records show that we take but little.

In our nursery are trees of all sizes, from a foot

and a half high at \$150.00 a thousand, to those 25 feet high at \$35.00 or \$40.00 each and upwards. We do not know of another nursery that has such a stock. We will ship trees from our nursery up to 30 feet high, or we will come right to your grounds and move your own trees or move in trees from the vicinity.

Any of the evergreen family can be moved at once, while Maples, Lindens, Catalpas, and such, from last of September on.

That new catalog of ours, "Hicks Trees", tells our tree story briefly and clearly. The illustrations are many and show numerous examples of big trees that have been successfully moved. It also shows how they are moved, which you will particularly like.

The price list which we send with it, is illustrated and arranged in a way that makes tree ordering exceedingly easy.

Come to the nursery and make your own selections, if possible, but if you can't come, then order from the catalog.

### Isaac Hicks & Son

Westbury,

Long Island

## The Right Use of Evergreens

(Continued from page 90)

recommended with evergreens as with deciduous trees. They do not take kindly to mixing, and either the one variety chosen should be used or the combination which Nature herself furnishes in the Hemlock and Pine, referred to before. This, with deciduous trees interspersed, is as fine an arrangement as it is possible to make.

Wherever it is possible to make an evergreen group the background for some floral display, it is well to do so, providing the flowers do not detract from the trees. The whole should form a picture rather than either one furnishing a feature. Rhododendrons fill the requirements of such a position perfectly, being themselves evergreen and harmonizing as almost nothing else can with the dignity of the trees. It is not by any means essential, however, to carry out such an arrangement in order to get the best results from planting the latter, for they are sufficient unto themselves.

The form of the smaller and slower-growing species is of more importance than anything else concerning them, for these are essentially the material for small places and for formal work. Some of these are very thin and long and pointed, others are broad and low and globular; selection in this instance should be guided by the style of the place, of a house and its garden, rather than by any thought for the garden's future appearance. This attitude is allowable to meet the limitations of a small place, if one plans to throw out unsuitable material as fast as it becomes unsuitable. The growth of the horticultural varieties which produce these various forms is so slow that after all changes will seldom need to be made because of increase in size, and the pruning shears will usually keep them to the lines which they are expected to fill, if they show any tendency to overstep. Usually their forms are pretty well fixed and they adhere to them without pruning.

*Juniperus Hibernica*—the Irish Juniper—and *Thuja occidentalis*, variety *pyramidalis*, are both slender and spire-like columns; *Thuja occidentalis*, variety *compacta* and *Juniperus communis* are dwarf and close-growing; *Juniperus Sabina* is prostrate; *Picea orientalis* is shrub-like; *Pinus Mughus* is low and dense; *Retinispora pisifera* and *Retinispora plumosa* are small, columnar trees; *Thuja occidentalis*, variety *Tom Thumb*, as its name implies, is a tiny dwarf, suitable for edgings.

Boxwood should find a place in every garden, great or small, the selection of its form also being guided by the style of the garden or of the house. The formal, pyramidal Box naturally takes its place in the formal, stiff and precise garden, or at the entrance of the dwelling that is symmetrical in its line; the rugged and unconventional bushy Box suggests old dooryards and the easy lines and pict-

## Potted Strawberry Plants

The best varieties, both new and old, and the best methods of planting to raise a full crop of strawberries next year, are fully particularized in

### DREER'S Mid-Summer Catalogue

Also the best varieties of Celery, Cabbage Plants, etc.

A most complete list of the Best Hardy Perennial Seeds for summer sowing.

Also vegetable and farm seeds for summer and fall sowing. Select list of seasonable decorative and flowering plants.

Write for a copy and kindly mention this magazine—FREE.

HENRY A. DREER, PHILADELPHIA

**Sheep Manure**  
Kiln dried and pulverized. No weeds or bad odors. Helps nature hustle. For garden, lawn, trees, shrubs, fruits and house plants.  
**\$4.00** LARGE BARREL. Cash with Order. Delivered to your Freight Station.  
Apply now  
The Pulverized Manure Co., 25 Union Stock Yards, Chicago

## A Deadly Pill For Dandelions

Patent Applied For

To clear your lawn of dandelions, plantains and other noxious weeds, use our "Jabstick" loaded with a deadly dandelion pill. Jab a pill into the head of each weed—that settles him. Easy standing work and no backaches.

The "Jabstick" and 500 Hoskins' Deadly Dandelion Pills, transportation prepaid, \$1.00. Your money back if they fail to kill. Right now is the time to dope them.

Ask us for a few Pills free for test.  
**WILLIAM A. SPINKS & COMPANY**  
370 W. ERIE ST. Established 1894 CHICAGO  
On sale at Druggists and Seed Dealers.

uresque charm of farmhouse or cottage or the tangle of old-time gardens—suggesting at the same time its suitable environment beyond doubt or question.

Ordinarily evergreens are not regarded with any consideration for their shade, yet they offer a most restful depth of it and a cool dimness that deciduous trees do not have. The nearest trees to a dwelling, however, should be from twenty-five to thirty-five feet distant, where their shadow cannot fall upon it, for perpetual shade is highly undesirable.

Always plant them near enough together to support and defend each other under the stress of severe storms, thinning out in subsequent years when they begin to crowd. And plant always two deep at least—two deep in an irregular grouping, not two rows, one back of the other.

And, finally, place the deciduous members of a boundary group or a screen mostly in the background to allow the evergreens to show dark and well defined before and among them. Leave plenty of room between the two kinds of trees—rather more than between the trees that are the same—remembering that deciduous trees expand very much more and very much more rapidly than evergreens, therefore need a wider berth.

### How Rush Seats are Made

(Continued from page 91.)

ened. The standard can be raised, lowered or turned around, so that the chair moves at a touch. At one side of the workman is placed a long, wooden trough in which the rushes are kept. A little water in the bottom is used for moistening the rush if necessary. Grooves in the trough hold the knives and mallet used in the work.

The weaver begins his task by taking a leaf of the rush and twisting it. The appearance of the finished seat depends largely upon the kind of twist used. For a small chair a tight, hard twist is employed. For a chair of massive frame, a looser and heavier twist is preferred. In general, however, modern work is of looser weave than that of a hundred years ago, and a larger twist is employed. As the rush varies greatly in width, sometimes two or more leaves are twisted together to form a strand, while sometimes a single leaf is used. When the end of the strand is nearly reached it is spliced with one or more rushes, the stub ends being left out and cut off later. The twist is first passed several times around the chair frame, then the corners are started, the work progressing towards the centre, while the chair is twisted rapidly around on its pedestal. A clever workman makes a firm, even seat, as durable as a good leather chair covering. After it is finished the seat receives a coat of shellac. This brings out the green and yellow tones of the rush, and preserves its surface from wear. Antique Colonial

# NABISCO

## SUGAR WAFERS

No more delectable refreshment can be served on a hot Summer's afternoon than a fruit-lemonade accompanied by NABISCO SUGAR WAFERS of appropriate flavor.

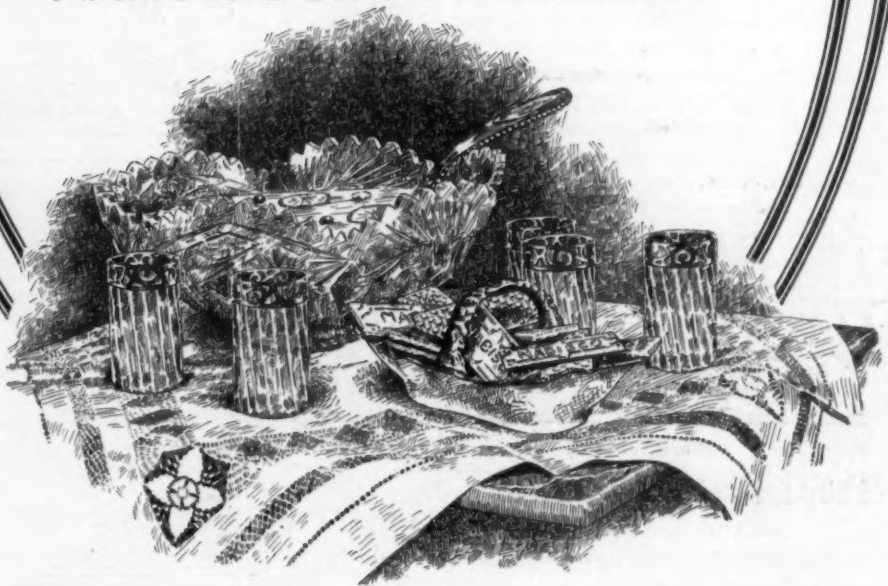
As an informal between-meal confection or as a complement to the formal dessert, NABISCO SUGAR WAFERS are equally appropriate.

A practical suggestion would be to keep a dozen tins—varied flavors—on hand.

**In ten cent tins**

Also in twenty-five cent tins

NATIONAL BISCUIT COMPANY



WM. M. CLARK  
ARCHITECT, GRAND RAPIDS, MICH.

### Stain Your Shingles with Dexter Brothers' English Shingle Stains Dip Them Before Laying

Dipping gives absolute protection—where rain gets through between and under shingles, as well as to the outer surfaces. Whether applied by brushing or dipping, Dexter Brothers' English Shingle Stains are better than paint. They protect the shingles with preservative, waterproofing oils, yet retain the natural texture and beauty of the wood. The pure English ground colors cannot fade.

Write for stained miniature shingles, so you can decide on the right color combination. Also descriptive booklet with letters from architects and owners.

DEXTER BROS. CO., 115 Broad St., Boston, 1133 B'd'w'y, N. Y.  
Makers of PETRIFAX CEMENT COATING

AGENTS: H. M. Hooker Co., Chicago; John D. S. Potts, 218 Race St., Philadelphia; F. H. McDonald, Grand Rapids; F. T. Crowe & Co., Seattle; Spokane, Tacoma, Wash., and Portland, Ore.; M. D. Francis, Atlanta, Ga.; Carolina Portland Cement Co., Birmingham and Montgomery, Ala.; Jacksonville, Fla., Charleston, S. C., New Orleans, La.; F. S. Combs, Halifax, N. S., AND DEALERS.



This shows you

where water gets through to the under shingles and wet rots them. Dipping the shingles two-thirds their length prevents this.

## STROKUM STOPS Third Crop of Caterpillars

**B**IND it around your trees at once. Do not think because summer is nearly over that the caterpillars are. The August crop is one of the worst, and not only injures the trees, but spins the cocoons for next year's destruction. Killing them this year means thousands less next year.



Strokum is easily put on; does not harm the trees; is not unsightly, and is easily removed at the end of season.

Send \$1.00 at once for a sample package of five pounds, which is enough to band five trees, averaging one foot in diameter. Express paid east of the Mississippi; 50c. extra west of it.

Send for our illustrated booklet.

**George Stratford Oakum Co.**  
166 Cornellsen Avenue, Jersey City, N. J.

## THISTLE-INE The Great Weed Destroyer

Positively Kills  
Poison Ivy, Sumac, Canada Thistles,  
Burdock, Wild Morning Glory, and  
All Noxious Weeds.

Mr. E. Herman of York, Pa., Requesting advice from Mr. F. Rockefeller, received the following:

Cleveland, Ohio, January 8th, 1908

Mr. E. Herman,  
York, Penn.,

Dear Sir:

Replying to your letter of the 14th instant, I have used a great deal of Thistle-ine. I dissolve it and use it according to directions on the can. I use a syringe and after pulling up a Canada thistle, partially fill the hole with the liquid, or spray the liquid over the thistle. I have killed thousands of them and have never had any trouble, and have repeatedly examined them some time after spraying with the liquid. I have never yet found a live Canada thistle after being treated in this way. I cannot understand why you should have any trouble. I do not believe I have ever made application more than once to the same thistle.

Yours very truly,

F. ROCKEFELLER

Manufactured By  
**The Lindgren Chemical Co.**  
GRAND RAPIDS, MICH.

6a Can sufficient to cover 5000 sq. ft. \$2.00



## LAWN ANT DESTROYER

Guaranteed not to injure grass, plants or shrubbery. Can be used on lawns, golf grounds and gardens. If, after using one-half can, it does not destroy the ants, we will cheerfully refund purchase price, \$1.00 per can. Testimonials and detailed information free.

**GRAND RAPIDS LAWN ANT DESTROYER COMPANY**  
54 Kent Street, Grand Rapids, Mich.

## Landscape Gardening



Prof. Craig.

A course for Home-makers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

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

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

250 page Catalogue free. Write to-day.  
**THE HOME CORRESPONDENCE SCHOOL**  
Dept. 226, Springfield, Mass.

## AN IDEAL GREENHOUSE

Ideal because it is designed right, built right and will grow flowers to best possible advantage, both as regards quantity of bloom and cost of producing them.

Has a complete iron frame. Will last for generations. But don't think we build only little houses. Send for circular which shows all types and sizes.

**HITCHINGS & CO.**  
1170 Broadway, New York



seats were often painted white, but this is rarely done in modern work, as the natural color of the rush is preferred.

Rush seats can easily be woven at home by amateur craftsmen who wish either to reseat an antique or to put a seat into a new chair. While the method of weaving is extremely simple, the amateur must be warned that the work goes slowly and is not at all easy. However, to people with strong hands and patient dispositions the task will prove a fascinating one. There are several important points to consider: the thickness of the strand once decided upon must be preserved throughout; the strand must be twisted tightly and held taut in position; the rush must be of the right degree of dampness. The seats will be humpy and uneven in appearance if these points are not carefully followed. If the rush is too wet, it will shrink too much in drying; if not damp enough, it will break in twisting it over the edges of the frame, so that this point is of especial importance.

Frames that can be used for weaving rush upon are of several sorts. Sometimes, as in the illustration showing the weaver at work in his home, the chair has square stretchers, sometimes rungs are found, and sometimes an antique chair has a slip seat with wooden corners. Whichever kind the frame is, care must be taken to see that the edges are rounded, as otherwise they will cut the rush.

In the diagram a method of weaving is shown with strands separated more widely than in the actual work, in order to show their direction. The strand of rush, twisted tightly on the top and edges of the frame, needs only a slight twist underneath the frame. New leaves are added at the corners when needed, when the stub end of the leaf is inserted. It is usually too thick at the end for twisting, and several inches should be left projecting, to be cut off later. If the chair seat is wider in front than in the back, the front corners should be filled in separately, till they are even with the back ones. An old and useless chair seat that can be taken to pieces and examined will be found a great help.

If there are no swamps near at hand where the amateur weaver can procure rushes, they can usually be obtained through a furniture dealer or cabinet-maker. With practice, the weaver soon becomes quite expert, and beautiful and durable chair seats are made through the exercise of this interesting handicraft.

## Covering the Open Stairway

**I**N a house where the open stairs lead directly from the living-room I recently saw a clever device.

A case of severe illness in the house, when the patient was greatly annoyed by the inevitable sounds from the living-room below, suggested the desirability of shutting out sound and odors from the upper hall.

From light wood a frame was made to fit the opening in the second floor and given an oak stain to match the trim of the hall. Over this was stretched a cover of bronze-green burlap which blended well with the paper, secured with tacks of hammered brass. This was fastened to the wall with hinges.

When lowered like a trap-door, it entirely separated the upper from the lower floor. When raised against the wall, it was not at all clumsy or ugly in appearance.

The door proved convenient, also, when the fireplace was depended upon for heat, as it prevented the warm air from rising to the upper hall where it was not required.

Even if such a door were not required for constant use, it would prove a great convenience for many occasions, and could be easily and quickly fastened in place, removing the objection that prevents many people from following the pleasing fashion of having the open stairway lead up from the living-room. Such a device would not, of course, serve in case the stairs enclose an open well between the floors.

ALICE M. ASHTON.

### Everyman's Greenhouse

(Continued from page 93)

error when half the glass is laid. Use "finishing" nails for securing the sash bars in place, as they are easily split. Next, with chalk line mark the middle of the roof sash bars, and secure to them the one-inch pipe purlin, which will then be ready to fasten to the uprights already in place. Next, make concrete by mixing two parts Portland cement, two of sand and four of gravel or crushed stone with sufficient water to make a mixture that will pour like thick mud, and put the iron pipe posts in their permanent positions, seeing that the purlin is level and the posts upright. (If necessary, the purlin can be weighted down until the concrete sets.) Then put into place the ventilators, glazed, and the headers for same—short pieces of wood, cut to go in between the sash bars, and fit these up snugly against the lower edge of the ventilator sash.

When laying the glass in the roof, which will now be ready, use plenty of putty, worked sufficiently soft for the glass to be thoroughly "bedded" in it, and leaving no air-spaces or crevices for the rain to leak through later. If this work is carefully done, it will not be necessary to putty again on the outside of the glass, but it should be gone over with white lead and linseed oil. Be sure to place the convex surface of every light up. The panes should be lapped from 1/6 to 1/4 of an inch, and held securely in place with greenhouse glazing points, the double-pointed bent ones being generally used. The lights for the ends of the house may be "butted," that is, placed edge to edge, if you happen to strike good edges, but



## Paint Your Walls and Get Exact Tints

**H**AVE you ever tried to match wall-paper or any other wall-covering to rugs or furniture?

☞ Have you ever leafed through book after book of samples, trying in vain to find something that would *just suit* the color values of your rugs and draperies?

☞ You wanted a blue—found six blues—and not one but would scream at your rug.

☞ Same with the yellows, grays and browns.

☞ The only wall covering for the *particular* person is a *made-to-order* one. Then the tint can be made *exact*. Use white lead paint and have it mixed and tinted by your painter *to your order*.

☞ Our white lead ("Dutch Boy Painter" kind) is smooth and clear, tints beautifully, and gives any finish desired—dull, half-gloss, high-gloss or enamel.

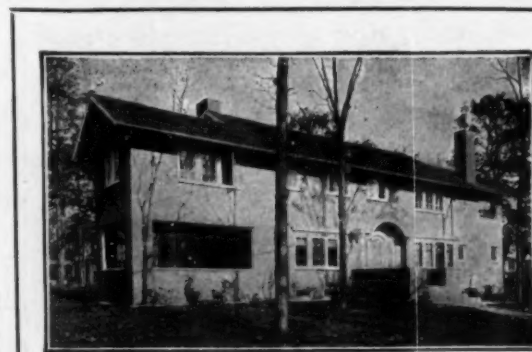
The artistic home-maker should be the most enthusiastic advocate of "white-leading" (painting with white lead) because there is no medium so flexible for the expression of the tasteful person's wish.

Our "Dutch Boy Paint Adviser No. 91" is very helpful on both interior and exterior decoration. Costs but the trouble of asking for it. Address

### 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 Co.,  
Pittsburgh)



### The Owner of this Attractive House Enjoys His Windows

They're *all* casements hinged to swing *out*—tight in winter and catching *all* the breezes in summer.

They're equipped with our famous Hold-fast Adjusters to operate and lock easily with one hand without disturbing screens, storm sash, curtains or Venetian blinds.

Our free hand-book tells you all about up-to-date casements and our remarkable casement devices.

Write *to-day* to the

**CASEMENT HARDWARE COMPANY**

154 Washington Street

Chicago

## MILLS WATER TUBE BOILERS



No. 24 Mills Water Tube Steam Boiler

**THIS** make of boiler is endorsed by leading heating engineers as the refinement of boiler making.

A trial will demonstrate its economy.

Fire Tube surface is the reason.

### THE H. B. SMITH CO.

Manufacturers of  
**BOILERS and RADIATORS  
FOR HEATING**

1225 Arch St., Philadelphia, Pa.

## RIFE Hydraulic Rams

Require no attention nor expense. Operate continuously.  
Complete installation for supplying Dwelling Houses, Greenhouses, Lawns, Fountains and Gardens.



Operate under a fall of 18 inches to 50 feet, raising water 30 feet for each foot of fall. Develops 80 per cent efficiency. Installed with pneumatic tanks where overhead tanks are objectionable.

We have plants for towns, formal gardens, railroad tanks and for irrigation.

**RIFE PUMPING ENGINE CO.**

2502 Trinity Bldg.,

New York, U. S. A.

as a general thing, it will be more satisfactory to lap them a little. The woodwork, before being put together, should all receive a good priming coat of linseed oil in which a little ochre has been mixed, and a second coat after erection. I have suggested putting the glass in roof and sides before touching the benches, because this work can then be done under shelter in case bad weather is encountered. The benches can be arranged in any way that will be convenient, but should be about waist-high, and not over four or four and a half feet across, to insure easy handling of plants, watering, etc. Rough boards will do for their construction, and they should not be made so tight as to prevent the ready drainage of water. The doors may be bought, or made of boards covered with tar paper and shingle or roofing paper.

The house suggested above is used only by way of illustration. It may be either too large or too small for the purposes of some of the readers of this magazine, and I shall therefore give very briefly descriptions of several other types of small houses, some of which may be put up even more cheaply than the above. The plainest is the sash lean-to (See diagram on page 93), which is made by simply securing to a suitable wall a ridge-piece to hold one end of the sashes for the roof, and erecting a wall, similar to the one described above, but without glass, and with a plain, 2x4 in. piece for a sill, to support the other ends. Either a single or double row of sashes may be used, of the ordinary 3x6-foot size. In the latter case, of course, a purlin and supporting posts, as shown in diagram, must be supplied. Every second or third top sash should be hinged, to open for ventilation, and by tacking strips over the edges of the sash where they come together, a very tight and roomy little house can be put up quickly, easily and very cheaply. New sash, glazed and painted one coat, can be bought for \$2 to \$2.50 each. Ten of these would make a very practical little house, fifteen feet long, and over ten feet wide.

Another form of lean-to where there are windows in the way is shown in another diagram. The even-span house, of which type there are more erected than of any other, is also shown. The cost of such a house, say 21 feet wide, can be easily computed from the figures given in the first part of this article, the north wall, and purlin braces from the ridge posts, being the only details of construction not included there.

A simple way of greatly increasing the capacity of the ordinary hotbed or cold-frame, is to build it next to a cellar window, so that it will receive some artificial heat, and can be got at, from the inside, in any weather. Several sashes can be used, and the window extended to include as many of them as desired.

By all means get a little glass to use in connection with your garden this coming year. Put up one of these small

## TERRA COTTA Garden Furniture



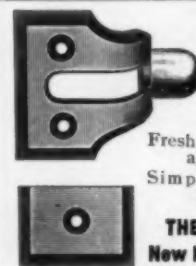
Your garden and hall will be more attractive if furnished with the Galloway productions. The material is hard burned selected clay fired to a point to insure durability in the severest climate.

The extensive collection of original designs and replicas of antique art includes:

FLOWER POTS FLOWER BOXES JARDINIERS  
VASES BENCHES FERNERIES TABLES  
SUN DIALS STATUARY FOUNTAINS

Write for catalogue containing illustrations and full information.

Galloway Terra Cotta Co., 3218 Walnut St., Philadelphia, Pa.



### IVES WINDOW VENTILATING LOCK

Fresh air and security  
against intrusion.  
Simple, Safe, Strong,  
Easily Applied

THE H. B. IVES CO.  
New Haven, Conn.



66 page  
Catalogue  
free.

## 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.



greenhouses, if you can: if not, get a few sash, at least. Don't put it off till next spring; do it now! You can, for instance, plant lettuce *now*, and have a crop in your frames for Thanksgiving and Christmas.

Next month we will take up the handling of vegetables and flowers in the small greenhouse. But don't be content to *read* about it. It's the pleasantest kind of *work*—try it yourself!

### Some Experiences With Wild Flowers

(Continued from page 99.)

As a ground cover the best plant that I have taken from its native haunts is the Foam-flower (*Tiarella cordifolia*). I have it from both the White Mountains and the Adirondacks, and under an old apple tree, with some of my Lilies, it gives the turn of a border a sort of a woody touch. Dutchman's Breeches (*Dicentra cucullaria*) is quite as graceful a ground cover, but loses its foliage. Some of both I have placed under shrubbery, where I have also installed of late the Fringed Polygala (*P. paucifolia*), the Bloodroot (*Sanguinaria Canadensis*), the Rue Anemone (*A. thalictroides*), the Rattlesnake plantain (*Goodyera repens*), and the Bunchberry (*Cornus Canadensis*).

Of all the wild flowers that I have brought home, the Cranesbill (*Geranium maculatum*) alone has stood by me through the thirty years or so that I have been doing this sort of thing. Where I planted it in my first wild garden—a sort of rock-edged border—it still persists, though it is now fourteen years since I have given it any personal attention, the place being rented to others. Perhaps it was from that loyal colony that one day, some years ago, was carried to the angle of the piazza, near my present garden, a single seed that sprouted in the driest of soil and each year has sent out its little quota of lilac blossoms. That one Cranesbill, which has always looked too pretty to transplant to a more favorable location, and a vine of the Rutland Beauty (*Calyptegia sepium*), were the only wild flowers that ever came to my garden of their own accord, thus earning additional affection. That Rutland Beauty, always known to us as Wild Morning-glory, was a wonder. A big, old-fashioned, round lightning rod ran up from my original wild garden, and some years after the border was first stocked, this vine made its appearance. Whether because of the unusual opportunity at hand, or to get the best of a sun that smiled on it only a very short time in the morning, I do not know; at any rate, summer after summer, it emulated Jack's beanstalk by running up thirty feet of lightning-rod and looking southward over the peak of the roof of the house. With its beautiful leaves and shell-pink flowers, the vine was a strikingly picturesque upward continuation of the wild garden. Ashes eventual-

# Annihilator of Space



To be within arm's reach of distant cities it is only necessary to be within arm's reach of a Bell Telephone. It annihilates space and provides instantaneous communication, both near and far.

There can be no boundaries to a telephone system as it is now understood and demanded. Every community is a center from which people desire communication in every direction, always with contiguous territory, often with distant points. Each individual user may at any moment need the long distance lines which radiate from his local center.

An exchange which is purely local has a certain value. If, in addition to its local connections, it has connections with other contiguous localities, it has a largely increased value.

If it is universal in its connections and inter-communications, it is indispensable to all those whose social or business relations are more than purely local.

A telephone system which undertakes to meet the full requirements of the public must cover with its exchanges and connecting links the whole country.

**The Bell Telephone System annihilates space for the business man to-day. It brings him and any of his far-away social or business interests together.**

## AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

**One Policy,**

**One System,**

**Universal Service.**

### VIRGINIA HOT SPRINGS



THE NEW HOMESTEAD

**2,500 feet elevation. Open all the year**

**Waters, Baths, Hotels and Scenery nowhere equalled**

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

**The Chesapeake & Ohio Railway**

Famed for its Mountain, River and Canyon 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.

Beauty and Comfort from Venice  
Combined With the Honest Skill of Sweden

## ERICSSON VENETIAN BLINDS

Let us tell you how to beautify your windows and add to the comfort of your home in our

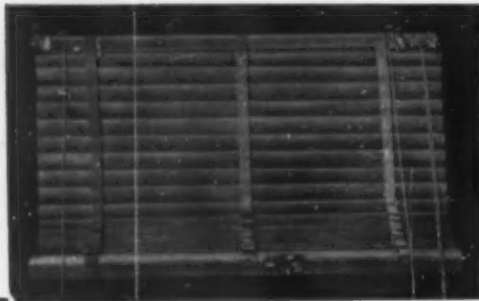
**"BLIND BOOK for PEOPLE WHO CAN SEE"**

and appreciate art and luxury in house equipment.

We'll prove the Ericsson lasts longer, is rigid in position, more inexpensive than you think, light, strong, occupies small space and is removed without tools. Write for the "BLIND BOOK" to-day—NOW. It's free to "PEOPLE WHO CAN SEE."

**SWEDISH VENETIAN BLIND CO.**  
1123 BROADWAY, NEW YORK, N. Y.

IMPORTED FROM  
SWEDEN



## BURLINGHAM

IMPORTER OF ANTIQUES

Has a large collection of old Chinese Porcelain and Lacque English Furniture.  
NEWPORT, R. I.

## WILLOWCRAFT

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.



**THE PERGOLA**

HARTMANN-SANDERS COMPANY

A very interesting pamphlet just issued by us on the Pergola can be had free on request. Ask for catalogue P-27.

**HARTMANN-SANDERS CO.**

Elston & 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

**HOGGSON BROTHERS** 7 E. 44th Street  
New York

**DESIGNERS AND BUILDERS**

UNDER A SINGLE CONTRACT WITH THE OWNER,  
LIMITING COST AND PROFIT



Running Water—No Plumbing

**A SANITARY PORTABLE WASHSTAND**

PORCELAIN CHINA  
Full Nickel Trimmings

**A Reservoir, Basin and Slop Jar in One**

**\$15.00—\$20.00**

Money back if not satisfied  
WRITE US

**Rowe Pedestal Lavatory Co.**

Buffalo, N. Y.

AGENTS WANTED

ly killed it, and similarly my flourishing colony of Mandrake (*Podophyllum peltatum*), met its death.

The Closed Blue Gentian (*Gentiana Andrewsii*), I am glad to number among my successful experiments in the border. The lovelier blue Fringed Gentian (*G. crinata*), I sometimes bring home when it is budded and let it blossom in the garden, which it does willingly enough. It is easily raised from seed sown indoors in pans, but that sort of gardening illy accords with my restricted leisure. The Cardinal Flower (*Lobelia cardinalis*) thrives for me in an ordinary sunny border. It does better in a fairly moist place, however, and certainly never looks so well as in surroundings approximating the wild. Close by the Cardinal Flower thrives equally well a handsome blue member of the mint family (*Salvia lyrata*), that I pulled up on a Virginia roadside. Coltsfoot (*Tussilago farfara*), that I found running wild in a great city, and Arnica from Nantucket, are neighbors that take quite as kindly to their new quarters.

Flat failures must inevitably figure in a field of gardening that perhaps never ought to be regarded as successful—one might even say allowable—when it oversteps the bounds of naturalization. Orchids I count as failures, because I have not had the time to give them the conditions without which it is not only useless, but cruel, to bring the plants home. I have tried half a dozen kinds, all with the same result; only the Yellow Lady's Slipper (*Cypripedium pubescens*) enduring much over a year. Last January I found in the Bahamas, in the pine barrens of New Providence, *Bletia verecunda*, the first of all exotic orchids to be introduced into England, and cultivated by Collinson so long ago as 1731. Though I knew that I should have to pot them, I ran the risk of digging—again with that penknife—a few of the bulbs. Doubtless this purple orchid will be another failure, but I have minimized my personal responsibility by dividing up my spoils with others who have better facilities. The Trailing Arbutus (*Epigaea repens*), I must also count among my failures—which have not been over-numerous, probably because I was early taught the proper care of growing things of all kinds.

My experience, as a whole, has been that while it is always best to reproduce natural surroundings, as well as soil conditions, as nearly as possible when bringing home wild plants, there is an astonishing number of them that will adapt themselves to what would seem, on first thought, really adverse circumstances. Which is not to be wondered at, inasmuch as many of the commoner cultivated perennials are growing wild in some parts of this country. Obviously, wild plants should not be rooted up indiscriminately; the best plan is never to take more than one specimen where there is not an abundance.

### The Architectural Value of Lattice-work

(Continued from page 101.)

Unless the walls are of masonry or plaster, painting will be necessary every two or three years, and this could be done far more easily and with less damage to the vines if it were possible to tilt the whole lattice frame away from the face of the wall while the painters are at work. In any case, do not have the lattice-work set too close against the wall. A space of two or three inches between lattice and wall should be secured, either by using deeper supporting members or by attaching the framework to blocks set against the wall.

There is little choice in the matter of color. I doubt if it be possible to go wrong in using white-painted lattice, though green is sometimes felt to be better on white surfaces. With white, however, the lattice will be visible through the foliage, giving the *apparent* support that is an essential, while with green it may be lost to sight, defeating its main purpose.

One thing more. If you are planning to have a paved terrace along one side of a house, do not fail to leave two-foot-square holes (to be filled in with earth) in the terrace floor adjoining the house wall, and flanking the entrance or at other convenient points. Otherwise you will have to forego your trellis, and vines, too, on that side of the house.

### A Garden of Vistas

(Continued from page 103.)

bits of flagging in the turf walk or, where the natural garden is a little steeper than usual, a few stone steps. Below these last is a small pond which is handled in a manner Japanese and makes one rather regret that the effect is not complete, and that the seat at its inner end was not a stone lantern.

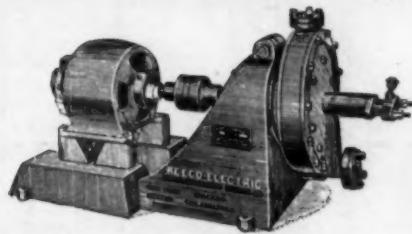
Very little trimming has been resorted to. In fact, only such as was required in removing unhealthy or unsightly bits here and there or in reducing some over-intrusion on the pathway. All this has been well handled by the owner and in such a manner as to defy detection.

There is but one criticism that occurs to the writer, and that is the general out-of-placeness of the white marble accessories. To suit the scheme perfectly they should be less emphatic in color and less classic in detail. The light terracotta color of the Italian oil jar and the buff of the Romanesque pot are happier by far than the pure white, and their lack of severity in outline is self-satisfying. The former, in particular, has the appearance of utter abandon and of having been set down carelessly for a moment and forgotten; it is not even set straight.

When the garden was viewed, it was not complete, the two long paths suggesting further treatment beyond. Such

## Reeco Water System

Simple,  
Compact



REECO ELECTRIC PUMP

Noiseless,  
Self-governing

No matter whence the water comes — well, spring, brook, lake, river—we can install the right system to deliver it at the correct pressure where needed in your house, your barn, or your garden. Noiseless pumps—electric or hot air—self-regulating, run for years without a hitch or worry. You will know the exact cost beforehand, and that cost includes the system complete ready for the turning of the faucet. **In the Business for Seventy Years**, we have installed over 40,000 satisfactory systems of every grade. The REECO ELECTRIC PUMP may be installed wherever a trolley line runs, or wherever there is a public or private electric lighting plant. The pressing of a button stops and starts it. There is, therefore, absolutely no waste of power.

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 40 North 7th Street, Philadelphia  
239 Franklin Street, Boston 24 West Craig Street, Montreal, P. Q.  
40 Dearborn Street, Chicago 22 Pitt Street, Sydney, N. S. W.



### 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



**MAULE'S SEEDS** ONCE GROWN ALWAYS GROWN  
Catalogue sent free upon request  
**WM. HENRY MAULE**  
1763 Filbert Street 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 Office: 79 Chambers Street



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 modern illuminant—electricity.

**THE ENOS COMPANY.**

Makers of  Office and Factory: 7th Ave. and 16th Street  
Salesrooms: 36 West 57th Street New York

Baltimore: 519 North Charles St. San Francisco: 334 Sutter St. Toronto: 94 King St. West. Pittsburg: The Norton Company, Century Building. Spokane: Cutter & Plummer, Inc. Boston: H. F. Esterbrook, Inc., 9 Park St. Portland: J. C. English Company, 128 Park St. Los Angeles: Brooks Decorating Company, 636 South Alvarado St.

# TILES

## Fireplace Tiles

**M**AKE the fireplace the most delightful furnishing of the home. Tiles will do it. There are colors to go with every decorative scheme. The effect is always delightful and a lasting satisfaction. The expense is no more than other materials. Investigate tiles thoroughly before you build or rebuild.

### "Tiles for Fireplaces"

will be sent free to home owners—present or prospective. Three other interesting books, also free: "Tiles on the Porch Floor," "Tiles for the Kitchen and Laundry," "Tile for the Bathroom"

The Associated Tile Manufacturers  
Room 2, Reeves Building, Beaver Falls, Pa.

would probably be of another character, as too much of the first treatment might become tiresome. Even this as set forth above might not suit every reader. Things of this sort are temperamental. Did one wish a central motive of flowers, the triangle facing the seat could be utilized and perhaps the pond could occur here also. In any event, for one who is fortunate enough to have a grove of cedars, the possibilities are unlimited and a very satisfactory effect secured for but little cost of upkeep.

### The Available Violets

(Continued from page 104.)

ing a border of it by means of slipping after the flowers are gone. It has two varieties, *bi-color*, with two dark petals, and *alba*, which is almost white.

The long-spurred lavender Violet, known as *Viola rostrata*, is common in meadows, and forms brilliant clumps of color in the garden. Planted close together, the flowers growing only about six inches high, it makes a delightful footing for the taller *Viola Canadensis* as a border combination. *Viola rostrata* usually blooms only in the spring, while *Viola Canadensis* blooms sparingly all summer. The latter grows one or two feet high, and its flowers are almost white, but the upper petals are violet-purple underneath. This plant does well in sunny spots, though it prefers half shade. It is adaptable.

The Downy Yellow Violet (*Viola pubescens*) grows a foot or more tall. It likes shade. Its short-spurred, clear yellow flowers appear sparingly all summer. This plant makes a charming backing for *Viola rotundifolia*, the Round-leafed Yellow Violet. This latter grows low in the shade. Its flowers, coming in the spring, are not large. Its leaves are its great beauty and these cluster close to the ground and form shining rosettes as the summer advances. They are a perfect foliage border for a shady bed.

*Viola blanda*, the small, sweet-scented White Violet, planted with ferns in some shady, low spot, is most beautiful of all. It must be grown in large colonies to be appreciated, for it is too small a plant to hold its own in a garden alone, nor can it well be near other flowering plants if its delicate beauty is to be appreciated.

Seed from most of the varieties can be obtained in early summer after the spring flowers fade; *Viola Canadensis* and *Viola pubescens* may be found maturing seed sparingly all summer; while, as I mentioned above, cleistogamous flowers of the Blue Violets are mature in August. Slips are best taken in August to start plants for the next spring. If I were purchasing plants from the florist I should do it in September, so they could be well established before cold weather. By doing this the gain on every hand would more than repay any extra effort that one has to make to arrange for purchasing plants at this time.

## "AMERICAN" PRESSED METAL SASH PULLEYS



**UNBREAKABLE**—Electrical Welding insures great strength, no danger of breaking when the pulley is being put into window frame.

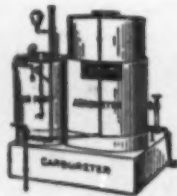
**SELECTION**—Most varied possible. Plain axle, roller and ball bearings.

**FINISHES**—All standard, and specials to order.

**COMBINATION GROOVE**—Suitable for sash cord or chain.

Catalogue and Prices Upon Request

**THE AMERICAN PULLEY CO.**  
Main Office & Works PHILADELPHIA, U.S.A.  
Chicago Branch, 124 S. Clinton St.



### COUNTRY HOMES

may enjoy city comforts and conveniences at less cost than kerosene, electricity or acetylene, with 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 satisfied customers.

**Economy Gas Machine Co.,**  
437 Main Street Rochester, N. Y.

## SILVER LAKE A SASH CORD

The original solid braided cord has never been equalled. It is made from best quality selected yarn and is guaranteed in every particular.



Any cord, chain or ribbon has sufficient breaking strength to hang a sash, but when it comes to wearing quality SILVER LAKE A lasts the longest.

**THE STANDARD**

**The Secret of Durable Stucco**

(Continued from page 84.)

by means of a straight edge. Texture and color are necessary if artistic results are to follow. By using the suggestions above outlined, the architect or owner is privileged to select the aggregates from which the stucco is made and has in fact as great play in the planning of the color, tone and texture as has the artist in mixing the paints on his palette.

As to the merits of the finished work, little need be added. The wall is impervious to moisture, hence free from the decay that must of necessity overtake all wooden structures. A stucco wall needs no paint as does the house built of clapboards, a fact that should be taken into consideration with the slightly greater first cost of a stucco wall over a wooden one. Few building materials give such a harmonious background and support for clinging vines, and contrast so pleasingly with the surrounding green of trees, shrubbery and the brilliant colors of flowers.

**Stenciling Fabrics**

(Continued from page 87.)

the dining-room by having heavy dull gold Japanese leather paper stretched on a screen frame and then stenciled in some stunning design, say of peacocks and peonies in rich low colors. A screen that is to be covered with paper should first have unbleached muslin stretched on it, and the paper pasted on that just as if it were the wall. The edges may be covered with narrow bands of leather tacked on with large-headed dull brass tacks. Grass-cloth also makes an attractive screen, and there are many other fabrics that may be used.

The small accessories of any room can come under the sway of the stencil brush, and, if done well, add a personal touch that is most taking. Lamp-shades, candle-shades, desk sets, bags of different kinds, bureau sets—these are only a few of the articles that may be decorated by the clever home craftsman.

Although stenciling is rapid work compared to painting or embroidery, one must not expect to accomplish the next to impossible, and finish a whole set of curtains in a day. The kind of design chosen of course makes a deal of difference in the amount to be done, but it is steady work, and to be successful must be carefully done. The result well repays one for the trouble taken.

**Plant Evergreens Now**

(Continued from page 80.)

Korean Pine, Blue Japan Cypress, White Spruce, Englemann's Spruce and Alcock's Spruce, *Variegated*: Such Conifers as the Japanese Juniper, *Juniperus Virginiana*, var. *alba spica*, and Irish Yew (*Taxus Hibernica*, var. *argentina variegata*), take on, more or less, a variegated color.

**Try This 'RICHMOND' Suds-Maker Free**



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 dishwashing—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 your local plumber and we will forward by express prepaid one **RICHMOND** 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 today.

**THE McCRUM-HOWELL CO. 275 Terminal Building New York, N. Y.**

**THE FIREPLACE**

is the feature around which the family life centers. Let it be honest, genuine and built for burning logs.

Send for our "Hints on Fireplace Construction," containing reliable rules for the proportioning of fireplaces and flues, and catalogue of our fireplace Throats and Dampers, Iron Coal Windows, Etc.

**THE H. W. COVERT CO.**  
169 Duane Street NEW YORK

**WHY WOOD MANTELS?**

A beautifully illustrated booklet full of suggestions to the home builder, will be sent to anyone thinking of building or remodeling. Address, **Wood Mantel Manufacturers' Ass'n., H. T. Bennett, Sec. Room 1225 State Life Bldg., INDIANAPOLIS, IND.**

**Rugs That Harmonize**

To effectively complete the color scheme of any room and add to its decorative value you should use **Thread and Thrum Rugs**. Made in any color or combination of colors you desire, of high class wool or camel's hair—seamless, reversible, heavy and durable. All sizes up to 12 feet wide, any length. The greatest value you ever received for your money. Write for our color card and price list to **Arnold, Conisbale & Co., New York.**

**THREAD AND THRUM WORKSHOP**  
Auburn, N. Y.

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

**DO YOU WANT A HOME?**

Send six cents for a copy of  
**"24 CRAFTSMAN HOUSES"**



This book gives the exteriors and floor plans of 24 Craftsman Houses costing to build from \$930 to \$9900. We will also send free a most interesting 32-page booklet.

**"THE CRAFTSMAN HOUSE"**

These books are both beautifully printed and will be sent post-paid to any address to interest you in **THE CRAFTSMAN**, the Craftsman idea in general, and our Special Offer (showing you how to get plans for a house free) in particular.

The Craftsman idea means better homes at lower cost. Craftsman houses are homes in which money usually spent for useless partitions and ornaments has been applied to more substantial construction, hard-wood interiors, built-in features and other things that make for more permanent satisfaction.

Such homes are the reward of intelligent thinking on the subject. Most people are willing to do the thinking, but don't know how to go about it. This is made simple by reading **THE CRAFTSMAN MAGAZINE** and **"CRAFTSMAN HOMES."** To introduce them to a wider public, we are making the following Special Offer:

<b>THE CRAFTSMAN</b> for a year - - -	\$3.00	} All for
<b>"CRAFTSMAN HOMES"</b> - - -	2.00	
Your own selection of over 90 House Plans		} <b>\$3.75</b>

**Edgar E. Phillips--THE CRAFTSMAN**  
Room 141, 41 W. 34th St., New York

**This THIS HOUSE**

**3 ROOMS & PORCH**

**\$350.**



Comfortable house is Portable. Shipped anywhere in sections. Anyone can erect it without skilled labor. Weather-proof, durable and artistic. Delivered immediately. We have all styles—sizes—prices. Also Portable Garages. Write to-day for Illustrated Folder No. 2.

**NEW YORK PORTABLE BUNGALOW CO.**  
Beck Place Poughkeepsie N.Y.



## Hanging Etagére



AN accurate reproduction of the Renaissance Period; fashioned from Italian Walnut, with a natural wax finish.

The Cella Shop's assemblage comprises numerous

single furniture pieces of the various important periods and a select assortment of Italian Terra Cottas and Garden Marbles. These selections possess rare and distinctive merit from both a decorative and artistic standpoint.

Comparison of goods offered, quality considered, shows that prices asked here are materially lower than those asked elsewhere.

**THE CELLA CLASSIC SHOP**  
INC.

ANTIQUES-REPRODUCTIONS

1 EAST 46th STREET One door East of Fifth Ave.

Inspection and Correspondence Cordially Invited  
D. A. CELLA

## Sun Dial Shop

Antiques  
Interior Decoration



MRS. HERBERT NELSON CURTIS  
22 East 34th Street NEW YORK CITY  
TELEPHONE 2970 MADISON

## ANTIQUE FURNITURE

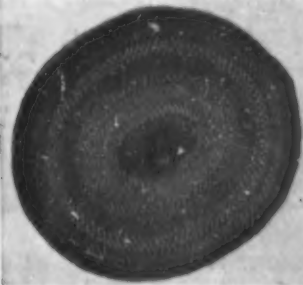
Rare China, Pewter,  
Old Lamps, Andirons, Etc.

NO REPRODUCTIONS

HENRY V. WEIL

698 Lexington Avenue

Cor. 57th Street New York



## ANTIQUES AND HAND BRAIDED RUGS

Write for catalog and lists

RALPH WARREN BURNHAM  
IPSWICH IN MASSACHUSETTS



## WHEN IN BOSTON STAY AT THE COPLEY SQUARE HOTEL

HUNTINGTON AVE., EXETER AND BLAGDEN STS.

A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies travelling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.

"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.

Evergreens may be planted both for temporary and for permanent positions. Indeed, there are many Conifers, such as the Retinisporas, which often are planted solely for their decorative effect during a season or a part of a season. Such plants are often crowded together as they would not be in permanent planting.

The dimensions of the hole in which an Evergreen is to be planted ought, as the writer's experience leads him to conclude, to be from three to four times the size of the root-ball, and fully ten inches deeper. This ensures the cultivation of the soil directly around the plant stem. Where the soil is very poor I have found that the addition of one part of well rotted barnyard manure to four parts of the soil is a valuable fertilizing agency in nourishing the young roots. This manure must be thoroughly mixed with the soil. The soil that is replaced should be very thoroughly wetted, especially if the Evergreens are set out in dry weather. In this case leave a basin of at least five inches depth around the base of the plant and fill it with water. After a day the soil will have settled and the basin can be filled up with the remaining soil mixture. Do not forget to firm the soil around the newly set out plant. A shallow basin for irrigating must, of course, be left around it.

Choose a cloudy day for transplanting if possible. Then every evening sprinkle the Evergreens. This spraying should be continued until the new growth at the tips of every branch indicates that the roots have taken hold in the new soil.

Frequent spraying and watering the roots is necessary during drought, for the leaves of Evergreens are dependent for their fresh appearance on the sap created by the moisture the roots drink in, and when the roots are dry and the plants water-starved the foliage becomes sere and yellow. Many of the little plants, such as the Japanese Cedars (the Retinispora) are often woefully neglected on this point. Especially true is this of Evergreens introduced for architectural effect and potted in tubs, shallow soils or window-boxes, where the roots soon dry out if they cannot find water, and, of course, they are not permitted any depth in which to seek it.

As to the proper distance Evergreens are to be planted apart, large-growing specimens should be distant from one another at least five feet each way. Hedge plants can be about two feet. Closer planting is only justifiable where immediate effect is required. Overcrowding, especially in hedge-growths, will cause certain of the plants to die, leaving gaps that are unsightly.

It is wonderful what beautiful effects may be obtained with the judicious selection of a few Evergreens, and although individual opinions differ as to the esthetic qualities of this plant and that, it must be conceded, that not only is there an Evergreen for every place but some place for



**MARBLE ORNAMENTS**

for Garden and Interior Decoration. Imported from our Studio at Pietrasanta, Italy. Consisting of tables, benches, vases, fountains, statuary, mantle-pieces, etc.

We are able to execute any order in marble of a patron's special design or our own without competition in price or workmanship.

**ARMANDO BATTELLI**

7 West 30th Street New York City

**Leslie F. Paul**

**Consulting Horticulturist**

Port Collins, Colo.

With State Agricultural College 1906-1910

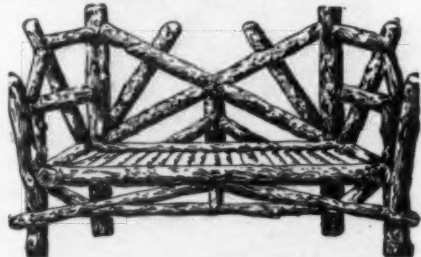
U. S. Dept. Agr. 1904-5 Kans. Exp. Sta. 1902-4

If you invest in western lands you will need expert advice concerning adaptability of crops to soils, water rights, titles, etc. Write for further information.

**Everything Rustic**



Can you realize the beautiful effect a Rustic Umbrella, a Newport Rustic Log Cedar Settee, or a Rustic Pergola would create in the grounds surrounding your home? Nothing is more artistic, ornamental or comfortable.



Weather does not affect Rustic Red Cedar furniture, and it will last for years. We will gladly furnish estimates and send new catalogue upon request.

**RUSTIC CONSTRUCTION WORKS**

33 Fulton Street, New York City

every Evergreen. Good taste is always requisite to good planting, but a little study of the subject will carry the novice well on the road to solving the problems that may confront him in the matter of selecting the Evergreens he needs.

**Propagation by Cuttings**

(Continued from page 112.)

permanent places by the following fall. Crimson and yellow rambler roses, the memorial rose (*Rosa Wichuraiana*) and all the family of prairie roses (*Rosa setigera*) can be increased easily in this way. The cuttings are best if taken in late autumn, of ripe wood of the summer's growth, and they should not be planted out in spring until the frost is unquestionably gone and the ground has settled.

Root and leaf cuttings have not been treated because they are less important to the gardener, who works out-of-doors. They are used only for special things that are not of great value to the beginner, largely because they are special.



**Book Reviews**

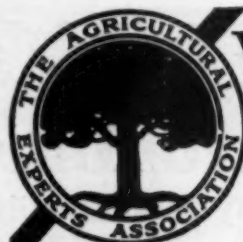
[The Publishers of House & Garden will be glad to furnish any books desired by subscribers on receipt of publisher's price. Inquiries accompanied by stamp for reply will be answered immediately.]

**British Floral Decoration.** By R. Forester Felton, F. R. H. S. Illustrated in color. Cloth, large 8vo, gilt top, 194 pp. London: Adam & Charles Black. New York: The Macmillan Co. \$2.50 net.

The writer of this work is a well-known British authority and expert floral designer and decorator whose work has been seen on some of the most notable public and private occasions. He takes up the subject of Table Decorations, Decorative Foliages, Orchids for Decoration, Church Decoration and many other specialized subjects. The twenty chapters teem with practical, artistic and authoritative suggestions for everyone interested in floral decoration. The illustrations give an excellent exposition of the text, although the twelve color plates are hardly up to the highest standard of color work, which is to be regretted in a volume so commendable in every other way.

**The Care of Trees.** By B. E. Fernow. Illustrated. Cloth, 8vo, 392 pp. New York: Henry Holt and Company. \$2 net.

Professor Fernow's comprehensive and copiously illustrated book takes up the entire subject of the care of trees in lawn, street and park. Written for amateurs by a forester, it places such information as the owners of trees may read in a convenient and systematic form that cannot fail to be of the greatest use.



**Where to Market YOUR Farm Products**

To make a farm pay handsome profits you must do more than raise good crops. You must sell them to the greatest advantage. For upon your marketing depends your whole farming success.

In the broad work this association is doing we are constantly hearing of the greatest marketing opportunities. We have time and again shown our clients markets where they have realized profits far above what they had expected. And

**We Can Show You**

For rendering you such services, we charge but a nominal fee. Moreover, when you engage us, for this same fee, we go over your entire farm or country place—if you desire—examining the soil and advising you as to the various ways your farming methods can be improved, with greater profit this year and in the years to come.

Upon our staff are well-known experts on landscape gardening, cattle and poultry-raising, fruit cultivation, buildings, sanitation and other special lines—all at your service.

**Our Booklet**

is replete with interesting photographs of country life. Tells you all the ways in which we can lead you on to bigger and better farming. Send for it today.

**The AGRICULTURAL EXPERTS Ass'n**

"We Solve Your Country Problems"

GEO. T. POWELL, Pres.

CHAS. H. PLUMP, Treas. & Mgr.

Department D.

5 and 7 East Forty-second St. NEW YORK



## Plant for Immediate Effect

### NOT FOR FUTURE GENERATIONS

Start with the largest stock that can be secured! It takes over twenty years to grow many of the Trees and Shrubs we offer.

### FOR AUGUST PLANTING IN SPECIMEN EVERGREENS

- Hemlocks** Broad, bushy trees, many times transplanted and lifting with fine roots—trees up to 12 feet.
- Arbor-Vitaeas** Of Vervaeues Golden Variety, a special lot of heavy specimens—symmetrical, broad and bushy—just the thing for formal work; and then a large variety of the other sorts and in large sizes.
- Spruces** Colorado Blue, Oriental, Norway, White, and many others, and specimens up to 8 to 12 feet.
- Retinosporas** All the standard and many rare sorts. Specimens up to 16 feet in height, and broad in proportion; and all of them branched to the ground and absolutely perfect.
- Boxwood** In bush, pyramidal and standard shapes. Specimens up to 6 feet in height and five feet in diameter; and these are "Andorra Grown," insuring to you acclimated plants, therefore safety in transplanting.
- Rhododendrons** Our usually large stock, counting up in the thousands of "Andorra Grown" plants in fifty species and varieties—sorts tested by us for hardiness—and these in the clean colored sorts.
- Evergreen Shrubs** Azaleas, Andromedas, Boxwood in many varieties, Hollies, Laurels and many others—too long a list to enumerate here, so send for

### OUR PRICE LIST OF "ANDORRA GROWN TREES"

**ANDORRA NURSERIES Wm. Warner Harper, Prop.**  
Box H, Chestnut Hill, Philadelphia, Pa.

## WANTED

The co-operation of a competent woman having entree into the best homes, to introduce artistic specialties for the house and garden. Liberal commission will be paid to the right person. Address

R. F. M., "House and Garden"  
449 Fourth Ave. New York

PROTECT your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. If your dealer will not supply you, write us.

**Onward Manufacturing Co.,**  
U. S. Factory and Glass Plant,  
Menasha, Wisconsin.  
Canadian Factory, Berlin, Ont.



## PEONIES

From the Cottage Gardens Famous Collection

**COTTAGE GARDENS CO., Inc.**  
**NURSERIES**  
QUEENS Long Island NEW YORK

WE OFFER a selection of about three hundred of the choicest varieties in one, two, and three year old roots.

Do not fail to send for our FREE CATALOGUE which gives authentic descriptions. It also tells you how to plant and grow this beautiful flower successfully.

Shipping season commences September 1st  
and continues during the Fall months.

## EVERGREENS

### Fine Specimens

Which have been grown in ample space and transplanted and are in the best condition to plant now for immediate effect. A list will be furnished on application.

All plants shipped with ball ensuring success when planting.

**ELLWANGER & BARRY**

MOUNT HOPE NURSERIES

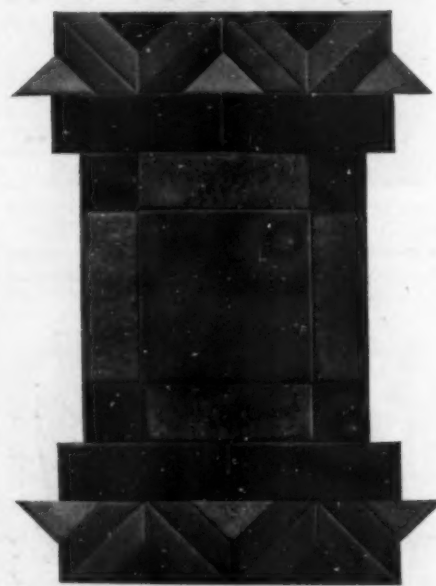
Rochester, N. Y.



## UNDERGROUND GARBAGE RECEIVER

Ever wished for a Garbage Can in which garbage cannot stink in summer? A can in which flies cannot breed and spread typhoid germs? A can having a cover which every time closes tight automatically—and cannot be opened by prowling dogs and cats? A can which, being out of sight, does not disfigure the backyard? The Stephenson Underground Garbage Receiver has all these advantages.

Also make Underground Earth Closets for Camps and for Dwellings without Sewerage and Portable Metal Houses for same.  
SOLD DIRECT. Send for circular.  
C. H. Stephenson, Mfr.  
Farrer Street, Lynn, Mass.



## ROOKWOOD FAIENCE TILE

in stock sizes and varied colors arranged in geometric design for border treatment in connection with plain tiles.

**ROOKWOOD POTTERY COMPANY**

Eastern Office 1 Madison Avenue. New York





Hunt & Grey, Architects, Los Angeles

## Cabot's Creosote Stains

give artistic and harmonious coloring effects of guaranteed durability, and the Creosote penetrates and thoroughly preserves the wood. The most economical and only appropriate coloring for

Shingled residences, bungalow shingles or siding, rough board camps or cottages, boat and club houses, shelters, etc.

Send for stained wood samples and catalog

**SAMUEL CABOT, Inc., BOSTON, MASS.**

AGENTS AT ALL CENTRAL POINTS

## BOBBINK & ATKINS

World's Choicest Nursery Products

### AUGUST PLANTING

Intending purchasers should visit our nursery and inspect the material we grow. We have experienced men to advise you and the completeness of our assortment will insure you of securing the proper material for every location. Having 250 acres of the most fertile ground under cultivation places us in a position to fill orders of any magnitude.

**EVERGREENS and CONIFERS** have become a garden necessity. Every lawn, even of highly developed beauty, can be made more beautiful by their use. We have many acres planted with beautiful Evergreens of all the hardiest and choicest kinds. Our Evergreens are well cultivated and can be dug with a ball of roots and earth. These can be planted in August.

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

**BOXWOOD**. 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.

**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.

**HARDY HERBACEOUS PLANTS**. For new and old-fashioned gardens, beds and borders. We have a large quantity and complete collection.

**DECORATIVE PLANTS FOR CONSERVATORIES; INTERIOR and EXTERIOR DECORATIONS** are grown in our 150,000 feet of greenhouses.

**POT-GROWN STRAWBERRIES, HARDY TRAILING AND CLIMBING VINES**. Ask for special lists.

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

**OUR ILLUSTRATED GENERAL CATALOGUE NO. 18** is comprehensive and especially interesting, instructive and helpful to intending purchasers.

We plan and plant Ground and Gardens Everywhere.

**THE GENERAL SUPERVISION OF PUBLIC GROUNDS AND PRIVATE ESTATES A SPECIALTY**

Visitors to our Nurseries are always welcome. We are only a few minutes from New York City.

**NURSERYMEN, FLORISTS and PLANTERS, RUTHERFORD, N. J.**



### RIVERDALE COUNTRY SCHOOL

Riverdale-on-Hudson New York City

Provides country life for New York City boys, without separating them from their families. Boarding pupils may spend Sunday at home. Day pupils remain till dusk. Transportation by Broadway subway, always in the direction opposite to the crowd, and in the company of a teacher. Forty minutes from Forty-second Street. Out-of-town pupils enjoy contact with the best sides of city life, together with all the advantages of a school in the remote country. Twelve high, healthful acres. Remarkable facilities for games and sports.

Lower school for boys from eight to twelve years. Thorough ground work. Upper school for boys from twelve years to age of college entrance. Solid and broad preparation. Excellent records made by graduates at Harvard, Yale, Columbia, Williams and Pennsylvania.

All teaching in small classes carefully graded by subject. For further details about this wholesome, substantial school, address

**F. S. HACKETT, Headmaster,**

Riverdale-on-Hudson New York City  
Telephone, 245 Kingsbridge

### 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 1910 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.  
**BROWN BROS., Architects, 817 Security Bank Bldg., Cedar Rapids, Iowa**

## Highlands Nursery and Salem Branch Nursery

(4,000 ft. elevation in the Carolina Mountains)

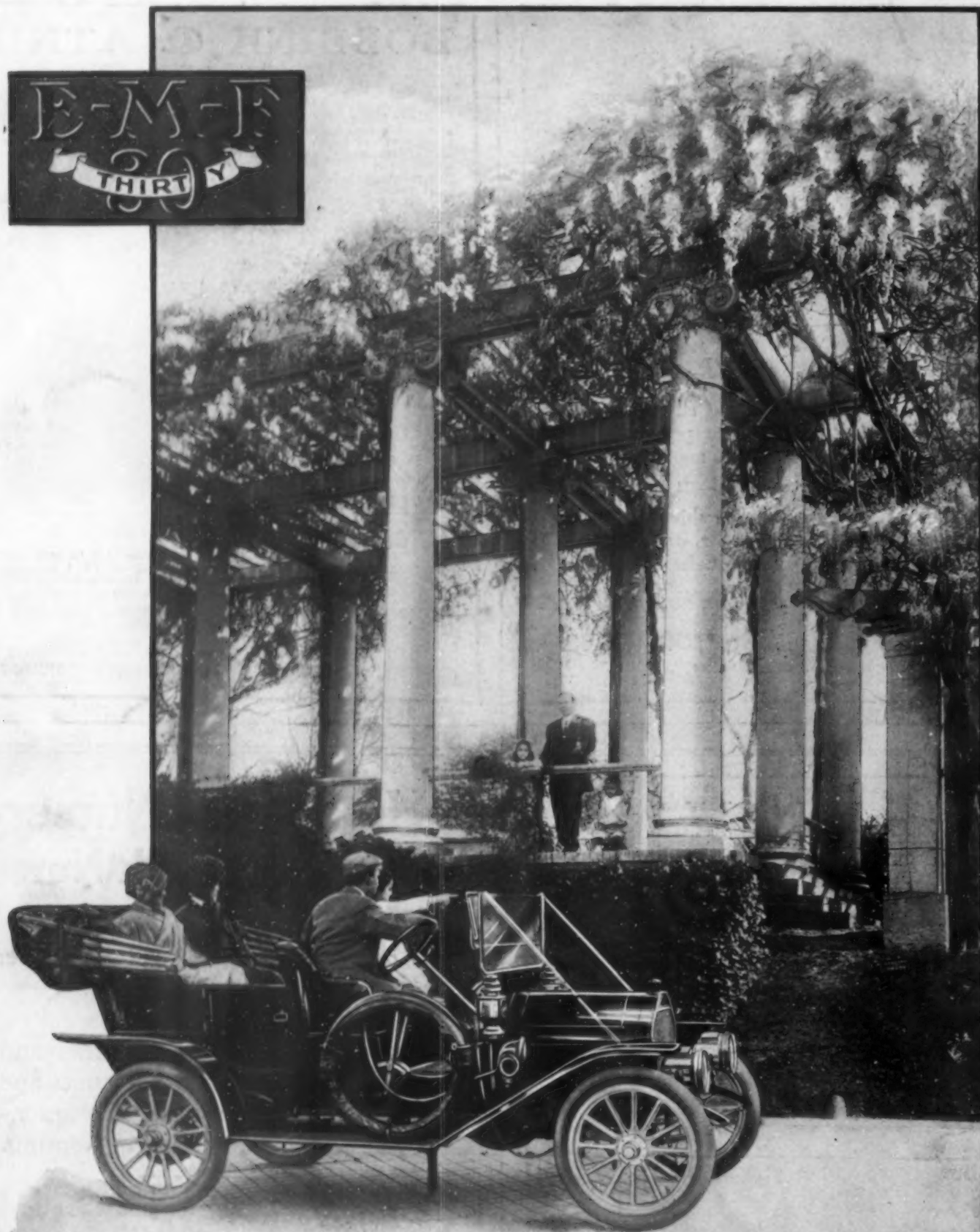
The largest collection of Hardy American Plants in the world.

Rhododendrons, Kalmias and Andromedas for August and September Planting give splendid results the following Spring.

Our *tried native species* are the Best and the *only absolutely hardy ones*. Write now for Beautifully Illustrated Catalogue which tells how to grow these things *successfully*.

**Harlan P. Kelsey, owner,**  
Salem, Mass.

E-M-F  
THIRTY



Everywhere E-M-F "30" is the first choice of that class of buyers who want all that can be had of efficiency, power, durability, elegance and comfort at a price under \$2000. E-M-F "30" sells for \$1250.

*In writing to advertisers please mention HOUSE AND GARDEN.*