

# www.hathitrust.org 

Public Domain, Google-digitized
http://www.hathitrust.org/access_use\#pd-google


#### Abstract

We have determined this work to be in the public domain, meaning that it is not subject to copyright. Users are free to copy, use, and redistribute the work in part or in whole. It is possible that current copyright holders, heirs or the estate of the authors of individual portions of the work, such as illustrations or photographs, assert copyrights over these portions. Depending on the nature of subsequent use that is made, additional rights may need to be obtained independently of anything we can address. The digital images and OCR of this work were produced by Google, Inc. (indicated by a watermark on each page in the PageTurner). Google requests that the images and OCR not be re-hosted, redistributed or used commercially. The images are provided for educational, scholarly, non-commercial purposes.







MSU Is An Affirmative Action Equal Opportunity Inetitution extenclederara.pm3-p. 4

# An Illustrated Monthly Devoted to Practical Suggestions on Architecture, Garden Designing and Planting, Decoration, Home Furnishing and Kindred Subjects 

## VOLUME THIRTEEN

January to June, 1908

| AUTOMOBILES |  |  |
| :---: | :---: | :---: |
| A \$5,000 Garage. | Andrews, Jaqucs \& Rantoul. | June. 210 |
| Housing the Automobile...... . . . | Harry B. Haines . . ......... | May. . . . . . . . . . . . . 173 |
| Stable Convertible into a Garage, A. | A. Raymond Ellis, Architect. | June............. . . 200 |
| FLORAL | DECORATIONS |  |
| Artistic Arrangement of Flowers, The....... . | Jane Leslie Kift. | January. . . . . . . . . . 28 |
| Greens for Christmas Decorations ........... | William S. Rice. | January . . . . . . . . . . 14 |
| Vines and Vine Covered Houses | Charles Alma Byers | April. . . . . . . . . . . . 130 |
| Window Boxes | Helen Lukens Gaut. | June.... . . . . . . . . 205 |
| Window Garden in Winter, The. | Eben E. Rexford. | February...........46 |
| GARDENS, GARDENING AND FIXTURES |  |  |
| Art of Pruning, The | C. L. Meller. | June. . . . . . . . . . . . 202 |
| Construction and Care of Hotbeds. | Ida D. Bennett. | March.. . . . . . . . . . . . 85 |
| Discarded Favorites Reinstated. | Eben E. Rexford. | June............... ${ }^{\text {ar }}$ 1 |
| Forcing Fruits for Market in France | Jacques Boyer. | March . . . . . . . . . . 76 |
| Garden Correspondence. | W.C. Egan.. | January..... . . . . . 34 |
| Garden Correspondence | W. C. Egan | February.... . . . . . . 7 \% |
| Garden Correspondence | W. C. Egan | March....... . . . . . . 106 |
| Garden Correspondence. | W.C. Egan | April.. . . . . . . . . . . $14^{2}$ |
| Garden Correspondence. | W. C. Egan | May................. 178 $^{8}$ |
| Garden Correspondence | W.C.Egan | June......... . . . . 214 |
| Garden of a Suburbanite, T | C. B. Wynkoop | April.... . . . . . . . . 127 |
| Garden Phlox. | W. C. Egan. | April............... ${ }^{3} 3^{6}$ |
| House and Its Garden, A. | Elise Gallaudet. | May................157 |
| Interesting Formal Gardens. | Mary H. Northend. | February. . . . . . . . . 40 |
| Native Shrubs for the Home Garden. | William S. Rice | February. . . . . . . . . 53 |
| Nooks and Corners in the Christmas Gardens of California. | Charles Frederick Holder. | January. . . . . . . . . . ${ }^{\text {2 }}$ |
| Plea for the Herb Garden, A | Lawrence Irwell | March..... . . . . . . . 86 |
| Practical Pergolas. | Mary H. Northend. | April..............112 |
| Quest and Culture of Orchids, The | G. Bertrand Mitchell. | March, April. . 90, 121 |
| Shasta Daisy, The........... | Georgia Torrey Drennan. | April............... 134 |
| Some Old and New Annuals | W. C. Egan. | April . . . . . . . . . . . 138 |
| Suggestions for the Month-The Garden | J. W. Hall. | January.... . . . . . . 32 |
| Suggestions for the Month-The Garden | J. W. Hall. | February. . . . . . . . 69 |
| Suggestions for the Month-The Garden | J. W. Hall. | March..... . . . . . . $10_{4}$ |
| Suggestions for the Month-The Garden. | J. W. Hall. | April............ . . . 1 + 0 |
| Suggestions for the Month-The Garden | J. W. Hall. | May........ . . . . . . ${ }^{176}$ |
| Suggestions for the Month-The Garden | J. W. Hall. | June................213 |
| HOUSE FURNISHINGS |  |  |
| Curtains Suitable for a Cottage in the Country | Correspondence. | April................ 19 |
| Decorative Loose Bindings for Books.......... | Correspondence | April..... . . . . . . . . 20 |
| Department of Decoration. . | The Editor's Talks | February.......... . 70 |
| Furnishing and Decorating the Nursery. | Sarah E. Ruggles. | May..................... |
| Furnishing of a House, The........... | Mary Hodges... | February. . . . . . . . . 40 |
| House and Its Furnishings, The | Mary Hodges. | May....... . . . . . . . 168 |
| In Regard to Curtains.. | Correspondence | February..... . . . . . 16 |
| Mr. Prime's Alexander Tapestries | George Leland Hunter | March..... . . . . . . . . 95 |
| Oriental Rugs for the Chamber... | Richard Morton..... | January............. . 8 |
| Regarding Refrigerators.. | Correspondence. | May ........ . . . . . . . . 17 |
| Selection of Oriental Rugs, The. | Correspondence.. | February . . . . . . . . . 70 |
| Suggestions for the Month-The House. | Leila Mechlin. | January . . . . . . . . . 3 I |
| Suggestions for the Month-The House | Leila Mechlin. | February . . . . . . . . . 68 |
| Suggestions for the Month-The House | Leila Mechlin | April........... . . . . ${ }^{3} 8$ |
| Suggestions for the Month-The House | Leila Mechlin |  |
| Suggestions for the Month-The House | Leila Mechlin. | June................ 213 |
| Suitable Table Covers . | Correspondence. | May.................. ${ }^{7} 7$ |

## HOUSES AND ESTATES



INTERIOR AND EXTERIOR FINISH OF THE HOUSE

| Covering for Bath-room Walls | Corresponde | May. | 8 |
| :---: | :---: | :---: | :---: |
| Curtaining Casement Windows | Correspondenc | June. | . 15 |
| Enamel for Walls | Correspondenc | June |  |
| Exterior Color for a Hoy | Correspondenc | May. | 18 |
| Exterior Color for a Residence | Correspondenc | March | 14 |
| Finish for Woodwork in Bath-room | Correspondence | March |  |
| Finishing Standing Woodwork | The Editur's Talks. | January |  |
| Front Doors for Craftsman House | Correspondence | June.... |  |
| Heating the Home | Correspondence | May. | 18 |
| Interesting Facts on House Heating | J. B. Chase. | February | 65 |
| Lighting Plants for the Country Home | Correspondinco | June.... |  |
| Old I vory Finish on Plaster Walls | Cirrespondenco | January. |  |
| Old Tile. | Correspondence | February |  |
| Redecoration of the House | The Editor's Talks. | March. | 105 |
| Seaside Cottage, A | Correspondence. | February | . 16 |
| Selection of Mantels | Correspondence | June . . . |  |
| Selection of Tiles | Correspondence | March |  |
| Selection of Tiles, Hardware and Lighting | The Editor's Talks |  |  |
| Simplicity in Hardware | Correspondence | January. | . 16 |
| Suggestions for the Month-The House | Leila Mechlin. | April... | 139 |
| Tiling for a Bath-room . . . . . . . . . . . . . | Correspondence. | January. | . 16 |
| To Render Old Floors Serviceable | Correspondence. | April. ... | 19 |
| Treatment for Cracked Walls | Correspondence | May. | . 6 |
| Treatment of Walls of New Houses, The | The Editor's Talks | April.... | . $4^{1}$ |
| Wall Coloring and Furnishing | Correspondenc |  |  |
| W all-paper Samples...... | Correspondenc | June.... |  |
| Walls and their Coatings | Claudia Q. Murphy | June. | . 204 |
| Wall Treatment. | Correspondence. | March. | 14 |
| Water Supply, A. | Correspondence. | January. | . 17 |


|  | MISCELLANEOUS |  |
| :---: | :---: | :---: |
| Educational Value of a Great Shop. | The Editor. | January............ 21 |
| Respite.......................... . . | Claire Wallace Flynn. | April................ ${ }^{20}$ |
| Suggestions for Christmas |  | January............ ${ }^{12}$ |
| Unique Flower Sale, A. | Kate Stevens Bingham. | February........... 61 |

STABLE AND KENNEL

| Americe Arab, The. | John Gilmer Speed | March. |  |
| :---: | :---: | :---: | :---: |
| Arabs and Barbs | John Gilmer Speed | May | 179 |
| Berkshir | John Gilmer Speed | February | 74 |
| Breeding of Fowls, The | John Gilmer Specd | June .... | 215 |
| Busy Bee, The |  | March | 10 |
| Cattle for the Country Place | John Gilmer Speed | February | 72 |
| Conformation of the Horse. The | George M. Rommel, | June..... | . 218 |
| Contrast, A | John Gilmer Speed | March | 110 |
| Crossing Breeds |  | April | 14 |
| English Bloodhounds | J. L. Winchell | March | 110 |
| House Dogs | John Gilmer Spced | January |  |
| In Behalf of the Greyhoun | Mrs H.C. Kelley. | June.... | 216 |
| Kentucky Saddle Horse, The | John Gilmer Specd | March | 107 |
| Kindness in Horse Training | Ernest C. Moses | April | 143 |
| Mr. Vanderbilt's "Doctor Selwonk". | John Gilmer Specd | March | 107 |
| Mr. Wardwell's Shropshires... | John Gilmer Speed | March | . 108 |
| Old English Sheep Dog, The | H.W. Berryman | May | . 180 |
| Old-Fashioned Morgan, The | John Gilmer Speed | March | 109 |
| Other Side of Nature-faking, The |  | May | . 9 |
| Pure Bred and Half Bred Morgans |  | May. | 10 |
| Scotch Terriers.................... | J. A. Glasse | April | 13 |
| Something about Cats. | John Gilmer Speed. | May | 182 |
| Virginia Razorback. The. | John Gilmer Speed. | April | 146 |

Vol. XIII.
JANUARY, 1908
No. 1.


THE JOHN C. WINSTON CO.


Faithful Reproduction of Charles II Walnut Armchair.

## The A. J. Crawford Company

LONDON
NEW YORK
251-255 FIFTH AVENUE
and
1 EAST 31st STREET
Interior Decorating Executed in all the English periods. The Largest Collection of English Furniture in America. Reproductions of Exclusive Old English Models at Moderate Prices.

## "The Little Shop"

## Peerless Rubber Tiling

Cushion Back

The Most Durable and Economical Floor Covering Made

## Beautiful Designs Effective Colorings

Noiseless, waterproof and non-absorbent
Peerless Rubber Tiling is made in large continuous sheets, and is impregnable to dirt and moisture.

It is sanitary, beautiful and a durable rubber floor covering.
Beware of cheap substitutions and imitations purporting to be sheet rubber tiling.

Send for our catalogue illustrated in colors.
Prices on application

Manufactured exclusively by
The Peerless Rubber Manufacturing Co. 88 Chambers Street and 16 Warren Street New York

## Oanatile

The Modern Wall Tiling
It coats five times as much to uer regular glazed tile as to use SANATILE-and you gain nothing. Every good quality of tiling ing. Every god danity oltiing
is pososesed by SANALIE., as well as many which tiling has not. It has an embosed, beautifully enameled surface in plain white or permanent tints and many artistic patterns. Aboolutely waterproof and cannot tear, crack or chip from accident.

SANATILE is a tough, elastic fabric, made in strips, on a
 applied by any good workman following instructions furnished with the material.


Representatives wanted in the wall paper and tiling trades to whom we can refer orders and inquiries received by us from their locality

## II eatherole

The beautiful, richly embossed, washable wall covering, made for use jin the highest class of decorative work. Can be furnished in colors to harmonize with any seheme of interior treatment. Samples of the new line ready about March first.

## 马anitas

The washable wall covering used in place of wall paper. Will not fade. Many new patterns and colorings.

Illustrated descriptive literature will be furnished on request
THE LEATHEROLE CO.
24 East 22nd Street (near Broadway) New York City

[^0]
## TRAILING ARBUTUS

THE late spring brought the arbutus last year nearer than usual to the month of the name the Pilgrims gave it, for it is usually rather an April than a May flower. Unfortunately it is growing rare in many places, it is so warmly appreciated, and there seems to be no hope that domestication will save it.

The arbutus is the one wild flower that absolutely refuses to be tamed. Others of its family-rhododendrons, azaleas, laurels-can be made to content themselves in our gardens. Even the edelweiss, the Alpine flower that blossoms in lofty solitudes, has been made at home in a rockery, but the arbutus, like a wild free bird of the upper air, languishes and dies out of its environment. Botanists tell us the arbutus is wonderfully interesting as a flower that is undergoing evolutionary changes looking toward perfecting a system of cross fertilization. Some flowers produce no pollen; others have plenty of pollen, but the stigmas of neighboring flowers are defective, so that the labors of the bees and small flies, which are the only insects abroad when the arbutus blooms, are in vain. In most localities, owing to these imperfections, the plant bears no fruit. It is propagated by its creeping stems which take root here and there. The means Nature provided for its preservation prove its destruction all too often, for one who plucks up one plant in his greed pulls up all those attached to it and destroys it all.-The Country Gentleman.

## OILED ROADS IN KANSAS CITY

T${ }^{\top}$ HE Park Board of Kansas City, Mo., has issued an interesting bulletin, showing the results of its work of oiling the boulevards. The bulletin says in part:
"Our experiment with light residuum oil last fall proved entirely satisfactory as a dust layer and of considerable value as a protection to the pavements through the inclement winter and spring months, but was not of sufficient gravity or body to entirely accomplish the results sought. Upon steep grades it was objectionable on account of the roadway becoming somewhat slippery. We began in May, last year, experimenting with the heaviest oil we could obtain in the Kansas oil fields. This oil is a residuum, left after the distillates have been removed, and is

> The Greatest Stories For Boys. THE North Pole Series
BY Prof. Edwin J. Houston, Ccientist, Teacher and Author
Three Volumes:- The Search for the North Pole, The Discovery of the North Pole
Cast Away at the North Pole.
\$1.00 Each; in Sets or Separately
Every Boy Should Have These Books

The John C. Winston Co., Phila.

## A NEW BOOK

For tourists who have visited or who hope to visit the Mediterranean ports

## A Trip to the 0rient

## The Story of a Mediterranean Cruise

## With nearly 200 Unique Illustrations

Price, $\$ 1.50$ net
Postage, 16 cents
A TRIP TO THE ORIENT, THE STORY OF A MEDITERRANEAN CRUISE, by Robert Urie Jacob, has been written at the request of fellow travelers, who did not have time to take notes by the way.
One said, "Do not write a guide book nor a love story, but a simple narrative that will recall the incidents and delightful experiences of the tour." Following these suggestions the author has undertaken the work.
An interesting feature of the book is the large number of illustrations made from artistic photographs, all of which have been contributed by amateur photographers. It contains nearly 200 illustrations of views or incidents in Funchal, Granada, Algiers, Malta, Athens, Constantinople, Jerusalem, Cairo, Luxor, Naples, and Nice, reproduced from unpublished photographs. They enable the reader to see not only the historic places and ruins, the wonders of these Oriental lands, but also the people themselves in their various pursuits, giving to the book the very atmosphere of the countries described.
The story was intended specially for voyagers who have visited the same places, but it should be equally interesting to those who are planning a similar trip. And those who must stay at home may in these pages be able to look through another's eyes at the places described.
The book comprises 392 pages, printed on enamel finished paper, and contains nearly 200 illustrations. Size, $51 / 2 \times 8$ inches. Bound in extra cloth-gold stamping.
The John C. Winston Co., Publishers 1006=1016 Arch St., Philadelphia
commercially called fuel oil. We have contracted for this residuum at eighty cents a barrel of forty-two gallons.
"Two steel receiving tanks of 8,000 gallons capacity each were erected near our track on the Belt railway at Grove Street, at a total cost of $\$ 714.99$. It is connected with a 4 -inch pipe line from receiving tanks to the side track, permitting the unloading of tank cars by gravity.
"When the macadam was absolutely dry and hard, the entire surface of the roadway was swept clean of dirt and screenings. The sweepings were left along the edge of the gutter for protection to the cement work when the oil was applied. To our sprinkling carts we attached a tin trough, perforated with quarter-inch holes, and thus obtained an even distribution of oil. The entire surface of the roadway was flooded with oil and thoroughly broomed in, after which the sweepings from the gutter, with sufficient limestone screenings to form a slight dressing, were cast over the oil and thoroughly rolled with a steam roller. Since the last of May we have given one application of oil to practically all the finished roadways, using 120,477 gallons of oil, which covered 135,314 square yards of macadam pavement. The cost follows:
For oil..
. $\$ 2,357.15$
For labor and supplies ....... 3,202.68
Total.
$.85,559.83$
"This is an average of 1.48 cents a square yard. A second application in September, it is estimated, can be made at a cost of not to exceed one cent a square yard, for less care will be required in preparing the roadway. The second application should carry our roadways through the winter and well into next season, in excellent shape, and at a much less expense for repairs."Landscape Gardening.

## TREES INJURED BY GAS

THE liability of a gas company in damages to the owner of trees on a boulevard in front of his premises, caused by the escape of gas from mains on streets, the Supreme Court of Minnesota holds (Gould vs. Winona Gas Company, ili Northwestern Reporter, 254), is not determined by the doctrine of insurance of safety, but by principles of negligence applicable to authorized public works.

Where such damage was caused by a leak due to the action of frost in the winter, and the escape of gas was not discovered by the company until June of the same year, the maxim res ipsa loquitur (the matter speaks for itself) applies. The failure of the trial court to give the plaintiff the benefit of the maxim was reversible error. The care to be exercised by the gas company is not ordinary care, as distinguished from extraordinary care, but due care, or care commensurate with the danger.
Whether the gas company could have been held responsible, without reference to negligence, in an action for trespass, the court leaves an open question. It also leaves unsettled the question of whether the defense of contributory negligence of the plaintiff in not notifying the defendant of the escape of gas could be asserted in a case where the defendant had no permission to go upon the plaintiff's premises.-Park and Cemetery.

## ARCHBISHOP LIEMAR'S TOMB IN BREMEN CATHEDRAL

NEARLY eight hundred years ago Archbishop Liemar was laid to rest in the cathedral at Bremen. His grave has just been discovered with an inscription, which, besides giving the date of his death, shows that he rebuilt the cathedral in 1088, a fact that had been a matter of doubt hitherto. Of the body nothing remained, but when the coffin was opened the clothes in which he had been buried, including his shoes, were still intact. On exposure to the air, however, they crumbled away into dust.-Exchange.

## THE NELSON SARCOPHAGUS

HOW many of our readers are aware, we wonder, that the sarcophagus surmounting the tomb of Lord Nelson in the crypt of St. Paul's cathedral is actually that which Cardinal Wolsey had prepared for the reception of his own body, and the handiwork of a Florentine sculptor of the early sixteenth century, Benedetto da Rovezzano. The statement has sometimes been made, but it is for the first time proved to be absolutely accurate in a very learned brochure on the work of Florentine sculptors in England, prepared by Mr. Alfred Higgins for the Archæological Institute.

# The Readers' Library 

 World Famous Books

1. The Type is as large and as clear as the type used in the usual large volumes of Standard Authors.
2. Unabridged. Each work is complete in one volume.
3. The Illustrations are an important feature. Each volume contains from eight to sixteen beautiful illustrations. These illustrations are not the rehashed old fashioned pictures usually found in standard works but are new and drawn by prominent artists and interpret the stories with great fidelity.
4. The Paper is strong and opaque. In the volumes with a great number of pages imported Bible paper is used. This paper is far superior to India paper because it makes the print clearer and blacker, and the discouraging difficulty of turning the leaves of an India paper book is entirely eliminated.
5. The Binding. The volumes are bound uniformly in flexible leather, with gold stamping on back, and each volume has the author's autograph signature stamped in gold on the side of the book; they have gilt tops and ribbon markers.
6. For the bookcase. The small size of the volumes, the rich binding, the desirable titles, all insure these books a welcome in every library.
Price per volume, postpaid,
$\$ 1.00$


## LIST OF TITLES

Adam Bede. By George Eliot. American Notes. By Charles Dickens. Barnaby Rudge. By Charles Dickens. Bleak House. By Charles Dickens. Chatrnings, The. By Mrs. Henry Wood. Charles 0'Malley. By Charles Lever. Child's History of England. By Charles Dickens.
Christmas Books. By Charles Dickens. Cloister and the Hearth. By Charles Reade.
Danesbury House. By Mrs. Henry Wood.
David Copperfield. By Charles Dickens.
Dombey and Son. By Charles Dickens.
East Lynne. By Mrs. Henry Wood.
Great Expectations. By Charles Dickens.
Hard Times. By Charles Dickens.
Henry Esmond. By W. M. Thackeray.
House of the Seven Gables. By Nathaniel Hawthorne.
Ivanhoe. By Sir Walter Scott.
Jane Eyre. By Charlotte Bronte.
John Halifax, Gentleman. By Miss Muloch.
Kenilworth. By Sir Walter Scott.
Last of the Barons. By Lord Lytton.
Little Dorrit. By Charles Dickens.
Master Humphrey's Clock. By Charles Dickens.
Mill on the Floss. By George Eliot.
Martin Chuzzlewit. By Charles Dickens.
Mrs. Halliburton's Troubles. By Mrs. Henry Wood.
Never too Late to Mend. ByCharles Reade. Nicholas Nickleby. By Charles Dickens.
No Name. By Wilkie Collins.
Old Guriosity Shop. By Charles Dickens. Oliver Twist. By Charles Dickens.
Pickwick Papers. By Charles Dickens.
Pilgrim's Progress. By John Bunyan.
Reprinted Pieces. By Charles Dickens.
Scarlet Letter. By Nathaniel Hawthorne.
Scenes of Clerical Life. By George Eliot.
Shirley. By Charlotte Bronte.
Silas Marner. By George Eliot.
Sketches by Boz. By Charles Dickens.
Stories and Sketches. By Charles Dickens.
Tale of Two Cities. By Charles Dickens.
Talisman. By Sir Walter Scott.
Tennyson's Poetical Works.
Tom Brown's School Days. By Thomas Hughes.
Two Years Ago. By Charles Kingsley. Westward Ho. By Charles Kingsley.
Woman in White. By Wilkie Collins.
Wuthering Heights. By Emily Bronte.
OTHER TITLES IN PREPARATION
THE JOHN C. WINSTON COMPANY,
PUBLISHERS
Philadelphia, Pa.

In writing to advertisers please mention House and Garden.

# MILLIONAIRE! STRUGGLER! PAUPER! 

Why are you rich?<br>Why do you toil hard to keep a little?<br>Why are you poor?

The meaning of money and its manipulations may answer all of these questions. There is something of vital interest for all classes of society in the great series:

## american Finance

## By JOHN PAUL RYAN BEGINNING IN THE JANUARY Metropolitan Magazine

The first instalment goes into the causes of the October panic ; its effect on all wage-earners as well as on men of means; it shows you why trust companies have privileges denied National banks; it opens to you for the first time the doors of the dramatic secret conferences between the millionaires, philanthropists, and Government officers which helped to carry the country over the crisis; it tells you how the people have suffered through carelessness and mismanagement.

All this is in January. In succeeding instalments Mr. Ryan will consider the question of currency and the commercial, industrial, and financial future of America and Americans as it may be conditioned by war, politics or the tariff.

## OTHER FEATURES IN THIS NUMBER ARE:

WHEN WE SHALL HAVE WINGS. By Camille Flammarion THE STORY OF THE FUR BEARERS. By Charles Livingston Bull THE LETTERS OF GENERAL CHARLES S. HAMILTON Other Great Articles. Eight Splendid Stories

AT ALL news-stands 15 CENTS A COPY \$1.50 PER YEAR

> We are desirous of securing a number of copies of Mousesparten

for January, 1905; July, 1903; April, 1902; June, 1902, and July, 1902, and will pay 25 cents for each copy sent us in good condition.

## CIRCULATION DEPARTMENT <br> House 0 farden

Between the great churchman and the great sailor the tomb has had most remarkable vicissitudes. The cardinal, who was great on monuments, had it prepared for himself in his lifetime, and obtained from Henry VIII. the grant of the small building adjoining the east end of St. George's chapel, Windsor (now the Prince Consort's Memorial Chapel), for its reception. But Wolsey's fall interfered with these ambitious schemes, and when he died he was buried "before day" in the Abbey church, at Leicester. Moreover, while preparing his own tomb on a magnificent scale, he had left his promise to prepare another tomb for his royal master unfulfilled, so Henry, to repair that omission, took possession of the cardinal's tomb, used "so much as he found fit, and called it his." That tomb, which was finally adorned with a profusion of metal work and statuary, and in its total effect Mr. Higgins thinks, comparable only to the tomb of the Emperor Maximilian at Innsbruck, was dismantled during the civil wars under the ordinance "for the removal of scandalous monuments and pictures," and it was found impossible to restore it at any later date. But the sarcophagus and base remained in situ until some time between 1808 and 1810 , when they were brought from Windsor to St. Paul's to make part of the Nelson monument. Their identity is absolutely established by Mr. Higgins's investigations. He has made careful measurements of the Nelson sarcophagus, and found it to correspond in its dimensions with the particulars given by Benedetto da Rovezzano in his inventories, which are still extant. Nelson's body does not, of course, lie in the sarcophagus, but in a vault underneath, but we have the curious fact that the tomb which was prepared by the cardinal for his own body, grabbed by Henry VIII. for the royal tomb, defaced by a Puritan parliament as a "scandalous monument," now forms part of the national monument to the great captain. In other words, Nelson has the sarcophagus which Wolsey intended for himself.Exchang.

## A RUDE LIGHT-STANDARD

M. STEINERT, whose famous colM1. lection of rare old musical instruments has been exhibited in various cities and is now at Washington, a despatch
from New Haven says, has just become the possessor of a rude light-standard of the fifth century. This article is not a candlestick, for it antedates the age of candles. It is about a foot in height, made of iron and wood. A rude and rusty rod of wrought-iron is driven into a block of wood, which, though very aged probably is not the original block that was cut out for the implement. The rod supports a tool which works on the scissors principle, one end being used for nippers. One of the iron rods extends backward and has a huge iron for a weight to hold it down. The fire brands were placed in the nippers and held there by the weight. One material which was used for illuminating in the days of this instrument was a sort of vegetable candle that grew in swamps. The ends of this were dipped in grease and set on fire, the center of the candle being placed in the iron jaws of the standard. This was the best method of illuminating at that age. The instrument was given to Mr. Steinert by a lady in whose family in Wales it had been kept for generations.-Pbila. Telegraph.

## THE TOPOGRAPHY OF MANHATTAN ISLAND

T T is only when, in digging deep the foundations of a new building, the presence of quicksand, a creek, or a flowing spring, suggests some of the old topographical features of the island that New Yorkers are reminded of what a very rugged and irregular piece of land their city was built on. The whole island has been in the shovel at one time or another, either to cut down or to fill up the surface. As Nature left it, the upper part of the island was long ago described as rocky and covered by a dense forest; the lower part, grassy and rich in wild fruit and flowers. Grapes and strawberries grew in abundance in the fields, and nuts of various kinds were plentiful in the forests, which were also filled with an abundance of game. The brooks and ponds swarmed with fish, and the soil was of luxuriant fertility. Near the present city-prison, whose new foundations gave very considerable trouble to the contractors, there was a deep, clear and beautiful pond of fresh water (with a picturesque little island in the middle), "so deep, indeed, that it could have floated the largest ship in our Navy." This was fed by springs at the (Continued on page 7.)

## 25 cents a copy $\quad \$ 3.00$ a year <br> OUTING MAGAZINE <br> FOR JANUARY

## A REMARKABLE EXPLOIT

Mr. Robert Dunn was in the Bering Sea soon after a brand new island, now famous, had been thrust above the surface of the ocean. This intrepid explorer set foot on this strange youngster among the lands of the earth; he climbed over and around it, "smoking hot" as it was. The photographs are of profound interest; the article he has written for the January number affords a glimpse into a distant geological period; it all pictures a real "world's work.' The story is entitled, ON THE CHASE FOR VOLCANOES.

## OTHER NOTABLE TOPICS

## At the Edge of Canada in the Far Northwest, by Clifton Johnson

A picture of present day pioneers at work building a nation. The article deals intimately with the life of the men and women who are facing the problems of existence on the frontier, with their pleasures, their "society," their plans and their outlook.

Old Salem Ships and Sailors: 1. The Vikings of American Commerce, by Ralph D. Paine
In the old $\log$ books left by the hardy New England sea captains, is a record of the brave days when the American merchant marine led the world. From these store-houses of romantic fact the author has derived a new and true story of a great era.

## Luvinsky and the Strad, by Emerson Hough

Or, as the author humorously dubs the story, "A tale of art by the wayside." A selfstyled musical connoisseur who is rather "nigh"' in his dealings with the untutored children of the back-woods here meets his match and is very neatly " done."

## Moorea, by Hugo Parton

Such is the euphonious name of "the happiest spot on earth," the new and real Utopia; it is fetchingly described in this article.

The noteworthy colored illustrations by Charles Sarka fairly breathe with the indolent tropical Moorean life they picture.

## Western Office

1511 Heyward Building
CHICAGO

STanufacturing Plant and Subscription Offices DEPOSIT, N. Y.

Eastern Office
35 and 37 W. 31st Street
NEW YORK

## BOOKS FOR BOYS AND GIRLS



Lost in the Forbidden Land River and Jungle The Hunt of the White Elephant
by Edward S. Ellis
These new books by the most popular boys' author, comprises the "Foreign Adventure Series," and are sold at $\$ 1.00$ each, or $\$ 3.00$ for the set, neatly boxed
A Heroine of the Wilderness
by Hezekiah Butterworth
The story of Lincoln's mother. Price $\$ \mathbf{r} .00$
By Love's Sweet Rule
by Gabrielle Emilie Jackson
A touching and sympathetic story
for girls. Price $\$ 0.75$
for girls. Price \$0.75
THE JOHN C. WINSTON COMPANY, Philadelphia
PUBLISHERS OF "INTERNATIONAL" BIBLES

bottom, which kept its waters fresh and flowing and had its outlet in a little stream which flowed into the East River at the foot of James Street.

Smaller ponds dotted the island in various places, and an unbroken chain of water stretched across the island from James Street to the southeast to Canal Street at the northwest. An inlet occupied the place of Broad Street; a marsh covered the vicinity of Ferry Street; Rutgers Street formed the center of another marsh, and a long line of meadows and swamp ground stretched to the northward along the eastern shore. The highest line of lands lay along Broadway from the Battery to the most northerly part of the island, forming its backbone and sloping gradually to the east and west. On the corner of Grand Street and Broadway was a hill commanding a view of the whole island, and falling off gradually to the fresh-water pond.-N. . Times.

## THE QUALITY OF GRASS SEED

THE Maine law regulating the sale of agricultural seeds requires that grass seed shall be sold under a guarantee as to purity. Bulletin I 38 of the Maine Agricultural Experiment Station, which, doubtless many of your readers have received, gives analyses of the seeds which were collected by the inspector and those sent to the Experiment Station by correspondents in 1906. The dealers are very generally conforming to the law and the purity of most seeds is now guaranteed. The question naturally arises in the mind of a farmer,-should a seed be strictly pure, and if not, how nearly pure should it be ?
The purity of seeds varies greatly with their kind. It is possible to grow timothy seed so clean that it shall carry practically no foreign weed seeds. It is not as easy to grow any of the other grasses or clovers so clean. There is no need for the sower to ever buy timothy seed that is much less than 99.5 per cent pure. Samples have been examined by the Station the present year, which contained not a single foreign, harmful seed.

The best red clover seed will oftentimes carry as much as one per cent of foreign matter, although these impurities are usually comparatively harmless. In many of the low grade red clovers, which are only 95 per cent pure, it sometimes happens that a large part of the impurities

## Great Books at Almost Half Price

We are offering to lovers of beautiful books a sumptuous, De Luxe edition of the works of Louisa Mühlbach. The eighteen volumes comprising the set are beautifully bound in rich, red half-morocco, with gold-marbled sides, gilt tops and deckled edges, and are printed from clean, clear-cut ty pe. They are perfect in every mechanicaldetail. Mühlbach's writings are among the most famous, fascinating, and intensely interesting historical romances ever written. Hundreds of sets have been placed in the libraries of discriminating American book-lovers at the regular price of $\$ 40.00$. We are prepared, for a short time, to supply a very limited number at $\$ 22.00-a$ saving of $\$ 18.00$ from the list price (almost half), and you need send no money now. Our confidence in the genuine value, and mechanical excellence of these books is such, that we will upon receipt of the Inspection Form below, with your name attached, send the books, prepaid, to your address, on approval. The mere signing your name attached, send the books, prepaid, to your address, on approval. The mere signing if not satisfactory, after examination. But if you have any inclination to examine the books, sign and send us the coupon to-day as there are only a limited number on hand.

## Vivid Histories of Social Life at Many Famous Courts

No books published reproduce so vividly the social life of the times they describe "Frederick the Great and His Court" is the most remarkable romance ever issued. "Henry the Eighth and His Court" and Joseph the Second and His Court" are marvels for interest and instruction. "Sans Souci" and "The Merchant of Berlin" are unrivaled in the entire domain of historical romance. All classes are represented in these volumes as they lived and loved, thought and acted. Thus, the human interest always prevails and has given this set of books enduring popularity.

## The Library of Historical Romances

By MÜHLBACH
THESE ARE THE TITLES OF THE EIGHTEEN VOLUMES:

| Napoleon and the Queen of Prussia | The Daughter of an Empress | The Merchant of Berlin, and Maria Theresa |
| :---: | :---: | :---: |
| The Empress Josephine | Joseph II. and His Court | and Her Fireman |
| Napoleon and Blucher | Frederick the Oreat and His Court | Louisa of Prussia and Her Times |
| Queen Hortense | Frederick the Great and His Family | Old Fritz and the New Era Andreas Hofer |
| Marie Antoinette and Her Son | Berlin and San Souci | Andreasmed Ali and His Ho |
| Prince Eugene and His Times | Goethe and Schiller | Henry VIII. and Catharine Parr | Marie Antoinette and Her Son

Prince Eugene and His Times Berlin and San Souci

Henry VIII. and Catharine Parr
Hundreds of historical characters are written about in these volumes, and their lives and actions are described in the most interesting style imaginable. In reading these romances one really feels they are a part of the time and people they are reading about. Do not fail to bear in mind that these are historical romances, not only bringing you into intimate touch with the greatest events of the world's history, but indelibly impressing these events on ting and diverting reading.
A Typical Example of Their Rare Value-Contents of One Volume PRINCE EUGENE AND HIS TIMES-The Countess of Sossons. The Laboratory. Prince Eugene. The Riot. Barbesieur Louvois. The State Reception. Help in Time of Need. The Flight. The Parting. Marianna Mancini. The Trial. The Skirmish. Louvois's Daughter. The Court Ball. The Lady of the Bedchamber. First Love. The Betrayal. The Disappointment. The Foes. The Repulse. The Farewell. A Page from History. The
Emperor Leopold I. The Council of War. The Plains of Kitsee. The Baptism of Blood. Vienna. The Re-enforcements. The Fall of Buda. The Friends. The Marquis Strossi. Laura. The Regatta. The Negotiator The Lovers Reunited. Antonio's Expiation. The Dungeon. A Two-fold Victory. The Dumb Music. The Retirement of the Commander-in-Chief. The Fall of Belgrade. The Marchioness. The Flight. The Forester's Hut. Sister Angelica. Louis the Fourteenth. The King and the Petitioners. The Window That Was Too Large. The Imperial Diet at Regensburg. The Judith of Esslingen. Her Return. Tine Island of Bliss. The French in Speier. The Treasure.
Caspar's Vengeance. The Duchess of Orleans. The Deliverance of Trier. The Fire-tongs. Brave Hearts, The Advance into France. The Ravens. Sick and Well. The Duke's Dangerous Illness. Insanity and Revenge. The Ambrosia. The Betrothal. Vengeanc.
If You Wish This Great Work as a Gift for Some One Else, we
will send it to any address you wili send it to any address you
specify upon receipt of $\$ 1$ down. Pay the balance in monthly instalments of $\$ 1$.

## Funk \& Wagnalls Company

New York and London
In order to secure one of the few remaining sets it will be FUNK \& Whanalis for you to mail this couporet, New Yor Gentlemen:-You may forward, for inspection, one set of the "Library of Historical Romances," by Mühlbach, in 18 volumes, bound in handsome half-leather. It is understood that this is to be a brand new, perfect set, which, if satisfactory after 5 days inspection, I agree to purchase at the
special price of $\$ 22$, payable $\$_{1}$ five days after receipt of the books, and $\$_{1}$ per month for 2 I months. It is also understood that you are to prepay carriage charges on the set, and that I will hold the work subject to your order if I do not care to keep it.
$\mathbf{H \& G}$
Name. .



## HURLBUT'S STORY OF THE BIBLE

 FROM GENESIS TO REVELATIONTold in Language that Interests Both Old and Young.
RECOMMENDED $\quad \begin{aligned} & \text { For its Freshness and Accuracy } \\ & \text { For its Simpicity of Language }\end{aligned}$
DENOM ALL $\quad \begin{aligned} & \text { Bor is Simpicity of Language } \\ & \text { For its Numerous and Appropriate Illustrations }\end{aligned}$ As the Best Work on the Subject Hon. David J. Brewer-Can heartily commend it to all. Bishop Vincent-An in-
valuable aid to parents. Rev. Russell H. Conwell-Writen by a master hand,
directed by a master mind. Henry. Butts, Pes. Drew Theological Seminary directed by a master mind. Henry A. Butts, Pres. Drew Theological Seminary The absence of doctrinal discussion makes it acceptable to all. Mr. Marion
Lawrence, Gen. Secy. International S.S. Asso n-Best thing of the kind. Lawrence, Gen. Secy. International S. S. Asso n-Best thing
The greatest aid to Parents, Teachers and all who wish the sible Story in a simplified narrative
Beautifully printed and bound, 762 pages, nearly 300 half-tone ifully printed and bound, 762 pages, nearly 300 hal
illustrations, 8 in colors. Price Only $\$ 1.50$.
For Sale By All Booksellers, or Sent Postpaid on Receipt of Price. THE JOHN C. WINSTON CO., Dept. $G 1006$ Arch Street, Philadelphia PUBLISHERS OF THE "'INTERNATIONAL" SERIES OF BIBLES.

# \$5 Now Saves $\$ 2.50$ Later 

WHEN we first announced that the price of McClure's would be advanced from $\$ 1.00$ to $\$ 1.50$, but that we would accept subscriptions for two years at $\$ 2.00$ or five years at $\$ 5.00$, among the first replies were three from three eager subscribers who sent us ten dollars for ten years. We took them, and if anyone else insists we will give him ten years for ten dollars.
A GREAT MANY READERS OF McCLURE'S who would rather pay \$r.50 a year than do without McClure's have nevertheless taken advantage of our offer to get the magazine at the old rate for a little while longer.
IF YOU ARE ONE OF THOSE who read and like McClure's, and have not yet sent in your subscription, do so now for at least one year. This offer holds good only a short time longer. $\$ 5.00$ sent to-day will buy in subscriptions to McClure's Magazine what will cost $\$ 7.50$ a little later. The subscribers who sent ten dollars are saving five dollars and insuring a monthly visit from the best and most generous all-around magazine published.
WE HAVE ALWAYS GIVEN SOMETHING more than a dollar magazine when McClure's was a dollar. We will give something more than a dollar-and-a-half magazine now that McClure's is $\mathbf{\$ 1} .50$. The point is, send the money- $\$ 2.00$ or $\$ 5.00$-to-day.

# McClure's Magazine 

64 East 23d Street, New York


## MR. C. H. FORBES-LINDSAY

has been bitterly attacked because he dared, before President Roosevelt visited the isthmus, to say that our work at Panama has been well done.

The facts about the canal and its romantic history are ready for you in his book:

## PANAMA

The Isthmus and the Canal
Cloth, 368 pp., 16 illuetratipan. 2 mapa from latest surveys. ONE DOLLAR NET
At all bookstores.
THE JOHN C. WINSTON CO., Publishers, Philadelphia
are harmless. It is, however, poor policy for the sower to buy a red clover seed that is less than 98 per cent pure. The best grades of alsike clover will run about 98.5 per cent pure on the average. It is doubfful if the purchaser should buy an alsike whose purity is less than 97.5 per cent.

Redtop is the most difficult seed of all. It will, of course, contain more or less chaff. It is difficult to grow redtop free from timothy, and the seed cleaners find it difficult to separate timothy seed from redtop after it has once been introduced. Samples of redtop carrying as high as 12 or even 15 per cent of timothy are not unusual. If one could be sure that the impurities were harmless, like chaff and timothy, it might be safe to buy a redtop, even as low as 85 per cent pure. Unless one is assured of the character of the impurities, it is unwise to buy a redtop less than 95 per cent pure.
From the above, it is evident that in the judgment of the director of the Experiment Station, it is wise to buy only high grade seeds that are comparatively pure. Not only are the high grade seeds purer, but they are usually larger, plumper and heavier, more of them will germinate, and they make stronger plants. There is certainly no economy in the attempt to save one, two or even five cents a pound on the purchase of grass seed. Expensive as seed is, it is a comparatively small item in seeding down, when the cost of labor and fertilizer are taken into consideration. Chas. D. Woods, Director, Orno, Me. --Hoard's Dairyman.

## THE TAPPER

IGIVE the story as it was told to me, and it was told me for a fact. A man fell from a housetop in the city of Aberdeen, and was brought into a hospital with broken bones. He was asked what was his trade, and replied that he was a tapper. No one had ever heard of such a thing before; the officials were filled with curiosity; they besought an explanation. It appeared that when a party of slaters were engaged upon a roof they would now and then be taken with a fancy for the public house. Now a seamstress, for example, might slip away from her work, and no one be the wiser, but if these fellows adjourned, the tapping of the mallets would cease, and thus the neighborhood be advertised
of their defection. Hence the career of the tapper. He has to do the tapping and keep up an industrious hustle on the housetop during the absence of the slaters. When he taps for only one or two the thing is child's play, but when he has to represent a whole troop it is then that he earns his money in the sweat of his brow. Then must he bound from spot to spot, reduplicate, triplicate, sextuplicate his single personality, and swell and hasten his blows, until he produces a perfect illusion for the ear, and you would swear that a crowd of emulous masons were continuing merrily to roof the house. It must be a strange sight from an upper window.-From Stevenson's "The Amateur Emigrant."

## TO COMBAT LOSSES FROM "BLUING" IN LUMBER YARDS

THE Forest Service has undertaken a series of experiments at Bogalusa, Louisiana, with the object of rendering lumber immune from the attacks of "bluing," thereby lessening what at present is a serious loss.

Lumbermen through all the Southern States, and indeed in many other portions of the country, are familiar with the large amount of damage caused by the so-called "bluing" or "staining" of the sapwood of freshly-cut lumber, when exposed to the open air. This staining is not an inherent quality of the wood, but is due to the growth of low forms of plants called fungi, all of which probably belong to the genus Ceratostomella. This plant is too low in the scale of life to produce true seeds, but, as a substitute, it produces microscopic organisms called spores, which, when ripe, are carried by the wind in countless numbers.

The air of forests, and especially around many lumber yards, is so infested with such spores, that when timber is placed in the yard to dry, it is immediately infected with them. If the timber happens to be moist, and possesses the necessary food to support the life of the plant, the spores immediately germinate and send in little threads, or hyphæ, to penetrate the tissues. Their action decomposes the sap, and causes the wood to become discolored, and consequently it is known popularly as "bluing." The deterioration in value of lumber on account of this pest amounts to thousands of dollars each year.


What will be the real issue in the next presidential campaign? Some say the tariff; others say the trusts. Both are right, but even more important the tariff; others say the trusts. Both are right, but even more important face the questions raised by the Philippines and Cuba. They have already involved us in one war. Will they involve us in another?
THE WORLD TO-DAY for 1908 will not neglect the trusts and the tariff, but it
believes that the time has come for a broad and intelligent discussion of

## OUR COLONIAL EMPIRE

During the coming year we shall publish as a leading feature two groups of articles on this important need. One, comprising seven articles, will be descriptive, and will describe the life, resources and opportunities offered America in the

$$
\begin{array}{lll}
\text { PHILIPPINES } & \text { CUBA } & \text { PANAMA } \\
\text { HAWAII } & \text { PORTO RICO } & \text { ALASKA }
\end{array}
$$

The amount of information at our disposal, the new photographs we shall reproduce, and the interest in the subjects themselves, will make this series one of the most readable and fascinating ever published in any magazine. The contributors are recognized authorities. Another group of articles will deal with the problems which these possessions raise. They will consist of five discussions by some of the most prominent men in America ot the following subjects:

```
1. Can the United States Afford to Have Colonies?
2. Can the United States Defend Its Colonies?
3. Can the United States Administer Its Colonies?
4. Can the United States Americanize Its Colonies?
5. How Could the United States Give Up Its Colonies?
```

THE WORLD TO-DAY for January contains the second article of the first series. It describes the conditions under which Americans are living in

## THE CITIES OF THE PHILIPPINES

By HAMILTON M. WRIGHT, Author of "A Handbook of the Philippines.'
Mr . Wright is one of the best known authorities on the Philippines and the article will be fully illustrated in colors from new photographs taken by him especially for the purpose.

## CARTOONS IN COLOR

Another striking and novel feature of THE WORLD TO-DAY for 1908 will be a series of Cartoons in Color by the well-known artist, G. C. Widney. They are not caricatures, nor personal, nor partisan, but real works of art-"Editorials in Color," on great themes of current interest.

These are but two of the many strong features that give THE WORLD-TODAY an individuality of its own. THE WORLD TO-DAY is a world review, but not a lifeless record of events. The reader will find in it illuminating and
fascinating discussions of living events and living people. No matter how many magazines you take, it is different from them all. The only Magazine of its Class at a Popular Price of $\$ 1.50$ a Year. Send $\$ 1.50$ for a full year, or at least for a trial subscription of 3 Months
for 25 Cents. Fill in coupon and mail at once. If you read the first for 25 Cents. Fill in coupon and mail at once. If you read the first article on OUR COLONIAL EMPIRE you will want them all. THE WORLD TO-DAY CO., Chicago
$\checkmark$


## A Charming Love Story DULCIBEL

by henry peterson
"This is a pretty love-story, interesting and wholesome, worth reading both for the fictitious love tale and for the his torical information it contains."-Chicago Record-Herald.
12 mo , cloth, 400 pages. Illustrations in color. $\$ \mathrm{I} .50$ postpaid.

## GOOD NEW BOOKS FOR EVERYONE TO READ

## Some Hymns and

 Hymn WritersRepresenting All who Profess and Call Themselves Christians
By WILLIAM BUDD BODINE, D.D.
Short studies in the Hymnal of the Episcopal Church. He has illuminated the whole sphere of hymnology, tion about such things as Christians ought to know. Large 8vo, 400 pages, on feather-weight paper, $7^{72}$
illustrations. Half morocco, autographed by the author, illustrations. Half morocco, autographed by the author,
$\$ 5.00$ net; postage 24 cents. Cloth, handsomely bound $\$ 5.00$ net; postage 24 cents.

## A Trip to the Orient The Story of a Mediterranean Cruise By ROBERT URIE JACOB

The story is written in a pleasant, chatty way, which makes it very entertaining; and the style, simple and fascinating, in connection the mind many illustrations, brings the scenes vividy to mind. tions. $\$ 1.50$ net; postage 15 cents.


A Beautiful Gift Book The Philippines

## Under Spanish and American Rules

 By C. H. FORBES-LINDSAY"Meriting high praise from an artistic standpoint and standing as nearly perfect specimens of the bookmaker's craft." Clezeland Piain Dealer.

Crown 8vo, cloth, gilt top, slip cloth covers in cloth box. 566 pages with 26
superb photogravure illustrations. $\$ 3.00$ superb photogravure illustrations. $\$ 3.00$
postpaid.

## The Samaritans

The Earliest Jewish Sect, their History, Theology and Literature

## By JAMES ALAN MONTGOMERY, Ph.D.

"This is the most full and careful presentation in existence of the facts concerning the Samaritans.
is mine of information. The author has apparently overlooked nothing. The method and style are clear and simple, and the book deeerves a place in any ibrary."-Bibical World, niv. of Chicago Press. Crown 8 vo , cloth, gilt top, 372 pages and 29 illustra
tions. $\$ 2.00$ net; postage 20 cents.

## Good Form for Women

## By MRS. CHARLES HARCOURT

A neat and handy little guide to conduct and dress on all occasions. The author gives good, sensible advice. The simple, well-planned volume should well
justify its commendable end and aim." Chicago Record-
Herald. Cloth, small 12 mo , uniform with "Good Form for Men." ${ }_{\$ 1.00}$ postpaid.

# The Best New Reading for Boys and Girls 

Paddle Your 0wn Canoe Series
By EDWARD S. ELLIS
"A book by Edward S. Ellis is always a welcome
gift to a boy." - Philateiphia Record.
" Mr. Ellis is a very safe author to
hands, as his books are always wholesome and pure as hands, as his
well as interesting."-Pittsturgh Chronicic-Tclegraph.

Three Volumes
The Forest Messengers The Mountain Star
Queen of the Clouds
ramo, cloth. Attractively illustrated, with colored $\xrightarrow{\text { frontispieces. }}$
e, $\$$ r.co The set, boxed, $\$ 3.00$ postpaid.
Each volume, $\$$ r.oo. The set, boxed, $\$ 3.00$ postpaid.
The North Pole Series

## By Professor EDWIN J. HOUSTON

"Here is a work full of interest, ., it contains matter which is strictly accurate in details as to the panied an expedition of scientists to the North Pole and had marvelous experiences. They went part of the way by balloon or air-ship until they found the quest."-Phrladelphia Inquiver

The Search for the North Pole
The Discovery of the North Pole Cast Away at the North Pole 2 mo , cloth, handsomely bound and illustrated Each volume, $\$ \mathrm{t} .00$. The set, boxed, $\$ 3.00$ postpaid ANDIRON TALES, by John Kendrick Bangs. "Not since the publication of the two tures has there vealer. Humorously illustrated in color and line by Dwiggins. $\$ 1.25$ postpaid
Note.-These books are for sale at all bookstores, or we will send any volumes desired on receipt of THE JOHN C. WINSTON CO., Publishers, PHILADELPHIA Publishers of "International" Bibles.

## SOME USEFUL BOOKS FOR YOU

KITCHEN GARDENING. By Thomas Bridgman. This work comprises $15^{2}$ pages, liberally illustrated. 12mo. Cloth FRUIT GARDENING. By Thomas Bridgman. Liberally illustrated. 12 mo . Cloth, 50 c . FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth
MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By Charles Barnard. 12 mo . Cloth THE STRAWBERRY GARDEN: HOW IT WAS PLANTED. WHAT IT COST. By Charles Barnard. 12 mo . Cloth
FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12 mo . Cl., 40 C .
THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia. ANY OF THESE VOLUMES MAILED ON RECEIPT OF PRICE.

It is well known that bluing can be prevented by drying the lumber in kilns as soon as it leaves the saw. This is expensive, however, and unless great care is taken, considerable depreciation in its value will occur. There are also patented processes by which the timber is immersed in certain alkaline solutions.

The work could be simplified, if the lumber were piled in open forms, so that quick seasoning would take place; for the spores of the bluing fungus can only germinate in the presence of considerable moisture. But to pile lumber in this manner requires more space than if closed piles can be used. Hence the problem which the Forest Service has set itself to solve is by no means a simple one, and its results will be awaited with great interest by manufacturers of lumber all over the country.

## WOLSEY'S GOLD KNOCKER

JAMES PAYNE says that at Ottford, in Kent, there was formerly a palace of the archbishops of Canterbury, in which Wolsey is said to have held his court. "It was but a small place and is now a farmhouse, picturesque enough, but exhibiting no special signs of prosperity. The other day, however, this little incident happened: The farmer sent for a carpenter to do some odd jobs about the house, and among other things to mend the knocker. The man took it off and said, after a close examination of it: 'Do you know what this knocker is made of ?' 'Why, brass, I suppose.' 'No; it is pure gold.' And it was. Think of the years that that rich prize has hung at the mercy of every tramp!"--Boston Transcript.

## FOREST FIRES SET BY FRICTION

ACANADIAN engineer has evolved a new theory to account for forest fires. While with a Government surveying party recently in a part of the far Northwest, where these conflagrations are frequent and destructive, he happened to catch a tree in the very act of setting fire to itself and its companions. It was this way: The tree had been partly uprooted by a severe wind-storm, and leaned over against the trees nearest to it, some of which happened to be dead. Fierce gusts blew down from the neighboring mountains and caused the branches of the inclined tree to rub with considerable force against those upen
which it rested. After the friction thus developed had been kept up for many hours, avers this courageous engineer, the dead wood upon which it was exerted first began to glow, then burst into flame, and a fire that swept through miles and miles of valuable timber was the result. The story is one which it is hard, but not impossible, to believe, and it is more than likely that several times since the world began woodlands have been devastated in just this way. There is much doubt, however, if any appreciable amount of responsibility will be taken from careless campers by the engineer's discovery. Not once in a thousand years could the circumstances he records be duplicated, while the reckless hunter and prospector regularly endangers the forests at least three times a day. Simplest explanations are usually best. $-N . r$. Times.

## PLANTING STREET TREES

THE planting of street trees requires as much care as does their selection. It is not enough to merely dig a hole and crowd the roots into it. Any expectations based on such planting are doomed to end in disappointment. In laying out for street planting, let the first stakes be set at the street crossings. When the abutting streets also are to be planted, place two stakes at each corner, about thirty feet from the point of intersection of the curb line, on each street. Then space off the intervening distance, setting the stakes equally distant apart, but not less than sixty-five feet, as the shortest distance.

Street trees generally are planted too closely together. Sometimes this is done with the intention of cutting out alternate ones, as the growth of the trees require. This, however, is seldom done, and the trees grow up too thickly, thereby overcrowding and injuring each other, destroying all the individual beauty of the trees and the symmetrical arrangement which an avenue of trees should have. Park and Cemetery.

## THE HOUSE IN WARSAW WHICH NAPOLEON ONCE OCCUPIED

THE French representative at Warsaw has just received a curious petition from a Polish peasant, who asks that his house should be rebuilt at the expense of the French Government. The ground for the request is that the building in question is really a most


Plans for your new home with all the information you need to make home building easy and satisfactory. Keith's Magazine is devoted to home building, decorating and furnishing. Each 64-page issue contains plans for seven practical, artistic house designs, drawn by the best architects in the country. Keith's Magazine is filled from cover to cover with helpful ideas and suggestions for home builders and home makers. It helps to make every dollar you put into your home count for beauty, utility and lasting satisfaction. Subscribe now and we will send you our handsome book, showing 42 Cottage and bungalow Plans free This book gives you your choice of 42 inexpensive, up-to-date, model designs, with accurate descriptions, illustrations and cost estimates at current prices. The book also tells how you can obtain Free Blue Print Plans. With Keith's Magazine and its free information service, together with our books of designs, your building simply cannot go wrong, because Keith's Magazine deals in facts. It can be relied upon absolutely as the recognized authonty for home builders, and is the only publication of its kind in existence. Book of designs for 74 Homes costing $\$ 3000$ to $\$ 5000$. Keith's for I year, $\$ 2.00$. Book of 120 Beautiful lnteriors and Keith's for I year, $\$ 1.75$. Single copies of Keith's at all news-stands, 15 cents. MAX L. KEITH, Lumber Exchange 000, MINNEAPOLIS, MINN.


# Free Advice on Decoration 

THE unprecedented growth of the Correspondence Department of "House and Garden" has necessitated the opening of a new Department which will be devoted to the interest of those who are building, decorating or furnishing their homes.

Beginning with the new year "House and Garden" offers its readers a House Finishing, Decorating, Furnishing and Purchasing Service which is complete in detail and thoroughly practical. Full color suggestions for the exterior of the house will be supplied with recommendations of proper materials to obtain the results. For the interior, the treatment of standing woodwork and floors, the selection of tiles, hardware and fixtures will be considered and specifically recommended, with the addresses of firms from whom these goods may be obtained. Samples of wall coverings and drapery materials will be sent and selections of rugs and furniture made. When desired, the goods will be purchased and shipped to the inquirer; the lowest retail prices are quoted on all materials.

This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.

## YOU ARE A DEAD ONE IF YOU CAN'T COME BACK WITH A GOOD TOAST

the SKULL TOAST BOOK
are 200 witty toasts

and | 150 clever pictures |
| :--- |
| (count 'em) |

Sent postpaid on receipt of price
THE JOHN C. WINSTON CO., PHILADELPHIA
interesting monument of the first Napoleon, which ought to be preserved. The cottage is about five versts from the fortress of Novogeorgievsk, in Russian Poland, and it is asserted that, in 1806 , the Emperor passed an entire day and night within its walls, while supervising the passage of the Narev by his army. Napoleon, in fact, made the house his headquarters. At that time it was owned by a Polish peasant, named Afek, of whom the present occupant-known by the villagers as "Afek-Napoleon"claims to be the great-grandson. Above the entrance the following inscription has been cut: Palais de l'Empereur, 23 Decembre, 1806 . Inside, on a block of black marble, is another inscription in Latin: Napoleo M. Imperator Rex Hostes persequens. Hic hostem exit 23 Xbris, 1806 in Okunin. The origin of these inscriptions does not appear to be known, but the tradition of the Emperor's stay has always been piously preserved in the Polish peasant's family. -Boston Herald.

## INCREASING USE OF THE PENNY-IN-

 THE-SLOT GAS METERSGAS meters of the "penny-in-slot" sort have not yet made much progress in this country, but in England they are both popular and successful. Meanwhile, as the Engineering Record points out, Americans are feeling the effect of these machines in the shape of a decreased demand from London for our kerosene. The new meters, it is said, have already caused the abandonment of oil throughout a large part of the English metropolis, where it was used up to a very recent period. At any rate, one company there has 80,000 of the machines in profitable operation, and none of them is used by persons for whom it was practicable to buy gas in any other way. And the more convenient source of heat is used for cooking as well as for light. Prior to the introduction of the prepayment meters Sunday was, in London, a day of small gas consumption. At present there is an enormous demand, between 12 and 2 o'clock on that day, when thousands of dinners are cooked upon gas-stoves, and so great is the call upon the service at that hour that it has been difficult to get sufficient gas through the mains to meet the demands. Another excellent result from the point of view of the operating
(Continued on page 14.)
Original from


## SOME INTERESTING FORMAL GARDENS

WHATEVER may be the differences of opinion as to the relative merits of Formal Gardens and those laid out and arranged more on the lines of natural conditions, it is undoubtedly true that each enhances the beauty of the other. Turn from either one to the other and the beauties of both are accentuated. There are proper settings for each which seem to be demanded and when these are lacking the effect is lost. The harmonies and proprieties must be observed, if the picture as a whole is to charm not only the eye but the intelligence as well. The Formal Gardens illustrated and described by Mary H. Northend are found in North Shore estates, some of them belonging to persons well known to fame in this country and even throughout the world
"HILLSIDE"
A Small Country Residence at Greenwich, Conn.,
is the title of a delightful description embracing full details of the building, fitting and furnishing of an unusually charming country house. The article is illustrated from photographs of the exterior and interior, together with floor plans. Here the architect and his wife have worked together to the successful projection of the ideal house which is a home in all that the word stands for.

## THE FURNISHING OF A HOUSE

Mary M. Hodges supplies an article on furniture old and new, and contrasts the existing conditions in its manufacture with those which prevailed in the days of Sheraton and Heppelwhite, following its increasing production along lines teeming with interest.

## NATIVE SHRUBS

William S. Rice, in a very readable paper, urges a more extensive use of Native Shrubs for the ornamentation of our home grounds. In the list enumerated, some are the familiar ones which we recognize and whose beauty we appreciate and value. Others, while known by name, are rarely seen by those of us living far from their natural habitat. All that is necessary, however, toward their more intimate acquaintance is the original effort of their acquisition, for a majority of them if given only reasonable care will
thrive and bring forth their wealth of blossoms or of berries or of both, to charm and delight us.

## FACTS ABOUT HEATING HOUSES

The faults discovered in the heating plant in cold weather should be carefully noted so that when the fire is finally "pulled" in the spring, no delay may be encountered in replacing the plant or in remedying the defect. The requirements demanded in an apparatus for house heating are a proper quality of heat, a proper maintenance of uniform temperature and the accomplishment of both the above in an economical manner, as to fuel consumption. Mr. J. B. Chase, reviews the relative cost and merits of hot air, hot water and steam, as mediums to encompass the object and gives some useful information and hints which many of our readers will be sure to appreciate.

## A UNIQUE FLOWER SALE

Surely the love of flowers and the propagation and care of them begets a love for our fellow men. Kate Stevens Bingham writes of how from the chance desire to do "something different" Mrs. Margaret Deland has established an annual sale of flowering bulbs "for sweet charity's sake" which has become a fixed function each spring in Boston social circles. Great labor is involved, but who will deny that the world is benefited two-fold, first by the money derived from the sale in caring for the needy and second in the softening and cheering messages given in the writings of this celebrated woman.

## WINDOW GARDENS IN WINTER

Eben E. Rexford, than whom there is none more keen in discernment when questions regarding the selection, propagation or care of plants and flowers are discussed, will write of how to properly care for the Window Garden. This chapter of notes will be welcomed by those of our readers whose plants are beginning to show the effects of mistaken kindness in their treatment, during the early months of winter. Time yet remains to overcome the mischief unwittingly wrought and to restore vigor and health to their lagging energies, and bring them into the warmth of spring fully prepared to continue in robust growth under conditions less onerous.


## Before You Subscribe to Any Magazine

Get our New Subscription Magazine Catalogue. Every magazine published is offered by us singly or with others at a special price-lower than you get them from the publishers.

## Subscription Department House ${ }^{\circ}$ Garten

1006 Arch Street
Philadelphia
company has been the equalizing of the summer and winter consumption. The average takings from each meter in the service of one of these London companies is about $£ 3$, or $\$ 15$, per annum.

There have, of course, been attempts to cheat the "penny-in-the-slot" meter. In those first supplied the weight of the penny set the mechanism in motion, but with the latter patterns it is necessary to turn a handle after dropping in the coin, and if a penny with a piece of twine attached is introduced the machine simply cuts the cord and gathers in the coin. $-N$. $r$ : Times.

## HOW SCULPTORS' FRAUD ENRICHED the english language

THE origin of the word "sincerity" is profoundly interesting and suggestive. When Rome flourished, when her fame was spread the world over, when the Tiber was lined with noble palaces built of choicest marbles, men vied with each other in the construction of their habitations.

Skilful sculptors were in request, and immense sums of money were paid for elaborate workmanship. The workmen, however, were then guilty of practising deceitful tricks. If, for example, they accidentally chipped the edges of the marble, or if they discovered some conspicuous flaw, they would fill up the chink and supply the deficiency by means of prepared wax. For some time the deception would not be discovered, but when the weather tested the buildings the heat or damp would disclose the wax. At length those who had determined on the erection of mansions introduced a binding clause into their contracts, to the effect that the whole work from first to last was to be sine cera-that is "without wax." Thus we obtain our word sincerity. To be sincere is to be without any attempt on our part to mislead, misrepresent, deceive or impose on another; to be, and appear to be, what we are; to say what we mean, and mean what we say.The Churchman.

As all persimmons are not fruit bearing, the fruit bearing sorts of Japanese varieties are usually grafted on seedlings of our native sorts. Strong two-year seedlings are good for the purpose.Florists' Exchange.

Nooks and Corners in the Christmas Gardens of California Cbarles Frederick Holder........ 2
Oriental Rugs for the Chamber Richard Morton ..... 8
In Search of Bungalows: What we Found Felix 7. Koch ..... 9
Suggestions for Christmas ..... I 2
A Remodeled Country House Mary H. Northend. ..... I 4
Greens for Christmas Decorations William S. Rice ..... 14
Educational Value of a Great Shop The Editor ..... 21
A Small House which is Good Clarence E. Shepard, Designer ..... 26
The Artistic Arrangement of Flowers 7ane Leslie Kift. ..... 28
Suggestions for the Month ..... 3 I
The House Leila Mechlin ..... 31
The Garden 7obn W. Hall ..... 32
The Editor's Talks and Correspondence Margaret Greenleaf ..... 33Old Ivory Finish on Plaster Walls Tiling for a Bath-room Simplicity in HardwareA Water Supply Wall Coloring and Furnishing
Garden Correspondence W. C. Egan ..... 34
The Stable and Kennel-House Dogs 7obn Gilmer Speed ..... 35

Copyright 1907 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Ofice, June 26, 1901 SUBSCRIPTION PRICE, $\$ 3.00$ A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS Remittances may be made by money-order or check, payable to the order of House and Gariden

> Subscribers should promptly notify the publishers of any change in address
> Manuscripts and photographs suitable for publication in House and Garden are solicited. Such as are not available will be returned, if postage is enclosed

## PUBLISHED BY THE JOHN C. WINSTON CO roo6-ıı6 ARCH STREET, PHILADELPHIA



FIG. I-RESIDENCE, AT PASADENA, OF THE RIGHT REV. JOSEPH H. JOHNSON, BISHOP OF SOUTHERN CALIFORNIA

# House and Garden 

# Nooks and Corners in the Christmas Gardens of California 

By CHARLES FREDERICK HOLDER

THE lover of artistic and picturesque gardens finds an interesting and novel field in Southern California. In Los Angeles there are many typical sunken gardens, and on Orange Grove Avenue, Pasadena, the famous Busch place has perhaps one of the most striking gardens of this kind in the country, a small cañon being given up to it. The rolling, undulating lawn here is particularly a thing of beauty. Mr. Busch at the time of the St. Louis Fair was a member of the art committee, and that this love for art extends to landscape gardening is shown in the great garden which extends from his Pasadena house to the Arroyo Seco.

I have mentioned this place not to describe it particularly but to illustrate what can be done with the most repellent and seemingly hopeless ground in a short time. Two years previous to the present writing the sunken garden with its splendid reaches of turf was an impossible hill rising between two small cañons, a piece of ground which doubtless had never felt the keen edge of a plough or a cultivator of any kind; indeed, a more unpromising piece of country it would be difficult to find, yet it was transformed by the clever artist in landscapes into a rolling surface of beautiful velvety green in lines of


FIG. 3-"THE HONEY PLANT"
beauty. The lawn slopes down to the edge of the arroyo and is laid out in an attractive manner, the gardener taking advantage of the natural beauties of the land, which is in places covered with live oaks. On the higher level the cañons which run through this place have been completely sodded, and at the lower end stand a beautiful group of live oaks which throw their wide branches over a large surface, furnishing refreshing shade.

This great garden is also planted with trees and in two or three years will be one of the most attractive private parks in Southern California, suggestive of what a citizen can do for a town, as the gardens are thrown open to the public several days in the week and have been visited by thousands of people from all parts of the world, which in itself is remarkable as there are no startling features, merely a corner in Southern California made green and radiant by the magic touch of water, a remarkable example of the effect of lawns.

During a recent trip East the writer visited many of the famous public gardens of America and came away with the impression that the most charming vista he had seen in crossing the continent was the vast lawn or well cut field of Franklin Park of Boston where a green rolling lawn stretched


FIG. 7-A NOOK IN MODJESKA'S CALIFORNIA GARDEN, "ARDEN

away into the distance and lost itself in the forests. Perhaps grass is particularly welcome to Californians, as illustrated by the miles of blue-grass and Bermuda lawns to be found everywhere in the towns mentioned.

If an examination of all the places which appeal to the artistic eye is impossible, one may glance en passant at some of the nooks and corners of Southern California gardens which are instinct with charming features, the gardens that are refined and cultivated, as are certain men and women. Such nooks are found on the place of the Bishop of Southern California whose home, Fig. i, stands above the Arroyo Seco, in Pasadena. The house, one of fine design, commands a splendid lawn with old Australian eucalyptus trees here and there, and a comprehensive view of the arroyo, a river of verdure which winds its way down from the mountains.

From the front of the house in winter the white peaks of the Sierra Madre may be seen over the mass of green and overhanging the real, wild garden of Southern California, Fig. 2, the poppy beds, which comprise acres, indeed miles of the yellow bellshape Eschscholtzia, which extend along the slopes of the Sierras; characteristic of the land of gold, presenting a blaze of color so pronounced that it has been seen twenty miles away.


FIG. 2-POPPY FIELDS-HUNDREDS OF ACRES OF FLOWERS

It is interesting to watch these flowers, as at night, indeed as early as four o'clock, they begin to close, coming out again when the sun appears; hence the gradual disappearance is seen at night and often wondered at by those who do not understand it. The socalled poppy is not confined to these upper slopes but is found everywhere in rocky barren places. The slopes it loves best are most uninviting,-semiwashes where the gravel is coarse, yet converted into a field of the cloth of gold which has become a mecca for countless throngs of tourists. There is a sumptuous "poppy car," and the globe trotter is landed in the very heart of the poppy field by an electric car. The poppy has been planted along the nooks and corners of the Pacific Electric road between Pasadena and Los Angeles and in midwinter when the rains have been early, the line is a band of gold, deep and ruddy, which winds its way down from the mountains, a remarkable and distinctive feature, not to say unique. At certain seasons these poppies are seen on the desert, presenting a remarkable appearance.

In some of the Pasadena and Los Angeles gardens in sunny nooks one may see the remarkable honey plant, Fig. 3, a column eight or ten feet high, the upper portion a mass of small old-fashioned pink


FIG. 8-APPROACH TO A RANCH HOME, SHOWING PARTS OF THE GARDEN
blossoms in whirls which presents a fascinating field for the humming birds which throng the gardens here. Beyond it, and as a background are loquat trees, and back of them a wall or trellis of fuchsias growing to the astonishing height of ten feet or more.

Even in the street in midwinter one sees vast mounds of bloom in unexpected places, the rough bark or trunk of the big fan palm, Fig. 4, being covered with pink ivy geraniums often presenting a solid mass of color.

One need not confine himself to towns alone to observe the beautiful in landscape gardening and house decoration under favorable and semitropic conditions. The ranches, particularly the large ones, afford unlimited field for the searcher after the picturesque. In the old days the cheapest and most available fence for the missions was the cactus or tuna bed and when it reaches its greatest height it becomes a picturesque feature of the landscape, winding away over the semi-desert like some strange weird monster. Each bright green leaf is armed with stiff spines also bunches of very minute ones, while upon the leaf edge grows the pear-shaped tuna


FIG. 5-CACTUS OR TUNA
or fruit, also covered with minute darts, Fig 5. The tuna when ripe is a rich purple, and very good when the taste has been acquired, but many are its victims, especially the "tender foot," who discovers its dangers too late. Once when walking over the mountains of Santa Catalina I came upon two ladies one standing with her mouth open and tongue out to an extraordinary extent, while the other was endeavoring to pick from it the countless minute darts of the tuna which she had bitten into. History repeats itself, even if it is sacred: the lady had eaten of forbidden fruit.

The island of Catalina is a beautiful winter garden in itself, eighteen or more miles from land out in the Pacific, and is a treasure ground for the botanist and lover of gardens.

The cañon sides are green with the wild lilac, and the so-called holly which is covered with berries during the winter months is picked and carried to Los Angeles by the islanders as "Christmas holly." In one of the gardens all the island trees have been gathered and a most interesting cactus garden comprising many rare species is seen. Among the rare plants
is the so-called banyan, a species of currant that attains the size and shape of a gigantic ball, twenty feet across. Here is an oak peculiar to the island, manzanita, adenostoma, winter apple, and others of interest and beauty.

A home about which many attractive nooks can be found is up the Santiago cañon in Southern California, Fig. 7. Here the actress Modjeska made her home and named it "Arden." The ranch is reached through a beautiful country passing through groves of live oak which rise on every side. About the house are groups of ancient trees!beneath which is a beautiful pool, in whose crystal waters the trees are reflected so distinctly that the picture can be almost reversed. Around this home are many delightful trails and walks, suggesting a fascinating pastoral life. In thinking of gardens and homes which are characteristic one cannot pass the famous one at Santa Anita Ranch, owned by E. J. Baldwin, the latter a pioneer in California, surnamed Lucky, and known to thousands over the country. The splendid and typical ranch is a mecca for tourists from all over the world. It was, so it was said, Baldwin's ambition to own a stretch of land from the Sierras to the sea, and that he nearly accomplished it goes without saying as his property began with Santa Anita cañon in the Sierra Madre, a few miles east of Pasadena, and extended many miles or almost to the Pacific, a splendid reach or sweep of land embracing several large ranches. The ranch house, Fig. 8, stands near an attractive lake in a forest of some of the largest palms and eucalyptus trees in the country and a maze of tropical verdure, constituting one of the most picturesque spots on the slope of the mountains.

Almost encircling the ranch house is a lake, a rare thing in Southern California, on the edge of which are many palms, papyrus from the Nile and other plants,
giving a tropical effect. From the drive the ranch house is seen through arches formed by the eucalyptus trees, and on every hand and in every direction are vistas pleasing and novel, at least to Eastern eyes.

The palms here are among the oldest and tallest found in Southern California, dating from the early mission time more than a century ago.

Fine drives wind through the place, encompassed by rare plants and trees, the entire ranch with its enormous orange, lemon and deciduous groves, its hundreds of acres in wine grapes telling the story of productive


FIG. 9-A LANE BACK OF A RANCHER'S HOME Southern California. One of the picturesque features of the place, an Eastern feature, is the poplar lane, Fig. 9, a long double line of these beautiful trees growing to great height and blending into rows of eucalyptus trees of which there are scores of varieties on the ranch. The latter are a study in themselves, the blossoms being fascinating in their colors and shapes. One tree is a blaze of red, the blossoms being blood color, presenting a strange and startling contrast to the vivid green leaves.
Another one ( $E$. globulus) has the daintiest, fluffiest blossoms hanging in pendulated clusters of softest white and pale green. Here is a variety (E. Germani) whose blossoms are of a tawny yellow color, in sphere-like clusters, three or four inches in diameter. The widely differing members of the eucalypti family-about one hundred and forty-give to California a great diversity of distinctive trees for ornamental and economic purposes, for their uses and adaptability are almost as numerous as is their variety.
Within a radius of thirty miles of Los Angeles there are scores of ranches and fine places nearly all of which are characteristic of the country, containing attractive nooks and corners, especially in their wealth of verdure, their contrasts of trees and flowering plants from every quarter of the globe.

# Oriental Rugs for the Chamber 

By RICHARD MORTON

FOR an elaborate Louis XV. or Louis XVI. chamber, Kerman florals are undoubtedly the most appropriate. The delicate colorings are in exact harmony with the colorings of the French eighteenth century, and the designs are those from which many French fabric designs were derived.

But for a Colonial or Georgian lchamber, the connoisseur will naturally turn first to the small rugs of the Caucasus. The patterns are rectilinear and range from the extreme simplicity of some Kazaks to the geometrical intricacy of many Daghestans. The colorings range from deep rich shades that melt softly together, to white, hard tints that set forth hard lines and angles.

The rugs of softer outline and richer color should be selected for Colonial and Georgian rooms of the earlier or Chippendale type, when furniture was in carved and pierced dark mahogany, and woodwork and plaster still retained the bold relief and elaborate architectural details of the Renaissance. In the latter half of the eighteenth century, Classicism replaced Renaissance; large curves and heavy construction in furniture gave place to straight lines and delicate frames; carving, to inlay and painting; dark reds and greens, to roses and pinks and elusive intermediate or closely adjacent and faintly contrasting tones. So that in Classic Colonial or Georgian chambers, Caucasian rugs in the lighter tones lie most quietly.

This phrase, "lie quietly," expresses what all rugs should do. If a rug seems to mount up from the floor, because of too great color contrast with the flooring, or of too little contrast with the rest of the room, it is badly placed.

Don't try to delude yourself with the idea that any Oriental will fit any Occidental interior. It is true that just as the period styles of the West overlap and share characteristics, so many rugs from the East respond to many different types of decorative environment. But it is equally true that a dark green floor covering in a Louis XV. interior is an abomination; and that in a mission room a Tabriz in light tints screeches like a siren whistle.

Of course, it is easier to cover floors appropriately with Oriental than with domestic rugs. The domestic rugs in patterns that imitate the Oriental have had most of what is good in the colorings eliminated in the process of interpretation on machine looms. Hatchings and irregularities that stamp the original with individuality vanish beneath the unsympathetic hand of the Philadelphia adapter. Most of the domestic rug patterns copied or modified from the French or English do not deserve even unfavorable comment.

The domestic rugs lack repose. They cannot "lie quietly" on the floor because they are not at peace with themselves. In walking over them it is necessary to surmount ridges of red that are separated by valleys of green, or to tread gingerly on kaleidoscopic hillocks.

Almost all Oriental rugs are restful. No matter how elaborate the detail, the gradations and contrasts of color are cunningly calculated to show it distinctly without lifting any part unduly.
The principles that have been observed in their composition ought to be followed in the composition of the interior as a whole. Remember that effects of distance contrasting with nearness, and of restless movement, are inevitable when harshly unlike colors are juxtaposed. Remember that as colors whiten and go towards blue they achieve distance and delicacy but lose mass. Do not give an ethereal appearance to the floor by using a rug in delicate tints beneath a dark ceiling and walls.

Only when the general color scheme of a room is light may the rug be light.
Among Oriental rugs that fit Colonial and Georgian chambers are those from Eastern Turkey and adjacent Persia; Mosuls, Sehnas, Serebends, etc. Many of the Mosuls-like some of the rugs woven by the Turkomans east of the Caspian-are very like the Caucasians in pattern, and not remote from them in manner of coloring. The frequent repeat of Sehna and Serebend patterns renders them undesirable for environments where decorative motifs are large and bold, and spaces are grand. But for simple chambers nothing could be better.



The original and most characteristic Bungalow in Southern California

# In Search of Bungalows WHAT WE FOUND 

By FELIX J. KOCH

WE were going out West and, incidentally, Southwest armed only with kodak and note book. "Keep an eye out for attractive bungalows," the editor said, "I can use something along that line." So we did. Wherever we went we inquired for bungalows. Our first source of information was on the railway crossing the Texas plains.
"Oh, you must get off at Deming, down in New Mexico; the whole town's built of bungalows."
"What else is there at Deming ?" we asked, interested. "Oh, nothing much! People found that by boring down into the desert and putting up windmills they could get water. Land was cheap and so the town sprang up. All lumber and the like . has to be brought in by railway, however, and so the bungalow style obtains!"
In a search such as this one, pictures must be relied on for the larger part of the story. We are at Yuma down on the border-land between Territory and State.


FIG. IO-BUNGALOW HOTEL, APPROACHED BY PERGOLA
"Don't fail to visit the Indian School," a friend told us, "the dearest brown bungalows, filled with young redskins. Really a model place of its sort!" Fig. I. We thought we knew bungalows when we saw them, but the two-story structure, Fig. 2, and the one-story dobe, Fig. 3, that people thereabouts designated by that name, were really quite beyond us. Nor was that yet the end.

Out in the Imperial Valley, where they have changed desert to garden, ne'er-do-well sons of rich men fresh out of college are set to ranching and sowing wild oats. Each of these has his "bun-galow"-and see what he calls by that name. The kodak has taken one which we trust speaks for itself, Fig. 4.

By and by we came to Pasadena the lovely, and to tourist-land.
"Yonder bungalow" our guide presently indicated and-we pressed the button. We were obeying instructions, Fig. 5. Down a shady little lane overhung with pepper



FIG. 6-"THE BRILLIANCE OF THE MOONLIGHT DEEPENED THE SHADOWS OF LEAF AND TREE"
trees, we found the original bungalow of Pasadena and Southern California. It was the first and still remains among the most characteristic of the type and close to the ideal. There were other bungalows, but somehow or other they recalled to us the bungalows of New England, or those which New Yorkers build, from the graft they filch, down on the coast of New Jersey.

We had a newspaper friend at Los Angeles, and we appealed to him. "Have you seen the bungalow village at Santa Monica?" "Not yet." Then he led the way. Duplicate of Asbury or Atlantic City, but there we'd call them cottages, wouldn't we ?

Up on Mt. Wilson, however, was our choice of bungalows. We had to reach it by burro, an exhilarating ride up through the mountains. On top the mountain, we must stay overnight. "Each room, you know, is a bungalow," the bôtelier explained, as he led forestward.

Built in a circle around the cone of the mountain were perhaps a dozen bungalows, unpainted, primitive frames, each with its porch to command the gorgeous view of the valley. The pines and the larches sang through the night, and from our bed we could peep out through the trees into the moon-filled valley, Fig. 6.

Regretfully we passed on to Santa Barbara. The old del-a-Guerra place, dating back to the times of Mexican rule, well-nigh, they told us was the ancestor of the bungalow in the West, Fig. 7. And out at Pacific Grove near Monterey, we found its most modern exponent, in the cottage erected by the worldfamous Loeb to live in while he experiments with the secrets of life. His "little low bungalow," he calls it.

Northward, in the valleys near St. Helena, one meets the bungalows too, and out in their gardens they have bird houses, larger than most dog-kennels, in which the sweet songsters disport the year through, Fig. 8. "Bird bungalows," they term them.
At Sacramento the "bungalow" has a style of its own, Fig. 9, and down at Fresno it is still quite another. There, public buildings in the "bungalow" style are approached by tempting pergolas, that add greatly to the effect, Fig. io.

Nor is the West alone in the possession of bungalows or the ability to misapply the name. Out on Lake Pontchartrain, near New Orleans, people speak of having their bungalows too, Fig. II. There though, these are little better than fishing club-houses as the photo attests.
Such wide variation of ideas as to what constitutes a bungalow is remarkable in the light of all that has been written and published in recent years relating to and descriptive of this most popular type of house. Because a house is one story in height, it does not follow that it is a bungalow. Simplicity of design, unbroken roof lines and freedom from extraneous ornament are some of the primary requirements. The form has much to do with the style-low studded walls, wide extending eaves and a hospitable entrance-way go far towards entitling the subject to bear rightfully the coveted title. How long it may be before the popularity of this style wanes and gives way to something else remains to be seen. The characteristics which have made the bungalow popular will insure its supremacy with people of good taste. It is the embodiment of many recognized principles of true art.


FIG. 7-" THE ANCESTOR OF THE BUNGALOW IN THE WEST"

# Suggestions for Christmas 

## Inexpensive Presents that Appeal to the Finest Taste

PHOTOGRAPHS and photogravures of famous paintings are always welcome gifts. The Christmas season naturally suggests the "Madonna" pictures. As this incarnation of maternal love and childish innocence was the most frequently repeated subject in early art, there are many presentations of it to choose from. In fact, a carefully selected set of, say, ten photographs, would make almost a history of Italian painting, for there is an uninterrupted and constantly improving series beginning with the stiff Byzantine type of Madonna and ending with the most perfect presentation of the Virgin in art -Raphael's Sistine Madonna.

Cimabue, Duccio, and Fra Angelico left us the most beautiful of the earliest examples. Though they retained the hard gold background of the Byzantines, they introduced a freer, more natural feeling into the treatment. Fra Filippo Lippi broke entirely with conventional methods, and gave us a graceful young woman of his day, richly robed and surrounded by every sign of opulence. Botticelli's imagination carried his even farther; nowhere does he reveal himself more characteristically than in these pictures of the young mother, crowned and enthroned, and surrounded by dreamy saints and angels.

But the prince of Madonna painters was Raphael. Of the many attributed to him, at least three dozen are incontestably his work. Every one is familiar with his Sistine, and the Madonna della Sedia; there are others scattered about in the world's great museums which would well repay acquaintance. One of the loveliest is his Madonna of the Meadow, in Vienna.

There are Madonnas by the Spanish masters to choose from; but of a higher type artistically are the early Flemish and German, quaintly, almost absurdly drawn, yet full of mediæval dignity. Hugo van der Goes's "Nativity" in the Uffizi Gallery, is one of the world's very great pictures.

First among all German Madonnas-in fact one of the greatest gems of German art-is Holbein's Madonna of Burgomaster Meyer, at Darmstadt. Albrecht Dürer's most famous is the Madonna of the Pear, now in Vienna. Earlier than these is Lochner's dream of ecstatic piety-the Virgin in the Rose Arbor; and the grand and solemn Madonna by Schöngauer in St. Martin's Church at Colmar.

The last great treatments of this theme were by the Dutch and Flemish masters of the seventeenth century. The best known are the Nativity by Rembrandt, the Madonna of the Innocents by Rubens, and the Madonna of the Rosary by Van Dyck.

Modern Madonnas scarcely deserve mention beside these great names. Not only are they inferior
as paintings, but they have ceased to be the highest expression of the deepest wave of religious fervor the world has ever known. They have added nothing to art. Photographs of the usual size, or photogravures $15 \times 20$ of all the Madonnas mentioned, can be bought. Colored prints should be avoided unless published by a reliable house and at a good price.
"I know a shop full of the most beautiful handmade baskets," said a woman with a genius for scenting out unusual and attractive things. "Everybody on my Christmas list this year is to get a scrap-basket. One can always use them and it simplifies the gift problem for me. I have found a dealer who has baskets every color and every shape-to harmonize with every room. None of those beribboned atrocities with foolish looking bunches of fruit or flowers dangling down the side; but dignified, hand-woven articles that it is a pleasure to buy. They come from Japan, Mexico, Sweden, Germany, plain serviceable baskets of no particular weave; very beautiful, but no less useful ones of intricate workmanship. Indian baskets are of course the most expensive. I am not going in for them. But there is a four-cornered nested basket of Japanese make that is durable and artistic, while inexpensive-and you can have it stained to match a sample of wall-paper or drapery. In that way I am sure to suit all my friends."

Among novelties in brass and copper are reproductions of antique door-knockers. Though knockers were long since generally replaced by doorbells, the decorative effect of the old-time metal striker is far better. Failing the genuine antique, the next best thing is the faithful reproduction. The well-known Spanish design of the lady's hand projecting from a frilled sleeve (originals of which can still be picked up in Cuba), the Russian doubleheaded eagle, the lion or the dragon grasping a heavy ring in the mouth, the Medusa head, the bunch of grapes-in fact all the familiar designs-have been copied, and are as excellent as the best material and the best modern facilities can make them. They run from four to ten and a half inches in height, and even a slender purse is not much slenderer after indulging in one.

The furniture styled "Quaint" is distinctly lighter in construction than its predecessor, "Mission" furniture. It has plain surfaces and simple lines, and the wood and leather used are finished in soft harmonious colors. Good workmanship is evident in even the most trivial details. All joints-not that joints are a trivial detail by any means-are of the old-fashioned tongue and groove kind; for these have never been improved upon by any modern device.

## Suggestions for Christmas

Joints so made by painstaking German workers of the fifteenth century are still intact. In other matters besides joinings "Quaint" furniture follows the best traditions of the craft. The Spanish and Russian morocco comes from the goat and the calf, and is unequaled for durability-a quality that cannot be claimed for sheepskin.

In Northern Europe, where forests were abundant, religious ideas in the Middle Ages were expressed in wood. This was left in its natural state, or covered with stucco and colored. The finest specimens have come down to us from the Tyrol, the Rhine country, Nürnberg, and throughout Flanders. The painted virgin in her shrine at an Italian street corner, became the carved virgin of a little German town. These little masterpieces-from the very primitive, simple thirteenth century work to the sixteenth century products so wonderfully intricate in detail-are today reproduced in plaster. These copies so closely simulate the grain of the wood, the worm holes, and the faded paint, that the difference in substance is hard to detect. Beside the many "mother and child" groups, we have that exquisite single figure-the Virgin of Nürnberg. The twelve-inch reproductions of this great work of an unknown master are easy to find. But they should come from a good dealer. The cheaper statuettes have been made from copies of copies, and are slovenly and unfaithful in detail.

Did any one-even a collector-ever have too many trays? The tray, or server, or salver, or plateau, or plate, or whatever you choose to call it, has always been a much-prized accessory in housekeeping, and even holds an honored place in history. For was it not on one of the salvers in the castle of Machærus that the head of John the Baptist was presented to Herod? And was not the heir of Spain presented to his father, as were many other royal heirs, on a golden salver? These "birth trays" were so much a feature of etiquette in high circles in the Middle Ages, that great artists like Masaccio and Gaddi did not disdain to design them. Most of the fine antiques have been bought up; but quantities of modern ones may be had-from the common kitchen tray to the latest importation from England the polished mahogany tray. Between these two kinds, come innumerable others varying in material and shape. One woman uses nothing but the oldfashioned lacquer trays - not the imitation with gold decalcomanie figures, but the original decoration that "won't come off." Another collects hand-made brass and copper trays. These are inexpensive, and with their beautiful play of rose and gold tints puts to shame the cold icy polish of the conventional silver server. And now the latest thing in trays is made of wood-oval, circular, oblong, with or without glass protector. The glazed ones would look exactly like a mahogany portrait frame, were it not for the brass
handles. They come from twelve to thirty inches in length, and the price even for the largest size is reasonable. The same thing in dark oak runs a little cheaper. An inlaid mahogany tray that could be used either in serving or as the top to a small table would delight the heart of any woman who serves afternoon tea.

Machine carving may satisfy those who want quantity rather than quality; but with those whose taste has been developed by experience and general culture it can never take the place of hand-carving. The mark of the chisel is quite as important as the enthusiastic rendering of a design planned for wood. However, if we had to trust to native American labor for our hand-carved furniture there would be little of it. The majority of carvers in a famous American firm established over half a century, whose furniture is of distinguished merit, are of foreign birth. The American would rather run a machine than take years to learn a handicraft; and the opportunity to learn is only just now beginning to be offered him by our trade and art schools and arts and crafts societies.

Women with a keen feeling for beauty like handmade jewelry. They insist on individuality in their personal ornaments, and love the lines and surfaces that come to metal only beneath the hammer of the patient workman. We have in this country a few isolated jewelry craftsmen who understand ornament as it was understood before the world was commercialized.
The workshop of such a craftsman is a fascinating place. His tools comprise forge and anvil, blowpipe, hammers and mallets of every conceivable shape, chasing tools; about him are sheets of gold, silver, copper, bronze, and little trays of stones bright and dull. He gloats over his bits of labradorite that show the deep green-blue of the peacock eye; he will show you beryl that runs through all the shades of green, blue, and gold; he has lapis from Chile, opal and turquoise matrix from Mexico, dusky tourmalin from Maine, transparent rose quartz from Arizona, and pieces of malachite, fluorite, etc., whose mysterious hues are far more beautiful in his eyes than the hard glitter of the diamond. An unusually attractive pendant is made by beating into an irregular disc a nugget of gold or silver, then piercing it by some quaint design, and studding it with one of the above stones.

People who regard the artistic value of a gift will enjoy buying Newcombe Pottery. It is made in the South, from Mississippi clay, and the products of the South furnished the motifs for the designs used. Every piece passes the scrutiny of a severe jury. Such protection is not guaranteed to the purchaser by all potters. Newcombe tea sets are particularly lovely. No pattern is ever duplicated. Each has individuality and shows a high standard of artistic excellence.

# A Remodeled Country House 

By MARY H. NORTHEND

NOT far from the Middlesex Hunt, in Concord, Massachusetts, is situated the all year round home of Mr. Grafton St. Lee Abbott. In the midst of rolling country, it stands the central feature of an estate consisting of about two hundred acres of meadow and woodland, bordered on either side by river and by road.

The house itself is commodious and handsome, a perfect type of the remodeled house, giving a splendid illustration of the successful alteration of a small country house. There is no set plan in its arrangement, no special style to its architecture, for in every particular the owner's desires were simply carried out by the architect, Mr. Philip B. Howard, of Boston, Massachusetts, and his ingenuity, not less than the owner's excellent taste, is responsible for the pleasing results.

The grounds are entered at the left of the dwelling through an avenue which winds between the stable at the left, and the house upon the right. On approaching the dwelling it seems unusually low because of its unique construction, and the fact that it is set fairly upon the ground with no vestige of foundation save under the middle part which formed the original house. This consisted of four rooms, to which a dining-room has been added, and it forms the right wing of the present structure.
There is no more difficult task than to remodel an old house to conform with the ideas of a new owner, and one that fails more frequently than it meets with success. The original house in this instance, as well as the din-ing-room, is of frame construction, with a covering of plaster on metal lath. A deviation is found, however, in the large ell at the left which is constructed of brick. The exterior of the ell is nearly hidden during the summer by the drooping branches of a great elm, which is a feature of the grass field at
the left of the grounds. At one side of the large door by which entrance to the house is gained, is a low covered veranda, unique from its position, for it is all upon the ground. Passing through the door one reaches the hall proper, one of the handsomest parts of the house. It is very wide, with timbered ceiling the beams for which were obtained from trees primeval that had grown upon the estate. The splendid effect of the hall is in part due to the wainscoting which extends from the floor of brick set in mortar, to the ceiling. The panels of wood as well as the moulding in the hall are white, contrasting beautifully with the dark beams of the ceiling and the brick floor. The hall is really more formal than any other part of the house, the idea of the owner being comfort not formality. In recessed alcoves Constitution mirrors are hung and interesting pieces of furniture add to the distinctiveness of the hall.
At the left of the hallway is the large receptionroom which occupies an entire wing of the house and ends in wide windows the seats of which are piled high with downy cushions. A large open fireplace is at one side of the room, and the walls on either side are effectively treated with rich panels of tapestry. Overhead, the ceiling beams accentuate the lowness of the room, and give it an old-fashioned aspect.

This room is really library, reading-room, and reception-room combined in such an agreeable manner that there is in the arrangement of it all no discordant note. Near the entrance, at the end of the room, are low book cases filled with choice books purchased more for their worth than because of their luxurious bindings. Opposite the large fireplace is a writing desk for the convenience of the guest or the master. Upon the walls are a number of portraits of the famous Adams family with whom Mrs.

## A Remodeled Country House



VIEWS OF THE RECEPTION-ROOM
Residence of Grafton St. Lee Abbott, Esq., Concord, Massachusetts

Abbott is connected, being a lineal descendant of the Presidents bearing that name.

The dining-room, like the receptionroom, occupies an entire ell of the house. Here again, the ceilings are timbered with huge beams which give a very solid and substantial appearance to the room. The floor is of brick corresponding to that of the hallway. The walls are wainscoted with oak showing a dado of plaster, and brick floor, oak wainscoting, and huge ceiling beams unite in giving a very unique effect to the room. Over the fireplace is a cement arch which is one of the chief features of the apartment.

At one end of the dining-room is a latticed window through which one obtains glimpses of the connecting conservatory beyond. Mr. Abbott has made his conservatory a valuable one through the beauty and rarity of the plants which he rears there, and during the winter it is filled with an endless profusion of blossoms.

The stairway leading to the second floor is reached through the main hall from which the smaller hallway opens. The little hall is quite as interesting as the rest of the house, with low broad stairs and round topped entrance door swung on heavy iron hinges.

Although the house has been only an alteration, the interior gives no hint of it. The rooms seem so perfectly appointed and so well planned, that their origin is forgotten and one remembers only the distinctly personal touches which make them part of a


THE DINING-ROOM


THE ENTRANCE HALL
characteristic all-year-round home. No jarring note can be found in the entire interior which betrays the fact that bit by bit the whole structure was perfected as the architect interpreted the ideas of the owner in plaster and stone.

In front of the house lies the garden ending with a pergola covered with vines, and during the summer the grounds are beautified with flowering shrubs. The garden is really one of the prettiest of its kind. Here are many of the flowers and plants prized so highly by our grandparents. Among them the Madagascar periwinkle, forget-me-nots, four o'clocks, larkspur, stock, cowslips, etc. Adjacent beds are, given over in early spring to bulbous plants of brilliant colors,-hyacinths, tulips, etc. Along the wall tall spikes of hollyhocks rear their heads and form a background for rows of lobelia with bright scarlet flowers. Handsome lawns and great trees surround the house on all sides, making a proper setting for it. On either side the meadow-land stretches away ending in the timbered section bordering the river, the scene of many a summer picnic and afternoon tea. At the left of the garden are the kitchen garden and stables, the latter filled with fine hunters, for both Mr. and Mrs. Abbott are members of the Middlesex Hunt and ride to hounds.

# Greens for Christmas Decorations 

## Some Unfamiliar Ones of the Pacific Coast

By WILLIAM S. RICE

WE have been accustomed to associate Christmas with holly and mistletoe from time immemorial, so that no Christmas seems like Christmas without them. Whatever else we have for decoration on this festal day, we must have holly, and it must have "lots of berries" too. Nothing else in the way of greenery has such bright, red berries set off by such glossy, dark, evergreen foliage. It also possesses the advantage of being inexpensive, and, furthermore, it keeps a long time without water, though it remains brighter if its stems are placed in water. It makes perfect wreaths and it is unexcelled for informal decorations on mantels, chandeliers, walls and dinner tables; and no gift seems like a Christmas gift, unless a spray of holly is attached to it.
In the forests of the Pacific slope grow several shrubs that take the place, largely, of American holly a mong the people of those States. Of course when nothing else will do but the real holly the nurseryman comes to the rescue with several varieties of English holly, among which is a very attractive variety with a pale yellow edge to the leaves. But to many Californians the native Christmas berry (toyon), also known as California holly, appeals more strongly because it is by far the most attractive, the showiest and the most popular of all greens employed during the holidays for decorative purposes. The Poinsettia, a tropical plant much cultivated in Los Angeles and vicinity, is a close rival of the Christmas berry, but it has the disadvantage of being a much higher priced plant than the former and an imported foreigner besides.

Next to the holly in popularity is the time-honored parasitic plant, mistletoe. This plant grows so abundantly on various oaks, willows and locusts west of the Rocky Mountains that in some localities it is really a pest and succeeds, finally, in killing the trees upon which it fastens its suckers. One of the handsomest
sprays that it has ever been my good fortune to see, so far as "lots of berries" is concerned, was gathered by a young friend who climbed to the top of a tall oak for it. She succeeded in breaking off the entire plant and brought it home in perfect condition. One of my illustrations shows a photograph of the spray with the berries their natural size. The mistletoe is not particularly interesting without these pearly white berries that repose like clustered gems among their deep green settings.

These berries come in the winter season, when food is comparatively scarce and hence some of our birds eat them very freely. Now, when a robin eats a cherry he swallows simply the meat and flips the stone away. The seed of the mistletne the bird cannot flip. It is sticky and holds to his bill. His only recourse is to wipe it off, and he does so, leaving it sticking to the branches of the tree on which he is sitting at the time. The seed sprouts after a time and, not finding earthwhich, indeed, its ancestral habit has made it cease wanting-it sinks its roots into the bark of the tree and hunts there for the pipes that carry the sap.
Now, the sap in the bark is the very richest in the tree-far richer than that in the wood-and the mistletoe gets from its host the very choicest kind of food. With a strange foresight it does not throw its leaves away, as do most parasites, but keeps them to use in winter, when the tree is leafless.

There is no danger of exterminating the mistletoe for, should all its branches be snapped off, the roots are still there and cannot be killed unless the branch of the tree is actually sawed off. A cross section of a tree branch about four or six inches in diameter, sawed off at the base of a mistletoe plant, is a great curiosity of nature to the novice. The roots of the former plant can be seen honeycombing the wood of the tree in all directions and they are


Greens for Christmas Decorations


MONTEREY PINE


REDWOOD

" fUCALYPTUS GLOBULUS"


WOODWARDIA FERNS
very noticeable, being a different color from that of the wood of the tree itself.

In some of the cities of the Southern States the mistletoe is such a nuisance upon shade trees that the authorities resort to an annual trimming out of it shortly before the holidays. Of course the citizens are not slow on these occasions to avail themselves of a supply with which to decorate their homes.

By Thanksgiving the foothills of the Coast Ranges and of the Sierra Nevadas are ablaze with the vivid cardinal of the toyon berries. The splendid, warmgreen foliage, slightly prickly and suggesting the holly, serves only to heighten the intensity of the vivid coloring of the clustered berries. It is no wonder that Californians all love it and prize it so highly for its decorative qualities. Christmas would hardly be celebrated among them without the sprays of this beautiful shrub. Florists' windows and the baskets of street venders at that time are gay with the magnificent clusters of the rich cardinal berries. Very often the venders mix the berries with the foliage of a certain live oak that exactly counterfeits the real holly.

The toyon shrub grows handsomely in cultivation, as many Eastern tourists doubtless have observed, at the grounds of Hotel Del Monte, Golden Gate Park, in San Francisco and in various private gardens; but it is not cultivated so freely as it deserves to be for so handsome a shrub.

Let me conduct my readers in imagination to any one of California's redwood cañons in the Coast Range Mountains near Mt. Tamalpais or along the banks of the Russian River, there to see one of the grandest decorative subjects to be found anywherethat is the giant Woodwardia fern, very often and quite commonly, but erroneously called "brakes," though the brake or bracken fern is not an evergreen as is the former. Here in the damp, woodsy mould by the edge of a frolicking mountain torrent we may see them revel in the gushing spray and wave their majestic branches, seven and eight feet long, in a truly regal fashion. There is hardly a forest pool in these, or the Santa Cruz Mountains, but contains clumps of these handsome ferns. They are plumelike in appearance with a heavy midrib and deep, notched clefts that extend from the edge nearly to the midrib. The spores, or fruit dots, are arranged in lines parallel to the midvein of these divisions.

Perhaps overshadowing this fern-bordered pool is the beautiful madroña or arbutus tree. The name madrona, given it by the early Spanish Californians because of its strong resemblance and close relationship to the Arbutus Unedo or strawberry tree of the Mediterranean countries, was called madrono in Spain. One tree on the shore of Lake Lagunitas in Marin County measures more than twenty-three feet in circumference and a hundred feet in height and sends out many branches each two or three feet in diameter. A large part of the forest growth on the
northern slope of Mt. Tamalpais is composed of it and as it is an evergreen, it forms a dense and refreshing shade the year round. The bark on the younger limbs which is a rich Indian red, begins to peel off in thin layers about midsummer leaving a clear, smooth, greenish-buff surface, and strewing the forest floor with its warm shreds it makes a rich, glowing carpet. The leaves, strongly suggestive of the rubber-tree, are likewise polished green above and somewhat paler on the under side.
Glancing upward among the handsome leafy branches you will observe at this time of the year great clusters of crimson, rough-skinned berries. Last spring great panicles of small, white, waxen bells resembling the lily-of-the-valley, hung in their places and filled the air of the sultry cañon with their sweet perfume. This is one of the handsomest native trees of California, and it seems a great pity that it should be used so extensively for charcoal, to be used in the manufacture of gunpowder. As a decorative motive for Christmas it is quite showy in informal masses; and besides it has very good lasting qualities.
At the florists' shops in San Francisco one sees great quantities of the shrub known as Oregon grape, really not a member of the grape family at all, but of the barberry family, and known also as Mahonia or the holly-leaved barberry. It is a very ornamental shrub and one much prized in Western gardens where it is known as Mabonia Aquifolium. In the spring when yellow with its masses of flowers; or in its summer dress of rich, shining green; or in autumn when it is richly touched with bronze, or scarlet, or yellow amid which, are the beautiful blue, grape-like berries, it is always a fine shrub. The writer has seen it in its native haunts in the Oregon forests in the vicinity of Mt. Hood where it flourishes in great abundance and it is one of the handsomest low shrubs covering the forest floor. The leaves bear a strong resemblance to holly and seven or nine of them are arranged opposite each other on the stem. The margins of the leaves are beset with long, sharp needles; and, on the whole, it is a very unpleasant plant to the touch although a great treat to the eye.

The Redwood, Sequoia sempervirens, is a handsome evergreen with foliage very similar to Eastern hemlock; although lacking the exquisite grace and softness of the latter, it possesses, nevertheless, a more vigorous look and does not shed its needles when it becomes dry as does the hemlock.

Thus far I have mentioned mostly the native shrubs used as Christmas greens in California; besides these there are many imported trees that supply exquisite decorative material. Among these are the eucalypti or blue gums from Australia, the pepper tree, and the bold and handsome leaves, six and eight feet long, of the Pboenix Canariensis or Canary Island date palm, and those of the native Washington palm.

# Educational Value of a Great Shop 

By THE EDITOR

ONE of the most interesting developments in the commercial life of the large cities of this country, which the past twenty-five years have seen, is the great shop where many and various lines of goods are sold under the generic term of Department Store. What this means to the public is evinced by the appreciation which has made possible the truly marvelous growth of many of them. It is the boast of some of these department stores that they have assembled in one building, or a connected succession of buildings, articles of every kind, quality and price from a shoe-string to a plowshare. The educational possibilities of these as general gathering places of the people are incalculable, and in this day of supremacy of house decoration, when the woman with the tiniest cottage and the flatdweller as well talk of color schemes and harmony of color, much of good or ill may be accomplished through this medium by the suggestions put out by the goods offered and by the salesman displaying them. The past few years has shown in many of the better class of these stores a remarkable improvement in the design and quality of goods and suggestions offered in the house furnishing and decorating departments.

In the leading city of the Middle West is located a business of this character of such magnitude and of such diversified interest that it is recognized as one of the most tremendous enterprises of the civilized world. While in many respects this is on lines similar to the ordinary Department Store, it


MOSAIC DOME OF TIFFANY FAVRILE GLASS
differs in important essentials. It is easier, however, to enumerate the lines of goods which are not offered, for kitchen-ware, stoves and plowshares find no place here. The perfection of detail shown in every department of these magnificent buildings can be realized by the layman only after much study and research. As a shopping center this store is, of course, known and recognized everywhere, but the specializing that furnishes only the best of material and workmanship in each department cannot be entirely comprehended at once. To the years of beneficent planning of a master mind (and yet how comparatively few these years), these structures stand as a monument unsurpassed. The health, the comfort, the real welfare of the army of employes, numbering something over seven thousand, are as closely considered to-day by the men to whom this charge has passed, as when under the philanthropic rule of him whose honored name the business bears.

The hospital, the rest-room, lunchroom, the reading and assembly-rooms are carefully planned and fully equipped to fill all requirements. The assembly-room may be utilized for entertainments of all kinds. A fine choral society has recently been inaugurated and musicals of no small worth havebeen given here, all talent being supplied by the employes of the company.

For the shopper the same thoughtfulness has provided attractive and beautiful cafés with service and cuisine unsurpassed. There are also rest and reading - rooms and these are fitted with well selected


REST AND READING-ROOMS FOR THE TIRED SHOPPER ARE HARMONIGUSLY DECORATED AND FURNISHED


WHERE RARE PIECES OF FURNITURE OF ALL PERIODS ARE ATTRACTIVELY DISPlayed


A BEDROOM FURNISHED IN WHITE ENAMEL AND WICKER SHOWING SIMPIICITY OF IINE AND Daintiness of coloor treatment


WHERE STURDY, WELL-MADE CRAFTSMAN FURNITURE HAS ITS PROPER SETTING


AN EARLY VICTORIAN ROOM WHICH IS RICH IN COLOR AND CORRECTLY FURNISHED
and harmonious decorations and furnishings. The hospital is the best of its kind, and there is a perfectly equipped nursery and play-room for the children where the Lilliputian furniture proclaims it their own domain.

Each of these rooms could safely be taken as a model, as the best artistic taste and practical knowledge has been expended in their fitting.

It is of the house furnishing and decorating department of this store that this article will chiefly treat and while these departments are only a part of the vast whole, they fill a most important place and mean perhaps more to the home-making woman than do even the several acres devoted to exquisite French millinery and gowns.

Set high at the northeastern corner of one of the buildings is the atelier, where beautiful and special designs for wall treatment and decoration are worked out.

Here, as in the drafting-room of the architectural department, and indeed all along the line, the best talent only is employed. One feature which is particularly helpful and practical in this house furnishing department is a number of rooms arranged to suit the requirements, if not in detail, in a general way, of every type of house. Here the worried woman whose head is filled with conflicting ideas of Renaissance, Early English, Louis XIV. and Colonial furnishings, and, withal, a real longing for a comfortable, beautiful and harmonious home, may have
her vague ideas made clear and what she recognizes at once as her own chosen schemes embodied and set before her in reality.
When the house plans are completed and only the decoration and furnishing is to be added, a day spent here exclusively devoted to choosing these will go far toward completing the selection. A full set of plans should be taken when one desires to facilitate this business of decorating and furnishing the house.

It should be borne in mind that the architectural detail as shown in the standing woodwork of the various rooms is an important factor in these selections. Courteous and thoroughly well-informed men of experience as well as excellent taste will take charge of purchasers and lead the way from wall covering to draperies, tiles and fixtures so easily and confidently that the furniture and rugs are found and decided upon before one realizes the dreaded work of choosing the wall-papers is well under way. The supreme convenience and help of seeing the various fabrics and wall coverings together with the assembled furniture cannot be too highly commended.

When the house is only planned and no specifications prepared, leaving undecided such detail as the character of wood for standing woodwork and finish of the same, excellent service is supplied. Frequently it is the architect who brings his client, and under his suggestion the full scheme is composed, but to


THE LILLIPUTIAN FURNITURE PROCLAIMS THIS THE CHILDREN'S DOMAIN
the puzzled woman with a desire for the beautiful and only a thorough knowledge of her own limitations, this house furnishing department is a boon beyond price. The furniture here is carefully selected and of the best construction.
The rug mart is one of the finest in America. Dependable and expert advice in selecting Oriental rugs is supplied to all purchasers. Time spent upon this wonderful collection is well spent and much can be acquired by the earnest student of the beauti-ful not only here but through the many departments of this truly wonderful store.

Early in October a new building was thrown open to the public. This has been reared upon the site of the original store and in point of architectural beauty stands abreast with any other building in the world dedicated to commercial purposes.

A feature worthy of much consideration and study is the architectural detail of the interior as evinced by the standing woodwork. Above the rotunda in the south room of this building is the magnificent mosaic
dome by Tiffany. It is made of iridescent favrile glass and is the largest single piece of glass mosaic in the world. The marvelous golden and rich blue of its coloring glows with radiant beauty impossible to describe. It is told that the designer has said he would be quite willing to allow this beautiful dome to go down the ages as the acme of his most artistic work.


THE GREAT SHOP


Cottage of Mr. Clarence E. Shepard, Kansas City, Missouri

# A Small House Which is Good COTTAGE AT KANSAS CITY, MISSOURI 

Designed by CLARENCE E. SHEPARD at small cost, seems in this day of expensive materials and labor almost impossible. This, however, has been achieved in the house we reproduce. The shingled exterior has been treated with a dark green stain and the trim is of ivory white. The stonework pillars and the walls surrounding the grounds are of native Missouri limestone. The hooded front door is an especially attractive feature of the house, and the piazza of generous dimensions will appeal to all.

This house was built in Kansas City, Mo., during the last year at a cost of something under $\$ 3,000$. All the floors on the first floor are of oak. Up stairs, pine has been used except in the bath-room, which is tiled.


FIREPLACE IN THE LIVING-ROOM

The standing woodwork of the lower floor is also of red oak and has been treated with a mission stain.
The living-room has a native stone fireplace with a six foot breast reaching to the ceiling. The stone of this fireplace, which is a feature of the living-room, is well marked with iron. From this stone was taken a hint for the color scheme for this lower floor.
The stairway is exposed and there are built in book cases and seats, all of which form decorative features in the room. The walls are treated in soft golden olive tones, accentuating the browns in the stone. Old blue pongee silk curtains are hung over ecru net curtains next the glass.
In the diningroom, opening directly from the living-room, the walls are

## A Small House Which is Good



CORNER IN THE DINING-ROOM
paneled with a rich iridescent shade of dark blue Japanese leather, and neutral colored burlap is used from plate rail to ceiling line. The paneled wainscot effect is obtained in this room by the use of strips of the oak set at eighteen inch intervals. Portières of old-fashioned blue Kersey coverlet are used for dining-room doors and curtains of Russian crash are hung at windows.

Dainty and attractive color schemes are worked out in all of the upper chambers, the dominating idea of the entire house being a unity of scheme, the purpose
being to obviate the possibility of disquieting effects.

The owner's idea in furnishing this


Second Floor Plan house has been to have it first thoroughly comfortable and artistic, and unconventional as well. He has been particularly successful in carrying out his wishes and the photographs speak for themselves. The various details in the fittings of the house have been carefully thought out, and there is nowhere a lack of harmony.


First Floor Plan


THE LIVING-ROOM

# The Artistic Arrangement of Flowers 

By Jane lestie kift

NOW that cut flowers are so universally enjoyed by all, arranging them has indeed become an art. We can all call to mind with horror the tight bunches arranged in pyramids, tied with not only many feet but in some cases yards of string, that were used a few years ago. Then where people wanted to be really elegant, they placed their flowers in a white paper bouquet holder.
These arrangements were not only most unsightly, but at variance with Nature and all her lines. Of course when paper bouquet holders were in style all people did not use them. People that were the least bit artistic or who had any general love for flowers, would have felt pain in cutting them with short stems and tying them closely together with string.

- The florists and decorators are educating people to appreciate the true art that can be displayed in arranging even a few field daisies. To arrange flowers artistically we must truly love them. By loving them I mean we must not only be able to appreciate their fragrance and beauty of color, but we must be able to see beauty in even the most humble weed, for we all acknowledge flowers to be among God's most beautiful creations.

To make them appear at their best after they are severed from their stalks we must be close observers of Nature and after we have observed we must follow in her lead.

When we stand on a hill and look about us, we see Nature on all sides. Here we see her groups. If we observe these closely we see nothing stiff or formal. Each flower, bush or tree presents an individuality which helps to form an exquisite whole. In Nature there are no straight lines but in their stead a series of graceful curves. Again as we look about us, we notice many colors, shades and tints, but all blend and form a most beautiful color harmony. What we should


Fig. i-A Hanging Vase Holder
always aim to attain in arranging cut flowers is the picturesque irregularity of Nature.
Much of our success depends on the receptacle in which we place our flowers. We must ever bear in mind, that a vase is to flowers what a frame is to a picture, 'simply a suitable setting. As a rule the more inconspicuous a vase or bowl the more pleasing will be the general effect. There is no set rule to be observed in choosing a vase that applies to all flowers, but as a general rule we should choose a bowl or vase, so that it will admit of the flowers looking when arranged as near as possible as they did on the plant. For example, always arrange flowers with long stiff stems in tall vases and again those with soft, slender stems should always be arranged in low wide-topped bowls so they can ramble over the side just as they did on the plant. Then flowers such as pond lilies require to be always floated in water, for so we see them in Nature, and we all know how the reflection in water adds to their charm.

Never, in gathering flowers, be guilty of cutting flowers with naturally long stems close up to the flowers, for had short stems been more appropriate Nature would never have endowed them with long ones.

In choosing a receptacle in which to place your flowers select one that will in no way mar their beauty but rather enhance it. If we choose a colored vase see that it blends well with the color of the flowers we are arranging. For example, place deep red roses or yellow daffodils or tulips in a dull brass jar. We will at once recognize how beautifully the deep red or brilliant yellow blends with the dull tones of the brass. They seem to fairly melt into each other. Or place copper colored chrysanthemums in dull green "Pompeian" vases or urns, if we are fortunate enough to possess any, and we will at once be satisfied with the effect. In Nature all colors har-


Fig. 2-An Artistic Flower Holder
monize. So must we harmonize them if we want a pleasing effect. Never place bright crimson and yellow flowers in the same vase. If you are desirous of carrying out a two color effect it is always safe to have one color white. White flowers never clash with any other variety.
There are many flowers, such


Fig. 5-A Circular Flower Holder


Fig. 4-An Attractive Fernery
with sufficient foliage mars the plant, then we have to add a little foliage of another kind. Maidenhair fern or asparagus is usually used for this purpose. Always have the foliage far exceeding the flowers in quantity. In the illustration of a filled stand orchids and ferns have been used and here we see at a glance the extreme grace and attractiveness of such an arrangement.

Clear, glass vases always have one advantage over others. They are transparent and therefore the stems are visible.


Fig. 6-A Japanese Flower Holder

Illustration No. 6 is that of a Japanese flower holder. This receptacle is so unique and unusual in every way that it at once meets with approval. It is simply a circle of heavy glass one and one half inches thick, in which there have been a number of holes drilled. In each hole you place a flower stem or stems according to the size of the flowers you are arranging. Then after you have finished, place the glass in almost any low dish. In the picture here given it was placed in an empty fernery. One great advantage this vase has over all others is that the flowers have every appearance of growing plants, all but two inches of stem being visible. Where we are arranging for a wedding and want to decorate a mantel, this circular flower holder, No. 5 , is especially artistic. This is composed of a wire form, to which is attached at intervals, small nickel holders, which support glass vases. When filled the form and glass vases are almost invisible and unless we are familiar with this style of flower holder, we stand and as we admire the charming effect, we are apt to question how it was accomplished. The first illustration shows a similar holder, only instead of being arranged on a circle for placing around a mirror or picture, it has been arranged on a straight bar for there are many times when this form is desirable, as for either side of a doorway, to suspend from a picture moulding or to fill up a vacant wall space.

The illustrations, Nos. 2, 3 and 4, show a new style fernery or flower holder. Some people are much more successful with ferns in single pots, than they are when they are planted in a fernery. Then again some prefer the ferns arranged individually, thinking


A Mirror Backing Heightens the Effect
that when we combine them we lose the effect of the individual fern. Therefore, for these people this little fern holder is quite useful and very dainty.

One point worth knowing in arranging flowers is that the beauty of a vase of flowers is always enhanced by placing it near a mirror. The reflection of the flowers in a glass always heightens the artistic effect. To paint a picture to produce a really fine effect on canvas requires talent inborn and Godgiven. The seed of this talent lying dormant, may be awakened and developed to most glorious and wonderful propor-tions:-but without the divine spark it can never be created. The artist with his brush catches the beauty of the subject and transfers it in all its delicacy of natural coloring and charm of composition to the canvas, to remain perhaps for centuries. So with the grouping of flowers. One must first have an appreciation of their beauties and a love for them. But the ability to produce the really beautiful and picturesque by variety of arrangement and harmony of colors is one which may be largely developed by study and experimentation. Study the habits of vines -the manner in which they naturally hang or festoon themselves when growing under most favored conditions. Study the natural growth of the many varieties of flowers commonly used for decorative purposes. See how their effectiveness is heightened in most cases by the background of masses of foliage. Make note that this rose is of an upright habit while that one has a graceful drooping tendency, and in your arrangements endeavor to display your flowers in an attitude as nearly simulating that assumed in growth as is consistent with the governing conditions.


## THE HOUSE

THIS is the month in which the drawing-room of a city house will have the most use, and so with propriety attention may be especially directed to it. There are drawing-rooms and draw-ing-rooms, as every one knows, the kind which promote sociability and the kind which induce every occupant to feel ill at ease. The difference is generally to be discovered in the arrangement of the furniture and the adjustment of light, but not necessarily in the character or quality of either. Even in a formal apartment chairs should be placed conveniently and to an extent arranged in groups so that two or more persons seated can carry on an easy conversation. How often one is stranded hopelessly upon a sofa which is as isolated as a throne and no more ease inducing! Make the drawing-room look livable. Leave the entrance unobstructed, place tables where they can be used, and utilize bronzes, plants and bric-a-brac primarily as decorations. The pictorial plays a large part in social gatherings and it should be carefully studied in the arrangement of household ornament. A palm, or a piece of sculpture, may be highly ornamental or merely an obstacle, according to the way it is placed. Keep the group plan in mind and have the furnishings simple. The more formal the room the less it should contain. Strive for harmonious and not pronounced coloring, an abundance of good light, and general air of dignified geniality. An architect.once said that his great desire upon entering the majority of houses was to sweep most of the things off of the mantel, and undoubtedly if he had been permitted to do so it would have been well. From the old days of the gruesome "best parlor" to the present time, these rooms have been too much regarded as show places. Though differing vastly in style of exhibits, some drawing-rooms in the handsomest urban houses are not unlike the sea captain's parlor.
The hall too, may well be considered. This should be even more formal than the drawing-room but in appearance not inhospitable. It is a mistake to furnish a hall as a room though it should afford a seat for serving-men and messengers and a table for card tray and the like. The many branched hatrack which was thought at one time an indispensable piece of hall furniture is now held in ill repute, and a
chest seat, with perhaps a wall mirror, has completely taken its place. If there is no closet in the hall such a chest for rubbers is indeed invaluable.
This is the time of sleet-covered steps and walks, so it may be suggested that sawdust or crumbled cork are quite as apt to insure safe walking as sand or ashes and are much cleaner and better. Both of the latter, in fact, are sure to injure painted surfaces and have been known to mar stone. Lay in a supply of the former, and keep it ready for use.

Even with this precaution the hard wood floors are apt to get scratched and marred more frequently in winter than in the spring or fall and will need more frequent repolishing. A saturated solution of paraffine and gasoline applied with a cloth is excellent for restoring the polish, but should be used with the utmost caution, and only by daylight when there is no fire or flame.
In January the house is usually exempt from workmen, unless an untoward accident makes necessary some repair, so it is at this time that the householder turns most naturally to the acquisition of those pleasant; unnecessary things which bring most joy and least real comfort; that is when compared with good roofs, kitchen ranges, and sanitary plumbing all of which are luxuries ofttimes painfully enforced. Pictures are being sold, rare etchings and prints being offered, there are Persian rugs and Japanese pottery to be had for a small fortune or a mere pittance. The question is how to choose, and the only answer which can be briefly given is to avoid anything obviously cheap unless you are a connoisseur. Pictures mean much in the home and never were good ones to be had for less, but great care should be taken in the selection. A simple watercolor, a photograph, or even a print, is more acceptable than a commercial painting or a bogus "old master." Native work to-day is of a high standard and the astute buyer will do better when he acquires a picture by a living artist than if on hearsay he procures an alleged work of a foreign celebrity. The person who says "I don't know what is good but I know what I like" is often criticised, but in the long run the person who buys a picture because it makes to him direct appeal will display more wisdom than the one who merely seeks a name.
Pictures and works in sculpture expressing action
are apt to make, eventually, tiresome companions, while those which leave something to the imagination and are full of repose may be said to "wear well."

Because one is inclined to fear the cold and to find difficulty in keeping the house sufficiently well heated it is quite important now to emphasize the necessity of fresh air and to caution against too many sealed windows. Give the house a good airing at frequent intervals and see that the ventilation is at all times active. Not only will this conduce to the health of the family but to the well-being of the house itself. And guard against too much dry heat for this is ruinous to wood work of all kinds, to say nothing of paintings. Keep the house an even temperature by means of the general plant and for special need use the open fireplaces freely.

Look well, at this time, to the sanitation, see that the drain in the butler's pantry does not become clogged, that the floor is free of grease spots, and the walls fresh painted or whitened. These are perhaps minor details, but they are of more importance now than in summer when the windows are all open and there is a free circulation of air-they are in fact a larger factor in the well-being of the house which is a home.

## THE GARDEN

THERE is but little outdoor work which can be done during this month in latitudes north of Washington City, but the time can be profitably employed by continuing the study of plans for spring work. Doubtless it was observed that certain hardy plants failed to do well in their present positions. If so make note of desired changes.

If your walks need repairing there will probably be days during the month when that work can be done when there is but little, if any, frost in the surface of the ground.

Get the catalogues of the best florists and see what they offer. Any of them will gladly mail their publications upon request. Make your selections and order early and bountifully. Insist on the best of stock and seed being furnished. It is a waste of time and space to try to get good results except from the best stock and seed.

House plants are now to receive the greater share of your attention. Don't forget that they require fresh air. There may be rainy days during the month when the temperature is sufficiently high to make it safe to put them out-of-doors for a while, but do not allow them to become chilled. The dry atmosphere of living-rooms is unfavorable to plant growth, and if they cannot be put out in the rain they should be sprayed, from time to time, or the heads dipped, occasionally, in a bath. The bath removes the
accumulated dust from the foliage and invigorates the plant.

In watering house plants, water freely and allow the roots to become fairly dry before repeating. As to how soon the roots will dry out depends on the plant growth, the more rapid the growth, the faster will the roots absorb the moisture.

Suggestions heretofore made and now repeated: When the bulb-beds freeze hard, cover with a mulch, three or four inches thick, of leaves or litter; protect half-hardy roses by banking coal ashes about the plants, and cover with straw or short boards to turn the surplus water.

If you are to make your first effort at gardening, start right-have in mind the fact that the designing of the garden and the selection of the accessories is an art the same as that of painting. A success cannot be the result of haphazard work. As the artist uses the canvas for a medium of expression, so the gardener must use Nature's own materials to make a pleasing picture. This requires study of the effects of composition of the materials to get expression. It is the artist-gardener, as much so as it is the artist-painter.

A home and surroundings adorned with flowers is sure to be happy even though it is not always prosperous.

There are a number of perpetual-blooming sweet violets which are entirely hardy in most parts of the United States. Violets are great favorites and always in demand. They do well in open ground and if given a sheltered sunny place will usually begin to bloom before the snows are gone. Put a selection of choice varieties on your "list" in making it up for the year's work.

In planning your yard this year have in mind the idea of letting the children help in its preparation and cultivation. It will add immensely to their happiness, bring them closer to the loveliness of Nature, and at the same time furnish for them a diversion of outdoor exercise. This must be considered in the planning, as it is well to let each member select some particular flower or plant. A personal interest will attach to its cultivation and development. A spirit of gentle, heathful rivalry will be brought out. Some of the best florists of the country have anticipated the idea of having the children to help garden and are offering roses and other plants especially for the pleasure of children. The little ones will enjoy a rose bed all their own.

Our Southern friends should get their sweet peas in the ground this month. Plant the seed three or four inches deep. Keep the ground loose and mellow
(Continued on page 15, Adverttsing Section.)


The editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

## FINISHING STANDING WOODWORK

I$T$ was a saying among architects and cabinet makers of old, "We want the woodwork finished in the color our God Almighty lets it grow." For they admired the beauty of Nature, and their successors-those who give Nature a careful study in these restless times-do so still.
It made the heart of the old cabinet maker hop with joy when his eyes rested on the rich and harmonious figures of the woodwork and veneers cut from the giants of the forest. With patience and respect for his trade and the precious wood and veneers he handled, he selected, treated and constructed them in the conscientious and tasteful manner which at our present time is so much admired and makes well preserved antique cabinet trim and furniture a desirable and valuable article of commerce.

But as well as such newly finished cabinet work looked in its natural waxed or polished state, its color could not remain as it was, for Nature was not yet done beautifying its product. On the contrary, it continued to increase its quality of color to such an extent in richness and variation, as time passed by, that the new effects and changes of character attracted the universal attention and admiration of the cultivated public.

Among the advanced lovers of Nature all over the globe, at once a desire was created to produce in an artificial way on wood the same effects as Nature brings about through time, and in such a manner that the imitation could not be detected, and to-day the architect and artisan in leading circles of the building trade realize that when the eye rests upon a quiet and beautiful color it makes the heart feel happy.

The public demand, as well as the desire and art of the architect, interior decorator, and cabinet maker, has brought out clearly that negligence to furnish interior woodwork with the very best and truest color decoration, is putting obstacles in the way of progress, culture and civilization. This is
the reason which prompts the heroic efforts now being made to show character decoration in woodwork wherever there is an opportunity to do so. Soft and charming antique, weathered, fumed effects resembling natural time effects on hard wood, which were not thought possible to imitate a decade ago, are artificially produced and can be seen in many recent buildings. In looking at them one seems to realize that in this line of trade there is a great field for study.

Some architects have made great reputations for themselves during the latter years by applying such effects to the woodwork in the residences of wealthy men, and likewise in furnishing the ceilings and walls with characteristic decorations in old plaster, old gold, old metal, silver, tapestry, bronze and old ivory, but usually the process or method used to produce these effects was kept a secret by those who were entrusted with carrying out the work. That was the regrettable cause why so few people were unable to profit from the beauty of the new color discoveries. Many an hour of worriment was spent by architects endeavoring to find men who could produce these effects on wood. Their search for such was often in vain and in despair they would be obliged to be satisfied with the wood finished after the usual methods which meant using asphaltum, colored dark filler, oil or aniline dyes, and this method of coloring they despised partly for its cheap, unnatural and painty appearance, and partly because the colors were sure to fade in a short time. The search for stains and colors which would produce the true natural effect of time on wood and would not fade, and also to find a durable protective finish as a substitute for wax solution, became a mania with everybody connected with the decorative business. At first very little success was obtained by them, although great sums of money were continually spent by contractors in experiments. Oil, water and greasy articles had to be carefully guarded against where wood was waxed, as they would soil and discolor the woodwork when coming in contact with it. This was
(Continued on page 15, Advertising Section.)


## A BARBERRY HEDGE

IAM building a new home and intend bordering my roadway with a hedge. My neighbor has one that colors beautifully in the fall. He calls it a barberry. I want something similar, but in looking up the catalogues I find that there are several barberries. Can you give me the proper name and directions for planting? My roadway is twelve feet wide.
W. H. S.

What you describe is undoubtedly Thunberg's Barberry, known botanically as Berberis Thunbergii, a native of Japan. The common barberry grows much taller and is less suitable for a hedge, as it has a tendency to become bare at the base. Buy young plants from ten to twenty inches tall, and plant about eighteen inches apart in a single row. Make a trench at least two feet wide and as deep, filling in with good soil, unless the native soil is good. Be sure that your drainage is good and especially that surface water does not stand over the roots in winter. You can even plant on a slight ridge, if necessary, for in time the overhanging branches will cover any evidence of the ridge. Bear in mind that where this barberry does well it will, in time, have a spread of at least six feet, consequently it should not be planted nearer the roadway than three feet. Sod or sow grass seed between them and the roadway for a cover until the shrubs monopolize the space. This shrub should never be cut back or trimmed as that destroys the characteristic charm of its arching branches, so beautifully draped with berries in the winter. As it will not bloom on the present year's growth, this berried effect is lost if trimmed.

I know of a case within a mile of me where a roadway of only ten feet wide has just been planted with this barberry close to the edge. If the plants do well and are not mutilated by very close trimming the owner will, in five years, have to ride in in a wheelbarrow.

A WAY TO EXTERMINATE ELDERS AND SUCKERS
I have just received the November issue of magazine and in your department I note the question of Mrs. J. P. McC. as to means of exterminating elders.

I once had a fine shade tree, of the "cork" elm species that sprouted the entire width of my lawn
( 100 feet), even going under the cellar, which was of cement, and coming up on the other side of the house. The roots ruined the cement work of the cellar and where they sprouted on the lawn would grow three times as tall as the grass, when being mown every week.

I chopped through the large roots near the trunk (after cutting the tree down) and packed salt around them. Farther away, where roots were smaller I cut through them and pulled out as long pieces as I could, putting salt wherever there was a broken end.

It took about two summers to completely kill the roots and stop the sprouting, for the tree was twenty years old, at least, and deeply rooted. I think the same treatment would kill the elders and other shrubs and when the roots are pulled out the damage to the lawn is less than when grubbed out. Those that run under the sod are easily reached in this way.

The elders do "sucker" badly but, in my experience, not more so than the commercial sorts known as golden and cut-leaf elders and some other choice (?) shrubs.
E. R. G.

Elms are generally surface rooters, and will, like the eucalyptus, travel a long distance for water. Your elm went down under the cellar, but the roots of the eucalyptus, was known, in California, to climb a low stone fence, re-enter the soil, and then choke up a drain pipe.

Applying salt to a freshly cut stump is often effective in killing the roots, holes bored down vertically allowing the application of salt to be more effectively applied.

## MANURE

I have a choice of buying fresh manure at one dollar a load or old manure at two dollars. As I may use considerable and the cost plays an important part with me, I would like your advice in the matter.
S. G. M.

You do not state the purpose you want it for. For covering bulbs or perennial beds, especially those containing shallow rooted plants like the hardy phlox, the old manure is the best and cheapest in the end, because it can remain the following season and thus save the cost of raking off and carrying the rough
(Continued on page 19, Advertising Section.)


Edited by JOHN GILMER SPEED


#### Abstract

The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of Horses, Cows, Dogs, Poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.


## House Dogs

IDO not know of any dogs pure in type that are not fit to be house-dogs. But I do feel with absolute seriousness that no one living in a city should keep any kind of a dog. To keep a dog in the city is a hardship to the dog, and an indecency to the people who live in the neighborhood where such dogs are kept. It happens that my city home is in the neighborhood of Gramercy Park; and pretty nearly every time that I go out early in the morning with particularly well-varnished boots I am compelled to become defiled in the interests of some house-dogs carried out on leash and miserable in their captivity. I think the large cities should have ordinances preventing the keeping of dogs within their precincts. I do not think that this applies in the least to villages and small country towns. A dog must have a proper kind of run, and whatever be his breed, he cannot have that run in any great city. On general principles, I should say that a shorthaired dog is a better house-dog than one with long hair. He is easier to keep clean, and freer of fleas and other vermin. If it were given to me to have one dog only I should be in great doubt as to which I should select. Should it be a fox-terrier? Should it be an Airedale? Should it be an Irish terrier? Or a collie? I am sure I don't know. But I do know that every gentleman
having a country place should have one or more dogs; without them, a country place would be quite incomplete.

Now take the fox-terriers - they are the most gentlemanlike dogs that we know anything about. They are descended from the Italian greyhound and the English terrier. Originally they were used in the hunt-ing-field to harrie a fox when the foxhounds were in fault. For a long time, however, they have become too slow to keep up with foxhounds, and their only purpose has been to serve as house-dog and companion.

Let me say right here that I have no purpose in this article of writing an essay upon the genesis of the dog. Anyone who cares to know about that subject may by reading the article in the Encyclopædia Britannica learn more than I know on the subject. I have said that I did not know which dog I should choose,

Griffon Bruxelloise, Peggy Kingcote Kennels, Greenfield, Mass. if I had only one dog to select. The fashionable dog at this moment seems to be the Boston terrier. And a very admirable little dog it is. He has gentleness, fidelity, and just enough courage to make him worthy as a friend and companion. He is a shorthaired dog, and easily kept clean, so I do not wonder that he should be popular. The same thing might be said in regard to bulldogs and bull terriers.


Really, however, I should recommend for a house-dog either an Irish terrier or an Airedale. The difficulty with the Airedale is that he is a tremendous fighter. You can never be sure in taking him out that he will not get into a scrap. The Irish terrier is just as courageous, but is less pugnacious. These two types, which are closely allied, are just about as nice as anyone could wish.

The collie is the most interesting of all the dogs with which I have ever had experience. Read "Bob, Son of Battle,"-and be glad. I have owned a good many collies, and I never knew one that was not faithful and true. Some twenty years ago an English nobleman of high distinction gave me a collie which I brought over to this country in the "Etruria." One day, a fellow club-member who chanced to be


Collie, Imp. Harwood Piccolo
Winner of two hundred firsts and specials Springdale Kennels, St. Charles, Ills.


Pure White Collife, White Mountaineer 106,357 , A. K. C.
Meadow Brook Farm, Allendale, N. J.

Now here again about "Laddie." He was a very young dog when my English friend gave him to me, and when I took him out to my place in Morris County, New Jersey, I had a toddling daughter, more pleasant than kind. She had a habit of sitting down on "Laddie," pulling his ears, and otherwise making him very uncomfortable. He soon found that his comfort was in quitting her acquaintance; whenever she appeared, he ran away. But towards nightfall, when the nurse brought the little girl to say her "good-nights," the dog took notice. Fifteen minutes or so after the child had disappeared, he would also disappear, and he stretched himself out by the side of her crib and remained there until the morning. Was not that fidelity? Now another instance about this same dog. One day my sister went off for a mile or so from my house and sat down by a spring on a very secluded road. There appeared pretty soon a very shabby man in a very shabby wagon. Instead of passing by, he stopped and tried. to engage in conversation. My sister was annoyed, and somewhat alarmed. She did not speak to "Laddie" at all, but "Laddie" took in the situation himself, and he went for that man there and then. He tumbled him out of his wagon, and my sister's only difficulty was to prevent the chewing up of the intruder.

If I were to tell you the rest of "Laddie's" history, sociologically and dogmatically, I should be in danger of reproof from high authority for "faking!" God save the mark!

Now as to other dogs: There is a prevalent idea that the mastiff is a cruel and dangerous dog. Nothing could be more absurd. The purely bred mastiff is as kindly as an oldfashioned policeman. But the mastiff,


Scottish Terrier
New Castle Kennels, Brookline, Mass.
crossed with some other breed, becomes one of the most dangerous dogs that can be conceived of. Take, for instance, the Newfoundland, a dog once held in very high esteem in this country, and still highly regarded in England, and cross this type with the mastiff and the result is a mongrel which gives disrepute to the mastiff and the Newfoundland. Here, by the way, is an axiom in regard to animal breeding: that mongrelization tends always to the accentuation and exaggeration of all the evils of both types. We all know that every now and then, "the yellow dog" of unknown parentage is most interesting - this is the exception that proves the rule.

I suspect that there is as much nonsense believed about dogs as there is about horses; and there the field stretches from horizon to horizon. The English greyhound, for instance, is regarded by people who have no knowledge of the breed as unintelligent and unaffectionate. Everyone concedes, of course, that for gracefulness of action and symmetry of form, there is nothing in the dog species that approaches it. I will confess that I was a pessimist in regard to the greyhound until I had an opportunity to study him at close quarters. I now know that a better dog for the house or the country place could not be had. Stretched on the hearth, he is as beautiful as a peacock on the lawn. And when he puts his muzzle into your lap, it is "Sweetheart, come back again."

Here is a rather interesting instance of greyhound breeding. Mrs. H. C. Kelley, Tioronda Kennels, Nyack, New York, began breeding only about eight years ago. She has succeeded by careful mating in breeding the best greyhounds that this country has
ever seen. The dog Ruinart, owned by Mr. John W. Patten, Devon, Pennsylvania, and bred by Mrs. Kelley, is probably the finest specimen of greyhound in the world. Mrs. Kelley has not recently bothered much with the dog-shows; but in August, she sent two puppies to Atlantic City, and swept the whole deck, winning every prize in which her dogs were eligible and also the gold medal forhaving the best dog in the show. I only mention this to show the value of absolutely scientific breeding.

In breeding dogs there is an easier opportunity to be scientific than in animals where the period of gestation is longer and the product less numerous. A mare has one foal at a time, and the period of gestation is nearly a year. A bitch whelps in a few weeks, and has a litter varying in number. So we can select and select quickly. Selection is the great secret of correct breeding. "Like begets like," is an axiom of the kennel as well as of the breeding farm. The union


Boston Terrier Toy-"Lady"


Champion Greyhound, Ruinart
Tioronda Kennels, Nyack, New York
This dog has never been beaten in a show ring, and is probably the finest Greyhound in the world
unhappy He must be compelled to erybody else usually not at all difficult. Did you ever notice the unconcealed pride that a trick dog displays when he has gone through his performance "letter perfect"? Indeed, a dog until he becomes stubborn from age, will work so hard to please his master that sometimes he does himself a serious injury in his effort to accomplish what he conceives to be his duty. But when you get a house-dog, or any other kind of a dog, be sure that you get one with an absolutely authentic pedigree.
of homogeneous blood, the mating of animals similar


Finely Marked Litter of Pups Squantum Kennels, Atlantic, Massachusetts


French Bull and Pup

## SUGGESTIONS FOR THE MONTH

(Continued from page 32.) THE GARDEN
by repeated cultivation. If the blooms are kept picked off daily, they will bloom abundantly for many weeks. Certainly they are the prettiest and most satisfactory flowers one can have in the early spring. They thrive everywhere and bloom profusely. No flowers are easier of cultivation. There are any number of shades of color, and in ordering seed it is well to have in mind the blending of colors to get the best effects in the garden while blooming. The florist can furnish you white shades, cream or light yellow, light pink, claret and maroon, lavender and light blue, blue and purple, pink and white, reds and scarlets, deep pink and rose shades. If you will indicate to the florist from whom you order what you desire to do in the way of space to be occupied and its surroundings, he can help you in combining effects in colors, and the a mount of seed necessary.

These suggestions are applicable to all sections of the country, being modified only by climatic conditions as to time of planting. In colder climates the seed can be planted later-as late as April in very cold climates with good results. Sweet peas will not do well in any climate, out-door culture, if planting is deferred until hot weather sets in.

## THE EDITOR'S TALKS

(Continued from page 33.)
a great annoyance and inconvenience to the occupants of such rooms, and of those people whose business it was to keep them in order. Those people who are not connected with the building trade will understand and appreciate the advantages of the new treatment.

But also in our long and tiresome march to progress and perfection, the time has come when experiments have been crowned with success, for as we have convinced ourselves, the long desired tones and also a good substitute for a wax finish have been discovered. No longer need the oil pot or water pail be carefully kept out of the way of the woodwork, or the shades be pulled down in order to preserve the color from fading.

The stains, which are of great variety


Beautiful, Well-Made

## Doors

more than any other one thing, give a dignified, refined and substantial effect to your building.
MorganDoors
are perfectly designed, substantially con-
structed and beautifully finished-they structed and beautifully finished-they
are perfect doors from every standpoint. Morgan Doors will never warp, crack or shrink. They become a permanent part of the building, making it more desirable to live in and adding to its per-
manent value.
The name " ${ }^{\text {M }}$
The name "Morgan" stamped on the
top of each door is your guarantee of absolute satisfaction. Made in any style of architecture, Empire, Colonial, Mission, Chateau, etc.
Write today for our handsome illustrated book The Door Beautiful which
will give you helpful ideas and show the details of the real beauty of Morgan Doors.

## Morgan Company

Sixth St. Oshkosh, Wisconsin.
Distributed by:-Morgan Sash and
Door Company, Chicago, Ill.; Mor-
Door Company, Chicago, Ill.; Mor-
gan Company, Oshkosh, Wis.; Mor-
gan Company, Baltimore, Md,

JOSEPH P. McHUGH \& COMPANY OF NEW YORK
Will ship on receipt of $\$ 5.00$
(Money Order or N. Y. Draft)


The Bar Harbor Chair,
of Weatherproof and Washable Handwrought Natural Willow, and Softly Cushioned in Floss.

```
9 West 42nd St.
At the
Sign of the Public Library. "Popular Shop"
```

 Q


3ugbting fixtures
of superior workmanship and design of the periods SHOW ROOM
617 Market St. Philadelphia READING HARDWARE CO. Mfrs.



Why does that house harmonize so beautifully with its surroundings? Because it is stained with

## ENGLISH SHINGLE STAIN

which not only gives that artistic effect, but preserves the shingles longer than any other stain or paint manufactured. Send for samples.

DEXTER BROTHERS COMPANY
103-105-107 Broad Street, - Boston, Mass.
 Chicago; W. Potts, 218 Race St., Philadelphia: F. H. MeDonald, 619 The Gilbert, Grand Rapids ; F. H. H. Crowe \& Co., Seatlle, Spokane, Tacoma, Wash,., and Portland, Ore.; Klatt-Hirsch \& Co., 113 Front St., San Francisco, Cai':

# - The Standard of Excellence - 



## in Builders'

 Fine HardwareWith Correct Designs in all the Leading Schools of Art is found in the productions of

## P. \& F. CORBIN

N. W. Corner<br>Eighth and Arch Streets PHILADELPHIA factories New Britain, Conn.

Interior view of the First Church of Christ, Scientist, Boston, Mass., in which we laid 30,000 feet of Interlocking Rubber Tiling, in a solid color, to harmonize with the stone finish.

## Interlocking Rubber Tiling

Noiseless, non-slippery, restful to the feet, sanitary, extraordinarily durable. The fines floor for use in public buildings, banks, offices, theatres, hospitals, libraries, kitchens, laun dries, billiard rooms, bath rooms, stairways, etc., etc.
Samples, estimates, and special designs fur nished upon application.
Beware of infringers. Patented.
Manufactured solely by


## New York Belting and Packing Company, Ltd.,

 91 and 93 Chambers Street, New York City[^1]of color, are most of them used on wellknown woods, and are clean, durable and true, containing no aniline or mineral paint, and rich effects as only Nature aided by time has hitherto produced to perfection.

Note.-In line with the December Talk in these columns is the article presented above. Here we have the view-point of the artisan who, with the artist's love for the beautiful and true, combines great technical knowledge of the most advanced treatment of woods, as well as practical and exclusive knowledge obtained through experiments of his own. This man is employed by a leading firm, and expends most of his time in producing the very especial effects desired by the architect; it will, therefore, be readily realized that his opinions on this subject are of moment, and they are here offered exactly as he has written them.

## CORRESPONDENCE

OLD IVORY FINISH ON PLASTER WALLS
Will you please furnish me with detailed specification of the materials and method of applying same for the purpose of producing "old ivory finish" on hard plaster walls, more particularly on Keene's cement plaster work. A. M. J.

Answer: I have requested several firms making excellent finishes in old ivory for use on plaster walls to correspond with you. I hope that this will result in mutual satisfaction.

## TILING FOR A BATH-ROOM

On page 122 of your magazine entitled "House and Garden" (September number) I notice such a pretty design for bath-room tiling. We are building a new house and the pond lily border struck me especially, and I cannot find anything like it in any tile catalogues. Can you tell me where I could get it? If you will send me the address of a house that has tile like you illustrate I will surely appreciate same.

Answer: We take pleasure in sending you some addresses from whom you can likely obtain the water lily pattern tile which you desire, and we heartily agree with you that this tile will make a most attractive decoration for your bathroom.

## SIMPLICITY IN HARDWARE

I note that you make a point in your correspondence of recommending that great care be taken in the selection of
hardware. I am anxious to have my small house correct in every particular, but as it is very simple and very plain I feel that it is almost impossible to obtain any hardware which is sufficiently without ornament to look well.

While I think a great deal of the appearance, I am also very anxious to use something in the way of locks which work easily, as I have had much difficulty in my present house with the sticking of locks. Will you send me some addresses from whom I can obtain some information in regard to the proper kind to use? Also suggest in a general way what I should select.

The woodwork for the lower floor is of yellow pine, stained in a dark shade of brown; the walls are tinted with a sanitary wall finish in pastel colors, dull blue, brown and old rose. The fixtures will be of brush brass. Should I have something similar for the hardware ?

Answer: I am mailing you an address which I am sure will prove satisfactory in the way of furnishing you with the information you desire. The absolute simplicity of the hardware recommended will appeal to you, and suit your rooms excellently.

I am mailing you a cut showing some of these pieces, and would advise your addressing the firms to whom I refer you. The fixtures should be of the same style as the hardware.

## WATER SUPPLY

I am building a bungalow in New Jersey and as it is set in the wooded heights and quite a distance away from any town I shall have to install something in the way of a water supply. Will you kindly give me some suggestions in regard to this?

Also, what would you recommend in the way of the proper heating appliance, steam, water, or furnace? I have two open fireplaces, one of these in a large living-room is very wide and faced about with the cobblestones gathered from about the place. Should the andirons here be of iron or brass?

Answer: I send you some addresses of firms to whom I would refer you for the water supply, and also for the heating apparatus of your house. The steam or hot water is recommended in preference to the hot air, although


The broughton self-closing basin cocks have been in use for several years. many of the largest hotels and public buildings in THE UNITED STATES ARE EQUIPPED WITH THESE GOODS. ::: ::: MADE IN BRASS, NICKEL OR SILVER PLATED, AND IN SOLID SILVER-METAL

## EVERY ONE WARRANTED <br> Manufactured only by

## E. Stebbins Manufacturing Co. SPRINGFIELD: MASSACHUSETTS



U-Bar Greenhouses
Designed and Built by
Pierson U-Bar Company Metropolitan Building
Fourth Avenue and 23rd Street - New York



If about to build, start your house righthave the walls sheathed to keep the cold out and keep the heat in. For better or worse, the sheathing once done, is done for all time.

You can pour heat into every room, but unless the heat is kept in the house-if it filters out-you are trying to heat not the house alone, but all out-doors.

## NEPONSET SHEATHING PAPER Keeps Houses Warm

NEPONSET-thick, pliable and tough-waterproof-is absolutely impervious to heat or cold. It soon earns its cost in the coal it saves.

Tar and rosin-sized papers soon dry out and split. Heat escapes and cold winds penetrate.

Ask your architect what he thinks of NEPONSET Don't sign your contract till you get his advice. Then refuse to consider any cheap substitute-watch the work and SEE that NEPONSET is used.

Let us help out on your building problems. Write in at once for free suggestions from our special Department of Building Counsel-conducted for that very purpose. We study every building subject. What we have learned will be of help to you.

Write us now for free
 samples and booklets. Building Counsel Dept. F.W.BIRD \& SON Makers (Established 1817) East Walpole, Mass.
Paroid-the famous Ready Roofing for all classes of buildings. Contains no tar-is higbly fire resisting. The only ready roofing with rust-proof fixtures.

## ERKINS STUDIOS

Sun-Dials, Benches, Tables, Vases, Fountains, Well-Heads, Gazing Globes, Pergolas, Balustrades, etc., in Marble, Stone, and Pompeian Stone that successfully withstands the weather. Illustrations and Estimates upon Request. 5 West 15 th Street - New York

[^2]varying conditions must always be taken into consideration in deciding a point like this. Heavy iron andirons would look best in your cobblestone fireplace.
The systems recommended are applicable to inexpensive as well as costly houses and may be obtained at various prices. I would suggest that you take the matter up direct with the firms whose names I supply.

## WALL COLORING AND FURNISHING

As a subscriber to "House and GarDEN" I have been greatly interested in your suggestions on house furnishing. Will you kindly give me the benefit of your advice as to wall coloring and furnishing of house, a rough plan of which I enclose.
House faces southeast. It is situated on an elevation with fine front and rear views. Hardwood floors in hall, library and dining-room only.

Living-room and hall finished in mahogany. Had thought of two-toned green paper for living-room. What color rugs or carpet? Furniture mahogany. Can you give me suggestions as to upholstering?
Library beamed and panelled in curly redwood, mahogany furniture (some old Colonial pieces) upholstered in tapestry. Thought of green and brown foliage paper.

Dining-room beamed and panelled in weathered oak. Furniture to match. Would landscape paper or tapestry look well? Can I get samples? What for hall?
M. C.

Answer: We appreciate very much your interest in this Department and are glad to furnish you with the requested suggestions. I am sending you samples of the various materials I herein recommend.
With the samples I send you full suggestions and addresses of the firms from whom you can obtain the materials and directions for the treatment of your floors and standing woodwork.

In your living-room and hall in which the standing woodwork is mahogany, I agree with your suggestions for the two-toned green paper and am sending one showing a stripe for the livingroom, and for the hall a green Japanese grass-cloth is recommended, unless you desire to use the same wall covering in both rooms.

Your rugs should be Oriental in design and weave if possible. Should you desire a domestic rug such as Axminster, Wilton or Brussels, select something showing a small Bokhara pattern in shades of soft dull red, green, cream and black.

There is connected with this Department an expert on rugs who will take pleasure in making selections for you should you desire it or in putting you in touch with the best shops from which to procure these.

The samples for drapery of raw silk to be used at the window over ecru net are also sent, together with a tapestry which is suggested for the door curtains and some furniture covering.

The ceiling of this room should be in a shade of ecru. Following your thought of green and brown foliage paper for the library I send one in these colors on a dull blue ground. This paper has an excellent effect on the wall as it is rich in color and quite imposing in design. Plain draperies should be used in this room as there will be so much of design on the wall. I send you dull blue Brunswick velvet at $\$ 2$. Io a yard, fifty inches wide. For your door curtains these should be made without any interlining whatever and run on a rod by a casing at the top. A narrow moss fringe can be set in the joining of the edges or a narrow gimp may be used in the same color.

## GARDEN CORRESPONDENCE

(Continued from page 34 )
material away. The winter's exposure almost turns it into soil and it acts as a mulch in hot weather. The practice of digging the winter's manure into the beds is injurious in a perennial bed or an old shrubbery border because of the disturbance of the roots. This phase of the matter refers only to perennial and shrubbery beds where they contain a rich soil. Where they have not been manured for some time it is better to use fresh manure and remove the coarser strawy part in the spring. In the meantime the rains and melting snows will have carried the better parts, i. e. the juices, into the soil. Fresh manure from city stables or from any well regulated suburban barn contains only those weed seeds that come with the hay or bedding, but "old manure" is often rotted
(Continued on page 21.)
Digitized by COOg


The man who buys any other Typewriter always HOPES it will be as good as the Remington


Remington Typewriter Company ifo S. NINTH STREET, PHILADELPHIA, PA.

Stanley's Ball-Bearing Hinges
Nothing equals them for
Big Public Buildings or Private Dwellings
Two will frequently take the place of three Ordinary y ingese, and their action is nisee
Iess and
Made in Wrought less and pertect.
lest Made in
lestought Bronze and Steel.
THE STANLEY WORKS

[^3]

## - a reputation <br> Built on QUALITY alone ORCELITE <br>  <br> For specifications see Sweet's Index, Page 744, or get the Porcelites <br> Book. Section E. <br> 

THE THOMSON WOOD FINISHING CO. Makers of Enamels and Varnishes - Philadelphia

Ives Patent Window Stop Adjuster
Prevents Drafts, Dust and Window Rattling.

ribs and heavy bed that will not cup one piece of metal with solid the screw. Manufactured only by The H. B. IVES CO., New
the the screw. Manufactured only
Haven, Conn., U. S. A. (Fifty-page Catalogue Mailed Free.)

DO YOU WANT A BEAUTIFUL HOME
Ready for you in summer. Then you should begin to arrange for plans now.
Send for my books or write me about Special Plans. I can give you what you want.
Picturesque Suburban Houses (1907). Price by mail \$2. New, artistic and original designs for cement, stone and frame houses from $\$ 3000$ up. containing designs falows (1906). Price by mail $\$ 3$. A unique and artistic book containing designs for one and one-and-a-half-story Bungalows from \$1000 up. stone, shingle and rustic summer cottages and bungalows. Price by mail $\$ 1$, New picturesque cottages containing original and beautiful designs for suburban homes, from $\$ 2800$ to $\$ 6000$. Price by mail $\$ 1$,
E. E. HOLMAN, Architect, W-1020 Chestnut St., Philadelphia, Pa.

## 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.


Fireplaces remove the chill from the house in Spring and Fall. Have you seen our illustrated catalogue of Brick
Mantels? We will send you one. Address:

## PHILADELPHIA \& BOSTON FACE BRICK COMPANY

165 Milk Street
Boston, Mass., Dept. 46

## REFERENCE TABLE <br> OF WOOD FINISHES

THE Unique Wood Tints manufactured exclusively by the Chicago Varnish Company are applicable to the least costly as well as expensive woods. These stains show the various natural shades as produced by time and weather, as well as such coloring as is appropriate for use in houses where the modern style of decoration prevails.

## DEAD-LAC

To preserve the color and the wood it is necessary to protect them against dampness, dust and smoke. Most varnishes produce an effect of very high gloss to which many object. Where a dull finish is desired, the Chicago Varnish Company has offered Dead-Lac. For the past several years this varnish has met the requirements of the artistic architect and his client. Dead-Lac is a true lustreless varnish and has received the unqualified endorsement of the highest authorities On a surface protected by this finish it is very hard to discover any treatment whatever, as it in no wise obscures the delicate lights and shades of the natural or stained wood. It is very durable and does not spot with water; in fact it may be wiped off with a damp cloth with perfect impunity.

## SHIPOLEUM

Where a gloss finish is desired over the stained or natural wood, Shipoleum is recommended where paleness is not essential (in which case Hyperion or Palest Crystalite is advised). For the service department of the house where the wood is often left in the natural color, Shipoleum should always be used. Three coats over the natural wood will give the most satisfying results. This varnish is thoroughly tough and durable and is unaffected by heat and moisture, and although it is used in the highest grade of work, it is invaluable for hospitals, laundries, stables, etc. It is easy to apply and dries rapidly. EGGSHEL-WHITE AND IVORY EGGSHELWHITE ENAMEL
Where an enamel finish is desired for the standing woodwork, this product supplies an eggshell gloss finish in the soft ivory tone seen on the woodwork of the really old Colonial houses, or may be secured in the pure white. This enamel supplies an effect heretofore obtainable only by careful polishing at the hands of skilled workmen. With Eggshel-White this is obtained by simply spreading the material with a brush. It is therefore a most economical as well as a most exquisite finish. Chicago Varnish Company's Flat Lead should always be used for under coats excepting in bath tubs.

SUPREMIS AND FLORSATIN
These two floor finishes made by the Chicago Varnish Comoany are recognized as the most durable as well as the most beautiful on the market. Supremis is a gloss finish; Florsatin has the full beauty of wax.
Write for "Architectural Finishes" and booklet on the treatment of floors. These will supply you with full information in regard to the products of the Chicago Varnish Company.

If you contemplate building or remodeling. write Margaret Greenleaf, Consulting Decorator of the Chicago Varnish Companv, 32 Vesey Street. New York, sending a rough draft of your floor plans, stating exposure, dimensions of the rooms and the character of wood used for floors and standing woodwork. You will receive complete suggestions for the wood finish, wall treatment, drapery materials, tiles, fixtures, etc., for use in your house. This service is rendered you without cost, provided you are using the products of the Chicago Varnish Company. Send ten cents to cover postage for "The Home Ideal," a booklet prepared by Margaret Greenleaf of the Chicago Vreparnish Company. The Chicago Varnish Company's address in New York is 32 Vesey Street. pany's address in New York is 32
and in Chicago 3I Dearborn Avenue.
in weedy corners that catch the drifting seeds from untidy waste fields, so that while some weed seeds are destroyed in the rotting, many are apt to be added from this cause. Fresh manure contains fully fifty per cent more plant food, load for load, than old, but is often injurious to plant life if in contact with the roots. In the case of bulbs no manure, new or old, should touch them, but should be placed some few inches below the bulbs or be used as a mulch. If fresh manure is used as a winter's covering for bulbs it should be removed in the spring and in the case of bulbs planted closely, as scillas or snowdrops, it is quite a task to remove all the straw, which, if remaining, produces an untidy effect, while stable manure contains all the elements of plant food and will in itself produce better effects than any other. The presence of weed seeds in it has caused many to use chemical manures for lawn covering.

## trimming maple trees

When is the best time to cut off some branches of maples that overhang a walk ?
©. B. J.
Cut them at once. The wounds will dry up and close the pores during the winter. If you wait until spring the fresh wounds will "bleed" considerably. Cut back close to the main trunk, leaving no stubs to decay, and paint over any wound of an inch or over.

## MICHIGAN REFORESTATION

TO restore the pine barrens of upper Michigan, the Cleveland Cliffs Iron Co. is carrying on extensive experiments at considerable expense. It has established two nurseries for raising pine seedlings-at Negaunee and Coalwood -and good success has been attained. White pine seedlings are ready for transplanting in two years; 90,000 of them are now being set out in cut-over land near Coalwood. A considerable quantity of seed was planted last year, and more will be this season, including fifty pounds recently received from Denmark. But it takes forty years to make a pine tree profitable to market for lumber. The company is also experimenting with the Southern cottonwood to supply pulp wood, of which the company is a heavy consumer, owning paper mills. Their holdings comprise nearly one half

$W^{E}$ WANT to send you this trial jar free, because we want you to know the real pleasure and comfort that come with the use of Creme Tacoma.
Creme Tacoma is a perfect complexion cream-a skin food and beautifier unlike every other.
It is pure, soothing to the skin and antiseptic. It is free from all grease, oil and starch. Just a sweet, wholesome cream that cleanses the pores, removes pimples and blackheads, soothes and cools the skin, and leaves it in a soft, smooth, natural, and healthy condition.

Creme Tacoma is not an artificial beautifier. It is absorbed almost instantly by the skin, and will not injure the most delicate complexion. It promotes healthy circulation, removing from the pores all obstructions, and in this natural way relieves all rough and disagreeable conditions of the skin, and renews and preserves that freshness and brightness of the complexion so essential to beauty. Creme Tacoma will relieve chafng, chapping. prickly heat, and sunburn almost instantly. It will not promote the growth of hair. You can buy Creme Tacoma at your druggist's at 50 c . a jar. If your druggist does not have it, do not take some inferior cream. Look for the label Creme Tacoma on the jar. If you do not find Creme Tacoma, write to us, tell us your dealer's name, and we will make it easy for you to buy Creme Tacoma.

Write to us to-day, te'l us your dealer's name, no matter whether he sells our
cream or not, and we will send you a trial jar. Do this no $N$. You owe it to
cream or not, and we will send you a trial jar. Do this non. You owe it to
yourself-to your complexion-to try Creme Tacoma. IRON CITY CHEMICAL COMPANY
313 Carson Street Creme Tacoma is a delightful face cream for men affer shaving.

Pittsburgh, Pa.



## A Lifetime Without Repairs

## Asbestos "Century" Shingles will Outlive the Building without either Paint or Repairs



[^4]Exposed to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such, defy all changes of climates, and thus become greatly superior to other forms of roofing.
Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.

## ASBESTOS "CENTURY" SHINGLES REINFORCED ASBESTOS CORRUGATED SHEATHING

## FACTORS:

THE KEASBEY \& MATTISON CO., AMBLER, PA.
million acres, mostly covered with hardwood, used to make charcoal for furnace plants. The forestry experiments are in charge of experts, graduates of Eastern colleges.-The Country Gentleman.

## TWENTY-FOUR MILLIONS IN TWELVE WEEKS-NEW PRUDENTIAL POLICY IS POPULAR

THE Prudential Insurance Company announces that twenty-four million dollars of Ordinary life insurance was issued during the first twelve weeks that the new low-cost policy of that Company was put on the market, demonstrating the public welcome given the new policy.

The Prudential states that in comparing the rates of its new policy with the average rates of 102 other life insurance companies of the world, the rates on the Prudential's new policy are the lowest, consistent with liberality and safety, offered by any company of corresponding size, importance and responsibility.

The agents of the Prudential quote the following interesting statements, from policy-holders and others, as to the reasons for selecting the new policy of The Prudential:
"You Prudential people have bested everything in life insurance;" " My Prudential policy is the cheapest and best insurance I have;" "The Prudential's new policy gives me more for my money;" "Policy eliminates all elements of uncertainty;" "New Prudential policy beats any policy I have examined;" " Rates much lower than those charged by other companies;" "Guarantees are better than estimates. I recommend The Prudential;" "Gives the public what they really demand;" " Keeping the dividends in my pocket looks good to me;" "I buy the Prudential policy because everything is guaranteed;" "You have certainly eliminated competition;" "We have been looking for just this policy;" "The rates alone, backed by the name 'Prudential,' catch the public favor."

## A DENVER PLAYGROUND

THE new playgrounds to be opened in North Denver, Colorado, it is said, will be the most complete of any similar places west of Chicago. Arthur Leland, public instructor of the parks
for children in Denver, has completed plans for the one in the Highlands bounded by West Thirty-ninth and West Thirty-eighth avenues and Osage and Navajo streets.

He has provided separate out-of-door gymnasiums for boys and girls. The south end of the block will be occupied by an oval track for foot and wheel races, the cinder path to be nine laps to the mile. The girls will also have a handball court, a giant stride, a set of seesaws, nine swings for the big girls and eight leather-bottomed ones for the little ones. A bląckthorn hedge is to surround the girls' gymnasium. A wading pool is also planned for later in the season. A combined gymnasium and bath house is desired for the northern half of the grounds.-Park and Cemetery.

## ADVICE OF ARCHITECTS IN LANDSCAPE GARDENING

$\mathrm{A}^{\mathrm{R}}$RCHITECTS are frequently expected to give advice in matters of landscape gardening, and, for their own sakes, they generally like to know how the trees and plants existing in the neighborhood of the houses that they build can best be made available as ornamental objects; so that suggestions in regard to the improvement of old and unsightly trees by pruning, possess a peculiar value to the profession. Most architects, we venture to say, have imbibed from gardeners of their acquaintance the idea that, in pruning a tree, the stump should be left of a certain length, for the reason that it is sure to decay at the end and if a sufficient length is left to rot away, the decay will not spread to the main part of the tree. According to "Garden and Forest," this notion is very erroneous. The proper way of pruning trees is, as it says, to cut the main branches back close to a healthy lateral branch. By bringing the cut surface in this way close to the currents of sap circulating in the lateral, new woody matter is formed over it, which protects it from decay; and, if the end of the pruned branch is painted over with coal-tar immediately after cutting, no decay of the stump need be apprehended; while, if the cut is made so far from a lateral that the sap ceases to flow near it, the decay which is then inevitable gradually communicates itself through the substance of the stump to the trunk of the tree.-The American Architect.


## Cottage Sideboard

(A Suggestion)

OUR specialty is Cottage Furniture. Can be purchased at cost, permitting persons of moderate means to furnish their homes with durable and comfortable furniture-and can be obtained from us in the unfinished state, to be stained to suit purchaser or to match interiors.

Pictures of 200 distinctive pieces sent on request. Visitors are requested to inspect specimen pieces displayed in our warerooms.
WILLIAM LEAVENS \& CO.
Manufacturers
32 Canal Street - Boston


Fifteen colored designs for decorating every room in your
house. Tells how you can get the same effects, or any others house. Tells how you can get the same effects. or any others
you desire. The Alabastine Book tells all about Alabastine.
 the many advantages it has over all other wall coatings. Also
shows how little it costs to decorate your home artistically with this most durable. healthful and beautiful of wall coat ings. Send 10 cents and receive this book by return mail. Alabastine Company, 921 Grandrille Ave., Orand Rapids, Mich.

Eastern 0tfice, Dept. V. 105 Water St., New York Citr

## COLONIAL INTERIORS

of unequalled durability are made at small expense in white or light tints with

## French's Decorative Enamel

Free sample cans to architects, contractors and makes durable floors.

SAMUEL H. FRENCH \& $C O$. Manufacturers of
Varnishes, Enamels, Paints, Peerless Mortar Colors, and Buck White Lead.
Establishod 1844
Philadelphia.

SAMSON CORDAGE WORKS, Boston, Mass.



## Russell \& Erwin Manufacturing Company,

New Britain, Conn.

$$
\text { No. } 26 \text { West Twenty-Sixth Street, New York }
$$

No. 1201 Chestnut Street, Philadelphia


A Concrete Residence at Garden City, L. I. W. G. Rantoul, Architect.
When you build a home use concrete. It is durable, inexpensive and fire-proof, needs no paint, repairs, or fire insurance, is warmer in winter, cooler in summer than any other style of construction and is adaptable to any style of architecture. We have just published a second edition of

## "Concrete Country Residences" (2d Edition)

which contains photographs and floor plans of over 150 completed concrete houses, designed by the best architects in the country which


A copy of this 160 page book (size $\left.10^{\prime \prime} \times 12^{\prime \prime}\right)$ will
be sent express prepaid upon receipt of $\mathbf{\$ 1 . 0 0}$

## The Atlas Portland Cement Co.

 Information Dept.
## TRANSPLANTING TREES AT NIGHT

IT has long been known that budding trees, when transplanted in the evening, are more likely to thrive than those moved in the daytime, says "The Garden." A French expert has gone a step farther, and claims that distinctly beneficial results can be gained by transplanting in the dead of night. He has transplanted large trees without losing any by the adoption of this method.Park and Cemetery.

## Sheraton Furniture

THE term "Renaissance" is usually applied to the great classic revival which beginning in Italy in the fifteenth century gradually spread throughout Europe, but the eighteenth century had also its Renaissance in France to express itself in Louis XVI style; in England it made itself felt in the work of Robert and James Adam and in the furniture of Heppelwhite and Sheraton.

To the Adam brothers was really due the reaction that took place both in architecture and furniture making. The brothers did not create the style which bears their name but they adapted to English conditions a style as old as ornament itself and which had already gained a footing in France.
The influence of the Adam brothers on the furniture makers of their time was very marked. The later work of Heppelwhite and more especially of Sheraton was largely shaped by them. Sheraton did not imitate; he was too great for that; but he embodied in his furniture a feeling for simplicity which he himself was generous enough to attribute to the brothers. In this country the Adam type of furniture is best known by the work of Thomas Sheraton. Heppelwhite's furniture also shows a strong Adam infuence. The characteristics of the


Adam style were, to quote an old writer, "simplicity, elegance, slenderness and low relief."

Chippendale won most of his laurels by his exquisite carving and the masterly way he applied ornament to form. This statement refers to his best work, which was executed before he adopted his rococo methods. His
earlier work was strongly influenced by the Dutch and his later efforts by the French. The English designer has never been at his best when copying the Frenchman.
To-day the fancy of collectors, particularly in this country, turns to the designs of Sheraton and Heppelwhite. The designs of these great furniture makers are often confused and there is some foundation for it. Both used the long, tapering leg, and both made a most effective use of inlay. Sheraton's inlay, as we find it in America, is often in the form of slender lines sunk in a mahogany surface; lines of holly, harewood, satinwood, boxwood or kingwood. He obtained masterly effects with inlay, often in the simplest manner possible. Heppelwhite usually chose more elaborate patterns, but clung to a simple and beautiful form of construction. The fluted leg is generally attributed to Sheraton, and the plain tapering one to Heppelwhite, but Sheraton made use of the taper just as he sometimes did of the shield back for his chairs. With Heppelwhite the shield-shaped chair was his most common form. When Heppelwhite used the plain, tapering leg he added the spade-foot, which Sheraton never did.
In looking for reproductions of Sheraton's work it would be hard to find anything better for a bedroom than the bureau which we illustrate. It has the charm and refinement necessary for a room, which above all should be simple and dainty in its appointments. This furniture expressed the spirit of the best work of the late eighteenth century, and a careful examination of its construction will show that painstaking regard for detail which was the hallmark of the handicraft of that day. In a room decorated in the style of the period, where wallhangings, curtains, and floor coverings have been chosen to harmonize, it would be possible to obtain by the use of this bureau and the pieces which accompany it, a very attractive Sheraton bedroom.
Note.-The model for this article is from Berkey \& Gay Purniture Co., Grand Rapids Mich., who make correct reproductions of Colonial and Period Furniture. Ther bro-
chure, entitled
Furniture of Character, and can be obtained by sending 15 cents in postage to Dept. N to partly defray expenses.

## TREE PRUNING

WHERE pruning is judiciously and courageously done, a tree which is apparently nearly dead may be brought back to vigorous life, and its existence prolonged, perhaps for a century. The principle to be observed is to increase leaf surface and promote its exposure to light. If half of a branch which bears only small and scattered leaves is cut away, the remaining half, which now receives all the nourishment from the roots that was previously distributed through the entire branch, will put forth much larger and more numerous leaves, so that the total area of the leaves on the half branch that is left will often be more than twice as great as that of all the leaves on the entire branch before pruning. As the elaboration of


DURING the long winter evenings, which are now at hand, in talking over the plans for the new home to be built in the Spring or for the alterations to be made, the question of the best fixtures for the bathrooms and toilets is one which must be decided sufficiently in advance of building, to be sure of having the goods ready when needed.
This important sanitary question has been solved by thousands of people, by the simple decision to use "Ideal" Solid Porcelain ware bathtubs, sinks, and laundry tubs, and either "Ideal" Solid Porcelain or "Impervio" Vitreous Chinaware Lavatories; while the closet bowl and tank should, without a doubt, be of the very best hard fire Vitreous China syphon jet pattern.

There is only one manufacturer in this country who makes all of the above mentioned goods, and who, therefore, can guarantee the same stable quality and durability throughout the fixtures. That manufacturer is the Trenton Potteries Co., Trenton, N. J.
The Company owns and operates six complete factories in Trenton, and is also represented in the Canadian trade by the Canadian Trenton Potteries Co., of St. Johns, Quebec.
The following letter we consider a testimonial, which will surely appeal to representative house builders and house owners, and we also have confidence that after your decision is that your Architect specify and your Plumber install goods of our make, you will feel like writing us a similar letter, after having used the fixtures.

North Adams, Mass., May 9, 1907.
Trenton Potteries Co.,
Trenton, N. J
Gentlemens:-I would like to have you send me, if you will, one of those little pocket catalogs. I got one catalog when I called on you and bought some tubs, but loaned it to the plumber, and now my family want to keep one of
these catalogs to show to our friends who look the house these catalogs to show to our friends. who look the house
over, as the goodsare very beautiful. I have two of your tubs and three lavatories. Hoping that you will favor me, I remain,

Yours truly
ARCHER H. BARBER.
Let us mail you a small booklet of fine half-tone illustrations of our goods. You can have one of these books by simply addressing

> The Trenton Potteries Co .,

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


NEW BURLAPS

## "Scotia" and "Empire"

## Suitable for High-Class INTERIOR DECORATIONS

## Send for Samples

RICHTER MFG. CO., Tenafly, N. J.

## New York, 20 East 21st Street <br> Chicago, 43 E. Randolph Stroet.

[^5]

Detail of Faience Frieze, Exterior of Woman's Building, Carnegie Technical Schools, Pittsburg.

Palmer \& Hornbostel, Architects.

Supplied by
The Rookwood Pottery Co. CINCINNATI

1 Madison Ave., New York

©.The tiled foor and wall is beautiful, sanitary, economical and lasts forever. It is water-proof, germ-proof, vermin-proof and fire-proof. It does not need to be painted, polished, oiled or repaired. It cannot be stained or scratched. All dirt spattered upon it can be removed as easily as from a dinner plate. It is a great saving of domestic labor.
Whe bath-room, kitchen and vestibule should always be tiled. Tiling is also appropriate in the hall and dining-room and on the porch floor.
(1)For interesting and instructive booklets on tiling, write, The Information Bureau of the

## TILE INDUSTRY,

318 Corcoran BIdg., Washington, D. C.

## Landscape Architects and Engineers

Plans for the development of private estates, parks, cemeteries and boulevards made and executed SOUTHERN WORK A SPECIALTY Established 1856
P. J. BERCKMANS CO.

Augusta, Ga.


2 .

## The New Jersey Zinc Co.

71 Broadway, New York
We do not grind zinc in oil. A list of manufacturers of zinc paints sent on application.


We will bind subscribers' own copies of House and Garden if sent to this office in good condition for one dollar per volume. Six numbers constitute a volume.

Temporary binding for preserving numbers of House and Garden will be furnished at one dollar each.

Subscription Dept., House and Garden. 1006 to 1016 arch st., phlladeliphia, pa.
the crude sap, and the consequent growth of the tree, is proportionate to the leaf-area exposed to the light, the vegetation of the pruned branch is in this case twice as vigorous as it was before pruning; and the same treatment can be applied to all the weak branches of a tree, with a similar result. Moreover, if the upper branches of a tree in feeble health are cut back more than the lower ones, the leaves remaining on the latter receive an increased amount of light, and contribute, in consequence, much more than before to the nourishment of the tree.-The American Architect.

## A CHURCH LOST IN LONDON

THERE is a derelict church in the Charing. Cross Road, the existence of which will be news to most Londoners. It is called by the title of "St. Mary the Virgin." Desertion seems to have taken place because the fabric was crumbling away. Of late nobody has cared to own it, no funds being available to keep it in repair, and the public authorities have been obliged, for the safety of passing pedestrians, to undertake some precautionary work. They are naturally anxious to discover an owner, and have summoned him by notice on the door of the edifice to make good the structural defects; but if there is really an owner, he is scarcely likely to place himself in evidence and assume considerable pecuniary liability. The old place will no doubt have to be removed altogether. As some of the walls threaten to fall at any hour, the Council has charged itself with the duty of shoring them up, and will duly file the account against the missing owner.-Liverpool Mercury.

## THE OLD MEETING-HOUSE, LOWER MERION, PA.

THERE is a little old stone meetinghouse in Lower Merion, Montgomery County, Pa., which is the object of peculiar interest to members of the Society of Friends. The meetinghouse measures but fourteen feet from floor to roof, and is more than thirty-six feet long and twenty feet wide. The walls, constructed of pointed stone, and in later years plastered in imitation of cut stone, are the walls of two centuries ago. The window panes are the small
(Continued on page 30.)

STRIKE a keynote and keep it. That policy triumphs anywhere, but especially in an advertising campaign. Consider the articles that publicity has made famous from ocean to ocean. In each case there will be found one strong centralized idea around which the intricacy of all the advertising is hung. No more striking example of the virtue of the crystallized idea can be found than in the unprecedented success of the publicity tactics used by the men who, during the last twenty years, have introduced Horlick's Malted Milk to millions of persons throughout the world. Whereever newspapers and periodicals go this food drink, which two decades ago was little known, has become associated everywhere in the public mind along with one heroic figure, Shakespeare.
Americans worship the great goddess Success. When any great achievement is attained, every one wishes to learn how it happened. Not more than a quarter of a century ago William Horlick, of Racine, Wisconsin, originated Horlick's Malted Milk. About this time Horlick's picture advertisement, often styled "The Maid and the Jersey," sprang into existence. The graceful red-cheeked country lass, and the healthy Jersey heifer, have become known to every household.
Horlick's Malted Milk Company needed advertising that had novelty, attractiveness and cleverness, but entirely in good taste. Nothing so embodies good taste and culture in the minds of people as the Plays of Shakespeare. Here was the field that could be drawn upon with impunity.
The many excellent qualities peculiar to Horlick's Malted Milk could have been exemplified in picture and in story; but paramount was the purity of the milk. "As pure as delicious, as wholesome as sweet." The advertisers of Horlick's Malted Milk adapted this phrase from Hamlet's speech to the players.

Claiming great purity, Horlick's Malted Milk Company set out to produce a pure, complete milk food, which should be, like Caesar's wife, "above suspicion." Scientific methods to obtain and conserve purity, together with strict sanitary regulations from the cow to the package, were developed and are rigidly maintained.
The cows which contribute to the great supply of milk used by Horlick's Malted Milk Company are carefully selected. None are admitted to the herd until they have been approved by the Company's veterinary surgeon as healthy and well-developed cows, capable of yielding a large supply of pure, rich milk.

The Company next demands extreme cleanliness in the barns. These must be white and clean,
well ventilated and lighted to furnish a pleasing environment for the cow. The food and drinking water must be of the highest grade obtainable.
The milk pails in which the milk is first received, and all cans in which it is transported to the works, are carefully inspected each day, and thoroughly washed and scalded by methods which insure absolute cleanness. The milk, when delivered to the works, is immediately stored for a few hours which intervene before it is used in the preparation of Horlick's Malted Milk. During this time it is kept in a beautiful refrigerating room, artificially

necessary malt extracts to raw or condensed milk to make it a good substitute for mother's milk. Moreover, to assist weak stomachs, the milk has been partially predigested, consequently is acceptable to most delicate stomachs.
So Horlick's Milk is a food for persons of all ages, weak or strong. Consequently an advertisement is required that exemplifies a food for worldwide use. Searching for such an advertisement, keeping all the time in mind the Shakespearean policy, the advertisers very logically decided to adapt in some way the "Seven Ages of Man" as
laid down by Jacques in "As You Like It." On this plan was constructed the advertisement which is probably the greatest picture sermon, in advertising history Jacques' words beginning, "All the world's a stage," have been taken and pictured to magazine readers associating Horlick's Malted Milk with the gamut of man's years.

First, "there is the infant in its nurse's arms." Upon this phrase the artist has drawn a youngster's introduction to Horlick's Malted Milk. He is a tiny thing in a long dress, but energetic enough to make known his desire for the food upon which he waxes lusty. Then comes the schoolboy, who "with shining morning face, creeps unwillingly on
his way to school." The artist has improved considerably on Jacques' conception of the lad. Jacques' boy crept off like a snail, but the lad brought up on Horlick's Malted Milk, with boundless energy and good temper, runs merrily to school. Some years pass, the school boy has become a lover. Not "sighing has become a lover. Not "sighing ful ballads to his mistress' eyebrow." He treats his sweetheart to Horlick's Malted Milk, a compliment just as delicious as his ballads and certainly more satisfying.
We see the lover again, but as a soldier, "seeking the bubble reputation at the cannon's mouth." He is wounded, the picture shows, but a Red Cross nurse is near him with the food that has brought him through infancy and boyhood to manhood.
Prosperous looking and stout, we find our hero again as the Justice. He is "full of wise saws and modern instances," the chief of which is
cooled at all seasons of the year. To secure the high standard of purity and cleanliness set by the Horlick Malted Milk Company, a quarter of a century ago the plant was placed in the green fields of the great dairy district of the Northwest, near Racine, Wisconsin. Far removed from the filth, smells and bacteria-laden dust of larger cities, with the pure air of the country and abundance of sunlight, the sanitary condition of the laboratories and works are maintained at the highest excellence. From the surrounding country carefully selected barley is obtained, and with important scientific methods converted into malt needed for this ideal food product.
Horlick's Malted Milk is an ideal food for babies and invalids. Cow's milk is good food for a calf but not for a baby. It lacks many of the sugars that mother's milk contains. Horlick's Malted Milk Company has formulated a milk which adds the
"That's meat and drink to me."
"That's meat and drink to me."
On the verge of old age we have our hero again. Spectacles on his nose show his sight is failing; but his frame is stout and his face has the ruddy hue of health. By no means an old man, he has undertaken a journey on the railroad. On the dining car he calls for the inevitable Horlick's Malted Milk. When we come to the final scene of the Seven Ages of .Man, "the end of this eventful history," we see our hero gray-haired, with his aged wife near him. It is old age now. But the man and his wife are strong and vigorous to the last chapter.
It remained for the Horlick's Malted Milk Company to originate and utilize this Shakespearean advertising. While it is held together by a single crystallized idea, that of letting Shakespeare do the talking, it has unlimited possibilities of development. It appeals to the high-bred cultured taste, but is appreciated by the most illiterate. As Shakespeare is the world-wide poet, the poet of all classes, even to the most lowly, so Horlick's Malted Milk is a product designed to win the affections of all persons and all classes.
Thus is the public educated.

# House ${ }^{\text {farden }}$ 1908 

## THE PASSING YEAR

The passing year has brought to House and Garden a gratifying meed of success and much pleasant commendation from our readers, for which we wish to express our sincere thanks and appreciation. To old friends and new we would say that the magazine for 1908 will be more beautiful, more practical, and more really necessary to the men and women who are directly or indirectly interested in their homes and gardens than ever before.

## THE SMALL HOUSE WHICH IS GOOD

Many leading architects in this country and abroad will supply our readers with suggestions so complete that they may be utilized to meet the needs of the interested builder. Houses ranging in price from $\$ 3,000$ to the costliest mansions will be reproduced and described.

This idea has been used in a measure in the articles treating of the inexpensive house which have run so successfully under the caption of "The Small House Which is Good." We feel in enlarging the field of the styles of house presented, we will be meeting the needs of all of our readers who contemplate building. These houses will be published, fully illustrated by photographs of exterior and interior of the finished house and showing also floor plans made from the working drawings. They will be found replete with suggestions which will be adaptable to many needs. The best types of houses from all parts of the United States will be presented and in most cases written of in an interesting way by the architect who has designed them. These will embody the Colonial, the typical city house, country house and bungalow, varying as widely in design and style as in cost.

HOUSING THE POOR
An especially timely series on the housing of the poor in the great cities will be offered during the year from the pen of the eminent authority, John William Russell. Mr. Russell knows his theme thoroughly; and while his articles will be in a measure statistical, they are full of information which is not only important, but extremely interesting. These articles will be illustrated by photographs showing some of the best and most modern tenements.

## SOUTHERN CALIFORNIA

Southern California and its beauties of house and garden will be written of from time to time by Charles Frederick Holder. Mr. Holder has been long a resident of Southern California and one feels that he speaks of what he knows and loves in these articles. Many suggestive ideas may be gleaned from these to be used in other parts of the country as it is an acknowledged fact that in successful homemaking which includes the surrounding grounds, this part of the world is unsurpassed.

## FOREIGN CONTRIBUTIONS

From our foreign contributors we will offer many especially delightful articles. The Duchess of Buckingham and Chandos writes of the celebrated collection of portraits in her home in Scotland. The Hon. Mrs. Forbes and Mrs. Jennings-Bramly will also supply some charmingly picturesque descriptions and illustrations of these wonderful old homes of the Scottish Border. Mr. Jacques Boyer will write about "The Tropical Gardens of Paris" and about the "Forcing of Fruits for the Market in France."

## SUBURBAN HOMES

Among other articles no less important to appear during the coming year will be the color treatment for the exterior of the suburban house. An article on "Mantels, Good and Bad," both sides of the question being fully illustrated and discussed. "What the Mirror means in the Decoration of the Home" and how it may be cleverly used to produce vistas and various spacious effects, which cannot otherwise be obtained.

## CORRECT FURNISHING

"Correct Furnishing," what to buy, where to buy and how much to pay for it, is an article which will be of inestimable value not only to the woman who lives far from the center of things but to the city woman as well.

## PICTURES

"Pictures" from a decorative standpoint and pictures as the leading feature of the room. How to group them and how to frame them. A number of opinions from authorities on these very important questions will be published during the year.

28

## GARDEN FEATURES

The Garden features for the coming year will, we feel, be better than ever before. Landscape effects for the larger estates and how to produce them will be written of by Engineers and Landscape Architects whose work has been proven out successfully. Some old-fashioned gardens-such as our great grandmothers loved so well-will be reproduced in plan and planting lists given. Of Formal gardens, many charming ones will be shown, selected from all parts of this and other countries by experts in the art.

Mr. Eben E. Rexford, W. C. Egan and others will contribute timely papers on the various problems which confront the lover of flowers and tell how to solve them. They will also write of how to obtain the best effects in garden planting and name best varieties of plants to use, the same being the results of their own personal experiences. Some of the really remarkable and interesting things to which Mr. Luther Burbank has been devoting years of experimental work, will be described by Georgia Torrey Drennan, while many of our readers have contributed articles, telling of their mistakes or successes in their garden efforts, all of which will prove excellent guides to others working along similar lines.

## SPANISH-AMERICAN PATIOS

"Spanish-American Patios" will be shown and their use and adaptability for more northern latitudes discussed. Their decorative possibilities in connection with the conservatory forms only one of their desirable features.

## HISTORICAL BUILDINGS

Several articles with rare illustrations will appear during the year--descriptive of Historical buildings or places-wherein the salient points are susceptible of being introduced in modified form into new structures, or in the development of the gardens.

## GRILL ROOMS AND RESTAURANTS OF THE WORLD

The perfection which the art of serving large numbers of people in limited time has reached, has led us to present several short descriptive articles-profusely illustrated-of the housing of the really great Grill Rooms and Restaurants of the world. The completeness of detail will prove a revelation to the majority of our readers, and yet many of the conveniences can and should be installed in our larger homes, with very desirable results.

## THE STABLE AND KENNEL

The Stable and Kennel Department in this Magazine is intended to cover a tolerably wide range, and to embrace within its consideration all kinds of animals ordinarily kept on a country place. KINE
We have already treated of horses and dogs, and an early article will be devoted to kine. This particular article will be beautifully illustrated with pictures of specimens and groups from the most notable herds in America.

## PIGS

Nor will the pig be neglected. For it must be known that these are very interesting animals, and there is a wide variety of types, going all the way from the short-legged Berkshire to the lean and fleet-footed Razor-back. It used to be that these Razor-backs that roamed the forests of Virginia and Kentucky were considered in their porcine way to be about on a par with the poor-whites of the South. There could be no greater mistake. From them come the best hams and bacon in the world. They are worthy of study and possibly of cultivation, though cultivation may hurt the wildness which gives to them their game flavor.

## POULTRY

To poultry we shall give particular attention. A gentleman living in the country who does not raise his own fowls makes a great mistake. It is the feed and drink provided to a chicken which makes or mars him. A chicken is not naturally nice in its habits, and will eat and drink anything. The cleanly Quakers recognized the importance of the proper feeding of chickens before anyone else, and so in every market of the United States to-day "Philadelphia Chickens" are quoted. This does not mean that these chickens come from Philadelphia or its neighborhood, but that they are superior, and have been properly fed and dressed.

## HORSES

The editor's particular predilections are for horses, and on equine matters he will usually supply the copy himself; but on some other topics pertinent to the department he purposes securing the aid and co-operation of the foremost authorities in the country. But on one thing he insists. No cut-and-dried technical treatises will he permit in this department. Practicality, as a first essential, in every case, he insists on. Bringing himself the fruit of many years' experience in these subjects, his aim is to make himself your Counselor-in-Chief, and his Department the "Handy Annex" to your country.place.


The story of this trip of the Sage of Shady Dale to the White House is told in the inimitable fashion of Mr. Sanders, who is in reality a character through which the Editor of Uncle Remus's Magazine exploits his views on general affairs.
THIS WILL BE JUST ONE OF THE MANY STRIKING FEATURES In the FEBRUARY Number of

## UNCLE REMUS'S MAGAZINE

## Edited by Joel Chandler Harris

## FOR SALE AT ALL NEWS DEALERS

TEN CENTS PER COPY
\$1.00 BY THE YEAR
P. S.- (Here's an extract from Mr. Sanders' story of his trip.) "No sooner had I shuck the President's hand than the dinner bell rung-we call it the supper bell at my house -an' then a lovely lady came to'rds me, wi' the sweetest lookin' young gal you ever laid your eyes on; an' right then an' thar I know'd whar the home feelin' come from."

IF YOU FAIL TO READ MR. SANDERS' STORY OF HIS VISIT TO THE PRESIDENT YOU'LL MISS A TREAT.
Why not subscribe to Uncle Remus's Magazine? If you send $\$ 1.00$ at once and mention House $\mathcal{E}$ Garden you will receive a beautiful reproduction of Florence Mackubin's famous pastel of Joel Chandler Harris.


MR. C. H. FORBES-LINDSAY
has been bitterly attacked because he dared, before President Roosevelt visited the isthmus, to say that our work at Panama has been well done.
The facts about the canal and its romantic history are ready for you in his book :

## PANAMA

The Isthmus and the Canal
Cloth, 368 pp., 16 illustrations, 2 maps from latest surveys. ONE DOLLAR NET
At all bookstores.
THE JOHN C. WINSTON CO., Publishers, Philadelphia
of food among the Indians. The bean is produced in pods which are seven'to nine inches long and of a buff color. They begin to ripen in midsummer, and have the quality of preventing thirst as well as of satisfying hunger. They are often of the greatest value to travellers through that desert country. The Indians, who know their value, do not hesitate to go a long distance away from water if they are sure of a supply of mesquit beans along their route. Among certain of the less civilized of the southern tribes of Indians-the Cucupahs, who live along the Colorado River in Lower California-mesquit beans form an important part of the winter food supply. The Indian women also make rope and twine of the bark of the tree and weave it into baskets. Horses and cattle also feed upon the beans. There are few regions of the earth so utterly sterile as to be without the means of supporting human life.-Invention.

## LABOR IN MEXICO

THE most senseless thing that any newspaper can be guilty of, is the comparison of the condition of Mexican labor with that of the United States. Our labor is not, as a rule, as efficient. We do not pretend that it is. Even in cotton-picking the negro will do four times as much in a day as the Mexican. Agricultural labor here is slow and ineffective. In the mechanical arts the same indolence is noted. So if the laborer or mechanic is not as well rewarded as the American artisan or laborer, it is because he is not worth it. In some industries cheap labor is an advantage. There are mechanical arts, grades of factory labor, where the native labor is as good as foreign, and so, being on a silver basis of compensation, is profitable for the employers. The Mexican laborer and mechanic has not the wants of his counterpart in the United States. He has not inherited those traditions of comfort and physical well-being which are natural in a race accustomed to providing for hard winters and enduring a variable climate. The climatic environment of the workingman here tends to make him easygoing. It is not easy to starve. And, when you think of it, men in Northern lands work because they fear hunger and discomfort. When it is easy to get food, and there is no peril from a rigorous
winter, men will not work with the same diligence. So it is evident that it is foolish to compare Mexican with American labor, and to print long columns of comparative wages.-Mexican Correspondence Boston Herald.

## ANCIENT COPPER MINES

THE copper mines of Sinai, the most ancient mentioned in history, were the subject of a recent communication by M. Berthelot to the French Academy of Sciences. Authentic documents show that these mines were worked since the time of the Egyptian dynasty (about five thousand years в. с.) until the end of the Ramesides (about 1300 to 1200 в. c.). While their possession was the object of several wars, they have been abandoned for three thousand years on account of the poor quality of the ores. From these mines came the sceptre of Pepi I., a king of the sixth dynasty, which is now preserved in the British Museum, and which Berthelot's analysis showed to be of pure copper. The adits still exist, as do ruins of the furnaces, the crucibles the huts of the miners and fragments of their tools.-Boston Transcript.

## DISCOVERIES AT POMPEII

$\mathrm{A}^{\mathrm{T}}$T Pompeii some mural paintings of more than ordinary interest have recently been disclosed. In the Eighth Region, between Nos. 16 and 21 of the Second Insula, Via III and IV, the remarkable discovery has been made of a house five stories high. The upper floor, which is entered from the highest level formed by a mound of prehistoric lava, is profusely decorated, and the principal hall displays on one wall the myth of Bellerophon, a nude figure who, holding with one hand the bridle of his horse, is in the act of receiving the letter and orders of King Prœtus, who is seated on a throne before him. The lower part of the house, looking towards Stabiæ and the sea, was used as a bathing establishment. Three steps lead into the frigidarium, which is perfect, the lower part of the surrounding walls being painted blue, and the upper red. The middle of the right wall is occupied by a picture representing a nymph, semi-nude, borne over the waves on a sea-horse. The horizontal band dividing the blue from the red surface is a kind of frieze of comic


This Telegram Means ${ }^{\text {s }} 4.20$ for ${ }^{\text {s }} 2$. 15 The Biggest Magazine Bargain Ever Offered


In addition to saving $\$ 1.35$ by ordering these three great magazines at the special price of $\$ 2.15$, any New Idea Pattern (value io cents) may be selected as a premium, provided the number and size of pattern desired accompany your remittance. You can make your selection from the designs in any issue of the New Idea Woman's Magazine, to be seen at any newsdealer's, or from the catalogue of any New Idea Pattern Agent. Note.-The Designer (without pattern) may be substituted for The New Idea Woman's Magaxine.

## J. T. WOOD, Manager

For Canadian Postage Add $\$ 1.50$. The Newsdealers' Subscription Bureau 8 Astor Place, New York City

## We are desirous of securing a number of copies of Mousesfarden

for January, 1905; July, 1903; April, 1902; June, 1902, and July, 1902, and will pay 25 cents for each copy sent us in good condition.

## CIRCULATION DEPARTMENT <br> House 6 Garden



## SOME USEFUL BOOKS FOR YOU

KITCHEN GARDENING. By Thomas Bridgman. This work comprises $15^{2}$ pages, liberally illustrated. 12mo. Cloth
FRUIT GARDENING. By Thomas Bridgman. Liberally illustrated. 12 mo . Cloth, 50 c . FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth
MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By Charles Barnard. 12 mo . Cloth . - - - - - - . . - - - 40 c .
THE STRAWBERRY GARDEN: HOW IT WAS PLANTED. WHAT IT COST. By Charles Barnard. 12 mo . Cloth - . - . . . . - 40 c FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12 mo . Cl., 40 c.

THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia. ANY OP THESE VOLUMES MAILED ON RECEIPT OF PRICE.
or caricature scenes, representing dwarfs and pigmies, in scenery evidently of the Nile country, fighting with various animals. One dwarf is in the act of throwing a large stone at an ibis; while another is trying to save by drawing to the land a figure (probably a woman) fallen into the river, when, seized himself by a crocodile, he has tied himself with a rope to another dwarf, standing behind, who is striving with might and main to prevent his comrade from being drawn down into the water.London Athenaum.

## DUST TO DUST

AMONG Canon Gore's stock Iof stories, which have the English cathedrals for a background, is one of two country girls who, evidently enjoying a holiday from fresh domestic service in the city, were observed by an attendant pacing fearfully the aisles of St. Paul's. Under the magnificent dome one of them paused to gaze in wonder about her. Curious to see in what words her manifest impression would find utterance, the attendant stole nearer. It seemed that her limited vocabulary was inadequate. Not so her companion. "Ain't it just grand!" cried she. The spellbound one remained silent for a moment longer. Then, as if breaking the chains of some strange enchantment, she turned upon her friend, "Yes," she said, slowly and timidly, "but, oh dear! Sarah, wouldn't it take just forever to sweep this place out!"-Exchange.

## THINGS MADE OF PAPER IN JAPAN

TN Japan, as is well known, it has long been customary to manufacture a multitude of articles, from overcoats and window-panes to string and pocket handkerchiefs, out of paper, but the Japanese Government, not content with these feats of national ingenuity, is just now bestowing great attention on the paper industries, and experimenting with pith, old silk rags, and many kinds of vegetable substances, with a view to other employments of paper in the arts. Mr. Liberty, in his recent paper read before the Society of Arts, describes a visit that he made to the Government paper factory at Shiebu-Ogi, where he watched hundreds of intelligent little Japanese girls and women preparing the
"mitsumata," or bark of the famous "paper mulberry tree," and arranging the snowy layers of pulp on the rectangular straining sieves. Toughness and a silk-like surface are the usual characteristics of Japanese paper, which, in spite of our recent progress in this department of the arts, still remains far superior to European paper.-London Daily News.

## TREES FOR WEST, NORTHEAST AND LAKE STATES

THE Forest Service has issued two recent valuable bulletins on tree planting best adapted to the hard conditions of the semi-arid plains of the West and also for the Northeastern and Lake States. Circular 99 is called "Suggestions for Forest Planting on the SemiArid Plains" and is devoted to the interests of forest planters in the western portions of Kansas, Nebraska and Oklahoma, Northwestern Texas, Eastern Colorado and New Mexico.
This entire region is practically treeless. Here and there, of course, trees have been planted, but forest planting has in no way kept pace with agricultural development. There is real need for forest growth. By careful selection of the species, the choice of suitable sites, and proper management of plantations, enough forest can be grown to exercise a marked effect upon farm development and to supply wood for most domestic purposes. The object of the circular is to show just what is practicable.
For street and roadside planting the most suitable trees recommended are honey locust, green ash, white elm, hack berry, and, in the North, Austrian pine.
Circular 100, "Suggestions for Forest Planting in the Northeastern and Lake States," is applicable to the New England States, New York, New Jersey, all of Pennsylvania except the western portion, Michigan, Wisconsin and Eastern Minnesota.
In general, conifers are specified as best adapted for planting in this region, since lands which are to be devoted to forest are usually too poor to grow hardwoods profitably. Conifers produce a variety of material which is in great demand. They also are far superior to deciduous trees for protective planting.
Species which are well suited for planting in this region are white pine, red


Plans for your new home with all the information you need to make home building easy and satisfactory. Keith's Magazine is devoted to home building, decorating and furnishing. Each 64-page issue contains plans for seven practical, artistic house designs, drawn by the best architects in the country. Keith's Magazine is filled from cover to cover with helpful ideas and suggestions for home builders and home makers. It helps to make every dollar you put into your home count for beauty, utility and lasting satisfaction. Subscribe now and we will send you our handsome book, showing

## 42 Cottage and Bungalow Plans FreE

This book gives you your choice of 42 inexpensive, up-to-date, model designs, with accurate descriptions, illustrations and cost estimates at current prices. The book also tells how you can obtain Free Blue Print Plans. With Keith's Magazine and its free information service, together with our books of designs, your building simply cannot go wrong, because Keith's Magazine deals in facts. It can be relied upon absolutely as the recognized authonity for

One year's subscription to Keith's, $\$ 1.50$ with illustrated bublication of its kind in existence.
Book of designs for 74 Homes costin $\$ 300{ }^{\prime}$ 's, $\$ 1.50$ with illustrated book of 42 Cottages and Bungalows FREE.
 MAX L. KEITH, Lumber Exchange 000, MINNEAPOLIS, MINN.


## HURLBUT'S STORY OF THE BIBLE FROM GENESIS TO REVELATION

Told in Language that Interests Both Old and Young.
RECOMMENDED $\quad \begin{aligned} & \text { For Its Freshness and Accuracy } \\ & \text { For its Simplicity of Language }\end{aligned}$
DENOMY ALLTIONS For its Mumerous and Appropriate Illustrations
As the Best Work on the Subject
Hon. David J. Brawer-Can heartily commend it to all. Bishop Vincent-An in-
valuable aid to parents. Rev. Russell H. Conwell-Written by a master hand,
directed by a master mind. Henry A. Butts, Pres. Drew Theological Seminary The absence of doctrinal discussion makes it acreptable to all. Mr. Marion Lawrence, Gen. Secy. International S.S. Asson-Best thing of the kind. wish the Bible Story in a simplified narrative
ully printed and bound, 762 pages, nearly 300 half-tone
Beautifully printed and bound,
illustrations, 8 in colors. Price Only $\$ 1.50$. For Sale By All Booksellers, or Sent Postpaid on Receipt of Price. THE JOHN C. WINSTON CO. Dept. G 1006 Arch Street, Philadelphia PUBLISHERS OF THE "INTERNATIONAL" SERIES OF BIBLES.

## Free Advice on Decoration

THE unprecedented growth of the Correspondence Department of "House and Garden" has necessitated the opening of a new Department which will be devoted to the interest of those who are building, decorating or furnishing their homes.

Beginning with the new year "House and Garden" offers its readers a House Finishing, Decorating, Furnishing and Purchasing Service which is complete in detail and thoroughly practical. Full color suggestions for the exterior of the house will be supplied with recommendations of proper materials to obtain the results. For the interior, the treatment of standing woodwork and floors, the selection of tiles, hardware and fixtures will be considered and specifically recommended, with the addresses of firms from whom these goods may be obtained. Samples of wall coverings and drapery materials will be sent and selections of rugs and furniture made. When desired, the goods will be purchased and shipped to the inquirer; the lowest retail prices are quoted on all materials.

This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.

## YOU ARE A DEAD ONE IF YOU CAN'T COME BACK WITH A GOOD TOAST

In the SKULL TOAST BOOK are 200 witty toasts and 150 clever pictures (count 'em)


Book made in shape of a skull Limp Leather, $\$ 1.00$ In Cloth, 60c. $6 \times 7 \%$ inches.

Sent postpaid on receipt of price THE JOHN C. WINSTON CO., PHILADELPHIA
(Norway) pine, Scotch pine, jack pine, Norway spruce, European larch, tamarack, chestnut, sugar maple, and red oak.-Park and Cemetery.

## USES FOR OLD NEWSPAPERS

HERE is an interesting suggestion which we find in a contemporary. Most housekeepers know how invaluable newspapers are for packing away the winter clothing, the printing ink acting as a defiance to the stoutest moth, some housewives think, as successfully as camphor or tar-paper. For this reason newspapers are invaluable under the carpet, laid over the regular carpet paper. The most valuable quality of newspapers in the kitchen however, is their ability to keep out the air. It is well-known that ice, completely enveloped in newspapers so that all air is shut out, will keep a longer time than under other conditions; and that a pitcher of ice water laid in a newspaper, with the ends of the paper together to exclude the air, will remain all night in any summer room with scarcely any perceptible melting of the ice. These facts should be utilized oftener than they are in the care of the sick at night. In freezing ice-cream, when the ice is scarce, pack the freezer only threequarters full of ice and salt, and finish with newspapers, and the difference in the time of freezing and quality of the cream is not perceptible from the result where the freezer is packed full of ice. After removing the dasher it is better to cork up the cream and cover it tightly with a packing of newspapers than to use more ice. The newspapers retain the cold already in the ice better than a packing of cracked ice and salt, which must have crevices to admit the air.-Invention.

## PIPES IN DEEP WATER

MR. F. S. PECK, a civil engineer at Watertown, New York, lately accomplished, in a very simple, cheap and expeditious way, what is usually a difficult and expensive operation-the laying of a long line of pipe in deep water. He had occasion to lay nearly I,000 feet of suction-pipe at Rouse's Point. The water was needed for manufacturing purposes, and as it was found that water near the shore was more or
(Continued on page 14.)


## FORCING FRUITS FOR MARKET IN FRANCE

I$T$ is hard to realize that the ancient Romans were familiar with the art of forcing vegetables and fruits so as to be able to tickle their epicurean palates with cucumbers, strawberries, etc., at seasons very far from the normal one for such delicacies. The refinement of the art and its development into one of great commercial value has been consummated in the last quarter of a century. Mr. Jacques Boyer in a most graphic article tells of what is being done in this respect in France, as well as how it is done. Numerous illustrations indicate what fascinating employment it affords to both men and women.

## THE QUEST AND CULTURE OF ORCHIDS

G. Bertrand Mitchell presents a very interesting paper, which will be published in two parts, dealing with the care, growing, seeding and hybridization of these aristocrats of plant life. There is also included in the first part an account of the hardships and experiences of several daring collectors who, at the risk of life and limb have been and now are exploring the jungles and mountains of Central and South America, searching for new or rare specimens, or replenishing the stock of the staple varieties.

## HOW TO MAKE AND CARE FOR HOTBEDS

No adjunct of the garden gives such quick or so satisfactory results when the small expenditure of effort and money is considered, as the "Hotbed." Ida D. Bennett under the caption above, presents details for the construction of several forms of them. Further, she outlines the best methods of planting seed and care of the growing plants until ready for transplanting to the open ground. The use of the hotbed advances the season of the garden by at least six weeks, a consideration well worth the effort required.

## SMALL HOUSES WHICH ARE GOOD

Two houses are presented under this caption-one from the boards of E. S. Child and the other from E. G. W. Dietrich. The two houses while showing some similarity of general style are quite different in plan, in size and in cost.
The necessary conveniences are embraced in each according to its needs and cost. The artistic features of the exteriors are apparent while the floor plans indicate the possibility of most beautiful and effective interior decoration.

## AN INTERESTING SET OF ALEXANDER TAPESTRIES

In the fall issues our readers enjoyed two articles entitled "What are Tapestries" by Mr. George Leland Hunter. In the March number he will describe a set of tapestries depicting scenes in the life of Alexander the Great, purchased forty years ago by the late William Cowper Prime, VicePresident of the Metropolitan Museum of Art. These tapestries date from the early part of the sixteenth century, bearing the monogram of Peter Van Aelst, the Flemish weaver, who wove the famous tapestries designed by Ra phael for Pope Leo X. They are associated with Francis the First by the salamander that appears in the upper border. Furthermore-but we will leave the rest of the fascinating story to Mr. Hunter and to the illustrations, that are superb.

## SOME LONG ISLAND COUNTRY ESTATES

There is a section of Long Island in the vicinity of Roslyn, Westbury and Wheatley Hills, where numerous very large estates are located of which the general public has no acquaintance, except that gained by glimpses of their extreme reaches which border the highways. Several of these estates will be described by Mr. Richard Schermerhorn, Jr., and photographs will be presented depicting certain features of them.

## A PLEA FOR THE HERB GARDEN

The implicit belief placed in the virtues of herbs, by our British forebears, and extolled by them in prose and verse, is written of by Lawrence Irwell. The particular qualities of each is set forth and a plea made for their more universal cultivation in the gardens of our homes.

## SMALL SUBURBAN PROPERTIES

Under this caption Mr. J. Donald Martin makes what he terms "a plea for another style of gardening." He advocates the division of a property of this character into a number of semi-enclosed sections, through the use of hedges of varying heights. Each enclosure will be treated differently of course, and have some governing feature which will suggest the planning and planting of it. This gives to the garden pleasant surprises, delightful and unexpected vistas, etc., just as in the rooms of a house, varying gradations of color or of treatment in decoration are given producing harmonizing effects in the general decorative scheme.


## Before You Subscribe to Any Magazine

Get our New Subscription Magazine Catalogue. Every magazine published is offered by us singly or with others at a special price-lower than you get them from the publishers.

## Subscription Department House ${ }^{6}$ Garden

1006 Arch Street

Google
2.-14-5
less roily and impure, it was necessary to have the inlet a considerable distance out in the lake. He purchased for the purpose a steel pipe of eight inches diameter, manufactured by the Spiral Weld Tube Company, at East Orange, N. J., using for couplings cast-iron flanges weighing, with bolts and gaskets, about sixty-five pounds to the pair. Plugging the end of the first length, he pushed it out on the surface of Lake Champlain and connected the second length, pushing this out in turn until the whole line was coupled. It then presented the unusual spectacle of a line of eight inch pressure pipe nearly 1,000 feet long, floating with a displacement of only three and one-half inches of its diameter.

When the requisite length had been connected, the line was tow ed to position, the plug at the end removed, and the pipe sank easily in sixteen and one-half feet of water, without breaking a joint or receiving any injury. No buoys or floats were used in the operation, and no apparatus of any kind. The pipe is now in use as the suction of a steam-pump and gives perfect satisfaction.

Work of this kind usually involves the use of expensive and troublesome flexible joints, and Mr. Peck's ingenious expedient is worthy of record.-Invention.

## RAPIDITY OF GROWTH OF TREES

B
EGINNING with a three-inch sapling the following named varieties of trees will in twenty years, under favorable conditions, attain a diameter approximately as follows: Inches
White or Silver, Maple. .............. 2 I
American White Elm................ I9
Basswood.............. . . . . . . . . . . . . . 17
Red Maple .............. . . . . . . . . . . . . 16
Yellow Locust. ........................ . . 14
Box Elder.... . . . . . . . . . . . . . . . . . . . 14
Hard Maple . . . . . . . . . . . . . . . . . . . . 13
Red Oak.............................. . . 13
Scarlet Oak ............................ . . . 13
White Ash ............................ . . . 12
White Oak.......................... I I
Hack berry . . . . . . . . . . . . . . . . . . . . . . 10
The height which each species may be expected to attain is omitted here as it will assume the usual proportion to the diameter. (Report of the New York Forestry Commission).-Park and Cemetery.


## Contents - February, 1908

Interesting Formal Gardens .Mary H. Northend ..... 40
The Window Garden in Winter Eben E. Rexford ..... 46
The Furnishing of a House Mary M. Hodges ..... 49
Native Shrubs for the Home Garden William S. Rice ..... 53
"Hillside," a Country Residence at Greenwich, Conn. George L. McElroy, Architect ..... 58
A Unique Flower Sale Kate Stevens Bingham .....  6
Interesting Facts on House Heating 7. B. Chase ..... 65
Suggestions for the Month ..... 68
The House ..... 68
Leila Mechlin
The Garden ..... 69
The Editor's Talks and Correspondence Margaret Greenleaf ..... 70
Old Tile The Selection of Oriental Rugs A Seaside Cottage In Regard to Curtains
Garden Correspondence W. C. Egan ..... 71
The Stable and Kennel John Gilmer Speed ..... 72
Cattle for the Country Place ..... 72
Berkshires ..... 74

Copgright 1908 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Office, June 26, 1901 SUBSCRIPTION PRICE, $\$ 3.00$ A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS
Remittances may be made by money-order or check, payable to the order of House and Garden
Subscribers should promptly notify the publishers of any change in address
Manuscripts and photographs suitable for publication in House and Garden are solicited. Such as are not available will be returned, if postage is enclosed

## PUBLISHED BY THE JOHN C. WINSTON CO roo6-ior6 ARCH STREET, PHILADELPHIA



HON. JOSEPH H. CHOATE'S DUTCH GARDEN, STOCKBRIDGE, MASS.

# House and Garden 

Vol. XIII
FEBRUARY, 1908
No. 2

## Interesting Formal Gardens

By MARY H. NORTHEND

"ONE of the dearest joys of life is that of anticipation. If, like me, you love to look forward to things, my friend, then cultivate a garden; for a garden is all expectation." So said the late Joseph Jefferson; and the words will find an echo, the world over, in the hearts of those who love Nature in all her moods and tenses, and who, at the call of spring, feel that ancient, primeval impulse to get down next to the ground, and to make things grow. Gardening is a very old, as well as a very beautiful, form of the creative instinct.
Surely, there can be no purer passion than a love for flowers; and since it is well-nigh universal, we can but rejoice that it is so easily gratified. The poorest little plat of ground will produce a wealth of nasturtiums that is fairly dazzling in brilliance and variety; and the cramped dweller in a flat can grow Boston ferns or scarlet geraniums in a window-box, whether it has shade or sun.
When we are free to consider the subject of flower culture in its highest aspect, we must agree that our most elaborate development of the art is found in the formal garden. This feature has come down to us from antiquity; as the modern Italian garden is but the direct lineal descendant of the Roman villa, where peacocks walked the terraces and goldfish disported themselves in the fountains, while among the tastefully grouped shrubbery, the finest sculptors had embalmed in deathless marble the flight of Daphne or the death struggles of Antæus, crushed by Hercules.
Returning crusaders brought to Holland, along with tulips, hyacinths, and various other bulbs from the Holy Land, the theory of the Italian garden, as seen and admired by Dutch crusaders in the seaports of Italy. A hint was enough for these flower-loving people. Thorough and practical in all their habits, they soon caused their sandy, alluvial soil to produce bulbs of a quality hitherto unknown to floriculture; and the theory of the Italian garden was soon adapted to the requirements of Holland, forming the basis of the Dutch garden of the present day.
The Italian Renaissance brought the formal garden into England, about the middle of the fifteenth century. Modifications of this model resulted in the English tea-gardens, which served as a pattern for
our Colonial ancestors, when New England was being settled, and gardens were being coaxed into bloom amid virgin forest and meadow.

Perhaps because of its comparative age, historic Salem has many of these gardens which were laid out by the earliest settlers, and planted carefully with root and seed that had been brought, by dint of infinite pains and hardship, across the stormy seas to the unk nown land. How many a cutting must have been a sad memorial of happier days in light-hearted youth, before the period of exile! This tree, perhaps, had bent above a father's grave, that shrub had grown beside the gate, and the vine had draped the arbor where friends now dead, or widely scattered, had been wont to meet.

With many a sad misgiving, as well as with many a loving remembrance, these old-time gardens must have been begun. They are all similar in outline, and present the same characteristic features. There is usually an old-fashioned arbor, deep buried in wistaria or Virginia creeper, and this arbor is located in the center, or at the end farthest from the house, and is reached by the straightest of well-kept paths, brickpaved or gravel-strewn, but always bordered with box. The flower-bed, containing violets or peonies or larkspur or foxglove, are usually bordered with the same quaint evergreen, closely clipped and flourishing. The effect of odor upon the memory is odd and inexplicable. The smell of wet box has power to bring a Salem garden before my eyes at any moment, although I have found similar enclosures in Portsmouth, in New Haven, and in several early New England towns.

The Chestnut Street homes have descended from father to son, keeping inviolate the old traditions and the Colonial gardens. Their quaint and appealing loveliness has exerted its influence upon the handsome grounds all along the North Shore, and many a fine formal garden has kept the touch of simplicity in the prim, box-bordered path. Our earliest impressions of beauty are those which persist longest, and our childish memory of "grandmother's garden" insensibly affects the ideals of our after life.
Our first thought is that formal gardens must of necessity show great and depressing similarity.


HON. JOSEPH H. CHOATE'S ENGLISH GARDEN, STOCKBRIDGE, MASS.

This is not true, because each contains features distinctly individual, which render it unique among its class. Unless the garden is an exact replica, made so by direct intention, it can no more be like another than two human faces can be exactly alike. There is a general similarity, and what we might call a family resemblance, but very little servile imitation; as the position occupied by each differs so widely from that assigned to every other, that location alone would render repetition not only undesirable, but actually impossible. Each formal garden is a rule and a pattern for itself, and could hardly be copied to advantage.

Certain features appear and reappear in an endless variety, always escaping monotony. The feature which was once termed an arbor, has now been transmuted into a pergola, but has suffered nothing by the change. According to the lay of the land and to the juxtaposition of buildings, it may occupy center, entrance, or any side, with equal appropriateness. So it is with the shrubbery and the trellises; so with the sunken garden and lily-pond; so even with the fountain, whose location, more than any other one thing, can make or mar the beauty of the whole enclosure. The great central fountain, in varied shapes and forms, has been the principal theme of so many a beautiful garden, that we had almost grown
to believe that the center was its only acceptable place. This is not true. Change the shape and size of the fountain, and it is more ornamental in another place. It can stand in a nook, among the shrubbery, with an effect as artistic as that reached by the central location of the Italian scheme.

An example of individuality, where original and striking effects are produced, as just now suggested, by means of unusual grouping, is found in the formal garden of Hon. T. Jefferson Coolidge, at Manchester, Massachusetts. It is reached from the somewhat higher level of the entrance by means of short flights of stone steps. In the center of this sunken space, one would naturally look for the stereotyped fountain of Italian marble, but one looks in vain. Its place has been usurped by a sun-dial brought from England, and the usurpation constitutes a pleasing surprise.

All around the dial lie formal beds of blooming plants, which are changed as the season changes, so that they may be always in fullest florescence. Nor is the fountain wholly wanting. As we stand by the sun-dial and look across the brilliant parterres, we see a flight of stone steps, guarded upon each side by a crouching leopard. Behind these, and against the wall, stands a handsome fountain, supported by strangely carved dolphins, and surmounted by a statue of Neptune armed with his trident. Granite


MR. W. B. THOMAS'S GARDEN, PRIDE'S CROSSING, MASS.


GARDEN OF POSTMASTER-GENERAL VON L. MEYER, HAMILTON, MASS.

## House and Garden



HON. T. JEFFERSON COOLIDGE'S GARDEN, MANCHESTER, MASS.
steps, below the fountain, lead down to a little pool beneath, where grow rare lilies. The note of individuality is sharply struck in the whole plan of this arrangement, and the fountain, in its unusual but appropriate location, is still the dominant thought.

The gardens of Hon. Joseph H. Choate at Stockbridge, are reached by a tree-bordered avenue which winds down from the house. The Dutch garden is on the hillside, enclosed by a low wall, which is half hidden by a luxuriant curtain of vines and blossoms. Inside this wall lies a bordering hedge, screened by tall hollyhocks of many hues. This garden is laid out in circles, crescents, diamonds, and other formal designs, which are separated by graveled walks. At one end is placed a crescent-shaped rockery, filled with leeks and field flowers. The central feature of the English garden is a fountain representing dolphins struggling in the coils of a snake, from whose head rise several columns of water, to fall again as spray upon the aquatic plants in the basin below.

The summer home of Postmaster-General George von L. Meyer, at Hamilton, Massachusetts, shows a quaint formal garden, whose box-bordered beds and walks lend a delightfully quaint touch of Colonial primness. The central fountain is of exquisite design, surrounded by great rectangular beds of blooming plants, each bed being of one solid color.

Mrs. Guy Norman's Sicilian garden, at Beverly Cove, is a charming spot. It is founded upon rock, built of stone and cement, and the soil was brought there and filled in, after the walls were laid. So it is really a sea garden. Great jars stand along the upper terrace, and jars, pots and vases of all description stand upon the paths and along the walls. Every inch of soil is crowded with bloom, and the effect is novel and foreign beyond description, besides being very beautiful.
The garden of Mr. W. B. Thomas, at Pride's Crossing, is tasteful and appropriate, as may be seen from the picture. The great central square of closely clipped turf, supports an old English sun-dial, of graceful pattern, in a suitable setting of flowerbeds, containing only old English flowers.

In the foreground of the picture lies the great triangular bed of tuberous-rooted begonias, with its border of Browallia. Against the fence stands much shrubbery, which stands out well against the background of encircling trees, while in its turn it forms a most effective background for lilies, iris, foxglove, larkspur, phlox, and a hundred other garden favorites, with no set arrangement except that suggested by their height. Truly has it been said that every garden is individual, and that this very quality of individuality lends to each an additional charm.


ENTRANCE TO MRS. GUY NORMAN'S SICILIAN GARDEN


MRS. GUY NORMAN'S SICILIAN GARDEN, BEVERLY COVE, MASS.

# The Window Garden in Winter 

A Chapter of Practical Suggestions for the Grower of House Plants

By EBEN E. REXFORD

WATERING HOUSE PLANTS.-One of the mistakes common to most owners of house plants is that of improper watering. Some use too much water, others too little. Between these two extremes there is a happy medium which the woman who would be successful in the culture of flowers, plants and shrubs in the dwelling must strive to attain.

Every pot more than six inches across ought to be provided with good drainage. At least an inch of broken pottery, brick, charcoal or gravel should be placed in the bottom of the pot, and so arranged that the hole in it cannot become clogged by the soil, which will settle down from above, under the influence of repeated waterings. If this is done, there will be no danger from overwatering one's plants, as all the water the soil does not have the capacity to retain will drain away from it.

In watering, apply enough to thoroughly saturate all the soil and make sure that this is done by using so much that some is seen to run away through the hole in the bottom of the pot.

Without good drainage, or if the hole provided for the escape of surplus water becomes closed, so that the amount which settles to the bottom is retained, the soil will soon become heavy and muddy, and after a little it will sour. No plant can grow well in such a soil. Roots will become diseased. Decay will set in. In a short time, the plant will die.

The danger from lack of sufficient moisture at the roots is quite as great as that resulting from the lack of proper drainage. Those who practice the "little-and-often" plan of watering-which consists in applying just enough to make the surface of the soil look wet, and doing this at irregular intervals, or when one "happens to think of it,"-will find that their plants fail, after a little, because their roots cannot develop in the lower portion of the soil in the pot, where it is often almost dust-dry. Every woman who grows plants should form the habit of watering them regularly, and thoroughly, and should make it a point to always provide a drainage so perfect in its operation that it will be impossible to injure a plant by the excessive use of water.
In fall and early winter, most plants will be more or less dormant. While in this condition they will require very little water. Aim to keep the soil simply moist, but do not repeat the operation of watering until there is a dry look on its surface. Later in the season, when growth becomes active, and the heat of the room causes more rapid evaporation, the
supply of water must be increased, but the dry-look appearance of the surface of the soil should govern in the frequency and quantity of its application.

While regularity in caring for one's plants is advised, each person must exercise her own good sense, and the wisdom which grows out of intelligent observation, and modify her treatment to suit the time and the condition. No hard and fast rule can be laid down for these things. The woman who loves flowers will study them as she would her children until she knows what each plant requires, and then she will be a law unto herself.

The Use of Fertilizers.-Many persons make the grave mistake of applying fertilizers when their plants are not in a condition to make use of them under the impression that something is needed "to make them grow." Generally, in late fall and early winter, as has already been said, plants are at a standstill. They are resting up, getting ready for active work a little later on. It is not wise to attempt to force such plants into premature activity by the application of rich, strong food. Let them take their time, and when they begin to grow-not beforemake use of a good fertilizer.

Let the application be weak, at first. Increase its strength as the development of the plant increases, being satisfied, always, with a healthy growth. A rapid growth, resulting from overfeeding, is as dangerous to a plant as to a person. There will be a reaction, sooner or later. No plant, however strong its constitution, can long continue in health under the high-pressure system. Small quantities of fertilizer, frequently applied, will be found much safer in every way than strong applications given at intervals of two and three months.
Airing Plants.-The importance of fresh air for human occupants of the dwelling is coming to be more and more understood each year, and in proportion as we observe the sanitary rules deduced from long and careful study of the question of ventilation will the health of the occupants of the window garden be improved. Go into a room not properly supplied with pure, fresh air and you will find the plants in the windows weak, spindling, and generally flowerless. Their foliage will be sparse, and yellow leaves will be more in evidence than healthy green ones. But go into a room which is well aired daily, and you will find plants growing healthily there. The difference is due to the difference in the air of the two rooms, ninety-nine times out of a hundred. In one room it has been robbed of its health-giving qualities by too
great heat, and by having been breathed over and over. In the other, the loss of healthy quality has been guarded against by a constant supply of the pure article from out-of-doors.

Pure, fresh air in a room does not mean cold drafts or an uncomfortable temperature by any means. But it does mean an arrangement by which air that is rich in oxygen can be admitted freely whenever it seems necessary to do so. Lowering the window a little at the windward side will let in enough pure air in a very short time to force out all impure air through an open door or window on the opposite side of the room. By opening the outside hall door and letting the hall fill with cold air the same purpose is accomplished if, after closing the outside door, we open the door between hall and living-room and let the air from which the chill has been taken by mixture with the warm air of the first room enter and drive out the foul air that has accumulated there. Practice one or the other of these methods not only every day but several times a day, and you will see the plants in your windows flourishing as if they were growing in the garden beds-provided other care is what it ought to be.
Temperature.-Most persons keep the air of the living-room at such a high temperature in winter that their plants suffer greatly because of it. The admission of fresh air, as advised above, will do much to counteract the debilitating effects of this practice, but a lowering of the temperature is earnestly advised in all rooms where plants are kept. Instead of allowing the thermometer to run up to $90^{\circ}$ or $95^{\circ} \mathrm{F}$., aim to keep it about $65^{\circ}$ or $70^{\circ}$. Such a temperature is summer-like, and quite warm enough for comfort when one becomes used to it. Discard the idea that warmth must be so intense that you feel it constantly asserting itself in waves of hot air from radiator, register, or stove. The ideal warmth for comfort and health is one that you are not all the time conscious of. Of course where stove-heat is depended on it will be impossible to regulate the temperature perfectly, but it can be kept at quite an even figure with the exercise of a little attention. We of the North need to learn the lesson of moderation in winter heating for our own sake as well as for the sake of our plants.

Stir the Soil.-It is an excellent plan to stir the soil in each pot at least once a week. This prevents its crusting over, and roots up all weeds that may attempt to get a foothold, and, most important of all, it allows air to get to the roots of the plants in such quantities that the soil is kept sweet.
When Fertilizers Are Used.-Before applying any liquid fertilizer it is always advisable to water your plants. The moisture in the soil enables it to take up and assimilate the plant-food and conduct it to the feeding roots, as it cannot when dry. If fertilizers are given in dry form dig them well into the
soil about the roots of the plants. Some kinds are soluble, and will dissolve readily in water. Bonemeal, which is a standard plant food, is most effective if mixed with the soil, where it will be slowly assimilated. Liquid manure, made by pouring hot water over soil from the barnyard, and leaving it to soak until the infusion is the color of weak table tea is an excellent food for nearly all plants. But those living in the city will be obliged to depend upon such fertilizers as can be bought at the florist's or the drug store. When you find one that gives good results, stick to it.

Turn Your Plants.-Turn your plants in the window at least once a week to give all sides of them an equal chance at the light. If this is not done, their branches will be drawn toward the glass and they will become one-sided and be lacking in that symmetry which is one of the charms of a fine specimen. No amount of pruning can remedy the difficulty which is the result of neglect.
Arrangement in the Window.-If your collection consists of large and small plants, it is a good plan to place the large ones at the sides of the window, and the small ones in the center. In this way the light gets to all of them satisfactorily, and none suffer from lack of it, as some must if the large ones are allowed to occupy the places near the glass.

Hanging Plants.-Hanging plants are often total failures because they do not get water enough. Being somewhat difficult to get at, they are neglected. If much water is applied a good deal of it will run off before the soil has a chance to absorb it, and, as a natural consequence, the plant will become very dry before more water is given, because of its exposure on all sides in a temperature several degrees higher than that at the window-sill. I think I am safe in saying that nineteen hanging plants out of twenty die before they are three months old, and in nearly every instance death is the direct result of lack of sufficient moisture at the roots. Give a hanging plant all the water it requires and there is no reason why it should not grow as well as the plants on the table below it.

I have a plan for watering this class of plants which I have frequently described, but its benefits are so obvious that I will make mention of it here: Take a tin can or cup holding at least a pint and make a few holes in the bottom of it. Fill with water and place it on the soil of the pot. Watch the result carefully. If the holes are too small, or too few, not enough water will escape to keep the soil properly moist. If too large, or too many, you will find the soil is made wetter than it needs to be. A little experimenting will enable you to so proportion the supply of water to the requirements of your plants that it will be an easy matter to keep them in just the right condition. The cup or can made use of can nearly always be hidden by the foliage of the plants. It is well to
paint them green, to make them less noticeable if there happens to be a sparsity of foliage.
Insects.-Insects must we watched for and fought persistently. The time to begin the fight is when the first one is discovered. It is comparatively easy to get rid of a few, but getting rid of the enemy when it has been allowed to take possession of all your plants is not a very easy matter.
If the aphis or green plant-louse puts in an appear-ance--and few collections are free from his attacksmake an infusion of tobacco extract and apply it with a spray, or, what is better, dip the infested plants in it. The aim should be to get it to all parts of the plant, and especially to the underside of the leaves. The extract of tobacco sold by florists and seedsmen is very strong in the nicotine principle, and will do its work most satisfactorily if the directions on the can or bottle in which it comes are carefully followed. It will not harm the tenderest plant. One or two applications will almost always rout the aphis. A weekly application thereafter will be likely to prevent his return.
If the enemy appears in the form of the mealy bug, fight him with a soap and kerosene insecticide prepared according to the following formula: Shave finely about four ounces of some good white soap, preferably castile. Pour hot water over it, and let it stand on the stove until it liquefies. Add to it, while hot, a teacupful of kerosene. Stir until soap and oil mix. Dilute one part of this mixture with fifteen parts water, and apply as a spray.

The red spider, which is one of the deadliest enemies of the plants in the window, can be conquered, or, at least, kept in check, only by the use of water. The spider dislikes moisture and will not flourish where water enough is used to keep the atmosphere well saturated with it. Therefore, spray your plants all over, thoroughly, as often as possible. Keep water constantly evaporating among them. Also from stove or register. It is an excellent plan to have the plant-table covered an inch deep with sand, which can be kept wet all the time. A weekly dip-bath in water heated to $120^{\circ} \mathrm{F}$., is an excellent preventive against the ravages of this tiny but powerful enemy of plant-life.

In Case Your Plants Get Frost-Bitten.-In houses heated with hot water, or by base-burning coal-stoves it is comparatively easy to keep out frost. But those who depend upon wood-stoves or the ordinary furnace often wake up on a cold morning to find their plants frozen. As soon as this condition is
discovered hurry them into a room where there is no fire heat, and shower them well with cold water. A warm room and warm water will only make a bad matter worse. Keep them well wet down, and have the temperature of the room but a few degrees above the freezing point, and the combination of cold water and low temperature will extract the frost so gradually that quite often very tender plants can be saved. The application of warmth would mean death to your plants. Do not remove them to a warm room for several days. If any portion of the plant fails to come through the ordeal satisfactorily, cut it away, promptly, to prevent its communicating its condition to other portions of the plant which have not been affected.
Storm-Sash.-Storm-sash will make the ordinary window frost-proof if put on properly. It should be made to fit snugly, and should hug the casings closely. Long, stout screws will bring it down tightly against the wood of the frame. Windows so protected will not coat over with frost, because of the stratum of air between them and the outer sash, and one's plants can be safely left with their leaves touching the inside glass. Some persons object to stormsash because they claim it prevents fresh air from coming in about the window. That it does this, when properly applied, is true, but fresh air can be admitted elsewhere about the room much more satisfactorily than at the window where plants stand.
Cracks and crevices at these windows will let in the cold in severe weather to such an extent that your plants may be frosted before you dream of it. It is well to guard against any danger of this kind at that point by the use of storm-sash, depending upon some other source of fresh air supply.
Neatness in the Window Garden.-Let the window garden be an exemplification of the utmost neatness. Remove every leaf that shows by its yellow tint that it has outlived its usefulness. Cut away all flowers as soon as they begin to fade. Allow no weeds to grow among your plants. Keep the pots washed to prevent the accumulation of slime on their outside. Prune each plant into symmetrical shape, and do this as the plant develops. Much of the vitality of a plant goes to waste if several branches are allowed to grow to be several inches long before they are shortened. Nip off the end of each branch when it has reached the length you want it to have, and let the force of the plant be used in the development of other branches, or the perfection of flowers.

# The Furnishing of a House 

By MARY M. HODGES

"Tfurnish a house" is a phrase which until more or less recently brought to mind "the upholsterer," "the parlor suite," the "dining-room set" and other phrases which are still enshrined in many cabinet-makers' catalogues; but fortunately are fast becoming obsolete with even the uninitiated. To-day a house is usually furnished by a professional decorator whose scheme of decoration is supposed to be wholly uninfluenced by any commercial consideration; or, by its owner. And though one cannot maintain that the taste displayed is always good, or that the results are satisfactory, still, the fact that this method is growing more popular has caused a wide-spread and personal interest in affairs decorative, and is emphasizing the theory that a dwelling should be an expression of the taste of its occupants.
In a modern novel, "The Spenders," there is a chapter entitled "The West against the East," in which the furniture of a room is described as indicative of the mental attitude of its occupants. Writing of this room in which a conflict is waged, between opposing factions on a matter of vital importance, the author skilfully lays before the reader the attitude of one of the factions, hitherto not introduced, merely by a description of the furnishings of the room. The "whatnot," the "Verni Martin" cabinet, the clumsily upholstered chairs, the worked mottoes, and wax flowers under glass, all combine to create in the reader's mind the degree of mental and artistic development of the people who are responsible for their indiscriminate assembling.

The complacent acceptance of avoidable ugliness which characterized the middle of the last century, both in architecture and furniture, is gradually being supplanted by a brisk battle for the beautiful. Even in the


EXCELLENT REPRODUCTION OF THE FIELD BED
smaller and less expensive home the influence of this is visible in the architecture of the house, the furniture with which it is fitted and the pictures which hang upon its walls. This crusade against "the upholsterer" has done more than add attractiveness to the home. It has opened up to many women an interest beyond the narrow range of petty household cares. It is as first aid to those who are seeking practical knowledge on points of house furnishing, to those who desire to know what the market affords that is really good of its kind, where specified articles may be found and at what cost,-this series of articles is proffered.

Some fifty years ago a passion for collecting old furniture was rife in England and eventually reached America. Old furniture which had been consigned to the attic was hauled down by "those who knew" and given a prominent place in the house. Each piece added a visible twig to the family tree, so to speak. Then came the period when they were drawn from some one's else attic and if by silence or discreet prevarication they still added "a twig," was the sin an unpardonable one? All of this gave rise to the wily "antique dealer" whom we all know and who has about had his day, and the dawn of the era of the repro-duction,-the genuine, honest, value giving reproduction, -is at hand. There is, of course, a sentiment attaching to a piece of furniture that has been used by one's ancestors, and there is interest undeniable in a piece that has been used by a noted person. While to a real lover of things artistic, no reproduction can be quite so satisfying as the genuine antique with its delicate graceful lines so full of meaning, its well seasoned wood so carefully treated in the finishing process, its cabinet work so exact, honest and skilful, it is true and
will always remain true that it is only to the few that the antique has a real value; to the many, the reproduction, given symmetry of outline, the same standard of integrity in material and workmanship, will be quite as satisfactory. Fortunate it is that this is the case, else the art of furnishing must come to an end, for there is necessarily a limit to the supply of old furniture that can be brought into the market, and that limit has virtually been reached. Luckily, there is no need to place old furniture on a pinnacle of unapproachable merit. The causes which have made the furniture of the nineteenth century so unsatisfactory can be pointed out and in themselves are not beyond remedy. It is not essential that it be pretentious and covered with meaningless ornament, nor is it essential that the cabinet work be dis-


GEORGIAN , Originals at Biltmore, North Carolina honest and the finish be cheap and glaring.

Time was when old furniture could readily be dis-


Original at Charleston, S. C. tinguished from new by superiority of work manship. The table stood more firmly, the drawers slipped more smoothly, and more care generally was given to detail. Now, however, these conditions are reversed. If anything, the mechanical construction of some of the furniture made in America is more accurate and exact, and it is true that there are particular classes of furniture in which new requirements or new invention have given birth to real improvements.
This is particularly true of upholstered furniture,the davenport and sofa of to-day and the wing chair,-though old lines have been retained, are in their mechanical construction far more comfortable than are the old ones, - and many an old bed about which one may use the most enthusiastic expressions of admiration would be shunned, and wisely, as a resting place, until it has been modernized as to


HEPPLEWHITE Shield-shaped Back its springs and


CHIPPENDALE
Originals in Museum of Science and Art, Dublin
mattress. One of the merits of old furniture is simplicity of design, and another, seasoned wood, and while there may be no way of definitely determining the latter point except by waiting to see whether the furniture warps by use, still as the cabinet-maker finds his work judged by these conditions, he will be proportionately careful to meet the requirements.

Allowing that these advantages of sound work manship, simplicity of design, and integrity of material may be secured in new furniture, is it not then equal to old, and for all practical and decorative purposes, quite as effective ?

There are, of course, in New York and other centers wood-carvers and cabinet-makers who can and do construct furniture in exact replica of antiques, this work showing the most finished craftsmanship. Many of these men, who for the most part are Germans and

## The Furnishing of a House

Italians, are employed constantly by decorators and frequently are under contract with them. They are skilled workmen and often artists and work under the supervision and from plans and detail drawings of draughtsmen, who, from travel and study as well as experience with the commercial side of their work, are well prepared to put out designs worthy of the most careful execution. The price of furniture produced under such collaboration is, of necessity, prohibitive to the person of ordinary means and it is only within the last few years that the great purchasing public, who are quite as eager for good designs as are their richer neighbors, but unable to possess them at such cost, have found within their reach furniture really worthy both from a standpoint of art and construction.

When the trade became assured that the passion for old furniture was not a mere caprice and was quite different from the taste for collecting antiques, and had its root in a genuine preference for certain designs familiarly made a century ago,it prepared to meet these needs; and how well it has succeeded is evidenced in the examples shown here.

The fact that the best models of factory-made furniture are not easily to be found, and frequently, when seen in a completed house, pass as a special design of the decorator, made for that special niche and that special house, is due to the "dealer" who controls to a great extent the policy of the manufacturer.

For furniture is made to sell and there is no room in the trade for that passionate devotion to art which leads an artist to keep his pictures unsold rather than lower them to the popular level. The manufacturer, however, is awakening to the fact that the consumer as well as the dealer is a factor to be counted, for, as a matter of fact, there is a strong impulse though it be blind, in the buying public toward the beautiful, and the concessions it must make to the dealers' taste is one of necessity and not of choice. This dealer, who comes every six months, with his money in his hand and his demand for something new,-the dealer,who knows no sin in furniture, save the "sin of sameness," as he expresses it, and who drives the designer to distraction by his unending demand for something


THE FRENCH OR "SLEIGH" BED


COLONIAL CORNER CHAIR
Reproduction of Patrick Henry's Chair, now at State Library, Richmond, Va.
new, is responsible for the prevalence of the type of furniture found in the ordinary furniture shop. To him no contortion of line, no wooden goitre appearing in unmeaning ugliness is offensive,-if it be a new contortion or a new goitre. For the ordinary dealer declares and believes that what the people want is novelty and he who would have intimated a few years since that the dealer might not after all be the "last word" and that a demand could be found for furniture made year after year on the same lines, would have been relegated to the limbo of theorists,-that class so utterly scorned by the commercial mind. Of late, however, the manufacturer has discovered that he can make good furniture and sell it too and as a consequence the output of some factories to-day shows a very growing recognition of the best models and a disposition to eliminate all others. The dealer being unappreciative of their value fills his floor with the types he considers salable; and the better models, though quite as available were he discriminating, are left for the "initiated" buyers who are comparatively few and who make the consumer pay them for their knowledge. Most frequently they are sold as "our own hand-made furniture", by professional decorators and house furnishers whose name, perhaps, together with the exorbitant price attached, lends them an alluring exclusiveness.
This same dealer was responsible for the style of cabinet-work put out in the Early Victorian period when the cabinet-maker deviated only from the ugly design he had used, to offer something different, though equally
bad and this solely for the sake of change. His idea of design alternated between extravagant eccentricity of outline and profusion of ornament,-being apparently actuated by a vague feeling that he must offer variety, and not, as with the earlier workmen, with an intention of doing a particular thing with a particular reason. It was in such furniture as this that the dealer revelled, and not until the interest in antiques (which was of itself educational), was widespread and the antique dealer was lured by the profits offered, into launching reproductions on the market under the guise of the "genuine antique"-and often very dishonest reproductions at that,-that the manufacturer saw his opportunity. America is charged with divorcing art from her everyday living, but the furniture manufacturer suspects that if it does it is from necessity and not from choice and with the courage of his convictions is feeling the public pulse for himself and determining its requirements as he sets about meeting them.
The originals of the Georgian side and arm chairs shown here are now at Biltmore, N. C. There are six in all and they were a part of a Baltimore collection, Mr. Vanderbilt paying \$14,500 for them at a sale. These reproductions are entirely accurate. Excellent reproductions of the Field bed are to be had and this is one of the best. It is a type of bed found most generally in early New England houses, the quaint tester lending itself, as it does, to a graceful and effective treatment is very adaptable to a modern bedroom. The originals of this type of bed usually show two carved posts and two plain-the head-posts being covered by the curtains, were often plain and uncarved,-a concession of our thrifty ancestors, no doubt, to economy of labor. In many of the best examples the posts are simply fluted.

The Sheraton chair which is a particularly good example is now in St. Michael's Church in Charleston, S. C., the Colonial corner chair is a reproduction of the one in which Patrick Henry died with the exception of the seat which in the original,


ADAM
Sir Spencer Ponsonby Fane Collection, London
now in the State Library at Richmond, Va., is a flat, leather seat. The originals of the Chippendale chairs are in the Museum of Art in Dublin.

There are factories in America where the plastic secrets of old design are being used freely and wisely by artistic designers and there are factories where slavish reproductions of charming old models are being pro-duced,-a practice which is much safer than an effort at originality, though to discourage the former would be to discourage creative genius and it is just such effort that will sooner or later culminate in a national type of furniture. Such a type is most devoutly to be hoped for: for after all it is rather a footless thing to have one's house furnished as one of the Louises the Jameses or the Georges had theirs furnished if one had no other reason for using those types of furniture than that they had been used by them; for one's dwelling should above all things be an expression of one's individuality, of one's thoughts and of one's mode of living. Goethe says, in speaking of strict period decoration, "One cannot praise the man who fits out the room in which he lives with these strange things. It is a sort of masquerade, which must have an unfavorable effect on the man who adopts it. Such a fashion is in contradiction to the age we live in and will only confirm people in the empty and hollow way of thinking and feeling wherein it originates."

The tendency in America to-day in house-decorating is distinctly toward a "modified period" treatment which gives scope for greater individuality; and in time, through the effort of the manufacturer to embody all the best of all the periods in their models, -and by the common usage of these modified types the American twentieth century types will be evolved. It is intended that this series of papers shall give accurate descriptions and reliable prices of correct furnishings of the various rooms of the house which are likewise practical and artistic, and within a cost possible to the householder of moderate means.

# Native Shrubs for the Home Garden 

By WILLIAM S. RICE

OF late years the lovers of outdoor life have paid more attention to the introduction of wellknown native trees and shrubs, for the adornment of private and city parks, than formerly and it is encouraging to know that they have, for, hidden in the forests and meadows are numberless shrubs whose brilliant and often highly decorative blossoms are compelled to "blush unseen" except for the eyes of the naturalist and botanist to whom, alone, their shy habits and native haunts are familiar.

It is rather for the less familiar ones, than the more favorably known ones, that I wish to offer a plea that they be more generally used in the home garden, or park, so that their beauty may be better appreciated and improved under the skilful hand of the cultivator.

The following is a list of native American shrubs that are worth cultivating and the month of their blossoming:

| Button Bush (Cephalanthus occidentalis) |  |
| :---: | :---: |
| Laurel-Magnolia (M. glauca) | June |
| Linden (Tilia Americana) | une |
| White Thorn (Cratagus coccinea) | May |
| Burning Bush (Euonymus atropurpureus) | June |
| Pussy Willow (Salix discolor) | April |
| Wild Azalea (Azalea nudiflora) |  |


| Mountain Laurel (Kalmia latifoli | ay |
| :---: | :---: |
| Spice Bush (Lindera Benzoin) | May |
| Red-bud (Cercis Canadensis) | May |
| Wild Crab-apple (Pyrus coronaria) | May |
| Dogwood (Cornus florida) | May |
| Shad Bush (Amelanchier Can | May |
| Rhododendron (R. maximum) | June |
| Black Alder (Ilex verticillata). |  |
| Witch-hazel (Hamamelis Virgini |  |

Who does not become fascinated at first sight with the bursting buds of the pussy willow (Salix discolor)? Yet who ever dreams of planting a young willow of this species in their garden or back yard? Strange, when it grows from cuttings so easily and will flourish anywhere with scarcely any attention. A twig placed in a bottle of water for several weeks will gradually send out tiny white roots at the base, and by and by, after being set in the ground outdoors, it will produce a handsome bush, which, year after year, will give you a whole family of silky "pussies" to stroke and admire.

The pussy, or glaucous willow, has pleasing foliage, and is a truly ornamental tree in its native habitat. In early April its gray, silky buds have lengthened out into long, caterpillar-like bodies known as catkins. You will observe that there are two very different


THE RHODODENDRON-COVERING WHOLE HILLSIDES WITH ITS GLORIOUS BLOOM

the tips of the style so as to be in position to be removed by the first insect alighting upon the ball of bloom. After the removal of the pollen from the still immature stigma by visiting insects this tip becomes sticky, so as to receive pollen imported by insects from neighboring button ball blossoms. Thus the flower prevents self-fertilization, by passing through two stages, first male, then female. How wonderful are some of the provisions that Nature makes to bring about the reproduction of species!
Nor are the blossoms of the button bush its only attraction. In the fall the greenish bristling seed heads turn to a dull crimson, thus Nature adds her last touch of beauty of the season to this decorative shrub.

In moist woods growing among the alders we may find the black alder, a bush that resembles the common alder, but which, in fall and winter, is covered with bright vermilion berries about the size of peas. In the soft, diffused sunlight of the autumn woods, or, relieved against the snowy winter background, its clustered fruit is highly decorative and cannot fail to attract attention.
The wild magnolia, or sweet bay, is a slender tree, frequently found in a shrubby state


ENGLISH HAWTHORN
in the North, but in the South it attains a height of fifty feet or more. Its bark is a light brown-
ish gray; the new twigs are deci-
dedly green and turn to a ruddy hue as they grow older. The leaves are oval-shaped, thick and leathery and are about six inches long. The upper surface is a rich, deep, glossy green, while the under side is a whitish green. The creamy white flowers are much the same shape as the yellow pond-lily, and it blossoms from May to August. They are delightfully fragrant.

It is not an uncommon sight in New York and Philadelphia to see the street fakers peddle bunches of these lovely blossoms along the curbstones. Nearly all of these people have a curious custom of turning the waxen petals all outwards which not only destroys the character of the flowers, but gives it a decidedly camellia-like appearance.

This shrub is common in the swamps of New Jersey and from there it extends southward and forms impenetrable thickets in Florida, especially in the interior swamps and pine barrens.

In the fall this tree will be found to be decked with a new grace - the mature beauty of its fruited cones. These cone-shaped seed pods are about the size of a butternut and in color a pale orange-yellow. By a score of slits it cracks open when its fruit is ripe, and


LAUREL-MAGNOLIA BLOSSOM AND SEED PODS
the scarlet seeds are exposed to view, each tied to its nest by a slender thread. This tree takes kindly to cultivation.

The mountain laurel is so well known that it needs but a brief description. There is hardly a wild shrub in the forest that bears more aristocratic looking blossoms than this plant. Its haunts are in hilly, or mountainous places, especially in the woods; and it is in all its glory in the latter part of May and throughout June. The pine woods of New Jersey are full of it, and when the clustered masses of pinktinted bloom enliven the sombre green copses, it is indeed, a beautiful sight. This plant thrives so well in cultivation that I wish to recommend it most heartily for the adornment of home grounds. We have only to remove the young plants without injuring their roots, or allowing them to dry, hurry them into the ground and
prune back the bush a little, and it will bloom freely after the second year.

There is a smaller variety of laurel known as sheep-laurel or lambkill. It is said to be poisonous to cattle or sheep, but its blossoms are certainly food for the eye. This shrub ranges from six inches in height to six feet, and grows plentifully in South Jersey.

We must visit the Alleghany and Blue Ridge Mountains in early July to fully appreciate the glories of the rhododendron. When this most magnificent of our native American shrubs covers whole mountainsides with its bloom, one stands awed in the presence of such enchanting beauty. Nowhere else, it is said, does this shrub attain such an enormous size or luxuriance. The blossoms are rose pink, varying to white, greenish in the throat and spotted with yellow and orange. The rhododendron is one of the showiest and handsomest plants for the adornment of the home grounds or of parks; and it is not difficult to grow, as the exquisite shrubs in Fairmount Park, Philadelphia, bear evidence.
The wild azalea is another beauty of the woodland that takes kindly to cultivation. The beautiful pink variety that blossoms before the leaves -appear, has a peculiar Japanesque grace all its

own. It is commonly found in moist, rocky woodlands and thickets and blossoms in early May. It is commonly known as wild honeysuckle, or Pinxter flower.
Less familiar than any of the foregoing shrubs is the burning bush. Its minutely toothed leaves are about the color of those of the holly but have a waxy finish; they are from two to five inches in length; in autumn they turn to pale yellow. The flowers, which appear in June, have a four-parted appearance; the rounded petals are a deep-red purple. The fruit, which ripens in October, is also four-parted, and hangs on long, slender stems; it is half an inch broad, light ma-genta-purple in color and imparts to the shrub a very ornamental appearance in autumn. One species of burning bush bears fruit somewhat flattened and angular; its color is a soft, unvarnished crimson with a singular orange-red berry popping out of the pod.

Did you ever realize how beautifully the red-bud, or Judas tree, thrives under cultivation? You have seen and admired it for many years on some wooded hillside, and watched, with pleasant anticipation, its crimson-pink, pea-shaped blossoms appear in late March, or early May-before the leaves are out; but have you ever thought of transplanting a young tree or raising one from seed in your own back yard ? Occasionally we see specimens in cultivation; but it is not nearly so frequently seen as it deserves to be for so attractive a shrub. Its leaves are four inches long, dark green, smooth and glossy, and perfectly heart-shaped; they turn a beautiful yellow in autumn. The name, Judas tree, is handed down by tradition; in the olden times it was believed to be the tree upon which Judas hanged himself.
The flowering dogwood is another well-known woodland favorite, admired by everyone for its bold, showy and decorative flowers. But is it appreciated as a shrub for the adornment of the home grounds? Hardly, and yet where will you find any cultivated shrub that can compare with it ? This flowering shrub, or tree, is so well known that it requires no description for identification. It may be interesting to the novice to learn that, what appear to be the white flowers of this tree are really not the true flowers at all but merely white bracts (leaflets) set around the true flowers in the center which are small and greenish yellow in color. The leaves are beautifully veined and turn to a


THE PUSSY WILLOW

Among the members of the hawthorn family we have a wide circle of relatives to select from for beautifying the garden or lawn. The white haw, or scar-let-fruited thorn, is perhaps the most widely known. It is found in wooded meadows or in fence rows in mountain pastures. The fruit is like a miniature crab-apple, is dull orange-red, and ripens in September. The flowers grow in clusters similar to the English hawthorn. They are white and often pink-tinted. The leaf is a dark, glossy green, very ornamental in shape. It is a shrub well worthy of cultivation; not only are its blossoms attractive but its fruit is extremely so in early September. Many of these native shrubs possess every quality desirable for garden and park planting. They are all hardy, many are very easily transplanted or grown from slips, while all possess brilliant and decorative blossoms or beautiful buds, bark or berries.

# "HILLSIDE" <br> A Country Residence at Greenwich, Connecticut 

GEORGE L. McELROY, Architect

THE country house we illustrate is of unusual and special interest, since it was in a way built about the furniture which it contains, these interesting pieces having been collected by the architect of the house and his wife.

In discussing the planning of this Mr. McElroy says,-"In designing this house I had in mind the furniture to be used in it, and the color scheme for each room was carefully arranged at the time the plans were on the boards. I had well in mind the effect produced by the color of one room on another; thus when we determined upon green for the livingroom, green and brown were chosen for the diningroom and yellow for the hall."

The living-room, as the plan shows, is about twenty feet square, and among its best features are the large fireplace and window seats. The walls are covered with green burlap, with an upper third treatment of tapestry paper representing a woodland scene showing some of the green of the lower wall. Most of the pieces of furniture in this room are really old and of carved oak and mahogany; some of this is upholstered in rich red. The coloring of the rugs shows soft green and dark red.

The dining-room, which opens off the living-room by means of double glass doors, is large enough to comfortably seat a dinner party of ten or a dozen without crowding. The furniture here is of mahogany and of specially good design, and the one large rug used shows browns and greens, almost covering the floor.

In the hall is used much old mahogany furniture and Oriental rugs. The wood trim and balusters are white enamelled, while the walls are yellow.

Of the two large verandas which add to the delights of this house, one connects directly with the hall and gives out upon the driveway. The other on the opposite side of the house has doors leading from both living-room and dining-room, an arrangement which is found most convenient for out-of-door luncheon or afternoon tea during the summer.

Of the service department on this floor there is a good sized butler's pantry with a service stairway (a somewhat unusual feature) leading to the cellar and laundry, and up to the servants' bedroom on the attic floor.

The kitchen is very large, with separate ice closet and servants' porch adjacent. The walls and trim throughout this part of the house are painted a light clean yellow.

In considering the bedrooms the architect says
that he felt the most important thing was to make them light, airy and cheerful, so it was determined that the trim as well as the doors on this floor should be enamelled white, and the furniture treated to match. Reference to the plan will show that two of these rooms and one bath-room are arranged in suite form. Throughout these the same coloring is used. The walls are covered with a paper showing wreaths of resida green and pink flowers against a white background. There is a charming open fireplace, the tiling used about it repeating the shade of green seen in the wall-paper, and the same color is again shown in the floor covering. At the windows are two sets of curtains. Next the glass dainty draperies of white swiss are used with over curtains of shell pink and white madras. These inner curtains are hung from a wooden cornice. The same madras is used for bed covers and cushions. Shell pink silk shades are used on the electric lights. The furniture in both rooms being of white enamel with an exception of the beds which are of brass, and one or two chairs of wicker which are cushioned in the pink. On the door of one of the large clothes closets (of which there are two) there is set a long mirror. The fireplace is fitted with a brass fender, andirons, screen and fire tools. The bath-room has floor and wainscot of pure white tiles, the walls above painted shell pink. This room is supplied with open plumbing, porcelain fixtures, plate glass shelves and rods for towels, and all the woodwork is of white enamel.

On the walls of the bedrooms and boudoir are hung some charming old prints and plaster casts, as well as an antique mirror.

The guest-room on this floor is done in Dresden blue and white. Here also the furniture is of white enamel and brass beds. The large double washstand is fitted with Dresden blue and white china. The bureau and chiffonier wear covers of blue and white. The wall-paper is in a deep shade of Dresden blue flowers on a ground of cream white. Of the two sets of curtains used, the ones next the glass are of swiss, the over-draperies are of cream net showing a border of Dresden blue to match the paper. The floor is covered with a Dresden blue and white woven carpet.

The third bedroom has the same enamelled furniture and the walls covered with a cartridge paper of soft green. • The green and white scheme is carried out in the floor covering. The swiss curtains are hung next the glass with over-draperies of an old


THE DINING-ROOM


THE LIVING-ROOM

the photograph, among them is the Italian monks' table, and the carved oak cabinet. The dining-room sideboard is a particularly interesting old piece, and the large collection of china and glass goes far toward making a complete and handsomely furnished house, as well as one which shows unusual ability expended in its designing and fitting. The hall has some antique pieces which are not shown in the photograph. Two of these, a sofa and a consol table, of the Empire period match perfectly, though purchased in different places.

The floors of living-room and hall are covered with well selected and beautiful Oriental rugs, several of which are rare specimens. Indeed, as the house stands in its com-

English chintz, showing a garland design of deep pink flowers and ribbons. Bed covers, furniture covers, cushions, etc., are made from this same material, contrasting agreeably with the plain green of the walls. Some good colored prints in white frames and bits of plaster are used decoratively.
There is a second bath-room on this floor finished as in the one previously described. The wall above the tiling, however, is painted in pale green.

The floor above contains two family bedrooms, and here again the white enamel trim is used and furniture like that in the bedrooms described. In one of these rooms, from which there is an excellent view of Long Island Sound, the wall is covered with a paper showing an old-fashioned nasturtium design which is very quaint and attractive. The window hangings are double, the swiss used next the glass. The over-draperies being of plain cotton material matching the lightest shade of the nasturtium leaf. The bed covers are of the same material, and the toilet set of the washstand is in the same tone. The adjoining room has a general tone of ecru and brown with a paper of quaint old design, with hangings and rugs in the same coloring.
The various pieces of furniture used in the fitting of this charming house were, as before stated, picked up from time to time while the house was in course of construction,--some in New York, some in Boston, some in Newburyport. One of the most interesting is a chair of Chinese design and French work manship. There are two or three other antique pieces in the living-room as shown in

pleted state it is an excellent example of correct furnishing, where strictly period treatment is not adhered to but where harmony of color and suitability to environment are potent factors in its success.

The lay of the land on which the house is set is an important feature in the picture, so completely suited to it is the building. The soft silver gray tone of the shingled sides, and white trim of the house, show in exquisite contrast with the sloping green lawn and rich dark foliage of the surrounding trees. The high latticed fence marking and enclosing the drying space for laundry days is a feature which adds to rather than detracts from the picture.

# A Unique Flower Sale 

By Kate stevens bingham

ONCE a year in February, the particular date depending upon the forwardness of the plants, Mrs. Margaretta Wade Deland, the wellknown author, gives a show and sale of flowering bulbs in her own house, the object being sweet charity. This beautiful and unique manner of raising funds for such a commendable purpose was begun thirteen years ago and was in the beginning a very modest affair. Since then, however, each season sees more bulbs on view and more people to view them than at the previous sale.

It was after her marriage and while at her summer home in Kennebunkport, Maine, that Mrs. Deland first commenced taking an active interest in flowers for as a child she did not care particularly for them, and she laughs as she confesses that she thinks the love for cultivating flowers is an evidence of approaching years. So much of the grounds at Kennebunk port were taken up with her flowers that her husband complained that there was none left for his pet plants. Returning to Boston for the winter she wished to raise money for various charities in which she had become interested, but was wearied of the hackneyed, conventional methods in which funds for such purposes are usually obtained. It seemed to her an imposition in more than one way to get together useless articles which you have importuned your friends to make, and then expect them to come and buy them and take them home to litter up their houses with. So the idea occurred to her, why would not it be a practical scheme to raise and sell bulbs which, besides charming their purchaser by their fragrance and beauty while in blossom, could be thrown away when faded.


MRS. MARGARETTA WADE DELAND

No sooner was the thought conceived than it was put in practice by the planting of four or five dozen bulbs, with their subsequent sale when they had reached maturity. This first venture proved such a success that it was repeated, and as people began to find out how thrifty the plants were, what the object for selling them was, and how agreeable were the people encountered there, this sale became one of the most pleasant as well as most artistic functions of the social season held in Boston, and each year shows better returns.

Last August, five or six thousand bulbs of various kinds were sent for from Holland, for although people say that all kinds of bulbs can be raised just as well in certain portions of this country yet, owing to the cheapness of labor abroad, the fact remains that they are much less expensive there than here. At first thought this would seem an immense number of bulbs for a private grower to take care of, but when you learn that it takes fifty or more of the small bulbs, such as the Roman and grape hyacinths, and four or five of the larger ones for each receptacle, it does not appear unreasonable.
In September the planting takes place and is not so much of a task as one would imagine although it does require a good deal of time, because earth prepared by a florist is brought in barrels and then with the assistance of one of her maids, Mrs. Deland sets out the bulbs in the various receptacles ready for them. But to buy prepared earth is an expensive way, and for an economical person it is better to get the proper ingredients of sand, good earth and manure, and mix it oneself.
The work of planting is begun by laying a bit of moss obtained from some florist, or dried leaves

## House and Garden

which answer the purpose quite as well, that of keeping the dirt from coming out, over the hole in the bottom of each pot. Next pieces of broken china or charcoal are put in the pot, then some earth, and upon this the bulb, and finally more earth which is pressed gently about the bulb until within half an inch of the top of the pot. They are now thoroughly watered and then set away in a cold and perfectly dark cellar where they must be kept for three months in order to obtain the best results. Some of the bulbs, as the Roman and grape hyacinths, will seem ambitious to make a more rapid growth than the others, but you must not favor them on this account by carrying them into the light, for their roots need as much time to mature as do those of the other bulbs.

Shortly before the holidays you will see by examining your plants that their roots are protruding out of the bottom of the pots and have formed a mat across the saucers in which they set and that white points, two inches high, are growing out of the earth, both of which are signs that the time is arrived when the bulbs are in condition to change their obscure home for a lighter and more cheery one.

So now they are taken up-stairs into a room having a northern exposure but no sunshine, for that is injurious to them. It is surprising after this move how rapidly the white spears change to green while at the end of a month evidences of buds in the form of tiny green balls between each of the stiff green spikes begin to appear. Now, although at this stage the plants are not particularly interesting to most people, it is then that their cultivator takes the most interest in them, for they develop so rapidly that they almost seem to be sentient and as though grateful for the interest and care bestowed upon them.

Now, to hear Mrs. Deland tell about her experience in raising bulbs one would think that all this was a very easy and simple matter, but anyone who has ever taken the entire charge of indoor plants, especially in this changeable and at times rigorous climate where the thermometer during the winter season registers a different degree of temperature every


AN EARLY SHOW OF BULBOUS PLANTS
hour out of the twenty-four, knows what a responsibility they are. Of course bulbs, owing to their hardiness, for they can stand almost any amount of cold, especially jonquils, which have been known to even freeze tight to their saucers and sustain no injury in consequence, are not so difficult to care for as are the more sensitive plants; still they require watering every day, the temperature where they are must not be allowed to get too warm, particularly if it is dry heat, which is very injurious to them, and they must have outside air occasionally, while in order that they may all come forward at the desired time, some must be placed in a cooler spot so as to retard their progress, while others must be placed where theirs will be accelerated as, near a furnace pipe for instance, but never in the sunshine, all of which shows what an amount of care they require. Flower lovers say, also, that to be successful with plants a person must have a genuine love for them in their hearts.

Thus as can be seen from the time that the bulbs have left their retreat in the cellar and been brought up into the room above until they begin to bloom, many hours of Mrs. Deland's time are spent in their care. It is the wonder of all of herfriends how the writer of "John Ward, Preacher;" "The Awakening of Helena Ritchie;" and other popular books; and a woman in as much demand as a lecturer by the innumerable women's clubs of this section of the country; and, moreover, the efficient head of a large household, manages to accomplish so much.
The papers do not advertise these sales in the customary way but will delicately say, for instance, that Mrs. Deland hopes to make one hundred jonquils blossom next Monday, as this was the day set last spring. Thus a stranger uninitiated in this charming annual sale would be quite in the dark as to what was meant by this enigmatical notice, but to one who does know this hint is sufficient, and before the opening hour arrives many visitors are waiting to attend it. Although promptly on hand one afternoon at the end of last February others had preceded me, so upon entering the anteroom of the mansion,
we with other persons were requested to wait so as to avoid overcrowding the rooms where the flowers were on view. When my turn came I perceived in mounting the stairs the powerful and subtle fragrance of the bulbs which was diffused throughout the house; and on reaching the reception-room I stopped there to inhale the perfume from pots of freezias set about in the great bay window; then ascended to the floor above where I was fairly overwhelmed with the beautiful vision which confronted me on every side.

In the large drawingroom and set about in every available place, upon the mantel shelf, tops of book cases, tables and stands, and completely filling from top to bottom the great bay window, converting the room for the nonce into a veritable greenhouse, were any number of potted bulbs in full bloom. Here were massed jonquils and daffodils of deep golden hue; Dutch, or the common hyacinth, of delicate shades of blue, pink, lavender and primrose, white and rich crimson; dainty white Roman hyacinths and grape hyacinths of a deep blue and of white; narcissi of several varieties, as the Polyanthus of a deep shade of yellow, the Princeps of a faint straw color with its center of a darker hue, the Poeticus, pure white, having its yellow center fringed with a sprinkling of red and dear to so many people from its old-time associations. The Narcissus is frequently called the Chinese lily because the Chinese grow it so generally in this country as well as in the flowery kingdom. Their favorite manner of cultivating it is to place the bulbs in an ornamental bowl filled with stones and water. The object of the stones is to keep the plant in place and as the stalks grow up tall and slender narrow strips of red colored paper are


A BED OF TULIPS
fastened around them so as to keep them from falling apart.

In the center of this fairylike looking apartment, and most becomingly attired in a green silk gown which harmonized perfectly with her lovely protégées, stood the hostess, Mrs. Deland, the lady to whose fertile brain and willing hands this interesting occasion was due. Her face flushed with the excitement and interest of the affair she now extended her hand in courteous, hospitable welcome to some new comer or then hastened to take some plant from an attendant with which to replace some bulb which had just been sold. On one side of the room sat a lady with a tin box in which were deposited the proceeds of the sale and from which change was made, while in different parts of the room were other ladies who were assisting in the function and answering the numerous questions showered upon them as to the how, when and where of everything pertaining to the sale, even to the age not alone of the bulbs but also of their cultivator as well. In the hall separating the front from the back aparments, in which latter were the bulbs in reserve, stood two neatly attired maids employed in doing up the plants as fast as they were sold. Beside them on a stand were wrapping paper, twine and pins. Well dressed women, with an occasional man, kept constantly coming and going, their arms laden with bulbs as they departed.

Altogether it was a most animated and entertaining scene, and as I stood in one corner quietly absorbing it all, the thought came to me what an infinite amount of patience, planning of details and deep interest in humanity as well as flowers this beautiful display meant, revealing to a student of human nature almost as much of the character of the well known authoress
as could be obtained from a careful perusal of her works.

The price asked for the bulbs at these sales is the regular market price prevalent at the time, and the profit should be at least one hundred per cent on the investment, although it not unfrequently realizes three, or even four hundred per cent. This makes a very satisfactory profit when there are several hundred bulbs on sale. Besides the old-fashioned red clay flower pots, Mrs. Deland had some of a low, square shape; others long and oval with knob-shaped feet; which held many bulbs; while there were some pots which had been especially made at the pottery for this occasion. These were of a soft, white clay, forming a pretty and novel contrast with the deep green stalks and showy flowers growing in them.

In the course of the year many people visit Mrs. Deland to ask her advice in regard to raising bulbs,


SUMMER HOME OF MRS. MARGARETTA W. DELAND AT KENNEBUNKPORT, MAINE


FLOWER BEDS IN PUBLIC GARDEN, BOSTON
for from her high position socially and reputation as a writer these sales have been advertised far and wide.
A very nice way for providing bulbs for a fair, or other occasion, is for a group of women to share the expense and burden of buying and growing bulbs, and then when they are about to blossom, bring them together to the place where they are to be disposed of.

As I was leaving the house after the sale I noticed what an air of culture and refinement pervaded it, with choice old family furniture standing about in the various rooms, family portraits in oil and other choice pictures adorning the walls, and books, books everywhere, while piled up on a stand in one apartment were a number of different floral magazines.

Once outside of the house a few minutes' walk brought me to the Boston Public Garden where in a few months will be seen the gorgeous display of outdoor bulbs for which this garden is justly famous.


AN ATTRACTIVE DISPLAY OF TULIPS

64

# Interesting Facts on House Heating 

By J. B. CHASE

ONE who contemplates building a home that shall satisfy, can well turn for a time from the contemplation of arrangement of room, interior decoration, woodwork finish and the thousand and one other details that delight the home builder, and consider carefully the more vital and no less interesting problem of heating. This rigorous climate of ours demands artificial heat. The home builder's problem is to secure that type which will give greatest comfort and prove most economical.

While the experience of many home builders has been that it pays in the end to leave all technical plans in the hands of a capable architect, or building engineer, even to the selection of proper equipment, there are few questions that arise equal to the interest and fascination found in choosing the proper method of heating; the selection of hot air, hot water or steam; the choice between different styles of equipment; the artistic placing of radiators, perhaps, or a careful consideration of direct, semi-direct or indirect methods of warming different rooms. The question of heating will take on many interesting phases. There is really no feature of home building more liable to bring disappointment, if not carefully provided for while plans are being made. Too many people sacrifice heating for other equipment or furnishings.

Modern heating methods have been remarkably developed during the past forty years. The fireplace is still in vogue for reasons of sentiment and is an excellent means of ventilation, but its value as a method of heating is no longer recognized. The sheet iron stove is rarely seen now, not even in the crossroads grocery store. Fuel has become too costly, and the luxury-loving American people have demanded more satisfactory means of keeping all sides warm at once.

The hot air furnace has evolved from a sheet iron
stove that was set in a central hallway or central room and had smoke flues and, later, hot air tubes passing through the different rooms. The greater economy and convenience of caring for one fire, instead of several, has made this heating method very popular. To-day the furnace is placed in the cellar and is so constructed that the smallest possible amounts of dust and obnoxious gases are sent into the livingrooms. Careful practice in proportioning size of pipes, locating them in the center of the building, etc., has done much to overcome the faults of hot air heating. It has been difficult to conduct heated air to remote rooms, against exposed walls and evenly distribute it into the several rooms without drafts.

In the approved type of furnaces made to-day, cold air is drawn from the outside and passed over the heated surfaces around the firepot. Great care must be exercised then, in the selection of such apparatus, to see that the fire-pot is made of material that will stand intense heat for a number of years. Otherwise the apparatus will be liable to need frequent repairs, while there will be the increasing danger of getting too much burned or devitalized and gas laden air into the living-rooms.

Low pressure steam heating is most highly developed in America. It consists of a boiler, in which steam is produced, and a system of wrought iron pipes through which dry steam is forced under low pressure to expanded pipe surfaces or ornamental radiators placed in different rooms to be heated. The system is entirely closed, pockets of air being vented through automatic air valves placed on the radiators and at the end of long runs of piping. Sometimes apparatus is installed to keep the entire system free from air so that steam will circulate at lower temperatures in the vacuum thus produced.

While its appearance may be forbidding because of steam gauge, safety valve, automatic regulator, gauge
cocks, etc., the boiler is absolutely safe and most simple in operation. Its efficiency depends upon its ability to produce steam quickly, maintain a steady water line and constant steam supply with minimum expense for fuel and attention.

Low pressure hot water heating differs from the steam system, in that two lines of piping are always used to connect boilers and radiators, thus completing a circuit in which water flows when heated; either because of slight pressure exerted by a mercury seal, or simply by the law of gravity. The system is opened to the air through an expansion tank placed above the highest radiator in the system. The tank permits the expansion of water without danger and keeps the system full. It is indispensable.

The boiler or heater is the same as that used for steam heating except that safety valve, steam gauge and other trimmings are dispensed with. Of necessity, the pipes are larger in a hot water system. It also requires more radiating surface to heat with hot water, because of more material and consequently more labor to install the same. Hot water costs more to install than does steam heat. Their respective merits may be found in the following features.

Hot water throws off heat at low temperatures and continues to radiate long after the fire has died down. Steam radiates at $212^{\circ}$ and is easily held to required


The low pressure steam boiler is very simple and safe in operation


A cottage warmed by small hot water boiler and two radiators The boiler has a combination fire-pot, part of which is used to heat water for domestic purposes
pressure. Hot water is easily controlled and may be made to circulate at different temperatures so as
to give desired amount of heat in the radiators; even temperature is thus most easily obtained.

Steam heat is quick to respond to firing or drafts and can be entirely shut off at any radiator.

Either heating medium can be carried to remote rooms. Steam is usually preferred for distances,


In houses with widely separated wings, the problem is to heat comfortably with economy

The following table is deduced from both theory and practice. So much depends on different methods of firing, different types of equipment etc., that the exact ratio will never be determined.
\(\left.$$
\begin{array}{cc}\begin{array}{c}\text { Method of } \\
\text { Heating }\end{array} & \begin{array}{c}\text { Amount of air warmed by one } \\
\text { ton of good anthracite } \\
\text { got air }\end{array}
$$ <br>

Hoo cubic feet\end{array}\right\}\)| Steam | 1600 cubic feet |
| :--- | :--- |
| Hot water | 1800 cubic feet |

While a comparative estimate of the costs of different methods of heating is desirable, it is not advisable for any home builder to select equipment on that basis of one set of figures, even though a particular friend has paid $\$ 200$ to have a furnace put in, and his neighbor expended $\$ 400$ for steam heat, while a third friend, in almost the same size of house, had to pay $\$ 500$ to have hot water equipment installed, the home builder has no


If proper equipment is installed, a healthy uniform temperature may be maintained with economy, in spite of wind and weather way of telling what the different
equipments will cost him for his house until the different rooms were properly measured up and an exact estimate made by heating contractors. Buying heat-


There are three different methods of radiation: The direct, the semi-direct and the indirect
ing equipment is not like buying a refrigerator or plumbing fixtures even. There is a problem involved. One house of eight rooms might cost $\$ 250$ for steam equipment,居


The water boiler is most economical of fuel while another house of eight rooms would cost $\$ 600$. The size of rooms, the amount of exposed wall and window surface should be carefully figured when determining the size of radiators and boiler required, or the number of pipes and size of furnace necessary to heat the different rooms properly. Then too, local conditions will enter into the cost of equipment and installation. The particular exposure of your building might demand special consideration, or the cost of labor might be variable. The home builder who builds well, must consider future comfort and economy. He will never regret giving his heating problem all the personal study and attention he can, and making early provision for the equipment of his choice.


## THE HOUSE

IF proper attention has been given to the house during the preceding months there should not be much which requires immediate attention in February. This should, in fact, be one of those in-between-times when the householder has opportunity to enjoy the fruit of his or her labor and to plan a little ahead.

It is well to determine at this time just what repairs are needed and what alterations had best be made when spring arrives and such things can be done most readily. Lists made from time to time are very helpful when work is systematized even though many of the items may have to be checked off for economic reasons.

Try the experiment, if the winter has seemed long and the days somewhat monotonous, of rearranging the furniture in some of the rooms, breaking up the set formality that common usage has brought about, and introducing a little pleasant variety. Good discoveries are made some times by chance and a more convenient arrangement hit upon by accident. Not that one would recommend perpetual unrest or continual alteration, for nothing could be more disturbing than this, but rather draw attention to the fact that even on this "straight and narrow path" there is danger of stepping off on the wrong side, of letting the chairs drift back into corners and tables shove themselves tightly against the wall.

There are lots of little things which can be done for the house at this time which have been crowded out of the other months and will greatly add to the comfort of the family-those odds and ends which after all make the distinction between the furnished house and the private home. Look over the closets, have the doors which catch adjusted, and hinges which squeak oiled. Indeed it is not a bad idea to have the rugs taken up some warm, bright day (even in February one will occasionally be found ) and have them swept and shaken out-of-doors. Moth and rust have been known to corrupt in February as well as in June.

It is this month that the library will probably come into most frequent use so it is not ill-advised at this time to give it special attention. Do not have the windows so curtained that they neither give light nor can be approached, let the books be accessible and
the chairs comfortable. The open shelves are undoubtedly much more troublesome to the one whose duty it is to keep them dusted than the closed cases, but if the householder wants to make companions of his books he will scarcely wish to keep them behind glass doors. It is best also, if the shelves are built into the house, to have them moderately low rather than as was once the fashion way up to the ceiling, this simplifies their care and adds to their convenience.
The decorations in a library should obviously be simple. There should not be many paintings on the walls and they should be decorative rather than pictorial in character-a type which engenders reflection rather than awakens thought. Etchings and engravings are peculiarly suitable for a library, and panels of carved wood, tapestry, or metal work may be used effectively.
It is a curious thing that more sculpture is not used in the decoration of the better type of American home, for nothing could be more attractive or can more readily be had. American sculptors have produced some excellent small works in bronze and are capable of adapting themselves to reasonable requirements. This does not, of course, refer to the ordinary bronze figure of commerce which is set on a pedestal and viewed with some awe, but the real work of art which makes a place for itself and has true significance. Occasionally one does come across a sculptured over-mantel, a little bronze set in precisely the right place above a book case or on a low table, or some artistic paneling of one kind or another, but much less often than one should.

It is especially at this time that the desire is felt to hasten the approach of spring and that room is made therefore for the blossoming plants which take the place at this season of those whose foliage merely is ornamental; and indeed, the bit of color furnished by a handful of early jonquils, or a bunch of primroses is a welcome note at any time. But if flowers are not attainable then just the green leaves will do; by all means however, have something, if not from the greenhouse then from the woods-a branch of cedar or pine, some holly or laurel.

Perhaps now one may find the seams of a carpet wearing conspicuously, or the tread of the stairs becoming threadbare, if so dyes of various kinds, oil
paint much thinned with turpentine, even water-color or pastels, properly applied, can be made to cover a multitude of shortcomings and help eke out a fair appearance until the end of the season. The resourceful householder will gladly make use of many such expedients.

Beware at this time of frozen pipes and drains, when the danger seems to be over, vigilance often lags with disastrous result.

Do not neglect the chimneys either. If open wood fires have been used constantly much soot will have accumulated which under special provocation may quickly burst into flame. The worst conflagrations commonly occur at the beginning and end of the winter season.

## THE GARDEN

FEBRUARY is a good month in which to turn over gravel walks or paths which are weedy or on which moss grows. The walk should be dug over with a spade or fork, burying the weeds and moss. This will give the roots more exposure to the late freezes which will practically eliminate them for the year. Immediately, if the walk is to be in use, pack the earth, put the gravel in shape and roll it down firmly. If the walk is not in constant use during the winter, defer the shaping and rolling until the latter part of March-that will leave the walk in better condition for the spring and summer months as it will have settled considerably. In finishing up make it highest in the center, to give a slight fall for the water to the sides; two inches will be fall enough for a walk five feet in width.

The matter of constructing walks is not, usually, given the consideration its importance demands. In laying out a walk let convenience be the factor of first importance. Put it where a walk is needed. It need not be straight, but if it be curved, let the curve not involve too much of a detour. When possible, avoid having a walk bisect a lawn, as that makes two lawns where there should be but one, and the larger the lawn can be made the more parklike and natural is the landscape. By all means avoid taking the walks circuitously around the borders, unless they are laid simply to permit rambles of inspection of the grounds; all walks designed for serious use should be convenient and direct.

In making a walk several things, besides location, must be considered. Some soils, especially those which contain much loam and sand, will pack with use and make reasonably good walks without further preparation. But most soils require additional material, such as gravel, cinders, etc., and even then they are at times objectionable for in walks with decided slopes and down which water runs in much volume loose material slides to the low places or edges.

Usually this can be avoided by repeated packing or going over with a heavy roller after a rainfall.

All things considered, where a walk is to be permanent, put it down with cement. The cement walk will last indefinitely. True there are difficulties in laying it, but they can be easily overcome. If a cement walk is put down, lay it on a foundation of at least twelve or eighteen inches of such material as brickbats, cinders or the like, for drainage purposes. If the ground where the walk is to be put is low even more drainage would be better. Pound this material down or else let it stand until well settled before laying the cement, which should be put on in two courses. Let the first course be two or three inches thick and made of well-mixed concrete composed of one part Portland cement, three parts clear, sharp sand, and five parts broken stone-about the size of walnuts. When this course has partly hardened, but while it is still moist, put on a finishing layer, omitting the stone, of one inch thickness. This last course can be dressed off and lined as desired.

While it is necessary to let the frost get out of the ground before undertaking to lay a cement walk, the fact should be kept in mind that this phase of the work ought to be done before the gardening proper is begun in the spring.

At this time of the year the bedding plants and such things in the greenhouse are practically dormant, and they consequently require very little water, only sufficient, in fact, to keep the soil slightly moist. By this is meant not to give driblets of water, but to make sure that it is needed before any is given, and then let it be sufficient to moisten the ball of soil thoroughly. After this give no water at all until the soil is dry.

One of the best annual climbing plants or vines is the morning glory, which may be likened to a large convolvulus. It is a very tender annual, and the seed must be sown in heat in February, the seedlings potted out, and then gradually hardened off. Rich soil is necessary, such as may be made by incorporating loam and well-rotted manure together. The morning glory, of which there is a great variety, does best in a warm, sunny corner.

The question will naturally arise, "What can I grow beneath trees?" Very few plants are a success under these conditions. The pretty, smallflowered Vinca minor (the periwinkle) may be relied upon. Its leaves are dark green, and the blue flowers peep up from amongst them in profusion. Ivy is, of course, excellent; but the small-leaved variety should be chosen. The St. John's wort or Rose of Sharon, too, luxuriates in the shade and poor soil usually found beneath large trees. This question is raised
(Continued on page 15, Advertising Section.)


The Editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

THE response to the editor's note of invitation at the head of these columns has been so unprecedently large that it has become necessary to open a new department in House and Garden for the benefit of those of our readers who require prompt and more extensive service than can be supplied them through the Correspondence columns. Where plans are sent for advice on the complete fitting, decoration and furnishing of the house these should be addressed to House and Garden, Department of Decoration.

This new department is under the immediate supervision of Margaret Greenleaf, the editor, assisted by a competent corps.
The exterior color for the house as well as full scheme for the interior treatment will be forwarded upon request, the latter to include wall treatment, woodwork, fixtures, tiles and entire fitting and furnishing of the home. Addresses of firms manufacturing or handling the products recommended will be supplied, when practical samples of materials will be submitted, and when desired, wall coverings, furniture, draperies and floor coverings will be purchased.

A careful study of each house plan is made, and where the owner has formulated a scheme of decoration, his plans will be carefully followed and suggestions and samples sent in accordance. A selfaddressed envelope mailed to the Department of Decoration will bring any further information desired.

The Correspondence Department will continue to publish queries and replies of general interest which are not too voluminous for our space. The new service has been planned to give thoroughly practical help to those who request it. To the woman who lives far from the center of things, and who is consequently somewhat out of touch with the latest ideas, this department will be of a special value. It is hoped also, that it may be further useful to the architect, particularly to him who is located in the smaller towns. Where his ideas, or those of his clients,
are fully formed, it will be the part of this department to supply him with the samples of material in accordance with the suggestions he may send in. This will apply as well to the contractor and the builder.

Where plans are submitted they are regarded as confidential and returned to the owner or architect when the scheme goes out. It is the sincere wish of House and Garden in making this unusual offer to its readers to supply them with the best advice and the opportunity to make the best selection and purchase within their means. It is requested that a limit be set on the amount to be expended in decorating, or furnishing, that the samples sent may be of practical value. It is also requested by the editor that all plans sent in show the exposure of the house and the character of wood employed for floor or standing woodwork be noted. With this information in hand substantial service can be rendered.

## CORRESPONDENCE <br> THE SELECTION OF ORIENTAL RUGS

Would you be kind enough to inform me where I can obtain reliable assistance in the purchase of rugs for my own home. I desire Oriental rugs but as I am only an amateur in my knowledge of these I feel that I should have expert advice.

Answer: If you will mail to this Department a selfaddressed envelope we will take pleasure in forwarding to you the names and addresses of several firms who are entirely reliable and who will advise you in regard to the quality of Oriental rugs. Quality of course is a most important consideration. However, in making the selection if you have already chosen the wall covering or the fittings of the rooms it is quite essential that these be considered in the purchase of your rugs.

Samples of wall covering, drapery and furniture covering should be carefully compared with the rugs
(Continued on page 15, Advertising Section.)


## SEEDSMEN'S DESCRIPTIONS

WHYdo seedsmen impose upon the public in their descriptions of their plants? I was led to plant quite a large bed of Nicotiana Sandera last summer, and was very much disappointed. It stood in a prominent position on my lawn. The flowers wilted badly in the sun, and only looked well on cloudy days. G. O. P.

The seedsmen should have told you to plant in a semi-shady position, which if done, would have given you satisfaction. This plant is a recent introduction from Europe where the sun's effect is less trying than ours, and as they may do well there in full sun, the introducers recommended such a situation which in turn was advised by our seedsmen. Try them next year in semi-shade and if you like their magenta red, they may please you.

## SELF-COLORED PETUNIAS

I want to grow a large bed of petunias next summer. Would like two shades of self-colors. What varieties would you suggest?
S. J. C.

Use Rosy Morn for center and Snowball for the border.
Rosy Morn is a rather dwarf single pink of a lovely shade. When first introduced by H. A. Dreer, of Philadelphia, it was apt to reproduce some flowers of a diversified color, but the originators have now succeeded in sending out seed that can be depended upon to produce the self-colored pink desired.
Snowball, as its name indicates, is a good, selfcolored white.

## CLIPPING A BARBERRY HEDGE

Does a hedge of the Japanese barberry need to be clipped.
S. E. I.

You probably refer to Berberis $T$ hunbergii, which never should be clipped. Clipping not only destroys its graceful habit but deprives you of most of its berried effects, as it does not bloom on the current year's growth. It is compact enough without clipping.

## A GOOD BLUE FLOWER

Give me the name of a good blue flower, rather dwarf-other than lobelias and campanulas.
M. G. L.

Anagallis Phillipsi is a dwarf annual, producing open, saucer-shaped flowers of a pleasing shade of dark blue. As its stems are procumbent, and somewhat straggly it is well to plant it in among sweet alyssum which causes it to climb up among the alyssum blooms, in which situation it is very attractive.

## TRANSPLANTING HAWTHORN AND CRAB TREES

Can hawthorns and crab trees, of fair size, be safely moved from the woods ?
T. C. K.

Hawthorns submit to removal quite readily but crab trees of two or more inches in diameter do not. Their root system is generally confined to one or two main roots only, with but few laterals. Nursery grown stock that has been root-pruned is much more reliable. Hawthorns with trunks up to eight inches in diameter may be safely moved in winter with a frozen ball. Select a tree that is in vigorous growth, so that you may be able to cut out, in entirety, some of its branches to compensate for the shock of transplanting. Just before hard freezing sets in, dig a trench around the tree so as to leave a ball six feet or more in diameter, digging under towards the center and getting well below the roots. Keep the trench full of water until the ball is well frozen. Prepare the hole for planting and dump a load of manure over it to keep frost out and move any time when the ball is sufficiently frozen.

## SETTING AND CARE OF COLD FRAMES

How should cold frames be set, and what care do they require in winter to carry over Canterbury bells, foxgloves, pansies, etc. ? It is often $20^{\circ}$ below zero in January and February here. S. C. M.

The frame should be sunken in the earth nearly its full height, and the soil within excavated, and proper drainage provided. If the frame is two feet high at the back and eighteen inches at the front, you can use the frame for a late, mild hotbed, after your plants are set out. Such a mild hotbed often comes
(Continued on page 19, Advertisıng Section.)


Edited by JOHN GILMER SpEED
The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.

## Cattle for the Country Place

EVEN a small country place is incomplete without one or more cows. It is easy enough in the country to buy milk and butter but it is infinitely more satisfactory to have the home products. Indeed there was a time when a man's wealth was measured in cattle-note, Abraham was rich in cattle. Before the Greeks invented metal coinage oxen were the favorite medium of international exchange and when coins were first made a bull's head was stamped on one side. This use of cattle in barter has given a word to the languages of Europe-the Latin word pecunia and the English word "pecuniary" coming from pecus, cattle.

So we see cattle have been important from the remotest civilizations, though the naturalists are in a quandary as to how they originated and how so many varieties occurred. That these many varieties have been vastly improved by selection in breeding there is no doubt. But what has all this to do with cattle on a country place? If you ask me that I shall have to frankly answer that I do not know. Possibly the same relation that the salute has at the beginning of a fencing bout; and may be to show that I read up a little on the subject of cattle in general before attacking the problem as to what kind of cattle are best for a gentleman's country place. I have heard it said



HOLSTEIN BULL-PUTNAM VALLEY FARM, PATTERSON, NEW YORK
supplanted the buffaloes on the Western plains.

By using bulls of these superior breeds the old longhorn herds of the cowboy days have been graded up to extinction. But the longhorn served his purpose well. The cows gave little milk and the steers made poor beef, but in the time when the herdsmen had to depend entirely on the natural water courses the herds had often to be driven miles to get a drink. The longhorns - lean, hardy and fleet of foot-could stand this kind of life; the bulky shorthorns would have perished of fatigue.
a hundred times that the best cow is the common cow-that is a cow of no particular or of mixed breed, an animal occupying the same place in the bovine world that the yellow dog does in the canine. Those in whom such ideas have lodged had as well skip this article for they will find no comfort in it, though they may find amusement in scoffing at theories with which they cannot agree. Mongrelization leads to decadence, decay and deterioration. Suffer it to happen and the milk and beef supplies would both fall off.

The great problems in cattle breeding are to get quality and quantity of beef and milk at the least cost for feed. It is not to be presumed that on ordinary country places where herds are kept that cattle for beef will be bred; but many country gentlemen do this. Of such cattle the shorthorns and the Herefords are the best. Personally I prefer the shorthorns as they are also good milkers. In America a generation ago the shorthorns were greatly in fashion and even many English breeders attended our sales to get breeding stock to take back home. At a dispersal sale near Utica, New York, some thirty years ago a young shorthorn cow of the noted Duchess family was sold for the fabulous price of $\$ 40,600$. This inflation of prices had a bad effect on the breed as farmers could not afford to pay the service fees, and inferior bulls were used. At this time, however, more reasonable prices prevail and the stock is at a high standard of excellence.

These shorthorns and Herefords have practically driven to extermination the old longhorns that

But I suspect the readers of this magazine are more interested in dairy cattle. If one cow or a few are to be kept I recommend one of the Channel Island breeds, either the Jerseys or the Guernseys. The latter I prefer because they have always seemed to me to be hardier and stronger and not quite so prone to the tubercular diseases. Both give milk of most excellent quality and rich in butter, but the quantity is not so great as that given by the Holstein cows and some others. On a country place we want everything to be beautiful. Nothing could be much lovelier than a herd of Jerseys or Guernseys grazing in a clean, rich pasture. They are very deer-like in appearance. Even tethered on a lawn they add rather than detract from the beauty of the place.

Some practical person may want to know whether keeping cows of these superior breeds pays. I am sure I can't say; I can say this, however, it pays as well as anything else a country gentleman doesit gives pleasure and satisfaction. Cows pay as well as a hunter pays or a yacht or a motor car. The herd of Holsteins of Mr. Aaron S. Baldwin's Putnam Valley Farm at Patterson, N. Y., pays


HOLSTEIN COWS-PUTNAM VALLEY FARM, PATTERSON, NEW YORK
handsomely; but Mr. Baldwin manages his herd in a business-like way and gives much personal attention to it. The Holsteins, originating in the provinces of North Holland, are very handsome. They are larger and sturdier than the Channel Island cattle and healthier too, being less liable to tuberculosis. They are excellent milkers and the milk is rich in butter. There are many persons of experience who greatly prefer them to Jerseys.

Kerry cattle have excellences that are not to be despised. They are black and small and shapely, but hardy and good milkers. In Ireland the Kerry is called "the poor man's cow," as it is of this breed that a thrifty peasant usually has a specimen.

In buying cows an amateur needs an expert adviser. An expert can tell with much certainty as to the milk-giving properties of a cow inspected and also
as to its healthfulness. An amateur's cow should never be too fine; this too fineness usually comes from close in-breeding. The milk-giving qualities of a cow are determined in a general way upon the shape of the bag and the lines of the hind quarters. The bag should be symmetrical and shaped very much like the crown of a "derby" hat with the teats alike in shape, and equally distant from one another. In housing cows all that I have said in regard to stabling horses applies. We want good ventilation and good drainage; above all things the cow stable should be kept clean. A method by which the rear end of the stalls can be flushed with a hose is advisable.

Cows are gregarious and friendly, and the stalls of the cow stable and the yokes by which the cows are secured should be so arranged that they can touch noses.

## Berkshires

THE English have been great breeders of various kinds of animals. One of their greatest achievements has been the creation of the Berkshire hog, which is one of the heaviest of the porcine species. This pig is also unusually healthy and very prolific. It is a black pig "and usually has a white blaze or mark down the face, a white tip to the tail, and feet white up to the ankle joint. It has a moderately short head with heavy jowls, a deep carcase, wide, low, and well-developed hind quarters,
with heavy hams. The skin is free from rucks and lines and carries an abundance of fine hair." We have been bringing Berkshires into this country since before the Civil War and they are now very numerous. I do not recommend pigs for small places; there are objections too obvious to mention. But no really large establishment can be run economically without them.

Without pigs on a farm there is a valuable surplus that is sure to go to waste.


BERKSHIRES-PUTNAM VALLEY FARM, PATTERSON, NEW YORK

## SUGGESTIONS FOR THE MONTH <br> (Continued from page 69.) <br> THE GARDEN

at this time in order that the selections for such may be made before time for planting out arrives.

During this month our friends in the South will be luxuriating in full-blown, out-door culture violets and hyacinths. They will also be giving attention to the rose garden, doing such work as pruning, mulching, etc. By the middle and latter part of March they will have a few roses in bloom, such as will be found north of Washington about the last of May.

## CORRESPONDENCE

(Continued from page 70.)
one contemplates purchasing for use in the various rooms. It will be found that it is not a difficult matter to secure harmonious effects where the rugs of the Orient are to be used. As, for instance, where a wall covering shows much blue a rug of Persian weave may be selected, having dull old rose, ivory, black, green and the faintest suggestion of blue. When placed in the room with blue walls it is interesting to note the prominence with which the blue of the rugs shows out. There is the danger, however, that the blues or other dominating colors will be of shades not entirely harmonious and for this reason the necessity of observing my previous advice will be felt, and the wisdom of trying the samples with the rug appreciated.

The Department of Decoration of House and Garden includes on its staff an expert on rugs, and the services of the department are tendered you in this line should you desire to avail yourself of it. Where references are sent selections of rugs may be made and if desired the rugs will be purchased and forwarded to the correspondent. If, after trying the rugs in the rooms where they will be used, they prove unsatisfactory they may be returned within the week, the purchaser paying expressage both ways. On the return of the rugs in good condition the money paid for them will be refunded.

## old Tile

I have some old Dutch tile-the real article-that came into my possession from about the chimney of an old New England farmhouse and am anxious to know something about the value of these,

## - The Standard of Excellence -



With Correct Designs in all the Leading Schools of Art is found in the productions of

## P. \& F. CORBIN

N. W. Corner<br>Eighth and Arch Streets<br>PHILADELPHIA<br>FACTORIES<br>New Britain, Conn.



## New York Belting and Packing Company, Ltd., <br> 91 and 93 Chambers Street, New York City

[^6]Baltimore: il4 West Baltimore Street. Buffalo: 600 Prudential Building. Pittsburgh: 913-9I5 Liberty Avenue. Spokane, Wash.: i63 S. Lincoln Street. Sole European Depot, Anglo-American Rubber Co., Ltd., 58 Holborn Viaduct, London, E. C.
as I have had would be purchasers who prefer to set their own price.

Answer: If you will send us some information in regard to your old Dutch tile, we can probably supply you with the required information. Furnish us with the size and some description of the decoration, and also the color of the background and the design.

## SEASIDE COTTAGE

I have just bought a house at the seashore. All the rooms, but parlor, have walls and ceilings of wood and look well, though built ten years ago. How, and what color would be best to tint parlor walls (ceiling is wood). It has two windows west, facing the water and one window south. The partition that was between this room and hall (all wood also) has been removed; the wood throughout is oak.
I would thank you to advise me on this. There are no skilled artists to be had there; so a simple idea would be best. The floors are also oak.

Answer: We would suggest that you tint or cover the walls of your parlor in pale green. If a paper is chosen it should be without figure.
For your ceiling in the natural oak we would recommend (if this is not too dark) that you leave it in the natural color. If, however, you feel the need of a lighter ceiling we would advise you to treat it with a white enamel, finishing with an eggshel gloss.
At the ceiling angle set a frieze of the green and white paper like the sample we send you; this will give an effect which will be appropriate for a seaside cottage. Stain your floors a light brown and finish with a semi-gloss.

## IN REGARD TO CURTAINS

I am afraid my letter will be rather lengthy but will thank you very much to give me the following information, which is about curtains.
My reception-room is papered in rich, plain red, woodwork all white. Artsquare, tiling for mantel, and furniture upholstered in green. This room has an octagon corner with three windows in same. What kind of curtains shall I use ?
The parlor, papered in delicate green, (Contimued on page 18.)

## Peerless Rubber Tiling

Cushion Back

The Most Durable and Economical Floor Covering Made

## Beautiful Designs

Effective Colorings
Noiseless, waterproof and non-absorbent
Peerless Rubber Tiling is made in large continuous sheets, and is impregnable to dirt and moisture.

It is sanitary, beautiful and a durable rubber floor covering.
Beware of cheap subssitutions and imitations purporting to be sheet rubber tiling.

Send for our catalogue illustrated in colors.

## Prices on application

Manufactured exclusively by
The Peerless Rubber Manufacturing Co. 88 Chambers Street and 16 Warren Street New York


Every Spring thousands of lovers of Roses are disappointed in not getting the kinds and varieties desired.
Roses By placing orders now we will reserve the plants for quantity and variety of Roses, in strong 2 -year-old
field grown plants, than we have ever offered in previous years. previous years.
Trees We have splendid blocks of handsome straight-stem Norway Maples, Oriental Planes, Pin Oaks, and other trees for planting in every location.

We have many hundreds from 5 to 12 feet tall, in
Evergreens all the finest and handsomest varieties. The specimens now growing in our Nurseries are conceded to
be the finest ever produced in America.

Hedge Plants We have them by the hundred thousand in our Nursery. We can supply any quantity.
We have them for every place and purpose: JapVines anesc Wistaria, Dutchman's Pipe, Clematis, Honeysuckle, Boston Ivy, Virginia Creeper, Euonymus, Ivies and the beautiful quick-growing Japanese Kudzu Vine.
We have the most complete collection of these popular favorites in the country. Our Landscape Department makes a specialty of Old-fashioned Gardens.

Our Landscape Department is equipped to assist you in the selection of the proper material for every location, or other Landscape problems you may have. We have men and the facilities to carry out all kinds of work.

Ask for catalogue. Visit Nursery
BOBBINK \& ATKINS,
Nurserymen and Landscape Architects, RUTHERFORD, N. J.


The broughton self-closing basin cocks have been in use for several years. many of the largest hotels and public buildings in the united states are equipped with these goods. ::: ::: Made in brass, nickel or silver Plated, and in solid silver-metal.

EVERY ONE WARRANTED
Manufactured only by

## E. Stebbins Manufacturing Co.

 SPRINGFIELD: MASSACHUSETTS

because it acts as a blanket on the house. It insulates against cold in winter and heat in summer. It makes the walls cold and dampproof; the house free from drafts. It saves you $33 \frac{1}{3} \%$ in your coal bill, not one winter but every winter your house stands, and the comfort and economy is continued and lasting.

Don't take our word for it. Ask your architect. He knows because for twenty-five years he has been specifying NEPONSET.

See for yourself that it is used in your new home. Sold by hardware dealers everywhere. Let us send you samples and descriptive literature so you will know when you get it.

Write us for advice on building problems. We are helping many; we can help you. Write us NOW.

the woodwork is white and red, that is the window casings are white and the floor is painted red, art-square green, furniture reed or willow and mahogany. This room has two French windows, and a bay-window with four tiny windows, around these are little panels of green, yellow and white glass. What kind of curtains for this room?

My bedroom, which is papered in blue stripes with overhead white, has the same octagon with three windows. I want this room to be all blue and white. What kind of curtains for these windows? Also, what kind of scarfs shall I use for my dresser, wash-stand and dressing table. I thought of using plain or dotted lawn or muslin, with tiny ruffles around edges and these put over plain blue cambric. Would that do ? Also thought of dressing my bed, which is plain white iron, the same way.

I have another room just like the one described only everything in it is in pink and white. Could this be treated as the blue room?

Answer: At your reception-room windows we suggest thar you use a brocade of silk and wool for the draperies; since this room has plain red walls figured hangings are quite permissible, the ground work should be of yellow tan showing a design of delicate blossoms and green leaves and a floating ribbon effect in soft blue. The green in this figure should harmonize with the upholstery of your furniture and the tiles, and the red should look well with your wall covering. I send you samples that you may try this. Next the glass it is suggested that you use figured ecru net, we send you sample of this also. Both samples are marked with the price.

I note that your parlor walls are covered in delicate green, and in this room the floor covering is also green, your furniture being of willow and mahogany.

You do not state whether the willow furniture has cushions, if not, I would suggest that you use a linen taffeta like the sample I send you for over-draperies at your two French windows, and also for cushions in the willow chairs to be fastened in the back and seat and be caught in with buttons. The selection I have made shows a softly mingled pattern of green leaves over a white ground, with yellow brown stems of the vine; this latter will harmonize with the
yellow glass of which you speak. White net curtains should be hung next the glass, these should be used in your bay window, the over-draperies to hang at either end of the window.
For your bedroom with the blue striped paper I am sending you a blue and white striped swiss which I think will be particularly effective for curtains here. These should be made to extend to the sill and be finished at the front and around the bottom with a three inch frill, each curtain caught back in the middle by a band of the material four and onehalf inches in width. This tied in a smart crisp bow, you will find makes a very attractive window, particularly if across the top of the window you use an eight inch valance of the material, made rather full with a heading at the top.
You might use plain soft blue silk half sash curtains next the glass, if there is need for these.
We would suggest that you use white dotted muslin over pale blue sateen for your dresser covers; these should be trimmed about with frills as you suggest. The cover to your bed (if you desire a muslin one) should be made of the same material suggested for the curtains, this should have a deep valance on three sides just escaping the floor and be used over white.
We send a pink dotted swiss for your pink room, and would recommend that this be used for window draperies, dressing table cover and bed cover as suggested for the blue.
Should you desire it the Department of Decoration will take pleasure in making any of these purchases for you.

## GARDEN CORRESPONDENCE

(Continued from page 7r.)
in quite handy in handling late grown seedlings. You may also set the frame upon the soil and bank up with manure or soil quite heavily. Leave the plants exposed as late in the fall as possible, covering with sash when the thermometer goes much below freezing, but keep as much air as possible by tilting the sash a few inches and holding in place by wooden blocks. When good freezing weather comes, cover the sash with a thin wooden shutter. Shutters made of half inch stuff are fairly light to handle and less apt to break the glass than heavier ones,


Economical Heating
Some heating systems waste heat and fuelbecause of their poor censtruction. This compels forcing the apparatus to obtain sufficient heat and necessitates many repairs Saving of fueland freedom from repairs is true heating economy.
"PIERCE" SYSTEMS of Low Pressure Steam and Hot Water Heating
are always under control and are cconumical because they require but little fuel and attention, distribute every particle of heat evenly throughout the house and require no repairs. They are constructed from best materials in one of the largest heating foundries in the world. There are over 300 styles and sizes to meet every requirement and nearly 200,000 in use, thousands having given perfect satisfaction for over thirty years. Sold through local dealers everywhere.

## "PIERCE QUALITY"

 SANITARY PLUMBINGgoods in Porcelain Enamel and Solid Vitreous Ware are ideal equipments for l'ath, Laundry and Kitchen. "It pays to secure both heating and plumbing goods from the same manufacturer."
Send for "Common Nense Heating and Sanitary Plumbiug.' $\frac{2}{2}$ most practical and interesting
book free The name of yourdrbook.free The name of yourarchitect, Steamitter anc Plumber PIERCE.BUTLER \& PIERCE MFG. CO. 851 James Street SYRACUSE, N. Y. Branches in all leading cities.


ACUUM MOBILOIL makes the engine run easier. Send for free booklet. Vacuum Oil Company. Rochester, N. Y.


The man who buvs any other Typewriter always HOPES it will be as good as the

## REMINGTON

## Remington Typewriter Company 110 S. Ninth Street, Philadelphia, Pa.



## Clovers

We are the lar. yest growers of Clovers and 'Timorhy seed in the world. We make a great specialty of
Timothy Medium Red Clover
Mammoth Red Clover
Alfalfa Clover Alsike Clover
Blue and Red Top Grasses
Salzer's 20th Century strain of above seed is positively the purest seed on earth.
SALZER'S Great Catalog


## PHOTO-CHROMOTYPE ENGRAVING COMPANY

## $\square$

 ...DESIGNERS... ...ILLUSTRATORS... ...PHOTO-ENGRAVERS... THREE-COLOR PROCESS FOR MAGAZINE, BOOK AND CATALOGUEILLUSTRATING

218-226 SOUTH 11TH 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. JMade in Wrought

THESTANLEY WORKS
Myrtle Street, New Britain, Conn.
New York Office: 79 Chambers Street
Original from



## Plan Now Your Garden for 1908

Our catalogue will be a help to you. It is different from others. It is mailed free.
H. E. FISKE SEED CO.,

12 and 13 Faneuil Hall Square, Boston, Mass.

## 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 recelve special attention

James Spear Stove and Heating Co.
1014-16 Market Street
Philadelphia, Pa.


No architect needed. Any careful mason can build our Brick Open Fireplace Mantels. You need one in every room. Send for catalogue. Address:
PHILADELPHIA \& BOSTON FACE BRICK COMPANY
165 Milk Street, $\quad \cdot \quad$ Boston, Mass., Dept. 46
when handling them in frosty weather. When the cold goes down as low as ten above zero, cover shutters and all with coarse straw or marsh hay. On mild days, during the winter, when above freezing, remove all covering down to the sash, and tilt them for air. Examine the plants and remove any dead foliage. Towards planting time watch all opportunities to leave the sash off, so as to harden the plants and get them accustomed to moving, generally covering with the sash at night, except a few nights before removal. The straw or marsh hay may be used for bedding in the stable as the winter's use has not hurt it. If mice or moles trouble you poison some wheat and strew it among the plants, but bury it in the spring on account of the birds, and also bait common mice traps with apples-placing some pieces near the trap to give confidence.

## SYMMETRY

LORD SELKIRK had a formal garden - an Italian garden, as it is called - and his gardener was very proud of it. One day, Lord Selkirk found a boy shut up in the sum-mer-house at the end of the terrace at St. Mary's Isle, and was informed by his gardener that it was for stealing apples. On reaching the other end of the terrace, where there was another sum-mer-house, Selkirk beheld the gardener's son looking dolefully out of the window. "Eh, John, what's this? Has your boy been stealing, too?" "Na, na, my lord," was the answer; "I just put him in for symmetry."-Pbiladelphia Press.

## CALIFORNIA DAIRYMEN

ALOT of the California dairy farmers are going out of the business, and already there is noticed a shrinkage of the butter product owing to this cause. No complaint is made that the business is not profitable only that they do not like to be confined to their business quite so close. Strangely enough, these farmers seem to think that they can work less hours and make more money in some other line of business. There is not a line of business that we know of where men do not average more hours of confinement than is experienced by the dairy farmer. There are no "soft snaps" in any trade or vocation if a man follows it out to its full bent.-Hoard's Dairyman.

THE ART OF LANDSCAPE GARDENING* The New Edition of Repton

$\mathrm{H}^{+}$UMPHRY REPTON was born at Bury St. Edmunds, England, on May 2nd 1752. He died at Harestreet, March 24, 1818. He thus lived at a time very advantageous for the sifting and clarifying of the principles of his art, for he succeeded two or three generations of writers and practitioners of landscape gardening who had had ample time to air their theories and experiment with them on a large scale often, alas! with ruinous results to the garden scenery of England. At the beginning of the eighteenth century there had begun a reaction from the excesses of the formal school, and the beauty and reasonableness of informal composition in natural or artificial scenery had been perceived.
Like other new ideas, this was pushed to excess, its essentials obscuted and its accidentals exaggerated. Hogarth invented his catchphrase "the line of beauty" to describe a reverse curve, and a few men of force and ability headed by Lancelot Brown, nicknamed "Capability," imitated by many others of neither force nor ability, proceeded to apply the meandering line everywhere, in and out of season, until they produced a worse monotony than the topiary work and bald symmetry of a former generation. Roads and paths turned back on themselves pursuing their own windings, and lines of lakes and streams, lawn surfaces and planting curved without aim or end. Then Repton appeared, a man born for his opportunity, and with great natural taste and powers of observation, saw for himself the work and ideas of his predecessors, chose what was good, and added many conclusions of his own. His method was that of common sense refined to the point of genius, and this with his sympathy with the point of view of his aristocratic patrons, and his perfect understanding of conditions, brought him a succession of clients and opportunities that has perhaps never been equalled. As he says himself "A large part of the scenery of England has come under my care." But so much of his work has succumbed to alterations or to its own success in not appearing to have been constructed at all, that his most valuable legacy is his
"The Art of Landscape Gardening." by Humphry Repton Mithin \& Co Met. $\&$ Co., Publishers. Boston and New York. Price, $\$ 3.00$

Your Country Cottage
should be made to harmonize with nature and fit into the landscape, by staining it with the soft, artistic colors of
Cabot's Shingle Stains
Cheap, handsome, preservative and lasting, as proved by over twenty years' use from 'Bar Harbor to San Diego, from Jamaica to Hawaii.

Samples of stained wood and color
chartsentfree on request
SAMUEL CABOT, Inc., Sole Manufacturers,
141 Milk Street Boston, Mass. Agents at all Central Points
Cabot's Sheathing Quilt-for warm houses


## CREME TACOMA

The Perfect


Creme Gacoma is so much better and produces so much more pleasing and satisfying results, that it stands in a class by itself.


Creme Tacoma is a perfect complexion cream, as white and pure as new snow. It will soften and soothe the skin, and beautify the complexion. You can use Creme Tacoma without fear of being disappointed.
It contains no grease or oil, and will not promote the growth of hair. It does promote a healthy circulation, cleansing the pores and relieving all rough and disagreeable conditions of the skin. With its use any woman can enjoy a beautiful complexion.
Creme Tacoma is antiseptic, and is absorbed quickly by the skin. It relieves almost instantly chafing and chapping; and its use will prevent these annoyances.
Sold by druggists at 50c. If your druggist doesn't have it, write to us.

## A Trial Jar of Creme Tacoma will be Sent Free Upon Request.

If you will write us, giving us the name and address of your dealer, we will send you free a trial jar of Creme Tacoma. You owe it to yourself to send for this free trial jar. To-day is the best time to do it. When you go to a store to buy Creme Tacoma, look for the label on the jar and don't accept an inferior substitute. Creme Tacoma is worth insisting upon having.

..COUPON...
Creme Tacoma
the iron city chemical co. 313 Carson St., Pittsburgh, Pa. Youmay send me, absolutely FREF, a rial-size package of Creme Tacoma,
free copy of your Book of Beaut $y$, Suggestions, Etc., Etc
My dealer's name is
His address is.
(Do not fail to answer in this ..... whether your dealer does or does not sell Creme Tacoma-"Yes" or "No.") My Name.
My Address.

## THE BARDSLEY



JOSEPH BARDSLEY, ${ }^{147 \text { to }}$ New York City 1 Baxter St.

Boston, 19 Pearl St. Chicago, 86 Lake St. St. Louis, 404 Security Bldg.


## Perfect Columns

Koll's Patent Lock Joint Columns are masterpieces of architecture, perfect in classic proportions. Their mechanical construction is faultless. They are made of extra thick stock, perfectly seasoned, and are weatherproof, very strong and very durable. For inand very durable. For in-
terior uses they are made of terior uses they are made of
every variety of hard wood. You cannot secure elsewhere as beautiful and substantial columns for all porch, interior, pergolas and garden uses.

Write to-day for our illustrated catalog P-19.

HENRY SANDERS CO.
860-1060 Elston Ave., Chicago Eastern Office: 1123 Broadway, New York

# A Lifetime Without Repairs 

Asbestos "Century" Shingles will Outlive the Building without either Paint or Repairs



Illustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Illinois, Prof. F. M. White, Architect, roofed with Asbestos "Century Shingles, laid French Method.

Exposed to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such, defy all changes of climates, and thus become greatly superior to other forms of roofing.
Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.

## ASBESTOS "CENTURY" SHINGLES

 REINFORCED ASBESTOS CORRUGATED SHEATHING FACTORS:writings which epitomize more effectively perhaps than any others the general principles of outdoor design. They are also more vivid and graphic than others because they consist mainly of extracts from his "Red Books" which were his reports on the improvements he proposed, with discussions of his reasons for them; and being a collection of isolated essays, the book is easy to pick up and read casually. It is probably safe to say that nearly every important principle and expedient of general design which has been used in modern work can be found in Repton. He saw that architecture was not an incident in the landscape, but was a part of it, and that both should be regarded as one composition. He restored the terraces and other architectural features to some houses and regretted their loss in others, where they had been destroyed by the mistaken zeal of his predecessors of the "landscape" school. He made formal designs himself, and united them with considerable tact to the informal work, a point in which modern designers too often fail. He understood that gardening was not and could not be an imitation of nature or painting, though the general principles of its composition are derived from both. He was beset by the clamor of his predecessors and their adherents about "Nature abhorring a straight line" yet had the courage to defend and construct straight lines in their proper place. He was ridiculed by amateurs like Knight and Uvedale Price, yet held to his own position, and replied with a courtesy and temperance that served to make his arguments more effective. It would be interesting and amusing, did space permit, to take up the charges of those who have decried the informal school one by one, and show how they are refuted in the writings of its most distinguished professor. He attacks the " modern serpentine gardening" (as he called it) the indefiniteness, the frittering, the hatred of straight lines, the mental narrowness and all the absurdities of which alleged landscape gardeners have been, with too much justice, accused. His designs would not fit our American conditions because of our different feeling, social and artistic, our different climates and conditions of vegetable growth, and our distance in time and space. But his basic principles are as useful here as anywhere, and his writings are most valuable to
those who would learn how to think of and analyze problems of outdoor treatment.
He seems to have met with the same kind of obstacles that discourage his successors of the twentieth century, the difficulty of getting his ideas properly carried out, the perversity of clients, especially of the man who sees what is right and does what is wrong, the recklessness and responsibility of those who alter his work, the sneers of the dull and ignorant, especially of the hired subordinate, the man in charge who has his employer's ear; it is only in speaking of the latter that he gives way to strong language. His mistakes are few, wonderfully few for a self-taught man. He is accused by Reginald Blomfield and others of turning houses of brick and stone to a uniform stone color, of changing a roof of red tiles to one of blue slates and so on, and convicted by his own pen. An obelisk at the end of a vista was to him an "eye-trap." But most of our differences with him are slight and unessential, depending on changes of fashion or feeling, and before condemning anything in Repton, the reader is advised to consider carefully what he has to say about it. He was very sensitive to the colors, texture and variety of foliage and flowers under different atmospheric conditions, but he has never the gardener's attitude towards them, a tree or bush is to him merely an item in a whole, of no especial value in itself. The gardenesque school which makes an ordered scheme out of trees, shrubs or groups of flowering plants, each developed for its own sake arose after his time with the great additions to the planter's resources made from the flora of Asia and America.

Repton's writings are naive, lucid, quaint and a little cumbersome in style. They show a man of interesting and lovable personality, of a mind singularly tolerant and fair towards not merely his rivals, but those who differed from and attacked him. He always strove for the better housing and comfort of the poor tenants on the great estates to which he was called, and this at a time when philanthropy was little understood or appreciated. He has left in his book the unconscious portrait of a gentleman of the old school.

This modern edition of Repton is edited by Mr. John Nolen who has eliminated certain archaisms and irrelevancies


No. 1045

## Dutch Arm Chair

## (A Suggestion)

OUR Specialty is Cottage Furniture. Adapted to shore and country houses. Can be obtained unfinished or stained to suit the purchaser, and individual tastes may be gratified.
A request will bring pictures of 200 distinctive patterns.
Visitors are invited to inspect specimen pieces displayed in our warerooms.

## WILLIAM LEAVENS \& CO.

## Manufacturers

32 Canal Street = = Boston


THE BEST SASH CORD MADE


EVERY FOOT IS STAMPED IN RED SILVER LAKE "A"

## Bound Volumes

We will bind subscribers' own copies of House and Garden if sent to this office in good condition for one dollar per volume. Six numbers constitute a volume.
Temporary binding for preserving numbers of House and Garden will be furnished at one dollar each.
Subscription Dept., House and Garden. 1006 TO 1016 ARCH ST., philadelphia, pa.

## An Interesting Greenhouse Combination



Is this one with aquatic house filled with all kinds of water-loving plants. and the curved lean-to grapery connected with it at the left.
Architecturally, it is decidedly pleasing-From a growing standpoint, ideal.

Let us plan a greenhouse for you. Write us.
HITCHINGS \& COMPANY
Greenhouse Designers and Builders 1170 BROADWAY

NEW YORK


## RUSSWIN HARDWARE

For Fine Residence Work

Unsurpassed in Design, Finish and Durability.

Haddam Design
Colonial

Booklets of designs will be furnished on request.

# Russell \& Erwin Manufacturing Co. 

New Britain, Gonn.

26 West Twenty-Sixth St., New York 1201 Chestnut St., Philadelphia



For Factory For Farm For Home CONCRETE CONSTRUCTION

Is the Best.

It is Economical, Durable, Fireproof and Sanitary; needs no paint or repairs, is warmer in winter, cooler in summer than any other construction and is adaptable to any style of architecture.
For the benefit of those who desire to make lasting improvements about the FARM, FACTORY or HOME, and as a guide to those contemplating new construction, we have published the following books:
FOR THE SUBURBANITE AND FARMER.
"Concrete Construction About the Home and on the Farm,"
a book containing directions for making and handling concrete, also many specifications, sectional drawings, and photographs of the smaller constructions that can be built by the layman without skilled labor.

Paper bound copies, free upon request. Cloth bound copies, 25 c each.

## FOR THE MANUFACTURER AND MERCHANT.

## "Reinforced Concrete in Factory Construction,"

a book containing besides several general chapters on concrete, concrete aggregates, methods and materials for reinforcing-ten chapters giving detailed descriptions of ten concrete factories and warehouses erected in various parts of the country by different systems with photographs and sectional drawings, and specifications furnished by the engineers in charge of the work.
This book profusely illustrated ( 250 pages, size $6 \ddagger \times 9$ ), pamphlet bound sent free upon request to ARCHITECTS, ENGI NEERS and MANUFACTURERS, who contemplate building. Cloth bound 50 c each.

## FOR THE MECHANIC AND ARTISAN.

## "Concrete Cottages,"

a sixteen page pamphlet showing photographs, floor plans and specifications for small concrete houses ranging in cost from $\$ 1,500.00$ to $\$ 4.000 .00$. Copies sent free upon request.

## FOR THE HOMEBUILDER AND INVESTOR.

"Concrete Country Residences,"
a book containing photographs and floor plans of over 150 CONCRETE HOUSES, ranging in prices from $\$ 2,000$ to $\$ 200,000$. These houses not only show a large variety of design, but are of several different systems on concrete construction. They are not imaginary sketches, but houses already built and designed by the best architects in the country.

Copies ( 168 pages, size $10 \times 12$ ) will be sent express prepaid upon receipt of $\$ 1.00$.
The Atlas Portland Cement Co., Information Dept., 30 Broad St., New York.
of the old editions, and reproduced photographically many of the sketches by which Repton explained his ideas. Some of these have slides or flaps which he invented to show the effect of the changes he advised. It is to be regretted that the handsomest of these represents a rather futile bit of lawn treatment in the front of Repton's own cottage, an intimate and personal thing which, used as a frontispiece is likely to give a false idea of the contents of the book and the work of a man who habitually thought on a large scale. But the preface is worth reading, and the book generally shows evidence of sympathetic and careful editing, and is handsomely printed and gotten up. It is the first of a series of classics in landscape architecture to be issued with the co-operation of the American Society of Landscape Architects.-Harold A. Caparn.

## Flemish Renaissance Furniture

FEW styles of furniture have suffered more at the hands of modern designers than the Flemish Renaissance; therefore, when fine reproductions are placed upon the market it is a pleasure to call attention to their good qualities.

There is great dignity in the Flemish Renaissance and when properly interpreted it is not incongruous in a modern house. It possesses those sturdy, substantial characteristics which make it eminently fitting for library, hall, and dining-room.
Flemish Renaissance was an outgrowth of the Italian Renaissance mingled with Spanish influence and infused with qualities of its own, which give to it distinctive character. Its origin came at the time when Charles, King of Spain, was Emperor of Germany and also Count of Flanders and Duke of Burgundy.
 Grand Rapids, Mich.

Holland and Flanders reversed the usual order of Renaissance development. The early and middle periods were less creditable than the later phases.

The Dutch and Flemish brought their work to perfection after the year 1600 .

If the English were the great furniture makers of the eighteenth century, the inhabitants of the
low countries were the great furniture makers of the seventeenth century.
During the sixteenth and seventeenth centuries Flemish and Dutch designs were so closely allied that the two adjectives are often used interchangeably. Previous to this date there was a great difference in the arts of the two countries: Flanders was more closely in touch with France and Holland with Germany. In the hands of the Flemish furniture makers the grotesque heads and masks of the late Italian Renaissance were adapted to a simpler, sturdier form of ornament.
The Arabesque, the Cartouche, and the various forms of animal and foral details which both French and Italian carvers had used until they were little more than grotesque fourishes, took on a new meaning. Columns, pediments, and mouldings were introduced in a constructive way, thus becoming a part of the actual furniture.
The illustration produced shows the fine constructive qualities which mark the earlier designs. Such work compares favorably with seventeenth century pieces, and is made at a price which is very reasonable considering the grade of the sideboard.
Prior to the sixteenth century there was no real dining-room furniture. The great halls of the day were used as dining places, and were fitted with furniture which served several purposes. When the hall lost its mediæval significance the modes of living changed. Dining in public went out of fashion, and the dining-room pure and simple came into existence. It was at this period that the sideboard, the round or square dining table, and chairs which were used solely at meals, first made their appearance.
In selecting reproductions or adaptations of old designs the wise householder will seek those pieces which perpetuate the seventeenth century spirit.
Flemish oak furniture in an appropriate setting has an exceedingly rich and substantial effect.
NotE: No furniture manufacturer in this country has brought out more reproductions of the Flemish Renaissance than the
Berkey \& Gay Furniture Company of Grand Rapids. Mich. The furniture of this period is entertainably described in their handsome brochure "Furniture of Character," which will be mailed to all desiring it. if they will send 15 cts . in postage to Dept. B. their office, Grand Rapids, Mich.

## MORE THAN ONE WAY OF PAYING FOR A CHURCH

THE cost of building the native church of the London Missionary Society in Apia has been defrayed chiefly by cricket matches! Once a week the chiefs ordered all the people, men and women, boys and girls, to play the game. Any one who disobeyed this order was fined a dollar. This did not often happen, for all usually mustered on the ground for play. The matches were played in different parts of the town, and from three hundred to four hundred players would take part in one game. Each player of the losing side had to subscribe a shilling toward the building of the church. The scheme became very popular, and after a while folk of all denominations, people from other parts of the world, white and black, desired to participate in the game. It


DURING the long winter evenings, which are now at hand, in talking over the plans for the new home to be built in the Spring or for the alterations to be made, the question of the best fixtures for the bathrooms and toilets is one which must be decided sufficiently in advance of building, to be sure of having the goods ready when needed.
This important sanitary question has been solved by thousands of people, by the simple decision to use "Ideal" Solid Porcelain ware bathtubs, sinks, and laundry tubs, and either "Ideal" Solid Porcelain or "Impervio" Vitreous Chinaware Lavatories; while the closet bowl and tank should, without a doubt, be of the very best hard fire Vitreous China syphon jet pattern.
There is only one manufacturer in this country who makes all of the above mentioned goods, and who, therefore, can guarantee the same stable quality and durability throughout the fixtures. That manufacturer is the Trenton Potteries Co., Trenton, N. J.

The Company owns and operates six complete factories in Trenton, and is also represented in the Canadian trade by the Canadian Trenton Potteries Co., of St. Johns, Quebec.
The following letter we consider a testimonial, which will surely appeal to representative house builders and house owners, and we also have confidence that after your decision is that your Architect specify and your Plumber install goods of our make, you will feel like writing us a similar letter, after having used the fixtures.

North Adams, Mass., May 9, 1907.
Trenton Pottrries Co.,
Trenton, N. J.
Gevtlemen:- I would like to have you send me. if you will, one of those little pocket catalogs. I got one catalog
when I called on you and bought some tubs, but loaned it to the plumber, and now my family want to keep one of these catalogs to show to our friends. who look the house
over, as the goods are very beautiful. I have two of your over, as the gator and three lavatories. Hoping that you will favor me,
tubs and I remain,

Yours truly.
ARCHER H. BARBER.
Let us mail you a small booklet of fine half-tone illustrations of our goods. You can have one of these books by simply addressing

## The Trenton Potteries Co .,

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


Made of Pressed Metal, having a strength, beauty and finish never before possible, with Plain Axles, Roller Bearings and Ball Bearings Catalogue for the asking
THE AMERICAN PULLEY COMPANY 29th and Bristol Streets

Philadelphia, Pa.

The final note of Comfort. Health and Beauty is added to your home with an equipment of snowy "\$tandand" Porcelain Enameled Ware in the bathroom, bedroom, kitchen and laundry.
Write for our beautifully illustrated book, "Modern Bathrooms," showing interiors of bathrooms and giving cost of fixtures in detail. Mailed for six cents postage.

Standard Sanitary Mfa. Co. Dept. 40, Pittsburg, Pa.


Detail of Faience Frieze, Exterior of Woman's Building, Carnegie Technical Schools, Pittsburg.
Palmer \& Hornbostel, Architects.

Supplied by
The Rookwood Pottery Co.
CINCINNATI
1 Madison Ave., New York

Digitized by GOOg


VARIETY OF DESIGNS Manufactured Solely by
FR. BECK \& CO.
BRANCHES
Chicago, 224 to 228 Wabash Ave
Philadelphia, 1213 \& 1215 Market St.
Boston,
Cleveland.
Tremont St. NEW YORK,
Ave, \& 2gth ${ }^{\text {St. }}$


## Poultry

PARTRIDGES AND PHEASANTS
$\mathrm{T}_{\text {ants, the large Hungarian Hares, all }}^{\text {HE cele }}$ kinds of Deer, Quatil, etc for stocking purposes. Fancy Pheasants, ornamental waterowi and live wild animals of every description.

Write for price list
WENZ \& MACKENSEN, Dept. 27. YARDLEY, PENNSYLVANIA



NEWCASTLE KENNELS, BROOKLINE, MASS.-Pedigreed and registered Scottish Terriers and bitches; all ages. Information always cheerfully given.


SPORTING AND PET DOGS FOR SALE.
Also Pigeons, Poultry, Rabbits, Pheasants,
Ferrets, Cattle, Sheep and Swine. Send roc Ferrets, Cattle, Sheep and Swine. Send roc for 88 page catalogue.
Keystone State Kennels, Dept. MR., Reading, Pa.
I have recently bought all the dogs that were imported by Mr. Shirley Marston, of Boston, for his Mill-
way kennels, and will enter and sell them at the comway kennels, and will enter and sell them at the com-
ing February Show of the Westminster Kennel Club, in New York. J. O. McMULLEN.

They include the following:
No. 1. $\begin{array}{lll}\text { Odsal Swasher Ch. Moston Michael } & \begin{array}{l}\text { Swashbuckler } \\ \text { Vasey Maud }\end{array} \\ \text { K. C.S. B. No. } 52670 \text { Odsal Peggie } & \text { Intruder }\end{array}$ Color dark brindle weight 50 lbs Parley vous 1905. He is one of the best stock and show dogs in the country. Price, $\$ 350$. No. 2.
Catton Model Norwich Crib Leicester Pansy $\begin{array}{ll}\text { K. C.S. B. No. } 24699 \text { Puggle } & \text { Ipsley Rodney } \\ \text { Regent St. Rajah }\end{array}$

Color, light brindle; weight, 45 lbs. Born May 5 1904. She is one of the best show and brood bitches old country. Guaranteed a good breeder and mother Price, $\$ 250$. No. 3 . Ch. Rodney stone Red Sailor Thackeray Primstone Ch. Primula K. C.S. B. No. 66003 Forge Lady Belvedere Prince Color, red smut; weight, 40 lbs Kate Orn Connor 1906. Another good show and stud dog that can win in good company. Price $\$ 150$. stud dog that can win in good company. Price, $\$ 150$

Dick Stone British Stone $\begin{array}{lll}\text { Bridgewood Sally } & \text { Dick Stone } & \text { Regina Stone } \\ \text { K. C.S. B. No. 72039 } & \text { Leburnum Rose } & \text { Prince Albert }\end{array}$

Leburnum Rose
Color, all white. weight 45 lbs Lady Felto 1905 A brood bitch whose breeding cannot be beaten, 1905. A broodtitch whose breeding cannot be beaten, She is a first-class breeder and mother, but not a good show specimen. Price, $\$ 150$ No. 5.

Royal Stone Buckstone
Jolly Kitty
No. 65935
Jovial Nan
Buckstone
Jovial Na King I'enempeh
Color, dark brindle ; weight, 35 lbs. Born Oct. 22, 1906. She is a brood bitch that is strong in the Swasher. Price, $\$ 150$.
was finally arranged that any person not belonging to the church could indulge in an innings upon payment of one shilling to the church. A number of young men, who otherwise would not have subscribed a cent to the church, became large supporters and subscribers, and many shillings were gathered in each day of the play, and now the Apia natives are in the proud position of having one of the finest and most handsome churches in the islands, entirely free from debt.-Western Mercury.

## WATER PIPE TELEPHONE

"IHAVE the most remarkable telephone in my house," remarked a resident of the Western Addition. "I noticed that at times I could hear very distinctly the conversation in the next house. Suddenly it would be broken off short in the middle of a sentence, and I could not hear another word. It would become audible again just as suddenly. By a series of experiments I have found out that the sound is conducted by the waters running through the pipes. When the water is turned on in my house I can hear all the conversation in any of the rooms next door in which there is running water. When I turn off the water all sounds stop suddenly. I told my neighbor of it, and we have put it to practical use. When I wish to speak to him I tap on the window, he turns on the water in his house and listens while I talk to him over the water-pipes in an ordinary tone of voice. When I have finished, he turns off the water in his house and I turn it on in mine and listen. In that way we can carry on long conversations with as much ease as if he were in the room with me. Still, our houses are about twenty feet apart."San Francisco Post.

## A REGISTER OF OLD LONDON

ALTHOUGH our British metropolis has been greatly improved during the last half-century, both as regards sanitation and architectural beauty, the cost, in the loss of many picturesque features and buildings of historic interest, has been very great. Builders, speculators, vestries, and those who have to do with this exchange of new things for old pride themselves upon having no sentimental feeling about relics of past times and past phases of life, and these have too often
been swept away without a regret. Happily this will be so no longer. Some years ago the late William Morris organized a society to protect ancient buildings, and in connection with this society a committee was appointed for the purpose of compiling a register of old things worth preserving, and beautyspots liable to be defaced within an area comprising a large part of Greater London.
The item, whatever it be, is catalogued, and its description is accompaned by careful plans, drawings, and photographs. More than this, the commitre have obtained the recognition of the London County Council, and the outcome of this is that a permanent body has been appointed to make a register or list of buildings of historic or architectural interest. It is still more satisfactory to learn that by an act passed the Council has acquired power to purchase or provide for the maintenance of buildings or places which come under the same description.Chambers's Journal.

## STONE FENCES GO

THE stone fences of Connecticut, says the "New York Sun," are doomed, and in a few years will be but a memory. In their place are miles of wire fences. When New Yorkers began to seek the country in the summer time, Connecticut became dotted with an everincreasing number of costly cottages, for the construction of which stone was the best and most durable material. Then it was that the builders turned to the fences, from which stone could be obtanned without the labor of quarrying. Contractors went about buying up stone fences, and farmers, eager to realize on this crop that their ancestors had tilled for them, found that even after new wire fences had been put up, they had a good profit from the sale of the stones. Farmers like wire fences, too, because they take up practically no room, and can be kept clean, whereas stone fences were fringed by weeds and bushes that could never be mowed or plowed out. In any other State the wire fences would not be unattractive, but here they seem strangely out of place, and to lovers of old-time Connecticut the absence of the stone fences will be a loss that the handsome modern country places cannot compensate for.-Country Gentleman.


## $70^{\text {th }}$ Anniversary Number reefs Garden Book

Everyone interested in Flowers or Vegetables, Shrubs, Decorative Plants, Lawn, etc., should have a copy.

Conceded to be the most complete, helpful and instructive catalogue ever issued. Used as a text book by many leading colleges. 248 pages, 4 colored and 4 duotone plates, and hundeeds of photographic reproductions of the
Newest and Best things for the Garden
We will send a copy without charge if you mention this magazine.

## 


nursery Company, New Haven, Conn. New Hardy Shrub Nothing so valuable has
appeared for years appeared for years A perfectly double form of our
native Hydrangea arboreacens naive registered as Grandiflora alba. Imagine our beautiful native Mydrangea bearing great heads of
snowy white sterile flowers fully snowy white sterile flowers fully as
large and perfectly formed as the best Blooms from June of the tender tub sorts from Japan. groups or as foreground for larger shrubs. it it bound to
be a tremendous success. Splendid illustration in be a tremendous success. Splendid illustration in 1907
Catalog. Offered this year for the first time. Ready May 15th. Catalog. Offered this year for the first time. Ready May 15th.
Well established from 3-inch pots, each 50 cts; per $10,44.50$; will make strong -blooming plants by fall. For larger size
(limited se se 1907 Catalog. THE ELM CITY NURSERY
THE ELM CITY NURSERY CO.
NEW HAVEN, CONN.
Our 1907 Hardy Tree and Plant Catalog, also our Special
Summer Planting List. Both sent promptly on request.


## INGEE Roses

are the best. Alurays on their ore roots. Plants arrival guaranteed. over so years'experitince.
Flower and retable seeds a specialty. Write tor New Guide to Rose Culture for 1908 -the leading rose catalogue of America. 134 pages Mailed free. Describes over 1,000 varies-
ties. Tells how to grow them and all other desirable flowers. Established 1850. 70 greenhouses. THE DINGEE \& CONARD CO., West Grove, Pa

## 1908 the 65 th $_{\substack{\text { tees } \\ \text { car ar of the } \\ \text { use of }}}^{\substack{\text { of }}}$ BUCK whteLEAD

 (Is the Evidence Convincing.$\substack{\text { Manufactured with improved machinery } \\ \text { and original formula by }}$
SAMUEL H. FRENCH \& CO.
Paint and Varnish Manufacturers Established 1844. PHILADELPHIA, U.S.A

## Do You Appreciate the Advantages in Using Tiling in Home Building ?

It's DURABILITY saves the costs of repairs and replacing. A tiled floor or wall never has to be oiled, varnished, painted or papered. Dirt or liquid matter of any kind will not stain it. The steel nails of the shoe cannot scratch or wear it.

Its SANITARY QUALITIES and the facility with which it can be cleaned gives assurance that the bath-room, kitchen, butler's pantry, laundry, vestibule and other places where it is used will always be in a clean sanitary condition.

Its DECORATIVE POSSIBILITIES permit the execution in tiling of ceramic mosaic of any possible design or color scheme on the floor or wall.

Tiling is fire-proof, germ-proof, waterproof, damp-proof and vermin-proof.

For interesting booklets on tiling, distributed free, write Information Bureau of the

## TILE INDUSTRY

318 Corcoran Bldg.
Washington, D. C.

## Landscape Architects

## and Engineers

Plans for the development of private estates, parks, cemeteries and boulevards made and executed.

## southern work a speciality. Established 1856

P. J. BERCKMANS CO., Augusta, Ga.




THE JOHN C. WINSTON CO.
ubl


PERIOD decoration, in the English styles, is a most important department of the activities of the A. J. Crawford Company. This firm has been so long engaged in the collection of English antiques and has secured such extensive opportunities to study English interiors renowned for beauty and purity of design, that the authenticity of its reproductions is utterly beyond question. Notable interiors executed for its American patrons will be cited, and photographs furnished upon application.
HALL EXECUTED IN ENGLISH OAK AND CAENSTONE

## VERY FEW LEFT

## American Country Homes and their Gardens

Edited by John Cordis Baker, With An Introduction by Donn Barber Sumptuously Illustrated

## Plans and Photographs of Houses and Gardens

THIS is a work of serious value, both for the house owner and the architect, as it contains drawings to scale of houses and gardens, in addition to the series of views from photographs specially taken for this work.
Many of the best examples in America are included, and some of great interest which have never before been published. A number of the plates are full page, and all are on such a large scale that the details may be easily studied. The pages are unencumbered with text, save for a brief title under each illustration.
The most recent work of distinguished architects is shown, including Messrs. Carrère \& Hastings; McKim, Mead \& White; Wilson Eyre; Frank Miles Day; Lord, Hewlett \& Hull; C. C. Zantzinger; Percy Ash; Charles A. Platt; Willis J. Polk; Donn Barber and others of equal note.

## To House Owners Present and Prospective

This work is both fascinating and invaluable. Every page is stimulating in suggestion for the improvement of the old home or the development of the new. It is not devoted only to the big estates but to those of moderate and limited size as well, and each is illustrated with equal care and fulness.
The book contains 250 pages printed in the fousedfarden manner on a specially coated paper, and is bound dark green cloth, lettered and decorated in dull gold and inks.

Orders Filled as Received Price $\$ 5.00$, Express Prepaid
THE JOHN C. WINSTON COMPANY
Publishers of HOUSE AND GARDEN
1006-1016 Arch Street - $\quad$ - $\quad$ - Philadelphia
In woriting to advertisers please mention hotse and gatides.

## SOME GOOD SHRUBS FOR SUCCESSION

 OF BLOOMSTHE importance of obtaining a succession of bloom in a shrubbery planting scheme is self-evident. In selecting the varieties to produce this there is room for a large variance of choice; tastes will vary; the climate, soil and the care given the plants should be considered. But the following list of twelve shrubs will be found to give good results with little care: Forsythia (golden bell), Cydonia Faponica (Japan quince), Viburnum opulis sterilis (snowball), Spiraa Van Houttei (white spiræa), Lonicera T artarica(uprighthoneysuckle), Weigela rosea (rose colored weigelia), Philadelphus coronarius (mock orange), Syringa vulgaris (lilac), Spirea callosa (pink spiræa), Spirea Anthony Waterer (dwarf spiræa), Hibiscus Syriacus (althea), Hydrangea paniculata grandiflora (common hydrangea). Other shrubs which are worthy of planting in the spring time are Hercules' club, Aralia spinosa, the purple and the green leaved barberry, several varieties of the dogwood and the flowering locust. Next to trees and shrubbery in consideration of a planting scheme come perennials.-Landscape Gardening.

## CULTIVATION OF HOTHOUSE FRUITS IN BELGIUM

CNS SL -GENERAL Roosevelt, writing from Brussels, tells of the development of the hothouse-grape industry and the extension of hothouse cultivation to other fruits and vegetables. He reports:
About forty years ago the cultivation of grapes under glass was practiced on a small scale at Hoeylaert, a village near Brussels, more as an experimental venture than as a business enterprise. From the beginning the experiment was accompanied by success, and from its small origin this method of cultivation rapidly developed until it now ranks as one of the most flourishing and lucrative industries in this district. To-day there are no less than 10,000 hothouses in the immediate vicinity of Brussels. The hothouses are usually from sixty-five to eighty-two feet in length, and about twenty-six feet in width. Heat is distributed through clay pipes.

The principal varieties of grapes are: Frankenthal, a blue, medium-size grape

## How is it heated?

Haven't you noticed that this is now the first question asked in buying or renting? It is because now recognized as the most important feature of a building. A cottage, house, mansion, flat, office, or store that is heated by Hot Water or Low-Pressure Steam will rent for more and sell for more.

keep every nook and corner of the building free from dampness or drafts, and clean, comfortable, and healthful for dwellers or workers.

Then there are the great economies to be considered. You save heavily at the coal-bin, burning, if you wish, cheapest coal screenings, poorest soft coal, coke, gas, wood-anything. These outfits do not throw ash-dust, soot, smoke, or coal-gases intc the living-rooms, thus reducing house-cleaning one-half, and saving much wear on carpets and furnishings.

IDEAL Boilers and AMERICAN Radiators will outlast the building - require no repairs. When property is sold owner gets full money back, or $10 \%$ to $15 \%$ increased rentals. Quicker and larger loans are granted on property thus modernized.


Prices in Spring are usually the lowest of the year. In these less hurried months, too, you get the best workmanship-the quickest, most skillful fitters ! Put your property in right heating condition now-ready for best living, renting, or selling. Don't delay investigating this big-paying building investment with its marked savings in fuel, labor, and repairs; besides the comfort, health protection, cleanliness, safety, low insurance, and durability. Quickly put into OLD buildings, farm or city-without tearing up floors and walls or disturbing occupants. Ask for book (free).

ADVANTAGE 12: All fire surfaces of IDEAL Boilers are at such pitch or angle elf-cleaning. Note that a deposit of $1 / 4$ inch of soot, which is a non-conductor of heat, requires $50 \%$ more fuel han when the heating surcatalogue giving full ADVANTAGES.
AMERICANRADIATORCOMPANY
Dept. 10 *****4*4****************

PICTURESQUE CAMPS, CABINS AND SHACKS
Price by mail, \$2.00.


A New Bonk of 40 original and picturesque designs for Cheap Camps, Log an Slab Cabins, etc. This book will fill a long felt want. Over half can $b$ built for between $\$ 350$ and $\$ 1,000$. It has careful estimates and cheap plan:
New Boak of Bungalows. Price by mail, $\$ 2.00$. A unique and artistic book containing designs for one and one and a half story bungalows in $v$ ariot styles from $\$ 1.000$, up. Vol III. Revised Edition. Price by mai Picturesque Summer Cottages. Dol. III. Revised Edition. Price by
$\$ 1.00$. Designs for stone and rustic summer cottages and bungalows. $\$ 1.00$. Designs for stone and rustic summer cottages and bungalows.
Picturesque Suburban Houses (1907). Price by mail, $\$ 2.00$. New, arti Picturesque Suburban Houses (1907). Price by manl, $\$ 2.00$.
and original designs for cement, stone and frame houses. and original designs for cement, stone and frame houses. Colonial an
English styles, from $\$ 3,000$ up. Estimates and full descriptions. E. E HOLMAN Architect W 1020 Chestnut Street Philadel

In witiny to atuertiscrs please mention IIolse and Garden.

# THE MARCH METROPOLITAN is crammed full of timely articles, good Fiction and artistic drawings. 

 Several plates in full color.
## Some of the Subjects:

Motor Boating.
Motoring.
The Stock Exchange and Its Influence on the Development of America, by J. P. Ryan.
Americanizing the World's Food Products.
The World at Large, in story and picture.

The Metropolitan costs \$i.50 a Year. I5c a copy. All dealers sell it.

## The Metropolitan Magazine

3 W. 29th St., New York City.

The Metropolitan is a Splendid
Advertising Medium.

| One <br> Of the Best Novels $\qquad$ <br> For Sale by all Booksellers Price, - - \$r.50 |  | "notable." <br> "One cannot rise from reading this book without feeling that it is a notable -Philadelphia Inquirer. <br> "Thoroughly original, fresh, earnest, spark ling with wit and humor. <br> "CLASSIC." <br> "A book which is destined to become one of the gems of modern novels. The plot is deep, strong, graphical many passing not be forgotten as that of man not be forgoten as that of many passing novels, but will be cherished as a classic, as a story of right against wrong which is destined to bring about a great change in the child_labor question." <br> -Birmingham News. |
| :---: | :---: | :---: |

as not to disturb the brown covering over the kernels, as this might destroy the germ. Mark a straight row, ridging same possibly three inches. Along this crest plant the nuts about two inches deep and two kernels in the hill. I do this by simply forcing the first two fingers of my right hand down into the soft earth, thereby making two holes, and into each drop a seed; this keeps them separate and prevents rotting. A commercial planter, of course, would laugh at this simple plan, but let him remember that we are dealing with a plant that is supposedly outside of its environment.

Late frosts are to be guarded against, so do not plant too early. Plants will show in about two weeks after planting. Clean culture must be given, as weeds must not be allowed. When the vines begin to run, gradually hoe the soil toward the roots; soon the blossoms will begin to show and here the interesting part of the work begins.

There is an old claim that the flowers must be covered or the vines will not bear, but please forget this, as it is an old whim and should be relegated to the past with the moon-planted potatoes. Immediately with the opening of the flower and exactly beneath it, is started what is called a peduncle, this being a sharp spine, which grows straight down into the soil, and on the bottom of which the nut is formed. Cultivate as long as possible without breaking these spines after which simply pull out the large weeds as they appear.

As the crop begins to ripen, the vines will turn yellow, which with us is the last of September or first of October. They are then lifted with the potato fork, being careful to loosen all the soil so as not to break the nut from its parent stem, as each nut has its own thread to hang to.-E. L. Keasey in The Weekly Farmer.

## SOME POISONOUS PLANTS

THIS is the subject of an interesting article by a correspondent of the English Journal of Horticulture, which reads as follows:

Many of our prominent garden subjects possess poisonous properties entirely unsuspected by the average gardener. In some cases all parts of the plants are injurious; in others it may be only the seeds, leaves, or roots. Primula obconica is to many persons the cause of more or less severe attacks of

In writing to advertiscrs please mention house and Ganden.
poisoning, in the shape of rashes and swellings on the hands and arms, much resembling the effects caused by the common stinging nettle. The leaves of various anemones are highly poisonous, those of Anemone japonica being especially so. The juice of $A$. ranunculoides is used for poisoning arrows in certain parts of Eastern Siberia; a powerful drug is obtained from various portions of Helleborus niger; the dangers arising from the use of the aconite are well known; the roots are liable to be mistaken for horseradish, and should on no account be planted in close proximity to vegetables. In color, the root of the aconite is brown, and that of horseradish is pale yellow. The blue Aconitum Napellus is one of the most dangerous plants in cultivation; persons who have eaten of this have developed a form of insanity, and some species have been used by natives in India to poison wells. The seeds of Delphinium ajacis are very injurious. Most of the poppies contain narcotic properties of the opium poppy of the East to a greater or lesser extent. Papaver somniferum, or opium poppy, is cultivated in this country, the opium being contained in the whitish juice of the capsule. The petals, also, are laden with the poison and should on no account be placed in the mouth. The seeds and rhizomes of Viola odorata, or sweet violets, are poisonous, although a distillation of the leaves has been pronounced a palliative and even a cure for the dreaded cancer. The effects of Lobelia erinus seeds are stated to resemble belladonna poisoning. Corms of Cyclamen persicum are deadly to a degree, acting as an emetic, and dangerous illness has followed the consumption of portions of the corms. The properties of nicotine, well known as a virulent poison, are contained in the leaves of the various kinds of Nicotiana grown in this country.

Narcissus bulbs must be placed in the danger list. $N$. poeticus is probably the most injurious, the scent of the blooms possessing a principle to cause illness if much inhaled. Lily - of - the - valley blooms should never be placed in any number in bedrooms for the same reason. Only a short time since a case of illness from this cause was published in the press. Few persons are likely to be tempted to experiment with the evil smelling bulbs of crown imperials (Fritillaria imperialis); they contain

# Van Norden Magazine - 15 Cents 

Beginning with the April number the Van Norden Magazine will be sold at 15 cents on the stands, and after March 31 the subscription price will be $\$ 1.50$ a year. $U_{p}$ to that date the dollar-a-year rate will hold good and we will write down subscriptions for any number of years at that price. Present subscribers will, of course, get their magazines at the dollar rate until their subscriptions expire. They may also anticipate renewals for any length of time at the dollar rate, up to March 31.

The editorial plans for the coming year call for a general strengthening of the magazine. The series of articles upon great national problems by men of authority will be continued through the year. The pictorial and descriptive features will be made better. A member of the editorial staff of one of America's best-known dailies has gone to South America to study conditions there and will contribute a series of articles that will run through the year. No American who has any business, political, or sentimental interest in South America can afford to miss this series.

The magazine will continue to discuss public affairs in the editorial section just as it has been doing, with cheerfulness and sanity, untrammeled by any obligations to any particular line of policy.

# VAN NORDEN MAGAZINE 

## 24-26 STONE STREET, NEW YORK

 BOOKS FOR BOYS AND GIRLS

Lost in the Forbidden Land River and Jungle The Hunt of the White Elephant by Edward S. Ellis<br>These new books by the most popular boys" author, comprises the "Foreign Adventure Series," and are sold at $\$ 1.00$ each, or $\$ 3.00$ for the set, neatly boxed.<br>A Heroine of the Wilderness<br>by Hezekiah Butterworth<br>The story of Lincoln's mother. Price $\$ 1.00$

THE JOHN C. WINSTON COMPANY, Philadelphia PUBLISHERS OF " INTERNATIONAL" BIBLES
${ }^{n}$


## SOME USEFUL BOOKS FOR YOU

KITCHEN GARDENING. By Thomas Bridgman. This work comprises 152 pages, liberally illustrated. 12 mo . Cloth
FRUIT GARDENING. By Thomas Bridgman. Liberally illustrated. 12 mo. Cloth, 50 c . FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth - - - - - - - $-{ }_{5}$
MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By Charles Barnard. 12 mo . Cloth
THE STRAWBERRY GARDEN: HOW IT WAS PLANTED. WHAT IT COST. By Charles Barnard. 12 mo . Cloth
FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12 mo . Cl., 40 c ,
THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia.
ANY OP THESE VOLUMES MAILED ON RECEIPT OF PRICE.
enough poison to cause serious injury. Gardeners working amongst the different varieties of Rhus should always take the precaution to wear leather gloves. The common Laburnum vulgare or golden chain is another deadly poison, fatal illness being the result of children eating the seeds and pods. The flowers of Wistaria Chinensis, and all parts of Daphne Mezereum, are injurious. From the bark of the latter is obtained a powerful drug, much used in medicine. The leaves and flowers of Neriums are fatal to animal life, and the scent of the blooms, if much inhaled, will cause serious illness. Kalmia latifolia is one of the most virulent evergreen shrubs cultivated in our gardens; the flesh of game birds that have fed on this shrub should never be partaken of.

## DWARF JAPANESE CHESTNUT TREES

$\mathrm{S}^{0}$OME twenty-five years ago, when the Japanese chestnut was introduced by California importers, and thence taken across the continent to New Jersey, it produced nothing short of a horticultural sensation. The immense size of the nut, the dwarf habit of the tree, which saves so much orchard space, and its wonderful precocity (since it often bears at two years from seed) were hailed with glee by the commercial grower. At first only seedlings could be obtained, and few of these. They brought high prices. There was little risk in using seedling stock, since ninetyfive per cent of the trees grown from Japanese seed will bear good nuts, but varieties must be grafted.

For fifteen years the Japanese chestnut's career took the ascending curve, but for the last ten it has been gradually going down, until to-day, while there is a steady demand for the trees, this species is no longer the favorite. The reason is not far to seek. The quality of the nut is poor and the public that once clamored for big nuts has gone back to the smaller European and American varieties simply because they are so much sweeter.

However, the amateur who wants a few chestnut trees merely as an interesting adjunct to his garden may well plant some of the Japanese. They are interesting trees, clean growers, dwarf enough in habit never to take up an embarrassing amount of space, free from

[^7]

## PERGOLAS

THE title suggests shaded walks flanked by masses of bloom, pillars of stone or cement or wood, clinging vines and rustic seats and at the end a burst of sunshine over the landscape vista, forming high lights and shadows that baffle the best of artists to paint. The camera and the pen have served Mary H. Northend well, for with the former she has caught the beauties of several charming Pergolas of a less formal character while her pen supplies interesting descriptions and practical suggestions concerning their construction.

## SOME LONG ISLAND COUNTRY ESTATES

The second paper by Mr. Richard Schermerhorn, Jr., on Long Island Country Estates deals with the Whitney and Duryea properties. Comparisons are drawn and the characteristics of each are described. The illustrations depict some of their beauty spots, and bring before us a wealth of formal garden effects, winding roads and natural woodland and meadow.

## VINES AND VINE-COVERED HOUSES

In a very readable, terse article Charles Alma Byers shows how romance and sentiment cling around palaces, castles and cottages where vines have twined themselves. The many varieties of vines best suited for the varying needs are described. Vines for the low dwarf retaining wall, or for the stone façade of a church or the chimney mounting from the foundation to high above the house roof; for porch columns, for rambling over pergolas, for draping ragged tree trunks, all are designated and the many illustrations show the charming effects produced through their agency.

## THE GARDEN OF THE SUBURBANITE

The joy of seeing things respond to a little coaxing, the happiness in gathering from one's own garden fresh vegetables and all this coupled with a marked gain in health, through the exercise it necessitated, to say nothing of the money saved and the superior quality of the vegetables raised, are written of by C. B. Wynkoop. What he has done every dweller in the suburbs should do. The satisfaction of being a "producer," of making a toothsome vegetable grow where only weeds grew before is immense. Try it and see if your enthusiasm is not fully aroused by the end of the first year's trial.

## BURBANK'S SHASTA DAISY

Georgia Torrey Drennan says that the Shasta Daisy is one of the triumphs of Santa Rosa (Mr. Burbank's home) and that it is regarded as one of his greatest achievements by Mr. Burbank himself. From the disdained ox-eye daisy he has, by years of effort and countless crossing of strains, produced the one described, which is hardy enough to thrive within the arctic circle or under the equator.

## "RESPITE"

The April number of House and Garden will contain a charming little poem by Claire Wallace Flynn entitled "Respite"-The three verses are set decoratively which adds to their charm.

## THE QUEST AND CULTURE OF ORCHIDS

The second paper of G. Bertrand Mitchell on Orchidaceous plants will appear in the April number. The Cattleyas, the Lælias, the Dendrobiums, the Odontoglossums, the Oncidiums and the Cypripediums are illustrated and described, while the interesting process of hybridization is explained and the most approved methods of culture are given. There is a fascination about these patricians of plant life that holds attention through every line that is written of them.

## GARDEN PHLOX

The very brightness of its bloom suggested the name Phlox, which is a Greek word signifying-flame. W. C. Egan has much to tell of this most beautiful and esteemed flower. Its several varieties are minutely described. The best location to select for it and how to prepare the ground and bed the plants are taken up with much explicitness.

It is a flower that found much favor with our grandmothers and in every old-time garden it was much in evidence. Various new varieties have been originated and developed since its first introduction early in the eighteenth century.

## SOME OLD AND NEW ANNUALS

Helichrysum bracteatum, an old variety of "everlasting" from Australia; a new annual from South Africa (that is, new to this country) Diascea Barbere; a "warm country" annual whose native habitat is Chili, the Alonsoa Warsce-wicz-and a new sun-flower, Helianthus sparsifolia, form subject matter for several interesting notes concerning them, which Mr. W. C. Egan has prepared and which must prove interesting to all flower lovers.

disease, with good colored foliage, and they bear when they are so absurdly small that they are a constant delight to the good folk who must have a garden that is ever "up and doing." Moreover, they bear freely and regularly and the nuts are sound and meaty, not bad when boiled, but uninteresting and flat when roasted or eaten raw. There may yet be a field for the Japanese in the making of marrons glacés or similar confections, but as yet it is untried. The real hope of the whole species lies in the improvement of its quality by hybridizing.New York Herald.

## A UNIQUE MOUNTAIN PARK IN RIVERSIDE, CALIFORNIA

ONE of the most beautiful places in Southern California is Riverside, and in a letter recently received from Mr . C. M. Loring, who is known as the father of the Minneapolis Park system, and who some years ago became interested in Riverside where he planted a long street of shade trees, he says the people there have taken a great deal of interest in tree planting and home embellishment. He says: "The street trees are under the care of a forester, Mr. J. H. Reed, who has been so successful that delegations come to him from other cities to learn his methods. The city is fortunate in having within its borders a rugged mountain, Roubidoux Mountain, about a mile long, half a milewide, and with an elevation of 1,372 feet, for which the citizens raised a fund for its purchase and improvement as a public park. Since its acquirement one of the finest mountain roads that could be built has been graded to the summit, from which the views are grand beyond description. In no other city within my knowledge is there another such*a park. On the sides of this boulder covered mountain the City Forester has planted some ten thousand trees of several varieties, and over a thousand palms, and there are yet to be planted hundreds of yuccas, cacti and other interesting desert plants near the summit, above the line of city water pipes."-Park and Cemetery.

European houses are offering a golden leaved form of the Dimorphanthus mandshuricus. The Dimorphanthus is closely allied to aralia, and it can be well understood how beautiful a golden-leaved form of it must be.-Florists' Exchange.

Some Long Island Country Estates: Part I..............Richard Schermerhorn, 7 r. ................... . . 82
Construction and Care of Hotbeds......................Ida D. Bennett ............................... . . . . 85
A Plea for the Herb Garden........................ . . . Lawrence Irwell ........................... . . . . 86
Small Houses Which are Good . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 87
A Residence near New York City ................. . E. S. Cbild, Architect.................. . . . . . . 87
A Residence at Jamestown, N. Y. .................E. G. W. Dietrich, Architect................. . . 87
The Quest and Culture of Orchids: Part I............. G. Bertrand Mitchell. ........................ . . . 90
Mr. Prime's Alexander Tapestries ....................... George Leland Hunter..................... . . . . . 95
Small Suburban Properties ................................ Donald Martin.............................. . . . . . .
Suggestions for the Month . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . IO3
The House . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Leila Mecblin . . . . . . . . . . . . . . . . . . . . . . . . . . . . 103
The Garden ...... . . . . . . . . . . . . . . . . . . . . . . . . . . . Fobn W. Hall ....... . . . . . . . . . . . . . . . . . . . . . 104
The Editor's Talks and Correspondence ................ Margaret Greenleaf. .......................... . . IO5
Selection of Tiles Finish for Woodwork in Bath-room Wall Treatment Exterior Color for a Residence
Garden Correspondence .................................. W. C. Egan ..................................... . . . . . . . . . . . 106


| Mr. Vanderbilt's " Doctor Selwonk " | The Kentucky Saddle Horse | Mr. Wardwell's Shropshires |
| :---: | :---: | :---: |
| The Americo-Arab | The Old-Fashioned Morgan | A Contrast |
| English Bloodhounds | By J. L. Winchell |  |

English Bloodhounds By J. L. Winchell The Busy Bee

Copyright 1908 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Office, June 26, 1901
SUBSCRIPTION PRICE, $\$ 3.00$ A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS Remittances may be made by money-order or check, payable to the order of House and Garden

Subscribers should promptly notify the publishers of any change in address
Manuscripts and photographs suitable for publication in House and Garden are solicited. Such as are not available will be returned, if postage is enclosed

PUBLISHED BY THE JOHN C. WINSTON CO. 1006-ııı6 ARCH STREET, PHILADELPHIA


THE HOTHOUSE OF FRANKENTHAL BLACK GRAPES

# House and Garden 

# Forcing Fruits for Market in France 

By JACQUES BOYER

THE art of producing flowers, fruits and vegetables out of season was known by the Romans 2000 years ago. Certain gardeners of the Eternal City knew as well how to force the rose as to supply the tables of their contemporary sybarites with the first fruits and vegetables of the season.

At the coldest season of the winter the Emperor Tiberius ate cucumbers daily, of which he was passionately fond, and his successor, Caligula, also at the same season of the year served melons and ripe figs to his guests. Seneca in vain stigmatized the sensualism of those who, "by a fomentation of hot water and artificial heat made spring flowers blossom in the midst of frosts," the rich patricians continued none the less to build the Cilician orchards, a kind of orangery heated by means of a furnace and which sheltered principally exotic trees or portable beds (horti pensiles) destined for the cultivation of asparagus, melons, artichokes, cardoon or other early fruits and vegetables appreciated by the Luculluses of the Peninsula.

As much as one can judge by the incomplete descriptions of the Latin authors, these portable beds were boxes mounted upon wheels, which were exposed to the sun during the day, and put under shelter at night. As with the Cilician orchard, panes of isinglass, alabaster or other transparent stones protected these boxes from the cold. Only rich amateurs could afford such luxuries.

During the Middle Ages these methods of forced culture were almost abandoned. Indeed only one chronicler is found, Jean de Béka, who alludes to them. In one passage of the life of Albert the Great, this author tells that the illustrious Dominican gave in Cologne on the 6th of January 1249, a great banquet to William of Holland, and the biographer adds that by means of an art really magical, one saw in the banqueting halls, trees covered with fruits and rose bushes in blossom.

From that period on the Arabs, more advanced in gardening than the Occidentals, conceived the idea of beds of manure to encourage the growth of their gourds, while the French gardeners invented only about the time of the Renaissance the economical
process consisting of producing heat by the fermentation of fresh manure.
In 1600 Olivier de Serres points out the use of glass bells to cultivate melons, while half a century later, André Mollet was the first to exploit the idea of frames of glass to preserve heat and protect the plants without shutting out the light so indispensable to their development.
After this the forced fruits were not long in appearing in Paris, and if we believe M. George Gibault, they cost exorbitant prices.

The first litrons (a measure containing the sixteenth part of a French bushel) of peas which came to the capital of France cost 150 francs ( $\$ 30.00$ ) each, and the 14th of May, 1657, a plate of strawberries sold for 100 écus, more than 600 francs of the present money (about \$120.00).
The celebrated gardener of Louis XIV., La Quintinie, made the forcing of fruits and vegetables the style. In December he sent to his master, asparagus from the vegetable gardens of Versailles which the great king relished with the true taste of an epicurean.

In the month of January came lettuce and radishes, then came cauliflowers in March; strawberries in the beginning of April, peas in May and melons at the end of June. His majesty so loved these succulent vegetables that his doctors Fagon and Daquin ceased to find further trouble with the digestion of their august patient.
Nor did Louis XIV. deprive himself of the pleasure of seeing his drawing-rooms decorated with forced flowers, such as hyacinths, anemones, narcissi or tulips that contemporary horticulturists forced into bloom at the very beginning of the year.
Then during the eighteenth century the English and Flemish people added greatly to perfecting the growth of fruit-trees; they conceived the idea of stove heated tents with beds of tan-bark, while all over Europe, here and there, new hothouses were being constructed; as, for instance, those built under the direction of Frederick the Great in 1752, which one still sees at Potsdam. Also tourists visiting Great Britain, know the famous vine-stocks which, planted more than a hundred years ago, are still producing


CLIPPING OF THE YOUNG GRAPES TO INSURE PERFECT BUNCHES
under their 250 square metres of glass at Hampton Court.
About ${ }_{1780}$ some French vegetable gardeners, among others Debille, Ebrard, Fournier and Vallette, commenced to sell "out of season" delicacies on quite an extensive scale.

Eight years later Decouflé forced beans and peas. Towards the year 1800 , the Quentin Brothers and Marie forced asparagus. Besnard, on the other hand, made a specialty of cauliflowers grown before the season. Finally the invention of the "thermosiphon" by Bonnemain and, above all, its application to the heating of hothouses by Gautier from 1830 gave vigorous impulse to that curious industry.

However the commercial exploitation of hothouse methods, with their fairy gardens where fruits and flowers flourished at the same time, did not become extensive in France until some fifteen years later.
The most important establishments of this kind were founded first in the provinces of Aisne and Nord and more recently they have created new ones in the suburbs of Paris. We shall visit together one of these monster aggregations of hothouses, where are grown, by scientitic means, beautiful bunches of grapes, big cherries, luscious peaches of exquisite flavor or excellent currants, any time from February to June.

In the hothouses of the Seine situated at Nanterre, of the extent of which an idea may be had
from the accompanying illustrations, they devote themselves almost exclusively to cultivating grapes and peaches for the table.

A fact worthy of special notice is that they apply themselves at times as much to retarding the ripening of vegetation as to forcing it, so that during the period that the sales are remunerative, fruits are not wanting.

This establishment consists of ninety hothouses twenty metres in length by ten metres in width and about three metres in height, some heated by steam others by means of a circulating system of smoke. Each one of them consists of a frame work of iron, with panes of " cathedral glass."

Along the summit are windows that can be raised for the purpose of ventilation.

Between the lines of hothouses run deep trenches which in summer are filled with water, so that the air saturated with humidity may more quickly refresh the vines during the heated term.

Each hothouse protects fifty vine-stocks besides six feet of Aramon Rupestris, the abundant flowering of which furnishes the pollen to prevent the grapes from dropping.

At the proper moment they proceed with the artificial fecundation in the following manner.
First the workman begins by shaking the blossomed bunches in order to throw on the ground the

Forcing Fruits for Market in France


PUTTING THE WHITE GRAPES IN BASKETS, MAGNIFICENT BUNCHES OF GOLDEN CHAMPION


PICKING THE PEACHES


THE SULPHURIZING AND DIPPING OF THE VINES
stems in lime, they sprinkle the leaves, they inject periodically sulphur of carbon into the soil. One must be very particular, according to the ideas of M. Battanchon, to sulphurize the vines every eight days as soon as the temperature of the hothouses exceeds fifteen to eighteen degrees centigrade to prevent the oidium (a form of fungi) from developing.

They inspect as well the vines for decay, for all unhealthy seeds should be removed immediately.

Owing to these multitudinous and constant cares these stocks, which they arrange on ropes with shoots about every twenty centimetres, bud in the midst of winter after three weeks of preliminary heating, commenced at eight degrees and augmented gradually to twelve degrees. They blossom in temperature between fifteen and eighteen degrees and
little liquiddrops which bathe the stigma, and then by means of a small bellows, resembling those used for the purpose of sprinkling insect powder, they blow on the pollen; they work by sunlight as much as possible between nine o'clock in the morning and three o'clock in the afternoon, and for certain varieties, for example the Muscat d'Alexandrie, they have to fertilize them three times daily for about ten days. By means of the accompanying illustrations we can follow the minute care received by these exotics both in order to combat the diseases that are as liable to attack them in the hothouse as in the open air, and in order to obtain choice fruits.
First they have careful examination of the slips, the staking of the vines in pots, the clipping, the pruning, the pinching and divers habitual operations.

Then comes the successive clipping which is confided to women and which exacts great dexterity as well as attention. They examine the fruit bunch by bunch and with pointed scissors cut off the crowding grape which threatens to prevent the maturing of its neighbor.
To fight against parasites they dip the


STAKING VINES IN POTS AND EXAMINING SLIPS ripen at the end of five months with a temperature not exceeding twenty-five degrees centigrade.

The principal species of white grapes cultivated in French hothouses are the Muscat d'Alexandrie, the Golden Champion, Foster's White, the Bicane, the Gradiska, the Trebbiano, the Buckland, the St. Jeannet, the Cannon Hall; as to black grapes, the Frankenthal, the Gros


BRUSHING NECTARINES AND WEIGHING BASKETS OF GRAPES


CHERRY TREES FORCED IN POTS

Maroc, the Appley Towers, the Black Alicante, the Madressfield, the Barbosa, the Alphonse Lavallée and the Big Colman.

But the horticulturist is to be rewarded for his pains, for now comes the harvest. The picking of the grapes begins the 15 th of April and lasts until the end of November; each hothouse furnishes from 1100 to 1500 pounds of grapes, which are sold in the markets of Paris from 25 cents to $\$ 1.50$ the pound, according to the time of year, and the variety and beauty of the fruit.

As coming next in importance among the forced fruits let us mention peaches. The precocious kinds are chosen by preference. They graft them on the almond tree and they are placed along the glass sides of the hothouse, much as they place the grape vines, being careful that the wood of the tree does not touch the iron, for if not avoided, after eight days of contact, a cancer or malignant growth is formed. The nature of this cultivation necessitates both great attention and many hands.

Independent of the careful attention given to all trellised fruit trees, forced peach trees exact an additional amount of watchfulness and care by reason of their liability to attack from ants and other plant foes. For this reason, frequent sprayings with nicotined water are made necessary to insure their destruction. As a result, however, of the increased care and vigilance given the trees which bear this most
luscious fruit, they gather in a hothouse, "sixty feet by thirty, from 1800 to 2000 peaches, from the ist of April to the 15 th of July, each peach selling at an average of about twenty-five to thirty cents in Paris. However, the first peaches often bring a much higher price.

And with what respect they handle these delicacies! Great golden apricots-whose lusciousness cannot be excelled-their soft, downy coats undisturbed by unnecessary handling. The brilliantly colored nectarines, however, are carefully brushed before placing them on the cotton in the packing boxes. In the grape baskets they separate each bunch with tissue paper, and they lay the peaches on a soft bed of cotton so that they will arrive at their destination with their velvety, purplish down. Apricots and nectarines are not at all common in the markets. The former has the same quality of skin as the peach, with a smooth stone like that of the plum. The flavor is a distinctive one, rich and full of character. French gardeners cultivate also in pots, cherry trees, currants, pear trees and even vines and peaches destined to be sold when they reach their maturity. These plants ordinarily pass two years in the nursery and two years in a hothouse; they then find purchasers at from $\$ 1.00$ to $\$ 20.00$, according to the time of year. However, this cultivation of fruit in pots is only an accessory to the already flourishing industry of the suburban horticulturists about Paris.

# Some Long Island Country Estates 

By RICHARD SCHERMERHORN, Jr.

PART I

THERE is a certain section of Long Island, which by the general public is very seldom visited, but which is nevertheless one of the most beautiful garden spots in the country. This is in the vicinity of Roslyn, Westbury and the Wheatley Hills, located geographically in the Northwestern part of the Island. Here vast estates have been purchased and developed by people of wealth, chiefly New Yorkers, who have sought this neighborhood on account of its comparative proximity to the city and because for landscape features it is excelled by no other section of the' neighboring country. Long Island in general is flat, but along the Northerly shore stretches a tall range of hills, particularly prominent and diversified in the Roslyn and the Westbury neighborhood.

To be sure little benefit is derived here from the water, but the beauty of the landscape is predominating and little wonder that such a site has been chosen for this exclusive settlement. Here we may find the estates of the Whitneys, Mackays, Morgans, Mortimers, Duryeas, Stows, Bryces, Pells, Whitehouses, Winthrops, Keenes, Burdens, a representative Manhattan community.

Most of these estates have arisen during the past ten years, and it is but lately, in fact, that a degree of development has been approached by which their beauty may be properly judged and their future attractiveness gauged. Were the mansion itself the sole object to be considered, interest in these places might have diminished long before this, but where the landscape is the primary function, time alone is necessary to give these estates the full beauty that has been sought for by owner and constructor together, and every year brings added interest, particularly for those who have been chiefly concerned in their development,
while the visitor who views them ten years from now for the first time may even then be enjoying only their elemental stage.

Prominent among the estates in this section are those of the Mackays, Whitneys, Duryeas, and Stows, views of which are shown in the accompanying illustrations. These four estates, though respectively different in character, are typical of the whole. The Mackay estate is excelled in thorough development by none on Long Island, while there are few superior than the Whitney estate in acreage and in general landscape beauty. The Duryea and Stow estates are considerably smaller but are splendid examples of artistic development.

The Mackay estate is exceedingly complete. Besides the residence are the following: stable, lodge, farmhouse, and out - buildings, kennels, dairy, gymnasium, superintendent's offices, conservatory, greenhouses, beside many minor buildings. The estate comprises somewhat over 500 acres, and is mostly wooded, the open farm land containing only about seventy-five acres. The mansion is located on the highest portion of the estate, known even before the Mackay's occupancy as Harbor Hill.

There is but one point of greater elevation than this on Long Island. The landscape treatment in the neighborhood of the house is formal. The main drive leading to the house proceeds in a direction rectangular to the axis of the latter, turning abruptly in a court somewhat, some 300 feet from the house, from which a more or less natural landscape is merged into the formal.

A very attractive formal garden is on the west of the house and on the east a branch drive leads to other portions of the estate. The stable, which is also of imposing appearance, is located not far from
the house but is entirely screened by a thick belt of woodland. The other buildings are scattered and located at varying distances, with the exception of the farm buildings and dairy, which naturally are grouped together in the open and cultivated portion of the estate. In the neighborhood of the residence an excellent opportunity arose for the building of a bridge, over which a drive to the northern boundary of the estate crosses the "service" drive which leads from the main highway in the neighborhood of the farm buildings, directly to the residence. This bridge was constructed of local boulders broken up to convenient sizes, and is now partly covered with ivy, rendering a most picturesque effect. In the same neighborhood a hollow by the roadside was transformed into an artificial pond, inhabited now by numerous ducks and swans.

Another interesting feature is a "deer run" consisting of an artificial deer which travels on a rail at quite a remarkable speed through some of the passes in the woods and here Mr. Mackay has full opportunity to practise in marksmanship.

The flower and vegetable gardens are laid out in a formal manner in one of the lowland portions of the estate.


THE BRIDGE-MACKAY ESTATE


THE POND-MACKAY ESTATE

Extensive conservatories and greenhouses have been constructed also, the grounds being laid out in terraced effects with border plantings of flowers and inner groups of vegetables, so that even here the effect is attractive as well as the grouping strictly utilitarian. The woods are overrun with bridle paths, and the former have beencleaned out thoroughly for the health of trees and also stripped here and there for the purpose of sightly effect.

The general idea followed in the construction of the Mackay estate seems to have been first to create a property of distinct substance using at the same time as far as possible natural materials for its composition. The main group of buildings and their surroundings it is true are of formal and stately design, even magnificent, but the estate as a whole seems to bear the


MR. W. L. STOW'S GARDEN AND TERRACES
installed and sewage disposalandanextensive drainage system provided.
The Stow estate lies between the Mackay's and Whitney's; a public highway separating it from the former and the "party road" and a portion of the Mortimer estate separating it from the latter. As in former cases so in this, the highest portion was located first of all and the house established here. Then came the cutting away of the wide vista to the south and the raising of the terraces. There is much of extremely formal design in
results of developing and improving natural conditions rather than working chiefly toward their embellishment. There are very few plantings of foreign shrubbery, the native material or material from neighboring locations being used almost exclusively. The driveways, with the exception of the main drive which is macadamized, are built entirely of material which has been excavated from the spot. The woodlands where they have been replanted contain but younger generations of the original growths, and the general grading conforms almost entirely with the natural topography. Through it all, however, there is gained a particular impression of solidarity. Nothing has been attempted which has not been executed thoroughly, while everything that has been completed is maintained in most excellent condition. On this estate a private pumping plant has been
the neighborhood of the Stow mansion which can be readily seen from the accompanying illustrations. It is certainly imposing in appearance, its vast façade of bewildering white standing out in strong contrast against the dull forest background. The entrance driveway connects with the "party road," and the effect is particularly striking after driving through nearly a mile of winding informal road to arrive finally and suddenly upon this brilliant structure. The formal garden which has been laid out on the first terrace is noticeable for its close, harmonious relation to the house, existing, in fact, as practically a part of the latter structure. There is a large farmhouse on the estate and a completely equipped stable; also three greenhouses and numerous other small buildings. The estate also possesses a private pumping plant. There are about 200 acres of land all told.


RESIDENCE OF MR. W. L. STOW
84

# Construction and Care of Hotbeds 

By IDA D. BENNETT

THE use of a well constructed and successfully managed hotbed puts forward the garden season at least a month or six weeks. Indeed so well established is this principle that it is of general observance, not only by the commercial florist and gardener, but also by the amateur, who although he himself may not possess a greenhouse or hotbed or, indeed dream of such a luxury, still unconsciously utilizes another's possession of the convenience when he purchases his tomato, cauliflower or cabbage plants of the florist, or peripatetic dealer of the sidewalk. Yet the hotbed is an easily acquired convenience.
The particular form the construction of the hotbed shall assume will depend upon several things: the amount one wishes to expend upon it, the purpose for which it is intended, whether for permanent or temporary use, etc. If for uncertain tenure, as in a rented place, or one where one's stay is uncertain, the plank frame will be found preferable. This may be made the full size of the pit or only a shallow frame of plank, extending only a foot or more below the surface of the earth, with the corner posts extending to the bottom of the pit to support it. The size will depend upon the character and size of the sash to be employed, whether florists' sash or discarded window sash. It will usually be found more convenient if the bed is of a width that can be reached across easily. The frame should be about a foot above the ground in front and eighteen inches in the rear. This will give sufficient slant to shed water and will concentrate the fulness of the sunshine on the glass.

The proper location for the hotbed is on the south side of a building or wall where it will get the greatest amount of sunshine and be protected from cold winds. It should be convenient to the house as the hotbed requires constant and timely attention and should, therefore, not be placed where it cannot be reached promptly, at any and all hours.

Having constructed the frame, a pit sufficiently larger than the frame to admit it should be dug about four feet deep. If the season is cold or the hotbed started very early it will be necessary to dig the pit a foot larger all around and fill in around the outside of frame with manure to preserve the inside temperature.

The sash may be arranged to slide on the frame or may be hinged to the back of the frame; this is more convenient in handling, and there should be a notched stick attached to the side to hold the sash at any desired angle when open. Having constructed the pit and placed the sash in position, it only remains to put it in commission.

For this fresh horse manure is required. Only that gathered over night should be used and that from
young, grain-fed horses is best. This should be placed directly in the pits, packing it down sufficiently to fill the pit snugly flush with the top. If the manure is dry it may be watered with hot water and it should contain an equal bulk or at least half its weight of straw or leaves, the object of the presence of leaves or litter is to provide fuel for the fire which the fermentation of the manure creates; without this the manure would heat quickly and as soon die out, while the presence of the straw or leaves produces a lasting heat that will carry the hotbed forward for two or more weeks, or until the seeds have germinated and gotten a start.

After placing the manure, place the sash in position and wait for the mass to heat. • This will, usually, be in about twenty-four hours. When the mass is thoroughly heated it should be tramped down evenly -this may best be done by laying a board on top and stamping heavily thereon. It should be made quite firm and as level as possible.

Over this leveled manure, place a couple of inches of old, well rotted manure made fine and smooth. This is to keep the tender roots of the young plants from working down into the rank manure below in search of food and being injured thereby. Over the old manure place four or five inches of good garden loam and leaf-mould well incorporated, and the surface inch of soil should be run through a coal ash sieve to free it from all roughage.

The soil should be moist, not dry or wet, and the sash should be placed and the soil allowed to warm up before planting the seed.

Some judgment should be used in planting the seed. If more than one bed is used or partitions are inserted in one large bed, this will allow of the growing of plants requiring the same general treatment, by themselves. Do not attempt to grow such plants as cabbage and cauliflowers-which love a cool tempera-ture-with heat-loving plants like tomatoes and peppers, but give them separate culture where their peculiarities can be indulged.

Seeds that germinate at about the same time should be given the same sash where practicable and tall growing plants should not be planted in front of low ones. Each plat of seed should be separated from its neighbor by thin strips of wood and all should be carefully labeled with the name and date of sowing.

Seed planted in the hotbed, having the protection of the frame, does not require as deep planting as seed sown in the open ground where it is exposed to changing temperatures, cold wind, rain and burning sun. Some seed should be merely covered, while others like the ricinus may be covered with a half inch of earth. When all the seeds are sown, water

## House and Garden

carefully with a rubber sprinkler, or watering pot with a very fine rose, cover with newspapers, close the sash and leave until the seeds begin to germinate.

As the seeds in the various plats sprout and the first leaves appear, the newspapers should be removed from over them and placed on the glass immediately above them. On warm, pleasant days the sash may be opened sufficiently to admit air and to lower the temperature when it becomes too hot, for the temperature rises very rapidly under glass on a sunny day, at the same time anything like a draft across the bed should be avoided.

The hotbed must be watched closely the first few weeks. Should the sun go under a cloud when the sash is open on a cool day, it must be instantly
closed, lest the tender plants are chilled. Should it be closed on a cloudy one and the sun suddenly conclude to shine, it must be watched that it does not burn and after the plants have gained some size it may be necessary to water two or three times a day.
Plants in the hotbeds are much benefited by transplanting, and wherever possible this should be done and so leave room for the more tender plant to be transplanted in fresh rows in the hotbeds.
The time for starting the hotbeds varies in different localities, but for ordinary garden operations, the first of April or last of March is early enough in the latitude of Chicago. This will give sufficient time for the development of the plants before the time for planting out.

# A Plea for the Herb Garden 

## By LAWRENCE IRWELL

OUR British forefathers believed in the virtues of herbs, and extolled them in prose and verse.
Here's pennyroyal and marygolds, Come, buy my nettle-tops.
Here's water-cresses and scurvy-grass, Come, buy my sage of virtue, ho! Come, buy my wormwood and mugworts. Here's all fine herbs of every sort; Here's southernwood that's very good, Dandelion and horseleek.
Here's dragon's tongue and wood-sorrel, With bear's-foot and horehound Let none despise the merry, merry cries Of famous London Town !

Most of these formerly well-known herbs, each having its own peculiar curative quality, are now almost unknown, but a reference to the herbals of Gerard or Turner, or to the "Acetaria" of John Evelyn, would readily show that they were considered good for the various ills to which flesh is heir.

The very earliest medicines were largely composed of herbs, and even to-day the learned prescription of a high priced New York specialist is likely to contain one ingredient which, under a formal Latin name, is neither more nor less than a garden herb.

The common marigold, for example, which Gerard calls "the Jackanapes-on-Horseback," was at one time much used for soup or potages. In Miss Edgeworth's story of "Simple Susan" she explains how the petals of marigolds were added, as the last touch, to the broth made for an invalid mother. John Evelyn compares the common bugloss to the nepenthe of Homer, but adds that what we now call bugloss was not that of the ancients, but was borage, "for the like virtue named corrago."

Borage is still cultivated in England in the neigh-
borhood of Oxford, and is used by some University students to give a delicate flavor to claret-cup.
Smallage was simply wild celery, which is described as being like parsley, " but greater, greener, and more bitter." Sweet cicely, or sweet chervil, is a kind of myrrh-"it adds a good relish to a sallet," and the roots may be preserved or dried. Culpepper, in his "English Physician Enlarged,", published about 1566 , has much to say concerning the astrological virtues of the different herbs. The following words, for instance, represent his opinion of balm: "It is a herb of Jupiter and under Cancer, and strengthens Nature much in all its actions. It causeth the mind and heart to become merry and reviveth the heart, especially of such who are overtaken in sleep, and driveth away all troublesome cares and thoughts out of the mind arising from melancholy or black choler."
The common form of balm, Melissa officinalis, sometimes known as "lemon-balm," is still used in medicine to produce a slight perspiration, and more frequently as a flavoring material.
In the United States to-day, we neglect herbs very seriously, while in England they are half forgotten, although occasional reminders may be found in the form of an old-fashioned garden in which they are still planted every year. In Covent Garden Market (London) there are a few quaint old herb shops (stores) where the "simples" of our grandmothers may be bought.
It is an easy matter to cultivate an herb garden, and in the midst of improvements in flowers of all varieties, such a garden imparts a delightful oldworld fragrance to the entire surroundings. Moreover, herbs make a most exquisite addition to nearly every form of cookery.

# Small Houses Which are Good 

I.

E. S. Child, Architect

TO erect a residence which is part of the landscape and not an inappropriate dwelling which seems to have been transplanted from some foreign soil, is not an easy task. That is the problem which is before the architects of today; not to be satisfied to make merely livable houses but homes which have beauty of line and every modern convenience.

The architect, in this instance, has succeeded admirably as is shown by the perspective. The quaint windows, the low, sweeping roof and the strong, white columns in the center and the stone ones at the ends, which assist in supporting the second floor which extends over the porch, all combine to make an exterior which is both harmonious and pleasing. The shingled sides and roof of the house are stained a rich brown and the twin porch columns and the trim of the windows and doors are painted white. The foundation, chimneys and two of the porch columns and the abutments on either side of the porch steps are all of local stone which gives a rustic appearance which is very picturesque.

The porch is so arranged that it does not darken the rooms in the front of the house. The reception hall, fifteen by sixteen feet, has an open fireplace of brick, opposite the front door. The stairway is at the side with a seat in the bay window. At the left of the hall is a reception room, twelve by eleven feet, which has wide openings from the dining-room and the hall. The dining-room has an open fireplace and is connected with the kitchen by a butler's pantry which is well supplied with dressers for china, etc. The kitchen has a stairway to the second floor, a pantry and a back porch. One chimney contains flues for the kitchen range, furnace and fireplaces in the hall and dining-room.

There are four chambers and a bath-room on the second floor. Each of the rooms has a good sized closet and there is a linen closet in the hall. Two rooms are finished on the third story and there is plenty of space for storage. The cellar contains the necessary coal bins, a laundry and a servants' toilet room. It is specified to heat this house with steam heat and it is to be lighted by electricity.

The first floor is finished in whitewood, stained chestnut in the hall, reception-room and diningroom and left natural in the kitchen and pantries. The bedrooms on the second and third floors are in whitewood, painted white and the bath-room has an imitation tiled wainscot.
This house, planned by E. S. Child, architect, of New York, can be erected now for about $\$ 9,000$.

IN the planning of small houses the architect is usually confronted with the request to incorporate in it all of those devices and conveniences which characterize a complete modern establishment, to install them in a very small fraction of the space usually allotted to them and in addition thereto to perform the task with an expenditure of money which at once precludes the possibility of its accomplishment. To reconcile these widely diverging conditions requires a master. A master of diplomacy as well as a master of ingenuity and resource who will keep paring down from both sides of the proposition until it is brought within the range of the possibilities. Once arrived at this point the architect is filled with ambition to attain the desired end and enters into the work with enthusiasm.
Those sterner qualities which are generally uppermost when engaged in designing public buildings or the elaborate homes of the very rich, are exchanged for a tender regard; the home feeling is aroused, ideals are reared and the small house is an accomplished fact, replete with the charm of a home, where more than protection from the elements is found.
He at once discovers anew that which he has known for years, that beauty in buildings, inheres less to features than to line and proportion, and that while sincerity and truth in design and construction are qualities which can be departed from only under the most severe penalties, the omission of ornamentation carries with it no retribution. The architect who tries to attain the true domestic quality in his work, a feeling too often entirely lacking in homes of low cost, finds a peculiar pleasure in designing a small house. The restrictions of limited cost and consequent limited area in which to work, present new and interesting difficulties which have to be surmounted.
In the house of Mr. W. A. Bradshaw, Jr., of Jamestown, N. Y., illustrated herewith, many points of extreme excellence are presented and among them may be noted a complete isolation of routes for servants, the hedging in of the kitchen which prevents sounds reaching the living-rooms, and the thorough ventilation of the kitchen by a separate flue. The house is compact and the relative position of the rooms renders it an easy one to care for. Wall space for furniture has been kept in mind, and abundant closet space has been provided. A gambrel roof is used and the exterior is covered entirely with shingles. The trim is a creamy white and the shingles are stained a rich brown. The house was built only a few years ago and cost complete, about $\$ 4,000$.


A VERY PICTURESQUE HOUSE


First Floor Plan
I. A RESIDENCE NEAR NEW YORK CITY-E. S. CHILD, Architect

Second Floor Plan


AN ARTISTIC, INEXPENSIVE HOUSE


First Floor Plan
II. A RESIDENCE AT JAMESTOWN, N. Y.-E. G. W. DIETRICH, Architect

Second Floor Plan

# The Quest and Culture of Orchids 

By G. BERTRAND MITCHELL

PART I

$\mathrm{A}^{\mathrm{s}}$S evidence of the increasing interest in this country in that most beautiful, most esthetic plant of all the floral kingdom, the orchid, there has been organized in New York City during the past few months the Society of Amateur Orchid Cultivators. It does not follow by any means that every member is, strictly speaking, an amateur, for as a matter of fact, one may find in this organization the names of the best known orchid growers in the country, and also the names of those who are not even amateurs, but merely orchid enthusiasts.

It would be difficult to find any branch of plant culture so full of interesting possibilities, of such constant revelations as follow even a superficial study of orchidaceous plant life. "Why my orchids are like great families of children to me," said a wellknown horticulturist the other day. "Everyone of them seems human, with no two exactly alike - even when of the same species. Of course there is a close resemblance of the blossoms on the same stalk, but this next plant, its neighbor or closer still its relative, is as different as are our own brothers and sisters." It is intensely interesting to learn that each part of a flower has its share of the common labor; that "the spots and fringes, silken curtains and waving banners," delicate or pungent odors are not mere adornments, but all are essential to the scheme for the perpetuation of this race of plants, and as one has said, "though they do not spin, they toil with a wisdom and foresight that Solomon might have envied."

As every plant lover knows, the orchids, though extremely diverse within certain limits and differing superficially in many ways, are still formed upon one common plan which is really only a modification of that observable in such flowers as the narcissus or snowdrop.

The flower of an orchid has three inner divisions (petals), and three outer divisions (sepals), mostly of


ARRIVAL OF AN IMPORTATION OF ORCHIDS
the same texture and petal-like appearance. One of the inner set, the labellum or lip, which is really the upper petal turned upside down, "to enable insects," as Darwin says, " to enter the flower more easily," has often a fluted edge or it may have either a beautiful or a grotesque shape, and is generally the most brilliantly colored of the petals. Besides secreting the nectar, and forming the receptacle for holding this fluid, its attractive appearance draws to the plant the tiny animal life, the necessary agent for its propagation, thus making it the most important of the external envelopes of the flower. Just how important it is, one realizes when told that with hardly an exception the orchid depends so entirely upon insects for fertilization that the failure to perform its functions would result in the extinction of this family of plant life. Several orchids belonging to the Arethuseæ, have lips so sensitive that at the least touch they spring up and imprison the insect, forcing it against the pollen masses which adhere to and are carried off on its body as it escapes through some narrow passage. In perhaps half an hour the lips open and are ready for the next visitor.

The wise men assert that in some species there are secret springs and hair triggers that are suddenly let loose, launching tiny barbs or arrows against repacious ants or bees which have eaten their way to these life-giving centers and by this means, the seed destined to insure the plant from perpetual sterility is saved from destruction.
The stamens in most flowers surround in a ring the pistils. "There is but one well-developed stamen in all common orchids which is confluent with the pistils and together they form the column. Ordinary stamens consist of a filament (not always seen in the orchid) which carries the anther-a sort of case filled with the waxy or meal-like pollen which fertilizes the pistil. The division of the anther into two cells is so
distinct in some species as to appear like two anthers." The stigmas which collect the grains of pollen and carry them down to the sawdust-like substance in the seed-pod, are formed from the upper and anterior surfaces of two of the pistils. The petals and sepals may unite to form a roof or hood over the labellum, or spreading apart, give the blossom the appearance of a moth or winged insect.

Can we wonder at the intricacy of the orchid mechanism after marvelling at the delicacy of tint and structure of these fairy-like creatures which appear to float in the very atmosphere? Is it strange too, that barbarous African natives, apparently devoid of all imagination or poetic sense, upon beholding this daintiest, most elite of all flora have saluted it with a "good day, sweet lady ?"

It is a common but most unfortunate fallacy that the orchid plant is a luxury for the wealthy, and we find the idea is general that they must be nurtured under great heat and at great expense. Those who associate with plant life in greenhouse or conservatory should have a more or less general collection of the aristocratic orchid. H. A. Burberry, a well-known English horticulturist, tells us that "orchids are easy to grow and their culture is not necessarily expensive, in fact," he continues, "orchid culture has become the common heritage of all." It has been shown that when once the nature of the plant is thoroughly understood, much less attention is requisite than would be thought necessary to grow them successfully. Some tropical plants still baffle the most experienced cultivators, owing of course to imperfect knowledge of climatic and natural conditions of the peculiar species under treatment. There are only a few of the varieties that are really expensive, apart from a "new discovery" or an extremely rare species.

A beautiful variety of the popular genus Odontoglossum, named Oncidium crispum, a native of Co-


PITCHER PLANT (Nepenthes Dicksoniana)
lombia and Brazil, blossoming principally in March, April and May, and which deserves a prominent place in every collection of cool orchids is purchasable at two dollars a plant. It is not our intention to advocate the buying and growing of orchids as a pecuniary speculation, but we do claim that their cultivation, and "the enjoyment of their great loveliness" is within the province of persons of very moderate means. "It would befolly to buy rubbish," as some one has said, merely for the sake of saying "I grow orchids." It would be equal folly to buy small and insignificant plants because cheap. Orchids at best are slow growing, and small weakly plants require extra attention and are sure to prove unsatisfactory.

Thomas Moore, another celebrated British botanist, wrote in 1857 that " the superb race of orchids, so varied in general appearance and so variegated in habits," were primarily divided into two distinct classes, i.e, the epiphytes, those found inhabiting tropical or semi-tropical countries where they adhere by tortuous roots to branches of trees, or luxuriate amongst decaying vegetable matter; and the terrestrial, from the fact of their growing naturally in the earth, on mountains, in meadows, or in wet, swampy places; many of them blooming in temperate zones. There were in his time, some three thousand known species, only a part of which were in cultivation. Some were small and insignificant but others were of the most resplendent and attractive plant life to be found in the whole vegetable kingdom. In 1894 there were fifty-nine known native species and varieties of the terrestrial class growing in the Atlantic States north of the Carolinas.

But the epiphytes, with their remarkable gamut of colors ranging from pure white to the deepest, richest reds and purples, their subtle perfumes and the Oriental-like sense of mystery which envelops their origin and habits are by far the most interesting


DENDROBIUM PHALAENOPSIS SCHROEDERIANUM
were dried to get the sap out and were packed in bags or boxes so constructed as to form


PHAIAENOPSIS SCHILLERIANA
about seventy-five cents each. Yet, out of this we must pay a fifteen per cent export duty, and later, an import duty. But constant fevers and overdoses of quinine, the only available remedy, affected my head, and I'll let younger men kill themselves if they want to." pack saddles for the mules.

In my time we would find the seaports full of orchid hunters. There were many Germans then in the business and everytaproom would be filled with these men and with Indians who had brought down the Odontoglossums for sale.
"Now came the work of exporting. The plants were in crates about two feet six inches by three feet in size, holding from forty to fifty. If fortunate, we might have from four to five thousand plants, which if they reached their destination in good condition, would net us


COLLFCTION OF CYPRIPEDIUMS

That this condition of things is the same to-day is illustrated by the statement of Julius Roehrs, a well-known New Jersey nurseryman who has four men at present in the tropics. One of these men recently wrote of losing twenty of his natives from yellow fever. The following extracts are from a letter received from another of the men, a French collector of many years' experience.
"Honda, Oct., 19-. My dear Mr.-Passing Bogota the other day I found your kind letter telling of the fortunate arrival of the orchids. I have had no heart to write before. Oh yes, I have more than time to write you, but I get in such a temper that it is difficult to write anybody. To tell you the truth I


PHALENOPSIS AMABILIS, SCHILLERIANA, STUARTIANA, ETC. am feeling quite sad all over with the business. You may fancy how horrified I was at the misery and disheartedness of the people of Colombia. To begin with, from Borongerilla to Honda, I was fourteen long days in literally a cholera hospital.
"We had no less than ninety-five deaths on board during the passage. I had to watch the agony of those poor fellows from ten to sixty years of age, soldiers, dying of hunger, dysentery and yellow fever. I fared the best all through that passage. Mon Dieu! not even a Christian burial-their bodies were simply thrown overboard into the river.
"Next at Honda I found the recommendations and advice given me to be equally treacherous. After three weeks looking around in the districts, I determined to set up at Nataguinio. The people were afraid to come down from the hills lest they be recruited. All the houses had been burned. The people had no homes, and 'after the war the drought.'
"The plants were very much shrivelled. I had started with a lot of seventy-five cases and pushed on, killing my brave mules. Five trips like that in six months-and such roads-made by the Spanish conqueror and never repaired since. What I suffered
from three months' association with these men I can't tell you. What work to secure enough wood to build rafts. S. sent another letter that one hundred cases were all lost. Came down with two rafts in five days-thought it would be wise to embark them in the River Magdalena. Next by his instructions I went to S . at Muzo, but this was a loss for me for the plants were never collected. This is where the celebrated mine of Esmeralda of the Colombian government is located. However, I got six cases.
"Then I started for the Crespum with one hundred men, Colombians, trying to make a living and at heart ready to kick out all foreigners."

Every collector has his especial territories and may go again and again to the same place.

Another retired orchid hunter told of going out from Bogota with his natives, and of gathering a large quantity of plants, but when loaded down and on their return, they discovered specimens so much finer that the first lot was thrown away. The next year this man was much astonished to find the discarded plants in excellent condition and growing in the moss at the foot of the trees. This time they were not abandoned.

# Mr. Prime's Alexander Tapestries 

By GEORGE LELAND HUNTER



FORTY years ago Americans knew little about tapestry and cared less. The uniformity of machine-made fabrics appealed to them more than the individuality of hand-made. They did not appreciate art in wood and wool and plaster and stone because they were not familiar with it. For most of them art began and ended with easel paintings, of which they bought inferior or pretended originals at prices that seemed to constitute them "patrons of art."
In Europe also tapestry was not held at its true worth. Valuable pieces dating from the fifteenth and sixteenth centuries were stowed away in garrets or relegated to barns and stables. The number of tapestry weavers at the Gobelins descended as low as twenty-five and the number of yards produced in a year to twelve. At Aubusson the industry was in a bad way. Nowhere was there enthusiasm for the decorative fabric that excels all others in beauty and lastingness. At that time a museum of tapestries
might have been bought for little. Ten thousand dollars could do as much as half a million now. For illustration of this, consult the catalogue of the Victoria and Albert Museum at South Kensington. A sixteenth century Flemish tapestry ten feet high by eight feet six inches wide was purchased in I 866 for $\$$ I20. Another similar tapestry ten feet by twelve feet nine inches, for $\$ 50$.
William Cowper Prime, first vice-president of the Metropolitan Museum of Art of New York City, was far in advance of his compatriots. Through his efforts a chair in the history of art was established at Princeton College, his alma mater, to which in 1889 he gave his important collection of ceramics. His "Pottery and Porcelain of all Times and Nations" was published in 1877 . He studied particularly the history of book illustration, and brought together a valuable collection of wood engravings of the fifteenth and sixteenth centuries. About 1870 he purchased the five Alexander tapestries that form the subject of this article, and which his acquaintance with sixteenth century design rendered him peculiarly able to appreciate. These tapestries hung in the


THE CORONATION OF ALEXANDER


ALEXANDER AND ROXANE
dining-room of his house in East Twenty-third Street, New York, until his death in 1905.

The most famous collections of Flemish tapestries are those at Madrid and Vienna. The former are illustrated and described in Valencia's two folio volumes, that can be consulted at the library of the Metropolitan Museum; the latter in the first four volumes of the "Jahrbuch der kunsthistorischen Sammlungen der osterreichischen Kaiserhauses," at the Avery Library of Columbia University. Both books give drawings of the marks or monograms that are often found on Flemish tapestries of the sixteenth and early seventeenth centuries; and frequently in connection with the mark of the city of Brussels, that is a shield between two B's, the first of which is reversed. A comparison of these marks with one another, and with contemporary monograms found on pottery and engravings, identifies the marks that are woven into the lower part of the right border of three of Mr. Prime's Alexander tapestries as those of a sixteenth century merchant weaver. The style and weave of the tapestries point definitely to the first half of the sixteenth century.

The most famous tapestry merchant or contractor of the period was Peter van Alst (also spelled Aelst)
of Brussels. It was he who wove for Pope Leo X., under the direction of the Flemish painter Bernard van Orley, the marvelous Acts of the Apostles designed by Ra phael. The original painted models or cartoons of these tapestries are to-day in the Victoria and Albert Museum having been acquired for England by Charles I. The tapestries themselves are still in the Vatican, where they were first shown in the Sistine chapel, for which they were made, on Christmas day, 1519.

About Peter van Alst we have documentary information in the account books of Philip the Handsome, who was son of the Emperor Maximilian I., father of the Emperor Charles V., regenthusband of Queen Joanna of Spain, and who inherited Brussels and the rest of Flanders from his mother, Mary of Burgundy. Under date of 1497 we read (with some omissions):
"To Pierre d'Enghien, tapestry merchant, living at Brussels, the sum MIII livres VII sols III deniers, for a chamber of tapestry with shepherds and shepherdesses, that he has sold to Monseigneur (Philip the Handsome) to use at his very noble pleasure."

Under date of June, 1504 : "To Pierre d'Enghien, called d'Alost (Alost being the French form of the Flemish town of Aelst), tappissier of Monseigneur, eight hundred ," and thirteen livres for five pile rugs from Turkey."

In 151I Pierre van Aelst is qualified as "valet de chambre et tappissier de Monseigneur." In 152I, "Pieter van Alst tappissier resident at Brussels" receives CXI livres for eight pieces of verdure tapestry.

It was about this time that the fashion of signing tapestries came into vogue-a fashion that was encouraged in 1528 by government edict. So that while we do not know how long Peter van Alst continued his business activity, we may be sure that tapestries woven for him after that year would be signed.

For the convenience of the reader I have had the monograms sketched as they appear on the Alexander tapestries. Two of these are reproduced on
the first, and one on the third page of this article. In only one of the large illustrations, "Alexander kneeling before the High Priest of the Jews," can the mark be discerned.

The mark before us is comparatively simple. The only obscurity comes from the changes that have been inflicted by age and ignorant repairers, whose treatment of monograms can be judged by the weird things they do to woven inscriptions and titles, transposing letters and even words.

Let us study the monograms. In all of them the letters ST are clear. In one the $A$ at the bottom is clear, in another obscure, in another without crossbar. In all the letter I or $L$ is found at the left of the S. The variation of the marks from a clear spelling of ALST is less than from one another. And among all the Flemish tapestry merchants and weavers, lists of whose names have been published in the great "Histoire Generale de la Tapisserie," a copy of which is in the Metropolitan Museum of Art, Alst is the only name for which this monogram could stand. That it is his monogram I am convinced.

As to the date of Mr. Prime's Alexander tapestries there can be no doubt. The taste of a century or even half a century later would have revolted at panels so crowded with figures. It would have hesitated to introduce into the foreground floriation inherited from the Gothic fifteenth century, and into the border such a luxurious wealth of human and animal figures, fruits and flowers. I regard the border, which is the same on all the tapestries except as enlarged for the wider ones, as one of the finest creations of Renaissance inspiration interpreted by a craftsmanship full of Gothic feeling.

The coloring of both panels and borders is superb. The accentuation of light and shade in the stripes that frame the panel, showing that the light comes from above on the left, is characteristic of the Renaissance, and most interesting to compare with Gothic handling of the same situation as illustrated in my article on the "Burgundian Tapestries at the Metropolitan Museum" in the December number of the English " Burlington Magazine."

the funeral of clitus
The salamander in the upper border on the left is so characteristic of Francis I. of France that one can hardly help associating the tapestries with him, especially as he was a great amateur of the art, and not only bought and ordered tapestries in Flanders but even set up looms of his own at Fontainebleau. The Alexander series would be one natural for him to select after his victory at Marignano in 1515 , but before his defeat at Pavia in 1525 , where he was captured by the Emperor Charles V.

Regarding the designer of the tapestries we have no evidence. The borders are strangely like some of Primaticcio's ornament at Fontainebleau. But they also resemble borders designed by Bernard von Orley, mentioned above as superintending Alst's work on the Raphael tapestries. Moreover the character of the faces and figures is so typically Flemish as to imply a Flemish designer as well as Flemish weavers.

Alexander was a favorite subject for tapestry designers. The inventories of the fifteenth and sixteenth centuries are full of Alexander suites. The set particularly associated with the Gobelins was

from paintings by Charles Le Brun in the last half of the seventeenth century. There are two important sixteenth century Alexander suites in the Imperial Austrian collection at Vienna, which it would be interesting to compare with the set before us.

The legendary history of Alexander, which tapestry designers usually followed, is much more thrilling than the real one.
It came from Persian and Egyptian sources, was composed in Greek in Byzantium about the eighth century, and being translated into Latin spread through Western Europe. About the middle of the twelfth century, when the romances of Charlemagne flourished most, a French poet, Alberic de Besançon, introduced Alexander into the vernacular. Of his poem only 105 lines remain. Towards the end of the twelfth century a long romance in lines of twelve syllables-from which the name of Alexandrine for this form of verse-was started by Lambert li Tors and finished by Alexandre de Bernay. In a few years the Alexander saga was found in various poetic forms.

Of Alexander's supposed meeting with the high
priest of the Jews, Josephus, the Jewish Historian of the first century, says:
"When Alexander saw the multitude at a distance in white garments, while the priests stood clothed with fine linen, and the high priest in purple and scarlet clothing, with his mitre on his head, having the golden plate whereon the name of God was engraved, he approached by himself and adored the name and first saluted the high priest. The Jews also did altogether with one voice salute Alexander and encompassed him about; whereupon the kings of Syria and the rest were surprised, and supposed him disordered in his mind. However Parmenio alone went up to him and asked how it came to pass that, when all others adored him, he should adore the high priest of the Jews. To whom he replied, "I did not adore him, but God who hath honored him with his high priesthood, and I believe that I bring this army under his divine conduct."

I should like also to explain that Clitus, whose funeral is pictured, was Alexander's close friend and had saved his life at the battle of the Granicus, but was slain by him in a fit of passion at a banquet.


ALEXANDER ON THE TAMED BUCEPHALUS

# Small Suburban Properties 

Being a Plea for Another Style of Gardening

By J. DONALD MARTIN

AMONG some of the older writers on landscape, Sir Uvedale Price has gone to great length to classify the beauty of outdoor life into the following orders:- the sublime, the picturesque and the beautiful. He goes on to prove that it is almost beyond human achievement to create the sublime under any conditions, as the Master hand alone can produce it. This is such a self-evident truth that we need not enter upon it further in this article on small suburban properties. The picturesque may only be obtained in its highest degree on properties that have some extent, that are extremely broken in contour, and naturally rugged. One would hardly find these three qualities on properties such as we are considering, and if we did, few people would care to live surrounded by that wild state necessary to the absolute picturesque.

The dividing line between the picturesque and the beautiful is so fine that we may say that these two orders flow into each other, intermingling in such a way that it is impossible to separate them - yet between the two extremes of these orders, there is such a marked difference that we must recognize both.
While few would care to be always surrounded by only the picturesque, a touch of this order is often extremely stimulating; so we can, at least, combine the picturesque and the beautiful in such a way that small views that have some of the qualities of each may be obtained on different parts of our small property.

Certainly the beauty with which it is most desirable to surround a home is that which will live in the hearts of the family in after years; that quiet, dignified repose and feeling of mystery which are seldom found on small properties, except in a few extremely old places, where the gardeners confined themselves to formal work.

As a means of comparison, let us consider the treatment of some large properties which has been productive of especially good results. Here the house and stable are usually placed some distance from the highway, and a feeling of privacy is acquired by mere distance. The driveways approach through well-kept lawns or meadows made doubly attractive by beautiful plant life. Every turn in the road means a new view, and many varied pictures of interest delight the eye before the house and gardens are reached. In many cases the estate has a park-like effect and, on account of the extent of the grounds, one feels free from intru-sion-beyond the multitude - and when one goes into the country or suburbs, is this not what is wanted ? To be beyond the dust and the grime and the noise and the worry that havebeen with us all day?

On these large estates we find a kind of beauty that is altogether out of the reach of the holder of a property of three or four acres, although very often one sees small places laid out on these principles. If property holders in one locality would combine with the idea of treating the picture as a whole, this method would undoubtedly be excellent. Then the highway would be a part of the general scheme, and a park-like effect might be obtained; but I fear that day must be relegated to the far distant future. At present, these places are parks in miniature. The boundary hedging is about knee high; masses of shrubs are placed in the corners and along the boundaries; a few more at the house; a tree or two on the lawn; a spot of formal gardening, and the place is complete. I have the greatest sympathy for the owner, where he has shown that an effort has been made to create a pleasing effect with such poor results.
Let us now see what can be done to produce


A BRIGHT CORNER IN THE FLOWER GARDEN
shrubs, trees, seats, pools, etc., should be made to correspond to the use to which each section is to be put.

The fault to be found with most places of this size is, that there is not enough of interest to be found on them, and when an owner has a choice bit he will invariably place it before your eyes, in a position where it is never out of sight, thus making it impossible for you to discover it for yourself.

Imagine the charm of two enclosed lawns one shaded, the other bright with sunlight, except for a patch of shadow cast by a feathery foliaged tree. Imagine these lawns separated by a hedged walk bordered with flowers, with only glimpses of lawn through arches as you walk to the house. Picture a long walk of flowering fruits, ending in an architectural feature, backed with dark green
certain effects that are undoubtedly desirable. In my opinion, privacy is of great importance. It is extremely difficult, if not impossible, to obliterate the boundaries on this place, as the distances are not sufficient. We have then the choice of recognizing this line as the line of a garden, or of making an ineffectual attempt to hide it with trees and shrubs, which only helps to attract attention more strongly to it. Let us recognize this line, and make our property an enclosed garden, with the beauty that we see in the immediate surroundings of so many old English houses. Hedges may be grown to a height that will insure us against intrusion; or fences or walls of good design may be erected and draped with vines. To erect a boundary of such proportions and density that would completely shut off all communication with the outside world, or create the feeling of imprisonment, should be avoided. Judgment and taste must dictate the height at which this boundary should be erected.

Let us now continue the development of our garden. We want a garden that will be a pleasure to wander through; not a flaring, glaring mass of color; or a picture that is taken in at a glance; but rather, let us subdivide it in such a manner that there will be a number of enclosures, which will be treated differently, just as all well planned gardens are treated. These enclosures need not and should not be massed with flowers, making the question of maintenance an overwhelming one, for there are many gardens, among them some of the best, where there are few or no flowers at all; just a bright touch of color at the base of a dial or around a pool. These gardens should be used as the separate rooms of a house, and the furniture, which, in this case, consists of flowers,
foliage. Half way along this path we enter one more enclosure,-a simple, old-fashioned garden, with its pool and bird baths reflecting the flowers all summer long. This garden is in an angle of the house, to which we have entrance, thus making an outside living-room, partially shaded by trees that border the tennis court beyond.

If we continue this treatment the service section is used in the general scheme, but need not be


TALL HEDGES ENCLOSING LAWN


LOW STONE WALL AROUND TERRACE
of box-like arrangements, all of one size and shape, treated in a similar manner. The size of the house in comparison with the grounds, and the extent of the grounds themselves would have to determine the size and number of enclosures, and also the treatment of each. If you will think of some old place on which you have been, where the box hedging has grown to the height of the eye, or over, where you had to look through the entrance rather than over the hedge to see what was beyond, did you then have the feeling that the place was cut up because you could not see all of it at once? This enclosure has given you a feeling of privacy, and at every turn a new and beautiful picture has greeted the eye; pictures that you never dreamed were there, because at first they were hidden. The spirit of long ago pervades
unsightly because it is given over to practical uses; in fact, it may be made to work into the scheme in such a manner that only on certain days will its use be known. The drives and stables, if the property boast of these, may be included in this formal treatment, and often adds wonders if properly placed and used, for the more there is on a property, if not too crowded, the more opportunity there is of making a place of varied beauty.

Shrubs may still be used in this formal treatment. Even irregular masses may back the tennis court, or other feature forming the enclosure at this particular part. Masses or specimens may be placed against the house without spoiling the general scheme; in fact, touches of informality will be a relief from the straight lines all about.
The character and design of the house, the lay of the ground, and the sizes, are so varied, that, of course no rule could be made that would apply to any two places; but I have tried to picture the properties one sees everywhere, and what might be made of them if some one were only bold enough to treat his in this manner.

The natural criticism to be made is that sub-dividing a lot cuts it up too much and makes it appear smaller. Does a house appear smaller when the partitions are erected ? Of course this would be true if the enclosures were bounded at a height that would enable one to look over and see them all; or, so small, that they would appear like boxes. I can imagine nothing more unbeautiful than a series


FRUITS, HEDGES AND FLOWERS IN THE POOI GARDEN


## THE HOUSE

THIS is the month of winds so as early as possible it is well to see that there are no loose bricks in the chimneys, or shingles on the roof, which can be readily dislodged. Have the chimneys pointed up, the roofs overlooked, ice bridges broken in the gutters, and all detached things made secure. Look to the windows also, have the putty renewed around the panes of glass, and the catches for the shutters repaired if necessary.

If additions, or alterations, are to be made to the house this spring, this is the time to get the plans out, so that work may begin as soon as the frost is out of the ground. Possibly it has been thought well to add a living-room, a summer kitchen or even a piazza, and if so it is most desirable not to postpone preparations.
There is nothing more attractive than a house which has been built bit by bit as necessity required, or the purse permitted, provided the building has been done in accordance with a well defined plan. Unless you are wiser than the majority-much wiser -do not attempt to be your own architect. Make up your mind what you want and then take your plan, or plans, to one who has had experience in dealing with such material. In this way you will save yourself much vexation and, in all probability, the appearance of your house. Windows cannot be cut even in a side wall with impunity, nor piazzas added without careful consideration. Each factor is a part of design and must be made to accord with the rest. A rural porch on a city house is like a gingham apron on a velvet gown-or, if you will, vice-versa-inevitably a misfit. It is this disregard of appropriateness and continuity which gives many houses such a sorry appearance. Look around in your own neighborhood and see how many squint or grimace, or are restless and uneasy.
But if you can add a piazza, or porch, do it by all means-and have it if possible two stories in height. Not one which will be merely a passage-way, an approach, or indeed an ornament, but an outdoor living-room. Have it deep enough to afford protection from the weather and secluded enough to insure real privacy. Two story porches, or galleries, are very common in the South, and there if anywhere the question of comfortable living in summer has been
solved. Such an outdoor living-room is not to be reckoned negligible by the grown up members of the family and to the children it is an unalloyed blessing.

If the home is in New England, winter will not loose its grip until another thirty days have passed and storm doors and windows will be more necessary than in the months which have just gone by-or at least equally so-but if it is in the latitude of Baltimore or Washington they can be removed before old Dame Nature starts in, as James Lane Allen has said, to do her spring house cleaning.

Painting is best done in the spring-that is outside painting-before the sun's rays are too direct and the flies come in swarms to track and disfigure fresh surfaces. Not enough thought is given, it would seem, to the color of exteriors, and many a house which might be unoffensive is made positively hideous through inartistic painting. Paint is, it is true, a protector of wood and tin, a sponsor for cleanliness, but why not at the same time a beautifier? Look to Nature for example and make the house accord with its surroundings; see to it that the color chosen for the window shutters and frames is not out of harmony with that selected for the walls, as you would give thought to the trimming of a frock or a coat. Try the effect of a glint of red where it will give life and yet will not be blatant. Nothing is so hard to handle successfully as great expanses of flat color or are as deadening to effect. Color in architecture is of far greater importance than many suppose, though the Egyptians, the Greeks, and some of the Oriental people repeatedly demonstrated it.

Above all things, if it can be avoided, do not paint bricks, as it destroys their texture and spoils their effect. Let the material which is used in construction manifest its character and serve the purpose for which it is fitted. The simplest things can be made attractive by their handling as well as the most costly, but sham is rarely if ever successful or satisfactory.

As this is apt to be a stormy month it may be a good time to give some special thought to the den-make changes in its furnishings and clear away some of the accumulated treasures. See if the mantel is not overcrowded with bric-a-brac which has been added so gradually that its superfluity has not been observed - give heed to the table and note whether it too is_not
groaning under its load. Over-ornamentation is a relic of barbarism-one of the tokens of recent advent into the world of culture and refinement. And yet so prodigal is the output of modern factories and so easy acquisition, that possessions accumulate almost, it would seem, without personal responsibility. Try the effect of a good clearing up and weeding out and see if even the den does not become more inviting and livable. Try the Japanese method of changing the pictures and ornaments from time to time and really make friends of them.

## THE GARDEN

MARCH is very much a month in which to prepare for gardening. Do not fail to put a top dressing on the lawn. The best thing to use for this purpose is a pulverized or shredded cow manure.

In sections of the country where the frost is out of the ground, it is time to prune, cultivate and fertilize the rose bushes. In those sections general gardening will be begun this month.

Many varieties of hyacinths bloom before the leaves appear. This can be avoided by placing a tube, made of pasteboard or heavy brown paper, around the bulb when it is removed from the cellar to the open. Let the tube remain open at the top.

In latitude of Richmond and further South, and in California, vegetable gardens are well under way, and second plantings are now in progress.

In shaded places the giant daisy (Chrysanthemum maximum) does well. Sow the seed in March and get results the first year. It has dark green foliage, large white blooms with yellow centers, and makes an attractive plant. If the blooms are removed as they begin to fade, this variety will bloom continuously during the summer.

Larkspur is a good hardy perennial of easy culture. The colors are of all shades. The Chinese larkspur (Delphinium Chinensis) is blue, grows about eighteen inches high, and is in continuous bloom from June into August. Russian larkspur (D. grandiflorum, var. album) is equally as desirable as the Chinese and usually grows from three to six feet high. Sow the seed in March and the plants will bloom during the year. They require a good soil and plenty of manure and sunshine. If the flowers are removed when matured, the plants will bloom a second time during the season.

In arranging for shrubbery have in mind the time when the different kinds bloom. For May blooming plant almond, honeysuckle, Japan quince, lilac, snowball, spiræa and tree peony; for June flower-
ing get akebia, clematis, dogwood, honeysuckle, snowball, spiræa, syringa, weigela and wistaria; clethra, clematis, spiræa, elder and honeysuckle bloom in July; and for August and September bloom althæa, bignonia, clematis, honeysuckle. Hydrangea paniculata grandiflora, Desmodium pendulifolium, and baccharis give good results. The flowering on some of these shrubs is succeeded by ornamental berries which attract song birds in the fall.

In the preliminary arrangements for gardening, which must be begun in earnest next month, the matter of fertilizing must not be overlooked. There is no soil but what will produce better results from intelligent fertilization. Every crop harvested, it matters not the nature of the crop, whether grain from the field, flowers from the garden or grass from the lawn, a decided percentage of vitality and growing force is removed from the soil. This must be restored by fertilization. To do this it is necessary to use a fertilizer or compost which contains the required chemical properties. The ordinary commercial fertilizer, composed quite or almost wholly of chemicals, will induce vegetable growth, but it does not supply the soil with the necessary humus, the foundation material, which the organic structure of the earth demands.

Preferable to any commercial fertilizer is a well decomposed manure or compost. If it is well rotted it can be used in drills along with the seed or it can be broadcast on the lawn without leaving any unsightly covering to be tracked over the walks and into the house.

Better than either the commercial fertilizer or the decomposed manure, which is difficult to obtain, is what is known as shredded cattle manure. This manure is admirably adapted to use in the garden and on the lawn. It supplies the necessary humus to the soil and is quickly transformed into plant food with consequent forced growth.

Aside from the superiority of shredded cattle manure as plant food there are other qualities which commend it to the use of gardeners. It is free from dirt or refuse, or offensive odor, and is without moisture to increase its weight. It can be handled as easily as commercial fertilizers, and used for mulch, beds or for potting. When broadcast on the lawn, it goes directly to the roots of the grass and results show for themselves.

It is the most natural thing in the world that manure in this form should have originated in Chicago, Illinois. Natural for the reason that it comes as a by-product from the five hundred acre brick-paved pens from which more than sixteen, million animals are annually handled, and the people about the Union Stock Yards are given to the habit of getting all there is out of their surroundings. If
(Continued on page 10, Advertising Section.)


The Editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

WITH the approach of the spring season the careful housewife gives much thought to the redecoration and refitting of her house.
In a certain thrifty and well regulated house which we recall it is the custom to redecorate one room each season. In this way the house is kept in absolutely good condition and all old furniture which is not of intrinsic value is disposed of from time to time, insuring a freedom from the thrall of old belongings for which we have no place and from which so many of us suffer. Recovering the walls of a room produces the most radical change at the least expense, and where the "doing over" does not include architectural changes the first question to settle is the choice of paper.
This season's offerings in wall coverings are especially fascinating, and excellent papers are to be obtained at prices within the reach of the most modest purse; both domestic and imported papers can be found much lower in price than they have been in the past, and therefore it behooves the economical woman to make her selection early, even though she must lay away the rolls of paper for another season. It is never real economy to select a wall covering which shows a very pronounced design or too vivid color. Where two toned or plain paper is not suitable a harmonious mingling of colors and tones may be found which will serve as an excellent background for pictures and a good setting for the furniture of the room. In a room where the rugs or floor coverings are already chosen these must be well considered in selecting the paper. A very excellent plan to pursue is to obtain a generous sample of the paper under consideration, and pin it on the wall (in a good light) of the room in which it is proposed to use it. A paper which has seemed thoroughly attractive and appropriate to us in the shop will develop entirely different qualities under this treatment.

By way of general advice on wall coverings, a very safe line to pursue in the selection of hall paper is to
confine oneself to two toned or plain effects. Japanese grass-cloth makes a beautiful covering for the wall of the hall; this is a closely woven fabric of soft sheen which is most attractive. The price of this material is, however, in some cases prohibitive as it costs eighty-five cents a square yard. A linen cloth, like buckram, comes also in an excellent selection of colors and gives satisfactory results as a wall covering. This material is about thirty-six inches wide and fifty-five cents a yard. It has the superior advantage of being extremely durable and allowing of re-tinting or painting if one desires to change the coloring of the room.

This also may be said of burlap. In the latter case, however, oil paint must be used on the burlap. Many decorators feel that the treatment of burlap walls with oil paint is an improvement over the fabric in its original state. This prevents its catching and holding the dust and while giving a somewhat uneven surface, such as we obtain through painted and tinted rough plaster walls, it is more satisfactory. In the matter of color selection for the walls of the hall, a yellow tan or a soft ecru or any one of the rich or pastel green shades may be safely selected, as with these tones the various colors which may be used in the adjoining rooms will harmonize.

Where the hall is large and well lighted some shade of green should be chosen. Where the reverse is the case, yellow tints are advised. In the adjoining rooms some of the same color as the hall walls show should be reproduced, either in some figure in the paper, in portières, curtains or furniture coverings. In nearly all instances it is practical to use the same tone for the ceilings of all rooms opening together. This is as essential to thoroughly harmonious treatment as the use of the same stain and finish for the floors throughout.

A simple treatment for bedroom walls is desirable although more of color and figure is here permissible.
(Continued on page 12, Advertising Section.)


## LABELING ROSES AND OTHER PLANTS

IENDEAVOR to keep my hybrid perpetual roses labeled plainly so I and my friends may know their names. I use large cypress labels, but sometimes my men are careless when removing the winter's covering, and either carry them away or get them mixed up. Is there any method of procedure by which this may be remedied ?
L. B. C.

The best plan to pursue is to take a thin sheet of lead and cut it into pieces about two inches long, a quarter of an inch wide at one end and tapering to a point at the other. Stamp letters or numbers in the broad end (a set of dies costs but little) and wrap the pliable pieces around the stems close to the ground. Take a stiff piece of cardboard, back of a letter pad, or cover of a pasteboard box, and enter number and name as you proceed. Take up the wooden labels, tie them in a bundle, and put them under cover for the winter, fastening the card with them, but in the meantime copy numbers and names in your garden book, so that in case of accident to one list, you have the other in reserve.
I use the same method with dahlias, but punch a hole in the lead, in which I put a thin, but strong wire. I run this wire through the tuber and also wrap it around the bunch, copying numbers and names. I also apply the same principle in describing color, size of flower and habit of plant of seedling delphiniums; but in this case I fasten the lead tags to stiff telegraph wire, a foot long, inserting the wire in the ground its full length. By growing a batch of hybrid delphiniums each year for a few seasons, culling out the small flowered, and weak colored ones by up-rooting them as soon as judgment is passed upon them and describing and tagging those that remain, and entering the descriptions in your garden book, you may, any spring, transplant intelligently, grouping your light blues and dark blues as you desire.

## HARDINESS AND MERITS OF SHRUBS

On the south side of my house, in full sun, I have a place of honor for the best all around shrub. It will be at the junction of the main and the service walks. Will you kindly name, in the order of their
merit, the six best shrubs for individual planting in full sun and suitable for this climate.

What can you tell me as to the hardiness and merits of the Scotch laburnum, Xanthoceras sorbifolia, Buddleia variabilis, and Hedysarum multijugum. The last two are recommended by Bobbink \& Atkins of Rutherford, N. J. A. C. Z., Lincoln, Neb.

In selecting a shrub for a choice position, where its environments play no part as to its form or character, and one has narrowed down the list to those of undoubted hardiness, and of symmetrical form, individual tastes step in and cause dissension. Some soils suit one species better than another, and as a consequence it grows to perfection and assumes an ideal form, while the "other one" in conditions suited to it, may equal or even excel the first. Another feature to be taken into consideration is whether a shrub is chosen for its flowers or foliage. Unless a shrub is desired, whose flowers form a companion for those of an adjoining one, its flowering qualifications should be of secondary consideration, and the foliage and habit become the first desideratum. The flowers are fleeting, but the foliage remains all the season. The crimson rambler is gorgeous in its season of bloom, but in most situations it is in disgrace the balance of the season on account of its poor foliage. I am going to place Forsythia intermedia first, on account of its rich, dark green foliage, right up to severe frosts. Often a very hard winter injures some of its bloom buds, and we may miss the golden fountain it personates when uninjured, when its leafless, long, arching branches are completely clothed with drooping yellow bells.

Prunus triloba, the Chinese double flowering plum, comes next, and although chosen on account of its flowers (they are of a pleasing color, attractive in form, and generous in quality) its foliage, when well grown, is good. This shrub, also, is apt to have some of its flower buds winter-killed, but when in perfection outrivals any shrub I know of hardy enough for this section. The flowers are like miniature pink, double roses, and often encircle a branch for a distance of a foot or more, as the kernels of corn encircle the cob.

Syringa villosa, a late blooming lilac, is next in the list, and while a magnificent sight when in
(Continued on page 14, Advertising Section.)

# The Stable and Kennel 

Edited by JOHN GILMER SPEED


#### Abstract

The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.




MR. REGINALD VANDERBILT'S " DOCTOR SEIWONK," MR. VANDERBILT DRIVING

## MR. VANDERBILT'S " DOCTOR SELWONK"

T
${ }^{\top}$ HIS large chestnut gig horse that Mr. Reginald Vanderbilt has been showing with great success for four years past is very handsome in appearance and brilliant in action. And his winnings at the various shows from Brookline in Massachusetts to Kansas City have been most remarkable footing up in the aggregate sixteen championships, five reserve championships, forty firsts, ten seconds and five thirds. This means that this horse has been in the ribbons, as the saying is, seventy-six times since Mr. Vanderbilt introduced him in the show ring.

I do not know what "Doctor Selwonk's" breeding is and I could not find out-but I guess (I will not say I judge) it to be a mixture of hackney and trotting blood. It is a queer thing about these horse show devotees-they seem to care next to nothing about the breeding of a horse they exhibit. If he can do the trick and carry off the blue ribbon that satisfies the aspiring soul of the exhibitor to overflowing, that shows that he can select and pay for a horse, that he can hire a man to condition and train him so that he may have the glory of driving the best horse in the ring. In this picture Mr. Vanderbilt is himself driving.

## THE KENTUCKY SADDLE HORSE

EVERY few years there appears on the turf or in the show ring some horse that in his or her class so outranks competitors that it is a repetition of the old experience when it was "Eclipse first, the rest nowhere." On the running turf last year Mr. Keene's Commando colt, "Colin," occupied such a position and won every race in which he started.
So also was the case in the Kentucky shows where in the five-gaited saddle horse rings Mr. Shelby T. Harbison's chestnut mare, " Edna Mae," carried everything before her and so won the admiration of those qualified to judge of this class of horses that I have heard many of them say that she is the best saddle horse seen on the tan-bark in a generation.

The gratifying thing about this mare's performance is the fact that she is not a mere accidental happening, but the happy result of careful, scientific breeding. In her is mingled the best blood of the foundation stock recognized by the American Saddle Horse Association. This mare is a dark chestnut, $15-3$ in height, and five years

"Edna Mae," Champion five-gaited saddle mare. Owned by Shelby T. Harbison, Lexington, Kentucky Ridden by Mat S . Cohen
old this spring, and the following tabulated pedigree is worthy of study:


Here is a list of "Edna Mae's" winnings, and it will be interesting to note that she wins in harness as well as she does under the saddle.

Richmond, Ky. Fair, igo6.-First in 3-year-old saddle mare; first in 3-year-old harness mare; first in high school class, stallion, mare or gelding any age.

Cynthiana, Ky. Fair, igo7.--First in saddle mare any age; first in combined mare any age; first in saddle mare or gelding any age.

Lexington, Ky. Fair, 1907.-First in saddle mare 4 years and over; first in saddle mare or gelding any age; first in combined class, mare or gelding any age.

Shelbyville, Ky. Fair, i907.-First in saddle mare 4 years and over; first in saddle mare any age; first in saddle mare or gelding any age; first in combination class, mare or gelding any age; first in fancy harness mare any age; first in harness stallion, mare or gelding any age.

Kentucky State Fair, Louisville, Ky., 1907.-First in saddle mare any age; first in combined mare any age.

Reserved Champion to Star McDonald? Owning both horses, preferred stallion win.
Louisville Horse Show, 1907.-First in class for saddle stallion, mare or gelding 4 years old; champion-best saddle stallion, mare or gelding any age.

It is rather a pity that those with Anglomania in the North and East have never taken to these horses and held them in greater esteem. To be sure, when these beautiful horses are shorn of two of their gaits -the single foot and running walk-and also shorn of their traits, then they are acknowledged almost everywhere to be incomparable. But why not have them complete in all their beauty and with all their accomplishments.

## MR. WARDWELL'S SHROPSHIRES

ACOUNTRY place with any extensive pasturage is quite incomplete without a flock of sheep; indeed a pastoral landscape without sheep grazing in a far meadow or on a near hill seems to lack in something that completes the composition. The sheep that seems to suit a country gentleman's place more admirably than any other is the Shropshire, which is a triumph of English composite breeding. This type has done admirably in America and is vastly popular. A man without experience in sheep breeding would be included to think a flock of sheep a great undertaking; and so it would be if gone into on a large scale. But a gentleman can go into the breeding of sheep on a small scale and gain his experience while his flock is increasing. One of the things that makes a country place often very expensive is the enthusiastic haste of the owners in wanting to accomplish in a year or so what other men have been content to accomplish in twenty. The experience gained is usually very costly-costly intrinsically and costly in the disappointments which dull the keen edge of enthusiasm.

On this very subject I find in the American Sheep Breeder some pertinent remarks from Mr. Richard Gibson of Belvoir. He says:
"To show how quickly a flock of Shropshires may


Shropshires from Pinehurst Stock Farm, Springfield Center, New York
be acquired; how persistent they may be in increasing the numbers thereof; the recuperative powers of even old ewes, may possibly be of interest to some of your readers. The five old favorites were retained at my dispersion sale, because no one could appreciate them as I could-for had they not produced prize winners? They were retained and are now in the flock looking as fresh as they did when first maternal duties required their attention. From the five I now have ten to breed this autumn, and three ewe lambs to put in the flock next year, all the ram lambs having been sold or made into international exhibits as wethers. What did these five old ewes do last spring by the assistance of 'Allen's Star'? They produced twelve lambs. Two had triplets, three had pairs. I am aware this cannot be duplicated in large flocks, but I thus throw out the hint to the beginner in flock management. Let him start slowly and learn experience by his failures as well as by his successes.
"A few well selected females, always using a good ram, will quickly grow into a flock, of which he may well be proud, and yield fifteen, twenty-five, fifty and even a hundred per cent profit on his original well selected ewes with a responsible ram. There are breeders of other than Shropshires that are entitled to consideration, but to the Shropshire I pin my faith. Have they not done well for me, hence speak well of the bridge that carries one safely over."

The picture with this article represents Shropshires belonging to the Pinehurst Stock Farm of Mr. William L. Wardwell, who has been a successful breeder and also a fortunate exhibitor.

"Sinbad," Americo-Arab Bred and owned by Mr. Herman Hoopes, Highland Farm, West Chester, Pa.

## THE AMERICO-ARAB

SOME years ago Mr. Randolph Huntington, now of Rochester, N. Y., created a new type of horse which he called the "Americo-Arab." The horses were handsome, symmetrical, fast and sturdy, with the best dispositions in the world. On the eve of what seemed certain success Mr. Huntington was balked by an unhappy misfortune for which he was in no wise responsible and his experiments seriously interfered with, his stud being dispersed in various directions. But Mr. Herman Hoopes of Highland Farm, West Chester, Pa., secured some of the Huntington stock and is still breeding this Americo-Arab. On this page is a photograph of "Sinbad" in his three year old form. This colt was sired by the pure Arab, "Naaman," his dam being an Americo-Arab or Clay-Arabian, as Mr. Huntington often called them, named "Clay Mocha." These horses are equally good under the saddle and in harness.

## THE OLD-FASHIONED MORGAN

WHEN the Morgan horse of Vermont was most famous he was not much if anything more than a pony. The efforts to improve him have in the estimation of men long interested in the breeding produced a type (if type it can be called) inferior in substance, symmetry, stamina and that general utility excellence which were so admirable seventy-five years ago. Some, however, have kept the faith in the oldfashioned sort of horse and have bred the type themselves while encouraging others to do the same thing. Notable among these have been Colonel


Morgan Stallion, " Rob Roy"
Owned by Mr. M. Roosevelt Schuyler, Nyack, New York

Spencer Borden of Fall River, Mass., Mr. M. Roosevelt Schuyler of Nyack, N. Y., and Mr. E. H. Hoffman of Lyndonville, Vt. They do not favor the introduction of the blood of other types for the purpose of getting more size. And when that blood happens to be quite heterogeneous-the hackney for instancethey scoff at such experiments and declare that it leads to sure mongrelization.

The picture presented here is of Mr. M. Roosevelt Schuyler's bay stallion "Rob Roy." He is surely of the old-fashioned type. He is not fifteen hands in height, but he is blocky, symmetrical and full of grace and speed. He has trotted a mile in less than 2.20 without training, except the ordinary road driving. He is thirteen or fourteen years old, but he still keeps his speed and the road is never too long.

His pedigree is most interesting to study. On every side and almost in each line of descent it goes back to "Justin Morgan," the founder. "Rob" was sired by "Ethan Allen 2d" a colt of Peter's "Morgan," out of "Nellie," who was sired by "Ethan Allen." "Rob's" dam was a daughter of "Starlight," out of a daughter of Peter's "Morgan." But the important thing in this horse's pedigree is that the degrading Hambletonian and Abdallah blood is absolutely lacking.

## A CONTRAST

IN the picture below we see two horses-one a mammoth and the other a miniature. The large horse is an imported Clydesdale stallion "Baron Doune." He was a winner of first prizes at both the Iowa State Fair and the Minnesota State Fair.

The little fellow, the hackney pony "Jupiter," is now twenty three years old. He was practically

"Baron Doune" and "Jupiter" Owned by Alexander Galbraith \& Son, Janesville, Wis.
unbeatable in the show ring, winning three years in succession at Chicago; he was also a great jumper and was never beaten at this game by anything of his size. Last autumn this pony's grandsire, "Mars," was still alive in England.
These horses were imported and are owned by Alex. Galbraith \& Son, Janesville, Wisconsin.

## ENGLISH BLOODHOUNDS <br> By J. L. Winchell

THERE is a prejudice, born of ignorance, as to the English bloodhound. He is a very valuable dog and very companionable. His appearance, to those who know him not, is against his popularity, but to those who have studied him, who have lived with him his face and his mien are both filled with dignity. The prejudice we have against him is that we naturally have against a detective. To hunt men seems repugnant to our nice sense of the proprieties. No woman would ever have fallen in love with Sherlock Holmes. But for a dog to hunt a man seems particularly repugnant and so we have in an idle and ill considered way put the bloodhound under the ban. Then again bloodhounds in modern times have been used to find criminals and other unfortunates, the criminal being the greatest unfortunate in the world. Bringing a man to justice is an obnoxious thing, for a dog to do it seems a bit unnatural. In the old days, when in England stealing was a capital offence and punished by death, it was held that a man who stole a dog was guiltless though a man who stole a dog's skin was guilty, for the learned judge charged that it was not meet that a man should die for a dog, but a dog's skin was property and the stealing of it was theft. Ideas may have changed in the intervening


English Bloodhounds
Mother, and daughter eight months old Bred and owned by J. L. Winchell
centuries since this ruling, but there is still a remnant of the feeling remaining and we are reluctant to put a dog after a man. This reluctance, however, is sentimental rather than practical. Should the general public obey the scriptural injunction and say to every rogue that preyed upon society: "Go and sin no more," we should soon have what the old time newspaper reporters used to call," a holocaust of crime in our midst." It is quite necessary to restrain the vicious and the dishonest. I take it the House and Garden is of particular interest in suburban places. Every one acquainted with current events knows that the suburban post-offices have been easy game for thieves for many years past. The thieves appear, blow up the safe, take out cash and stamps, disappear and there is an end of it. Now if in each such neighborhood there were a brace of English bloodhounds, a large percentage of such thieves would be run to earth. The bloodhound can take up a scent many hours old and follow it truly. He is the best and surest policeman in the world. But as a dog to be fond of ? I know none that excels him. He is a model of dignified fidelity. Then again he comes near to refuting Mr John Burrough's contention that no animal, save man, can reason; indeed I believe he does refute it. Take two instances within my personal knowledge. A bloodhound was lying on my hearth in front of an open wood fire. My little daughter sat on him and the long ears not being to her liking she concluded to trim them with a pair of scissors. The dog set up a mighty howl but did not move. Had he moved the little girl would probably have been thrown into the fire. Was it instinct or instant reason that restrained that dog?

Again, a bloodhound bitch had a new litter of puppies. Under such circumstances bitches are not kindly to strangers. Some friends were spending the day. A little girl escaped from the house and wandered into the kennel. The bitch did not know her, but she took the little girl by the petticoat and led her to the house. That was only instinct too, I fancy.

The English bloodhound must not be confounded with the bloodhound of the South, which is a mongrel with a strong admixture of foxhound and the dogs do not breed to a fixed type. I was the first importer ${ }_{L}$ of pure

## 272 Million Dollars

Life Insurance, Issued and Paid for during 1907, on over 1,500,000 Policies, is the Magnificent Record of

## The Prudential

## Total Insurance in Force, over

## \$1,337,000,000 ON Seven and One Quarter Million Policies.

Paid Policyholders during 1907, over 18 Million Dollars Total Payments to Policyholders to Dec. 31, 1907, over 141 Million Dollars Loans to Policyholders, on Security 7 Million Dollars of their Policies, Dec. 31st, 1907, over $\}$ Tax Payments by Company in 1907, over REDUCTION IN EXPENSES IN 1907, on a Basis of $\}$ 1 $1 / 4$ Million Dollars

1 Million Dollars
Equal Premium Incomes in 1905 and 1907, nearly $\}$
Gain in Insurance in Force in 1907, over 84 Million Dollars This was a Greater Gain than in 1906.


JOHN F. DRYDEN, President.
Home Office: Newark, N. J.



## Little Talk on Decoration

The room reproduced above is from Haddon Hall, one of England's most magnificent old buildings. Here the rich dark oak of the paneled wainscot in combination with the wonderful tapestry hangings and furniture covering produces an effect which is impressive and beautiful.

In this day of period furnishing, in many of the handsome homes of America reproductions of such rooms are desired. The unique stains made by Chicago Varnish Company finished with Dead-Lac will give an exact replica of the oak of the stained woodwork seen in the Old World cathedrals and castles.

One coat of Chicago Varnish Company's Baronial oak wood tint Number 325, followed by one coat of No. 20 Surfacer and one of Dead-Lac, will supply the rich soft brown tone to the wood which gives the appearance of age that is so desired.

In deciding upon the wood stain or finish to be used in any room, it is quite necessary to consider first the character of the room, and the draperies, wall coverings and furniture with which it will be fitted. When these are considered together an harmonious effect is insured.

Where advice is desired upon the selection of wood stain, finish or enamel to be used in combination with appropriate wall covering, draperies, floor coverings, furniture, etc. this will be supplied free upon request to all customers of Chicago Varnish Company. Where floor plans are sent, sample panels showing treatment advised for standing wo odwork and floors, together with samples of wall covering and draperies, will be forwarded. This method of laying before the client the full color effect of all rooms under consideration is found most satisfactory.

Margaret Greenleaf, Consulting Decorator for the Chicago Varnish Company, is located at 345 Fifth Avenue, Room 1007. Floor plans or rough drafts of same can be submitted to her. Exposures should be clearly marked on the plan and the character of the wood used for standing woodwork and floors mentioned. Miss Greenleaf may also be personally consulted at the above office, where samples of the wood finishings made by the Chicago Varnish Company may be seen.

```
35 dearborn avenue
chicago, ill. CHICAGO VARNISH CO. \(\begin{gathered}\text { ng vesey street } \\ \text { new yori city }\end{gathered}\) CHICAGO, ILL.
NOTE.-This offer is made only to those who use the materials of this Company.
```



IVERLAKESASH CORD
The difference in cost between the best and the poorest cord for a whole house, will not pay for the annoyance caused by one window hung with unevenly wearing cord, or the expense of repairing it when broken. Save annoyance of broken sash cords by having your windows hung with

SILVER LAKE SASH CORD
ESTABLISHED 1869.
H- Eict Our name is stamped on every foot.

English bloodhounds and mine were consigned to me by Mr. Edwin Brough, the best known breeder in Europe.

## THE BUSY BEE

THE value of $\$ 25,000,000$ placed on the annual output of honey puts this farm crop only slightly behind raw cane sugar, which had a valuation at the refineries of $\$ 28,000,000$. Comparisons with the output of sixty-four beet-sugar factories, which have a capacity of 49,500 tons of beets daily may seem odious. Yet the product of this coddled and fostered industry- $\$ 45,000,000$ was less than double that of the busy hive communities.

The bee in effect pays the interest on the public debt- $\$ 24,310,326$. Shall not the insect which Napoleon made an imperial emblem have some state recognition such as Massachusetts gives to the codfish in its legislative halls? As a matter of fact, the products of the New England fisheries, which have been the subject of treaties and international conventions and occasionally raised the spectre of war, amount in value to only half the bee's product.
At least the bee deserves a share in the national affection which is lavished on the hen. This industrious worker maintained its reputation during the year by giving poultry products a value of $\$ 600,000,000$, exceeding that of the wheat crop. That the dairy products counted for more than any crop except corn testifies to the importance of another of the humbler farm industries. The great proportions to which the lesser agricultural products have grown, the orchards with their minor item of 1,754,927 barrels of cider, the $\$ 113,000,-$ 000 worth of miscellaneous vegetables, the $5,000,000$ tons of cottonseed, once plantation waste but now furnishing the equivalent in value of seven 20,000 -ton battle-ships, make a nature wonder story of never-failing interest. - The New York World.

## SUGGESTIONS FOR THE MONTH <br> (Continued from page 104.)

THE GARDEN
your dealer in fertilizers or seed cannot furnish you with shredded cattle manure it is suggested that correspondence be had with the Pulverized Manure Company of Chicago. There may
(Continued on page 12. )

anything and everything required for garden and grounds, formal or informal. If a tree, a plant, a shrub, or a vine has been found worth while in this country, you may procure a stock of it from

## Biltmore Nursery

In the extensive landscape and forest plantations of Biltmore, covering a period of over twenty years, there have been the fullest and most vigorous tests of quality. Everything offered by Biltmore Nursery stands approved by experience, and may be planted with assurance.
Send your name and address for a copy of the famous Biltmore
Nursery Catalog-the world's greatest production in the line
BILTMORE NURSERY, Box 133, BILTM0RE, N. C.

## Garoen ffurniture

## Plan Your Garden for the Future

Settle your ideas of what you want to do or intend to do. Construct your plan and work with that ultimate end in view.

Where the Garden Scheme permits of Formal treatment, the Terrace, Balustrading, Steps and Fountains should be planned at one time.

Most Garden pieces are stationary. A Wall Fountain that would go well with your Garden now, may not be at all appropriate finally.

If at present you only need a vase to break the monotony of the wall, or a Sundial Pedestal for some plot, or possibly a Table or a Bench for the Tennis Court, which afterwards would be used to help out the Pergola yet to be built, purchase these pieces with the ultimate scheme always in mind.

The Erkins Studios have every facility to help you, or to collaborate with your Architect in the planning of your Garden, and in our Studios we show the most complete collection of Garden Furniture. If you are interested in furnishing your Garden write us.

## $\mathbb{C h e} \mathfrak{C r k i n s}$

5 đal. 15tb etteet,


## THE WORLD'S FINEST NURSERY PRODUCTS

Every Spring thousands of lovers of Roses are disappointed in not getting the kinds and varieties desired. By placing orders now we will reserve the plants for delivery in Spring. We have for Spring a larger quantity and variety of Roses, in strong 2 -year-old field-grown plants, than we have ever offered in previous years.
We have splendid blocks of handsome straight-stem Norway Maples, Oriental Planes, Pin Oaks, and other trees for planting in every location.
We have many hundreds from 5 to 12 feet tall, in all the finest and handsomest varieties. The specimens now growing in our Nurseries are conceded to be the finest ever produced in America.
Hedge Plants
We have them by the hundred thousand in our Nursery. We can supply any quantity.
We have them for every place and purpose: Japanese Wistaria, Dutchman's Pipe, Clematis, Honey suckle, Boston Ivy, Virginia Creeper, Euonymus, Ivies and the beautiful quick-growing Japanese Kudzu Vine.
We have the most complete collection of these popHardy Plants ular favorites in the country. Our Landscape Department makes a specialty of Old-fashioned Gardens.
Visit Our You will find two hours walk in our Nursery, bealthNursery ful and interesting.
Our Illustrated General Catalog

Tells you about the above and many other interesting things requisite to the Garden.

BOBBINK \& ATKINS,
Nurserymen and Landscape Architects RUTHERFORD, N. J.

> $\checkmark$ HE delicate tracery of the work of the Brothers Adam executed in metal when well done is worth while.

A little portfolio containing examples of Ornamental Hardware in many schools will be sent on request.

## The Yale $\mathcal{E}$ Towne Mfg. Company 9 Murray Street, New York <br> Chicago <br> San Francisco



Figure it out:
A larger heating plant than your house should require - more heat, more coal, than your house should need; againstone small sheathing expense, a smaller (less expensive) heating apparatus, and a smaller coal bill, year by year.
Sheathe your new house with a good sheathing it means a great saving. The one good sheathing is Neponset paper.

## NEPONSET <br> SHEATHING PAPER Keeps Houses Warm

It seals the walls against all draughts. Less heat is required because the heat stays in the house. It cannot leak out. You get 100 per cent. on your fuel expense. Insist on Neponset waterproof sheathing paper and see that it's used.
Write our special Department of Building Counsel for free samples and advice on any building subject. We are helping many; we can help you. Write now.

Building Counsel Department

be other houses at Chicago or in other Western cities manufacturing similar fertilizers, but if so the information is not at hand.
$\therefore$ A liberal use of proper fertilizers will more than recompense for any outlay in purchase price or time and trouble in application. This will be shown from the early spring until the frosts of winter claim all vegetation in increased growth and beauty of foliage.

## THE EDITOR'S TALKS

(Continued from page 105.)
A very attractive effect is obtained by using a floral overhead with plain or two toned stripe on the lower wall. Where the plaster is to be tinted, as in the case of a new house where the walls have not yet settled, or where the owner is prejudiced in favor of sanitary wall tints, the general scheme for the room may be much improved by a papered ceiling, the paper extended to the picture rail, or where no picture rail is used a paper showing garlands of flowers may be se-lected-the lower edge cut out following the design. This irregular edge can be applied directly to the plastered wall with pleasing results. Where a floral side wall is used the ceiling to the picture rail should be white or tinted in some light plain color harmonizing with the wall covering. Many attractive bedroom papers may be found as low as twenty-five cents a roll of eight yards. It is not well to buy a cheaper paper than this, as it is impossible to find them in at all permanent colors. Very attractive papers for the nursery are now on the market and may be purchased at much more reasonable prices than in the past.

In choosing the new wall covering, if the portières to be used in the doors show decided figures no more pronounced design should be allowed in the paper than a two toned stripe, or if the carpet or rugs show much of figure the same rule should hold. In all rooms there should be some plain, unfigured spaces or massed color upon which the eye may rest.

## CORRESPONDENCE SELECTION of tiles

Would you kindly give me some advice in regard to the choice of tiles for my new home? I have open fireplaces in my library, living-room and den. The library is dark oak wood-
in writing to advertisers please mention Housie and Garden.
work and I should like to make the walls yellow. The dining-room is of mahogany woodwork with high wainscot and about twenty-four inch frieze. The den, which is practically a smok-ing-room and opens off to the library, will have the woodwork of oak stained with green. These stains have been your selection, therefore I feel I should appreciate further advice on the wall coloring and particularly the tiles to use in these rooms.
A. B.

Answer: I would suggest in your library (which I note your desire to make yellow) that you use eight inch tiles of tobacco brown color and dull finish. These should be chosen to harmonize with the brown of your woodwork. If the walls of this room are done in strong yellow, you will find this introduction of the brown tile to be more pleasing than any other color.
For the den with the green woodwork, I would advise dull tile in a shade of yellow harmonizing with the adjoining library wall covering. I would be glad to suggest treatment for this wall if you will inform whether it is your desire to use paper here and if there is a wainscot in the room.
For the dining-room with the high mahogany wainscot, I suggest that you use a tapestry paper or fabric from the top of wainscot to ceiling line. This should show a mingling of rich green leaves, and purple red plums on a tan background. The ceiling should be tinted a soft ecru.

FINISH FOR WOODWORK in bath-room
Can you advise me in regard to the best finish to give the standing woodwork in a bath-room which is not tiled ? The wainscot extends to the height of six feet, the wall above is rough plaster. Would you consider it advisable for me to use tile on the floor ?

Answer: There is a new material on the market for the finish of woodwork in bath-rooms, kitchens and any portion of the house where there is much of moisture of heat or where substitute for tile is desired. This material has a fine high gloss and a surface like glass. It can be readily applied by a good workman and shows no brush marks in application. Tile are very satisfactory for the floor of a bath-room. If you will send me a self-addressed envelope,


## Keeps Your Spark Plugs Clean

Zerolene, the new non-carbonizing oil, ends all the troubles of carbon, frost and friction in gasoline engine lubrication. Gives perfect lubrication in any gasoline engine, regardless of type or temperature. This oil is produced in only one place.

## ZERNLEIE Lutiaiaing OIL

leaves practically no carbon deposit, and "works" with absolute uniformity in zero
weather or midsummer heat. Put up in sealed cans with patent spout that prevents can being refilled. Remember the label shown in cut, and the non-refilling feature which prevents substitution of inferior oils.

STANDARD OIL COMPANY


## How to Avoid Paint Waste-

Two-thirds of the cost of painting is in the labor.
It costs more to put-on a poor paint than a good one-
Because poor paint won't work so well under the Painter's brush-won't spread so easily or evenly.

And you can't get as good a job.
The poor paint won't cover as many square feet to the gallon as "High Standard" Paint-the good paintwill cover-
And won't last anything like as long.
Now, the best paint-

## Lowe Brothers High St andard LiquiidPaint

Costs only a little more per gallon than the poor paint-It takes fewer gallons of "High Standard"' Paint to cover the job-

And the total cost for enough "High Standard" Paint to do-the-job will be less than the total cost for enough of the poor paint. It takes less Painter's-time to put-on "High Standard" Paint-
And "High Standard" Paint lasts from two to four years longer than the other.
There's a "High Standard" Paint for every purpose-for both exterior and interior work. That "Little Blue Flag", on every can is your pro-
tection. Write for free Booklet "Attractive Homes and tection. Write for free Book let "Attractive Homes and
How to Make Them." If you request, will include Color Cards showing latest fashions in combination.
The Lowe Brothers Company Paintmakers-Varnishmakers 450-456 E. Third Street, DAYTON, OHIO New York Chicago Kansas City


Do you want a good refrigerator? One that is not an ice eater-one that will soon pay for itself in saving
on ice bills? Send us the coupon below, and let us tell you why the McCray Refrigerator will save you money on ice bills-and why you should not entrust the health of your family to an ordinary refrigerator. Prominent physicians, hygienists, and experts on
sanitation, have repeatedly warned the public that sanitation. have repeatedly warned the public that
much of the illness of children can be traced directly to zinc-lined and unsanitary refrigerators. Zine corrodes and forms oxides that poison milk and other food. Isn't it worth while for you to study the refrigerator question, and learn something about the hygienic

that are endorsed by physicians, hospitals, etc., and are used in thousands of the finest residences, clubs, hotels,
public insututions, etc. ? They are lined with White Opal Glass, Porcelain Tile, or White Wood, and have a perfect circulation of pure, cold, absolutely dry air. McCray
$\mathrm{R}_{\text {a }}$ geerators are always sweet, clean and perfectly dry $-\mathrm{M} . \quad$ in fact that damp salt will soon dry in them. $\mathrm{M}, ~$
imme_ Refrigerators are built in all sizes ready for
 $\begin{array}{lc}\text { Every ri } & \text { erator is guaranteed to give lasting satis- } \\ \text { faction. is } & \text { s tell you how easily Miccray Refrigera- }\end{array}$ tors can be s, ranged to be iced from the outside. Send Us This Coupon
and let us send you free our 40 page illustrated
catalog that explains why McCray Refrigera-
tors are superior to other refrigerators and
different from ordinary ice boxes. Send tors are superior to other refrigerators and
different from ordinary ice boxes. Send
us the coupon now. McCray Refrigerator Co.
674 Mill Street, Company,
K944 Mil Stree
Kendallville, Indian 634 Mill Street,
Kendallville, Ind Kendallville, Ind.

Kendallville, Indiana,
Gentlemen:-Please senc
me your free Catalog of
McCray Refrigerators. McCray Refrigerators.

In writing to advertisers please mention House and Garden.


T${ }^{\top}$ HE life and desirability of an iron fence depend entirely upon its construction and whether it is galvanized. How true an alignment a fence will hold depends almost entirely upon how securely the posts are anchored. Our illustration shows at a glance the simple yet effective construction used with Anchor Post Iron Fences which has proved so popular.

We design, build and erect, when desired, fences, entrance gates, iron railings, etc., for estates, lawns, gardens and farms, each fencing especially adapted to its purpose.

Illustrated Catalog upon request.
Anchor Post Iron Works
43 Park Row,
New York City

I shall be glad to furnish you the name of the firm manufacturing this material.

## WALL TREATMENT

I have noticed in several of your Talks that you advocate allowing the walls of a house to settle thoroughly before papering. Is this absolutely necessary in all cases and what material would you advise me to use to tint the walls? Can I get a ready-mixed color which is permanent?

Answer: There are a number of wall finishes manufactured which are more or less successful. I am sending you the address of several manufacturers, also I send you some samples which have been supplied to me by one of these firms. These will show you very excellent colors which their product insures; and the finish is sanitary, the color lasting. Golden brown and sage green as well as the pale blue (for a bedroom), are particularly attractive.

EXTERIOR COLOR FOR A RESIDENCE
Kindly advise me as to the color in shingle stain and exterior paint I should use on the house of which I send you a photograph.

Answer: The roof shingles should be stained moss green. The side wall shingles of upper story stained golden brown. The lower portion painted a darker shade of brown; all trim, columns etc., ivory or deep cream.

I have requested several firms manufacturing paints and stains for the exterior of houses to send you sample panels or color cards.

## GARDEN CORRESPONDENC

(Continued from page 106.)
bloom, its best feature is its splendid rich foliage down to the ground, all the season through.
It is, however, subject to scale and should therefore be watched and cared for.
I will now jump from foliage and flower considerations and choose one for its berry effect-Lonicera bella albida, a comparatively new hybrid, • bush honeysuckle, one of the showiest 'shrub in fruit that I know of, branching to the ground. Its foliage is also good,
much better than the old-fashioned Tatarian bush honeysuckle.

In the next selection foliage and berry effect are equally divided-Viburnum lantana var. rugosum has heavy, large, rugged foliage and red fruit.
Spiraa Van Houttei, when well grown makes a good individual specimen, and is fine when in bloom, and the foliage is fair, except for a time after blooming, when it is somewhat marred by the presence of the fading flowers. All of these shrubs require a space of fully ten feet in diameter devoted to them, except the spiræa.
Xanthoceras sorbifolia and Buddleia variabilis both failed with me, being winter-killed. Hedysarum multijugum, also failed, but I may not have given it drainage enough. I have never grown the Scotch laburnum as I did not imagine it hardy enough to stand our climate, it is L. alpinum from the mountains of Europe, and is the hardiest of the family. Why not try a couple of plants each of these four kinds, planting in a reserve place and watching results ?

## PLANTS FOR A SHADY SITUATION

I have a shrubbery border facing northwest, and in full view of the house. The shrubbery lines are sinuous and have flowers beds in the rather deep bays facing the porch. I want to grow something in one of these beds that will stand some shade and give a good display of flowers throughout the season. What would you advise ?
L. A. P.

Presuming that there is no overhanging foliage at the bed in question, I would suggest planting started tubers of begonias, Duke Zepplin and Lafayette. They form strong compact plants eight to ten inches high and are free bloomers. The fowers are double and a rich scarlet in color. Of the two varieties I prefer the Duke Zepplin, but both are good. Plant them fifteen to eighteen inches apart and between them plant sweet alyssum. The situation is an ideal one for begonias, and the sweet alyssum will flower freely there.

The combination of the scarlet and white, when backed by the green of the shrubbery will be a pleasing one. Both belong to that class of plants that may be termed tidy in that they drop their faded flowers and always look neat. You can buy the tubers in the spring at


Until you try Creme Tacoma you will never know the pleasure and comfort that come with its use.
Creme Tacoma will soothe the skin and beautify the complexion.
It will prevent chapping and chafing.
It will smooth out wrinkles and crow's-feet.
Will remove pimples, blackheads, and all rough and disagreeable conditions of the skin, and renew and preserve a fresh, beautiful complexion.
Creme Tacoma contains no oil nor grease. It is absorbed instantly by the skin. It is pure and antiseptic. Just a sweet, wholesome cream that cleanses the pores, soothes and cools the skin, leaving it soft, smooth, natural and healthy. It will not promote the growth of hair on the face.
We will send you a trial jar of Creme Tacoma free. We want you to try Creme Tacoma. We want you to know by actual test the benefits that come from its use, and we want to send you a trial jar free. Write us to-day for this trial jar. We know you will be pleased with our cream, and that after trying the sample you will always want it on your dressing table.
Creme Tacoma is sold by druggists at 50 cents a jar. If your druggist does not have it, send us his name and we will make it easy for you to buy Creme Tacoma.
For men Creme Tacoma is a delightful after-shaving cream. Prevents all roughness and smarting.

## IRON CITY CHEMICAL COMPANY

313 Carson Street, - $\quad$ Pittsburgh, Pa.

## ....COUPON....

Creme Tacoma
the iron city chemical co. 313 Carson St., Pittsburgh. Pa. You may send me, absolutel. FREEE,
 atrini-size package Book of Beauty,
free copy of yur Bot Suggestions, Etc., Etc.
My dealer's name is.
His address is.
(Do not fail to answer in this .... whether your dealer does or does not sell Creme Tacoma-"Yes" or 'No.')
My Name. My Address.

## AMERICAN NURSERY COMPANY

COMBINING
FRED'K W. KELSEY, New York City.
F. \& F. NURSERIES, Springfield, N. J.
bloodgood nurseries, Flushing, L. I.
new Jersey and long island nurseries.
Hundreds of acres of the best grown TREES, EVERGREENS, SHRUBS, ROSES and HARDY PLANTS: AZALEAS, RHODODENDRONS, TRAINED SPECIMENS, BOXWOOD, FRUITS, VINES, Etc., at reasonable prices. Everything for Country Estates, Parks and Gardens: Beautiful 1908 catalogue now ready. Consultation and inspection invited. Complete estimates furnished.
SALES DEPARTMENT, 150 Broadway, New York.

## THE BARDSLEY

Improved 1904 Pattern

JOSEPH BARDSLEY, 147 , 101 18 Baxter St.
Boston, 19 Pearl St. Chicago, 86 Lake St. St. Louis, 404 Security Bldg.
Cncinnati. 3135 Epworth Avenue $\quad$ San Francisco, 519 Mission Street

The man who buys any other Typewriter always HOPES it will be as good as the

## REMINGTON

Remington Typewriter Company 110 S. Ninth Street, Philadelphia, Pa.

$\qquad$


## Perfect Columns

Koll's Patent Lock Joint Columns are masterpieces of architecture, perfect in classic proportions. Their mechanical construction is faultless. They are made of extra thick stock, perfectly seasoned, and are weatherproof, very strong and very durable. For interior uses they are made of every variety of hard wood. You cannot secure elsewhere as beautiful and substantial columns for all porch, interior, pergolas and garden uses.
Write to-day for our illustrated catalog P-19.

HENRY SANDERS CO.
860-1060 Elston Ave., Chicago
Eastern Office: 1123 Broadway, New York


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 noiseordinary hinges, and their action is noise-
less and perfect. TMade in W rought Bronze and Steel.
THE STANLEY WORKS Myrtle Street, New Britain, Conn,
New York Office: 79 Chambers Stree


Have you in your house one of our Brick Open Fire= place Mantels? You will find them in every country on this globe. You cannot afford to be without one. Send for our catalogue. Address:

PHILADELPHIA \& BOSTON FACE BRICK COMPANY 165 Milk Street

Boston, Mass., Dept. 46
a moderate cost and after potting them, start them into active growth in a greenhouse or hotbed, gradually hardening them off and planting out when all danger of frosts is past. If you have not got these facilities, get some florist to start them. While most any of the begonias would do well there, those I have named are the best. When cold weather injures the foliage, take up the tubers, dry them off, and place them in a paper bag and hang them up in some dry, frost-proof place. The sweet alyssum may be grown from seed or raised from cuttings, but are sold at a very low price in the spring by any florist.
morning glory "heavenly blue"
A few years ago I saw in California a wire fence covered with a morning glory they called Heavenly blue. I was very much impressed with its beauty and have attempted to grow it here, starting the seeds in the greenhouse, but while the plants grow vigorously, they do not bloom. Do you suppose the soil is too rich?
D. C. C.

Heavenly blue is the very appropriate name applied to the Ipomaa rubra carulea, meaning the red-blue ipomœa, the flowers being a lovely shade of blue when first open, fading to a red when closed and at their end. It is a plant that under ordinary cultivation requires a long season of growth before blooming, a condition which exists in California but not with us, and the frost cuts the vine down before it blooms.
You can bloom it however by confining its roots. Many plants, and this is one of them, do not believe in race suicide, and when their roots are confined, and as a consequence their food supply becomes exhausted, they seem to make up their mind that their days are numbered and if they are to perpetuate their species they must hurry up and flower and ripen their seed.
Start your seed in the greenhouse, planting in small pots, say a two and a half inch pot at first. Do not shift until fairly well pot-bound, then use the next size, making one more shift into a three and a half. In the meantime these pots had better be sunken in a box, in sand, to subserve moisture. When the weather is surely settled, say about June Ioth, you are ready to set in place. In none of the pottings are you to use any broken

In writing to advertisers please mention House and Garden.
crocks over the drainage hole at the bottom of the pot.
Make a box eight inches deep and six to eight wide, and of the required length, allowing six inches for each plant. Have the box tight at bottom and ends, except that you bore a few very small holes in the bottom, slightly smaller than a lead pencil. Sink your box to an inch below the soil, filling it with good soil, and sink the plants, pots and all, within the box. The plants will send down roots through the drainage holes in the pots. You should have a few blooms when set out and a fairly continuous show during the season.

NOTE.-In Garden Correspondence, page 7r, in the February typographical error. Mr. Egan was made to say: "keep the trench full of water until the ball is well frozen." This should read: " keep the trench free of water.

## SHEFFIELD PLATE*

THE above title is that of a very readable book, it being the latest addition to Newnes' Library of the Applied Arts. The work is by Bertie Wyllie who deals with his subject in a very exhaustive yet most interesting manner. It is divided into six parts or chapters. By glancing at the headings of these one may form an accurate idea of its completeness:

I-Fashion and Frauds.
2-The Discovery. The Inventor and the Pioneers.
3-How It Was Made.
4-Qualities and Methods of Judging of Them.
5-Makers and Marks.
6-Periods and Designs most prized.
The book is profusely and beautifully illustrated with one hundred and twentyone cuts of characteristic pieces delineating the best examples of the art.

## IN ENGLISH HOMES $\dagger$

FRESH from the press the second volume of this most sumptuous work is at hand. A careful résumé warrants us in expressing the opinion that it is fully up in every respect to the high standards set by the initial volume. The illustrations from photographs taken specially by Charles Latham include the architectural features and the decorative adornments of many of the most notable houses in England.

[^8]

No. 2143

## Cottage Book Case

## (A Suggestion)

$\mathrm{O}^{\mathrm{u}}$ UR Specialty is Cottage Furniture. Adapted to shore and country houses. Can be obtained unfinished or stained to suit the purchaser, and individual tastes may be gratified.

A request will bring pictures of 200 distinctive patterns.

Visitors are invited to inspect specimen pieces displayed in our warerooms.

## WILLIAM LEAVENS \& CO.

## Manufacturers

32 Canal Street $=$ Boston, Mass.


## A PERFECT GREENHOUSE

is one where each component part gives the highest efficiency.

Structure-ventilation-heating-work together to produce results and satisfaction.

Hitchings \& Company make and guarantee their greenhouses complete.

## Write us.

HITCHINGS \& COMPANY 1170 Broadway - New York


A Concrete Residence at Montclair, N.J.
D. S. Van Antwerp, Architect

Are you going to build? If so, why not of CONCRETE! It is inexpensive, fireproof, will not deteriorate with age, needs no repairs or paint, and is adaptable to any style of architecture. Our book

## CONCRETE COUNTRY RESIDIDENCES

contains photographs and floor plans of over 150 CONCRETE HOUSES, and should be of immense value to you in planning your house. These houses were designed by the best architects in the country and are of several different systems of concrete construction.

A copy of this book, 168 pages (size $10 \times 12$ ), will be sent express prepaid upon receipt of $\$ 1.00$
THE ATLAS PORTLAND CEMENT COMPANY 30 Broad Street, N. Y. Information Dept. NEW YORK

However familiar one may be with the beauty and lavish.taste displayed in the country mansions of England, still, the magnificent splendor of architecture, decoration, furniture and art objects presented in this superb collection of photographs-and illuminating letterpress description-may well astonish the most cultured, traveled and enthusiastic artist. To be familiar with all this work contains is to possess a knowledge of art in its several branches, which should prove most satisfying.

## Good Furniture at Moderate Prices

What to Buy and Where to Find It

$\mathrm{I}^{\mathrm{T}}$has been truly said that it is an art to furnish a house properly at a moderate price. There is no safer guide in buying than a reliable trademark. It is a guarantee of quality. Furniture makers of high grade would be unwilling to place their names on an inferior piece of goods, just as silversmiths would be unwilling to affix "Sterling" to spurious silver. The principle is the same in both cases.

Such a shop-mark as that of the Berkey and Gay Furniture Company is an indication of highest workmanship. Their name carries weight, whether the furniture be simple or elaborate. They have but one system; the same methods, the same machinery, the same careful inspection pertain to their furniture-making in all its branches. One piece of furniture has to be as good as another so far as material and construction go. Whether a piece be plain or ornamental, it stands for good work and lasting value.
How is it possible, it may be asked, for this firm to make good furniture at a slight advance over


Model from Berkey \& Gay Furniture Co., Grand Rapids, Mich.
the price asked for inferior work ? Because they have reduced furniture-making to a science. Because they have the best equipped furniture plant in the country, and because their name is a guarantee of excellence.

The purchaser of Berkey and Gay furniture can rest assured that he is getting the best possible return for his money, and before buying for his
home, no matter how modest, it would be well to take this fact into consideration.
Every piece of furniture that comes from the Berkey and Gay factory represents time, skilled labor, the best material, and the highest type of equipment. This is an age of specialization, and each department has its expert. A customer buying Berkey and Gay furniture can purchase for a lifetime for it is made to last.
Anything worth buying is worthy of care; buy the best that you can afford, and take care of it. Then your great-grandchildren will treasure your Berkey and Gay furniture as heirlooms.
The Berkey and Gay Furniture Company makes many costly pieces. Carving, inlay, and a great deal of handiwork necessarily render furniture expensive. But the point we would emphasize is this-that they do make simple furniture also, and at a remarkably low figure considering the quality. Such furniture is a great boon to people of limited means, for it is both beautiful and economical.

Berkey and Gay Furniture Company's brochure entitled, ". Fur-
niture of Character," gives an idea of their beautiful furniture niture of Character," gives an idea of their beautiful furniture. It will be mailed to those who are interested if they will send 15 . cents in stamps to partly defray the cost, to Dept. B, to this com-
pany at their Grand Rapids address.

THE AMERICAN NURSERY COMPANY
THE American Nursery Company has acquired all the real estate, property, business and good-will of the well-known F. \& F. Nurseries, Springfield, N. J., The Bloodgood Nurseries, Flushing, L. I.,-established 1790Frederick W. Kelsey, N. Y. City and the New Jersey and Long Island Nurseries. These old established and successful concerns will hereafter be conducted as branches of the Company under the same local management as heretofore. The Company with its extended Nurseries and complete assortments has now the largest facilities of any establishment in this country. With these advantages of economic production, of central location, and of unequalled facilities for distribution, and extended direct importations of Specimen Trees, Bay Trees, Boxwood, Trained Fruit Trees, etc. the Company is in position to furnish all varieties of fine hardy planting material in wholesale or retail quantities on the most favorable terms. Every requisite for the complete planting and decoration of Country Estates, Parks, Municipal Street Planting, Forestry Departments, Orchards, Lawns and Gardens, is thus available. Every effort will be made to insure the patrons of the former establishments the advantages these enlarged facilities provide. With hundreds of acres of well grown stock now ready for planting, new customers may be assured of liberal treatment. Inspection is invited: Also


DURING the long winter evenings, which are now at hand, in talking over the plans for the new home to be built in the Spring or for the alterations to be made, the question of the best fixtures for the bathrooms and toilets is one which must be decided sufficiently in advance of building, to be sure of having the goods ready when needed.
This important sanitary question has been solved by thousands of people, by the simple decision to use "Ideal" Solid Porcelain ware bathtubs, sinks, and laundry tubs, and either "Ideal" Solid Porcelain or "Impervio" Vitreous Chinaware Lavatories; while the closet bowl and tank should, without a doubt, be of the very best hard fire Vitreous China syphon jet pattern.
There is only one manufacturer in this country who makes all of the above mentioned goods, and who, therefore, can guarantee the same stable quality and durability throughout the fixtures. That manufacturer is the Trenton Potteries Co., Trenton, N. J.
The Company owns and operates six complete factories in Trenton, and is also represented in the Canadian trade by the Canadian Trenton Potteries Co., of St. Johns, Quebec.
The following letter we consider a testimonial, which will surely appeal to representative house builders and house owners, and we also have confidence that after your decision is that your Architect specify and your Plumber install goods of our make, you will fe $\in 1$ like writing us a similar letter, after having used the fixtures.

Trenton Potteries Co.
Gentlembi:-I would like to have you send me, if you will, one of those little pocket catalogs. I got one catalog
when I called on you and bought some tubs, but loaned it when I called on you and bought some tubs, but loaned it to the plumber, and now my family want to keep one of
these catalogs to show to our friends who look the house these catalogs to show to our friends who
over, as the goods are very beatiful. I have two of your tubs and three lavatories. Hoping that you will favor me, I remain,

Yours truly
ARCHER H. BARBER.
Let us mail you a small booklet of fine half-tone illustrations of our goods. You can have one of these books by simply addressing

## The Trenton Potteries Co .,

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

## HIGH GRADE PRESSED METAL SASH PULLEYS



Made with Plain Axles, Roller Bearings and Ball Bearings

Combination Groove for Chain or Cord CATALOG SENT UPON REQUEST

## The American Pulley Co.

29th and Bristol Streets PHILADELPHIA $\therefore \quad$ PA.

The final note of Comfort, Health and Beauty is added to your home with an equipment of snowy "Standard" Porcelain Enameled Ware in the bathroom, bedroom, kitchen and laundry.
Write for our beautifully illustrated book, "Modern Bathrooms," showing interiors of bathrooms and giving cost of fixtures in detail. Mailed for six cents postage.
Standard Sanitary M)fa. Co. Dept. 40, Pittsburg, Pa.


Detail of Faience Frieze, Exterior of Woman's Building, Carnegie Technical Schools, Pittsburg.

Palmer \& Hornbostel, Architects.

Supplied by
The Rookwood Pottery Co.
CINCINNATI
1 Madison Ave., New York

# - The Standard of Excellence - 


in Builders' Fine Hardware

With Correct Designs in all the Leading Schools of Art is found in the productions of

## P. \& F. CORBIN

N. W. Corner<br>Eighth and Arch Streets<br>PHILADELPHIA<br>FACTORIES<br>New Britain, Conn.

Interior view of the First Church of Christ,
icientist, Boston, Mass., in which we laid
o,ooo feet of Interlocking Rubber Tiling, in
solid color, to harmonize with the stone
nish.
Noiseless, non-slippery, restful to the feet,
nitary, extraordinarily durable. The finest
jor for use in public buildings, banks, offices,
eatres, hospitals, libraries, kitchens, laun-
ies, billiard rooms, bath rooms, stairways,
c., etc.
Samples, estimates, and special designs fur-
shed upon application.
Beware of infringers. Patented.
Manufactured solely by

## New York Belting and Packing Company, Ltd., <br> 91 and 93 Chambers Street, New.York City

```
HICAGO: I50 Lake Street.
i. Louis: 218-220 Chestnut Street.
Hiladelphia: in8-120 North 8th Street.
in Francisco:
AKLAND:
    IIth Str
STON: 232 Summer Street
idianapolis, Ind.: }229\mathrm{ South Meridian St.
```

Baltimore: in4 West Baltimore Street.
Buffalo: 600 Prudential Building. Pittsburgh: 913-915 Liberty Avenue. Spokane, Wash.: i63 S. Lincoln Street.
Sole European Depot, Anglo-American Rubber Co., Ltd., 58 Holborn Viaduct, London, E. C.
consultations regarding planting, sketches, or estimates for plans and planting complete.

The officers of the Company are: Fred'k W. Kelsey, President; William Flemer, Vice-President and 'Treasurer; Theodore Foulk, Vice-President; P. H. Goodsell, Secretary.

## BEAUTIFY THE HOME GROUNDS

THERE are many reasons why the home should be made more attractive without as well as within, but probably the one of most importance is the influence that beautiful surroundings may exert upon the minds of children. A well-kept lawn with shade trees, flowering plants and vines will unconsciously develop in the child's mind a love of home and of the beautiful in nature that may in later years repay many-fold the expenses involved, while bare and cheerless surroundings will engender a feeling of discontent as well as a lessened capability to appreciate the refinements of life.
The comfort of all occupants of the home should be considered. A leisure hour during the heat of summer may be spent with more comfort and refreshment on a shady lawn than elsewhere.
The women of the house, especially, appreciate and have a right to ask for cleanly and pleasant surroundings.

The value of the premises is materially enhanced by the judicious planting of trees and shrubs. The place in which a tree stands generally determines its value; if in a forest it may be worth ten dollars for fuel, if on the lawn it may add $\$ 100$ to the value of the place.

The matter of expense can scarcely be urged as a reason for the failure to make improvements in this line in country homes, as there need be but a trifling outlay of money.
Horses, labor, good soil and manure are all available on the farm, and native trees and shrubs may usually be found in abundance in neighboring fields and woods.
A definite plan should be formed before planting is begun. In order to meet with success in planting, it is essential to have a definite plan of procedure. A simple plan will answer; in fact, the simpler it is, the better it will be; but it must be explicit.-Frederick Cranefield, Wisconsin Experiment Station.-Home and Farm.

PROTECTS THE TREES
"Tree Tanglefoot" is an Effectual Bar to Insect Pests

ASTICKY preparation applied directly to the bark of trees, and known as "Tree Tanglefoot," has been used very extensively with great success in New England against the gypsy and brown tail moth, and in the California prune orchards against the canker worm. It will not injure trees, and is applied to make a band five inches wide and onesixteenth of an inch thick. No climbing insect pest can cross this. It remains sticky much longer than any other known substance. All who wish to preserve fruit or shade trees will find that the slight expense of "Tree Tanglefoot" bears no comparison to the benefit it will confer. It costs only twentyfive cents per pound, much less in greater quantities, and should be applied when the caterpillars begin to crawl. Any druggist or general dealer can supply "Tree Tanglefoot" and anyone can apply it, as no apparatus is required.

## THE BEST BORDEAUX

THE value of this mixture for a fungicide consists principally in the adhesiveness of the copper. The French experimenter G. Gastine reports many tests made with copper mixtures and solutions. His conclusions in a summary of his work show that of all the alkaline Bordeaux made by what he terms the American method (supposedly 5 lb . lime, 5 lb . copper sulphate and 50 gals. water) and the same to which molasses or linseed oil was added were the best, 90 to 95 per cent of the copper remaining on the leaves after washing. The adhesiveness of the copper was lessened when the ingredients were mixed in too concentrated form. Delay in application after mixing reduced adhesiveness but the mixture to which molasses was added was effective after forty-eight hours.-The Country Gentleman.

Our native Rhododendron maximum deserves planting because of its late flowering. It is almost midsummer before it blooms. The prevailing color is light pink to the bud, becoming white on full expansion; some are tinted purple. In its native haunts it grows to a height of 20 feet.-Florists' Exchange.


We want every reader of House and Garden to have a copy of our "70th Anniversary Garden Book." It is more than a mere catalogue. It is the acknowledged authority on flowers, vegetables, decorative plants, shrubs, lawn-every needful for the large country estate or a small city garden. Many leading colleges use it as a text-book.

The 70th Anniversary Edition "Dreer's Garden Book" has been enlarged to 248 pages.

Four color and four duotone plates, and hundreds of photographic reproductions of
Worthy Novelties and Dependable Varieties of Flowers and Vegetables.
Both the amateur and professional gardener can rely on the varieties listed as being absolutely the best strains that are grown.

We will send a copy without charge if you mention this magazine.

## Henry A. Dreer, 714 Chestnut St., Philadelphia



1908 the the 65 th $^{\text {Vearo of the }}$ BUCK whteLEAD<br>by Succeeding Generations of the American People.<br>(Is the Evidence Convincing?)<br>Manufactured with improved machinery and original formula by and original formula by<br>SAMUEL H. FRENCH \& CO. Paint and Varnish Manufacturers Established 1844. PHILADELPHIA, U.S.A

Ives Patent Window Stop Adjuster
Prevents Drafts, Dust and Window Rattling


The only Stop Adjuster made from one piece of metal with solid ribs and heavy bed that will not cup, turn or bend in tightening the screw. Manufartured only by The H. B. IVES CO. New Haven, Conn., U. S. A. (Fifty-page Catalngue Mailed Free.)
A REPUTATION
Built on QUALITY alone
ORCELITE

Has no compettor where the best
For specifications see Sweet's Index, Page 744, or get the Porcelites Book. Section E.

THE THOMSON WOOD FINISHING CO.
Makers of Enamels and Varnishes - Philadelphia
Do You Appreciate the Advantages in Using Tiling in Home Building ?

Its DURABILITY saves the costs of repairs and replacing. A tiled floor or wall never has to be oiled, varnished, painted or papered. Dirt or liquid matter of any kind will not stain it. The steel nails of the shoe cannot scratch or wear it.

Its SANITARY QUALITIES and the facility with which it can be cleaned gives assurance that the bath-room, kitchen, butler's pantry laundry, vestibule and other places where it is used will always be in a clean sanitary condition.

Its DECORATIVE POSSIBILITIES permit the execution in tiling of ceramic mosaic of any possible design or color scheme on the floor or wall
Tiling is fire-proof, germ-proof, waterproof, damp-proof and vermin-proof.
For interesting booklets on tiling, distributed free, write Information Bureau of the

## TILE INDUSTRY

318 Corcoran Bldg. Washington, D. C.

Send for our 1 go8 Catalogue of Seeds, Bulbs and Plants. rilles \& co., Dahlias a specialty. - -


## Water-Reducing Valve

When the water pressure is too high it causes splashing at the spigots, hammering in the pipes and sometimes bursting of the plumbing apparatus.

This valve will insure against these annoyances.
SEND FOR CATALOGUE
WATSON \& McDANIEL CO. 137 N. Seventh Street Philadelphia, Pa.


Mercer Boiler for Steam and Hot Water Heating

> Our Heating Boilers and Radiators

are made for the home where the Architect and Owner demand uniform heat in all weather.
The efficiency of our apparatus makes this always possible.

## MILLS SAFETY BOILERS

## THE H. B. SMITH CO.

Factory, Westfield, Mass.
728 Arch St., Philadelphia

## ABOUT ROSES

LIKE the majority of the flowers worth having, the rose, as a price for its beauty and splendor, demands care and attention. Left to itself many foes prey upon it from the first opening leaf bud till the last withered petal, marring its beauty and impairing its vitality, but given this attention, what an ample return is offered.
The essentials to successful rose growing are proper location and soil, quality of stock, pruning, cultivation, watering and watchfulness against the ravages of insects and diseases. All these contribute to the health and vigor of the plants and the familiar observer can readily determine whether the proper treatment has been given.

That any good corn land will grow the hardy roses is probably true providing other conditions are right, but the quality of the flowers will be just in proportion to the culture they receive. Roses are heavy feeders, and that seems a good, rich, deep, loam, fairly well retentive of moisture.
The red clay soils of New Jersey have been found to be admirably adapted to their growth. If the soil is shallow, sandy or gravelly, or if it contains too much clay, it is best to dig it out to a depth of eighteen inches and compost or fill in with a good loam soil. Good drainage is a necessity, as roses do not like wet feet, and will not thrive in a cool, damp place. Tardy starting in the spring may indicate ice-incased roots and poor drainage.

Roses grown out-of-doors, either in pots or open ground, should always be staked, even though they may be but a few inches in height. Wind frequently injures the roots of an unstaked rose.

The rambler roses are exceedingly pretty in combination-two of contrasting color planted together, so that their branches interwine. The red rambler may be associated with the yellow or with the white; but the pink rambler looks best with the pure white alone.

Turn down a large flower-pot on a sunny garden bed, pressing it in to mark a circle. Remove the soil inside, and substitute leaf mold and sand. In this space stick the cuttings closely, water thoroughly, and keep covered with the pot during sunshiny hours, raising it on each side with a bit of wood or flat stone to admit air. Lift the pot at night and
in dull weather. Sprinkle as often as needed to keep the soil moist, and after a month or so the slips will begin to grow-that is, many of them will. Let them remain a week or so longer, and then pot off into two inch or three inch crocks, giving rich earth.-Farm and Home.

## RETIRED FARMERS

MOST farmers make the mistake of retiring from business when they feel themselves getting old. The unhappiest set of men I have ever met are these same retired farmers and especially those who unfortunately sold their farms and moved to town in order to take it easy. They worked and saved for a good many years for the purpose of laying up happiness for old age, but they never learned that happiness cannot be stored up like grain in a bin. Somehow the weevils find their way to the granary and work destruction. The only happiness we are entitled to is what we gather each day as we go along and it seems to be very closely related to hard work.
The happiest men I ever knew were those who worked right up to the last day of their lives.-Farm Press.

## BIRDS VS. SPRAYING

$\mathrm{I}^{\mathrm{T}}$T looks very much as though the time was drawing near when we shall have to choose between our birds and spraying. Each year brings fewer birds and many varieties have almost disappeared. How seldom do we see our little friend the house wren, or yellow warblers. Yet ten years ago our orchards were filled with songsters.

Only the other day the writer was talking to one of the heads of the New York State Agricultural Department, who has a large farm with many acres of fruit trees, and he said the continual use of poisonous insecticides in spraying was rapidly destroying the birds. Last year, he went on to say, he had found nest after nest filled with little dead fledglings. Some of these he had sent to a friend to examine in order to find out if his idea that spraying was killing them off was correct. In every case sufficient poison was found in their stomachs to cause their death.

The result of this destruction is going to be that the more we spray, the more


## Peerless Rubber Tiling

Cushion Back

The Most Durable and Economical Floor Covering Made
Beautiful Designs
Effective Colorings
Noiseless, waterproof and non-absorbent
Peerless Rubber Tiling is made in large continuous sheets, and is impregnable to dirt and moisture.

It is sanitary, beautiful and a durable rubber floor covering.
Beware of cheap substitutions and imitations purporting to be sheet rubber tiling.

Send for our catalogue illustrated in colors.

## Prices on application

> Manufactured exclusively by

The Peerless Rubber Manufacturing Co.
88 Chambers Street and 16 Warren Street New York

## Landscape Architects and Engineers

Plans for the development of private estates, parks, cemeteries and boulevards made and executed. southern work a speclalty. Established 1856 P. J. BERCKMANS CO., Augusta, Ga.



## GARDEN POTTERY

ITALIAN FLOWER POTS
SUN-DIALS VASES
STATUARY BENCHES
WINDOW BOXES ETC.

CATALOGUE ON REQUEST
WM. GALLOWAY, 32d and Walnut Streets, Philadelphia

## A Lifetime Without Repairs

Asbestos "Century" Shingles will Outlive the Building without either Paint or Repairs



Illustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Illinois, Prof. F. M. White, Architect, roofed with Asbestos "Century" Shingles, laid French Method.

Exposed to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such, defy all changes of climates, and thus become greatly superior to other forms of roofing.

Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.

## ASBESTOS "CENTURY" SHINGLES REINFORCED ASBESTOS CORRUGATED SHEATHING

## FACTORS:

THE KEASBEY \& MATTISON CO., AMBLER, PA.
we will have to spray. As soon as man succeeds in substituting artificial methods for natural, Nature withdraws her support. If we love the birds and want them, we shall have to make provision for them by planting some trees for them, and taking care that they are not sprayed with poisonous mixtures, such as Paris green and arsenate of lead. Many may be tempted to laugh such a plan to scorn but it takes no wise man to prophesy that unless something of this sort is done the next fifty years will find our homes birdless, and our grandchildren will have to go to the museums of natural history to see the songsters "whose voices are forever stilled."-Country Gentleman.

## FREESIA CULTURE

FREESIAS have been grown to over two feet in height, each pot displaying thirty or more fine clusters of bloom, by treating the bulbs as follows:

Well-ripened bulbs are secured early in August, and each dozen is given a sixinch or seven-inch pot. The soil should be composed of fibrous loam two parts, woods earth and sand one part, and ashes and well-decayed manure one part. Mix thoroughly, and let stand for a few days. Put a layer of broken crock in the bottom, then fill till within an inch of the top with the compost, firm moderately, and press the bulbs in, covering with a half-inch layer of the compost, coarsely sifted.

After potting water freely and set the pots on a layer of coal ashes in a cold frame in a place protected from the hot sun. When the bulbs become active give air freely, and water copiously as needed. In about six weeks after potting, the plants should be ready to remove to their winter quarters. Give plenty of sun and air, and encourage a sturdy growth by applications of drainage from the stable. This liquid fertilizer should be diluted at first, but increased in strength till the buds develop, when fertilizing should cease, and only clear water applied as needed. Keep the plants in a cool place, and avoid direct sunshine while blooming. After blooming water alternately with clear water and manure water, and give strong sunshine till the foliage ripens, then set in a sunny frame and withhold water. In July shake the bulbs out and keep in a paper bag till potting time-Park's Floral Magazine.


Hens are worth more than our gold mines. Did you know that?
Fresh eggs for the suburban and farm breakfast, as well as for the rest of mankind, make us all brothers.

The pedigreed hen is "coming to her own." Pure-bred stock will be an attraction in this new department of House and Garden. How to own sanitary poultry houses, what sort of fixtures to select, how to keep down lice, how to spray and disinfect poultry quarters, will be discussed correctly by well-informed workers who have made success on their own account. How to caponize, feed chicks, prevent disease; to get eggs, pick and market table poultry-all will be discussed.

## Bees

Flowers, Fruit, Poultry, Honey, make an attractive combination-profitable, too.
This department will enlarge on the value of honey as a food; the simplicity, ease, and fascination in bee culture; the value of bees as pollenizing agents, etc. It will give directions for amateurs, how to start to supply comb honey for the table. It will recommend bee outfits: hives, books, breeds of bees, etc. This department will certainly prove a money-maker for manufacturers of apiarian supplies. Photos of model apiaries, prominent beekeepers, etc., will increase the interest of each article.

## Dogs

Here is a department every one is interested in, whether the owner of a handsome collie, English bull, or a dog of "low degree." Photos of various breeds and cross-strains from the continent and in America will be features of this kennel department.
Well-informed fanciers will contribute practical articles on "How to know and purchase a good dog." They will explain their various natures and value, as watch-dogs, sheep-dogs, coach-dogs, etc.
Photos are on hand of certain types which will illustrate these talks. The advertisers who appear in House and Garden are certain to get reasonable returns. -


## Poultry

PARTRIDGES AND PHEASANTS
$\mathrm{T}^{\mathrm{HE}}$ celeebrated Hungarian and English Partridges and Pheas: T ants, the large Hungarian Hares. all kinds of Deer, Quail. etc, for stocking purposes. Fancy Pheasants, ornamental water fowl and live wild animals of every description.

Write for price list.
WENZ \& MACKENSEN, Dept. 27. YARDLEY, PENNSYLVANIA.


PIGEON BOOK Free of charge. Tells you things
about squabs you never knew bef about squabs you never knew before
and will interest you in one of the most delightful and interesting pastimes that you could invest in to-day In writing ask for special information about our Homers and free book wil
THE BEST SQUAB CO. Box H.

Delmar, Del.

## America's Leading Poultry Book PROGRESSIVE POULTRY CULTURE

## By PROF. A. A. BRIGHAM

A book that appeals directly to every man or woman interested in either the raising or breeding of poultry. One of the latest works, and unquestionably the ablest, yet written on this subject, dealing carefully with its every phase, and practical in all details. The volume is the result of actual experience, and the author's name is a guarantee as to its working value. As associate editor of the Western Poultry JourNAL and a careful student of the subject both in this country, Germany and Japan, he is qualified to write with authority. Fully illustrated, carefully indexed, with a total of 293 pages, cloth (in special mailing box), postpaid, \$1.50.

We are prepared to send this volume on receipt of price and will refund the amount paid if not satisfactory. A descriptive circular will be sent if desired. Orders and inquiries should be addressed to

## The Torch Press, Publishers CEDAR RAPIDS, IOWA



Kennels

## Spotswood Banker

A. K. S. C. B. 78171 FOR SALE Winner of 50 prizes, Mahogany brindle, splendid disposition. Also stud dogs, brood bitches and puppies, all from selected pedigree stock

Spotswood Kennels,
629 Callowhill St., Philadelphia, Pa.
 NEWCASTLE KENNELS, BROOKLINE, MASS.-Pedigreed and registered Scottish Terriers and bitches; all ages. Informatio always cheerfully given.

|  |
| :---: |
|  |  |

SPORTING AND PET DOGS FOR SALE.
Also Pigeons, Poultry, Rabbits, Pheasants, Ferrets, Cattle, Sheep and Swine. Send roc
for 88 page catalogue. Keystone Stato Kennels, I have recently bought all the dogs that were im-
ported by Mr. Shirley Marston, of Boston, for his Millworted by Mr. Shirley Marston, of Boston, for his Milling February Show of the Westminster Kennel Club, in New York. They include the following:
No. 1.
Odsal Swasher Ch. Moston Michael Vwashbuckler $\begin{array}{lll}\text { Odsal Swasher } \\ \text { K. C. S. B. No. } 52670{ }^{\text {a }} \text { Odsal Peggie } & \text { Vasey Maud }\end{array}$ Color, dark brindle ; weight, 50 lbs Parley Vous 1905. He is one of the best stock and show dogs in the country. Price, $\$ 350$. No. 2.
Catton Model Norwich Crib $\begin{aligned} & \text { Leicester Pansy } \\ & \text { Ipsley Rodney }\end{aligned}$ K. C. S. B. No. 24699 Puggle Regent St. Rajah

Color, light brindle; weight, 45 lbs . Born May 5 1904. She is one of the best show and brood bitches that can be found, and has won many "firsts" in the old country. Guaranteed a good breeder and mother. Price, $\$ 250 . \quad$ No. 3.
Red Sailor Thackeray Primstone Ch. Rodney Stone K. C.S. B. No. 66003 Forge Lady Belvedere Prince Color, red smut; weight, 40 lbs. Born Nov. 17 1906. Another good show and stud dog that can win in good company. Price, $\$ 150$.
No. 4. Bridgewood Sally
K. C.S.B. No. $\begin{array}{ll}\text { Dick Stone } & \begin{array}{l}\text { British Stone } \\ \text { Regina Stone } \\ \text { Leburnum Rose } \\ \text { Prince Albert } \\ \text { Lady Felto }\end{array}\end{array}$ Color, all white ; weight, 45 lbs. Born June 23, 1905. A brood bitch whose breeding cannot be beaten, and it is doubtful if it can be equaled in this country. She is a first-class breeder and mother, but not a good
show specimen. Price, $\$ 150$ show specimen. Price, $\$ 150$ No. 5.

Royal Stone Buckstone
Jolly Kitty
K. C. S. B. No. 65935
Jovial Nan Jing Penem
Color, dark brindle ; weight, 35 lbs . Jolly Mern Oct. 22, 1906. She is a brood bitch that is strong in the Stone blood and has had pups recently by Odsal
Swasher. Price, $\$ 150$.

GREAT DANES-These magnificent dogs are docile, sensible and obedient, but splendid watchers at night. We have some es
pecially handsome young stock at present. Best blood extant pecially handsome young stock at present. Best blood extant.
Ideal dogs for country place. Correspondence solicited. Ideal dogs for country place.
DANICKA KENNELS, Geneva, N. Y.
English Bloodhounds The most pertect family dog. Companion-
able, intelligent, affectionate. Natural man trailers, easily trained to find any member of the family or strangers; long registered pedigrees: always winners on the show
bench and on the trail. See Recreation for June. June.
Youn
prices, Hllustrated book, 2 stamps. Photograph 25c.



THE BROUGHTON SELF-CLOSING basin cocks have been in use for several years. many of the largest hotels and public buildings in the united states are equipped with these GOODS. ::: ::: MADE IN BRASS, NICKEL OR SILVER PLATED, AND IN SOLID SILVER-METAL.

EVERY ONE WARRANTED
Manufactured only by

## E. Stebbins Manufacturing Co. SPRINGFIELD: MASSACHUSETTS

Works at Brightwood

\(\left.\begin{array}{|c|c|}\hline U-Bar Greenhouses <br>

Designed and Built by\end{array}\right\}\)| Pierson U-Bar Company |
| :---: |
| Metropolitan Building |

JOSEPH P. McHUGH \& COMPANY OF NEW YORK: ESTABLISHED 1878: Will ship on receipt of $\$ 5.00$ (Monэy Order or N. Y. Draft)


THE BAR HARBOR CHAIR, (Natural Willow, Floss Cushion) Will mail for 25 c . in Stamps THE PORTFOLIO OF 1000 SKETCHES, illustrating Quaint and Unusual Willow, Mission and Upholstered FURNITURE OF ORIGINAL DESIGN. 9 W. 42d St., Opposite Library. (SIGN OF THE "POPULAR SHOP.")

For the convenience of subscribers our Subscription department will receive subscriptions for all magazines and periodicals at publishers rate.

HOUSE AND GARDEN

1006 Arch Street, Philadelphia

## PHOTO-CHROMOTYPE ENGRAVING COMPANY

| ...DESIGNERS... |
| :---: | :---: |
| ...ILLUSTRATORS... |
| ...PHOTO-ENGRAVERS... |
| THREE-COLOR PROCESS FOR |
| MAGAZINE, BOOK AND CATALOGUE |
| ILLUSTRATING |

## 218-226 SOUTH 11TH STREET

. . .PHILADELPHIA . . .

## SWEET PEA CULTURE

THE seed of sweet peas should be planted as early as the weather will permit, yet it is well to be on the safe side, and be sure that danger of hard frosts is past. I have grown the finest sweet peas in town for many years, and my method of culture is as follows:

I have a portion of the kitchen-garden quite near the house, which is devoted to the culture of early vegetables; this inclosed by a fence of poultry wire six feet high, which is strengthened at the base by a board one foot wide. Just behind this fence a trench one foot deep is dug, and in this a small quantity of well decomposed manure is placed, which is covered with a layer of soil, on which the seed is sown and covered to a depth of about three inches. Then, as the vines make their appearance, the soil is gradually drawn up around them, until the trench is filled and the vines are so deeply rooted that all danger of drouth is averted. Besides, as the vines are so near the house, the water from the weekly washing serves as a fertilizer, also helping to supply moisture, and the poultry netting furnishes the best possible support for the vines besides protecting them and the garden vegetables from the depredations of frost, stray animals and children.

If choice seed is purchased at the outset and the blossoms are gathered before seed is allowed to form, you need have no fears but that you will have a plentiful supply of lovely, sweet flowers throughout the season, and if your home is near a large town you may be able to earn a few dollars by selling the blossoms to others less fortunate than yourself, besides making many sweet gifts to your friends.-Farm and Home.

## MAKING VENEER IN WESTERN MILLS

 H W veneer is manufactured is a mystery to the majority of people. The industry is not only one of the chief occupations of Mattoon, Wis., but an exceptionally interesting one also.After a tree has been cut in the woods and brought to the mill on flat cars it is rolled into a pond near the mill. Logs are hoisted from the pond to a drag saw, where they are put into a steam box for at least twelve hours in order to soften the timber. This steam box is a large box directly behind the drag saw into which
the timber is piled. A two inch pipe containing holes through which the steam can escape passes through this steam box. At the end of twelve hours the timber is removed from the steam box and then comes the process called peeling. With spuds and axes the bark is removed easily, for the timber is soft now and red hot. It is then ready to enter the mill and be cut into veneer.
The peeled log is hoisted on a crane to the veneer lathe, and that is the last one sees of the log. When it once passes this lathe it comes out on the other side long, thin sheets of veneer. According to thickness desired, it is cut from the onehundredth of an inch to one-half inch thick and sixty-four inches long.
As the veneer leaves the machine it slides along on a table thirty feet in length. Ten feet from the end is a clipper, where it is clipped into different widths, an inch being allowed for drying. It is now ready for the drying process.
The drier is eight feet wide and a hundred feet long. It is a chain driven machine throughout having four sets of rollers. In order to heat this drier there are twenty thousand feet of one inch pipes passing through it above and below each set of rollers. The temperature must always be from 200 to 250 degrees. Veneer is put into the drier at one end, or, in other words, fed to the drier.
While the veneer slowly moves through the machine it is also dried, so that it is smooth and dry, but very hot. The men in charge of the veneer at that end always wear canvas gloves to prevent their hands from becoming burned and blistered, while the perspiration runs freely from their faces. It takes from fifteen minutes to two hours for veneer to work through this drier one way.
The second story of the local mill is known as the glue room. Here veneer is glued together for furniture factories, bordering panels for dressers and glass backing.
The machine known as the hydraulic veneer press is ten feet high. The veneer that has been glued for panels or glass backing is placed into this machine and by pressure of water in a tank beneath it slowly presses the veneer together until it is firm and dry. Then it is removed, packed and shipped.Milwaukee Sentinel.


## Free Advice on Decoration

THE unprecedented growth of the Correspondence Department of " House and Garden" has necessitated the opening of a new Department which will be devoted to the interest of those who are building, decorating or furnishing their homes.

Beginning with the new year "House and Garden" offers its readers a House Finishing, Decorating, Furnishing and Purchasing Service which is complete in detail and thoroughly practical. Full color suggestions for the exterior of the house will be supplied with recommendations of proper materials to obtain the results. For the interior, the treatment of standing woodwork and floors, the selection of tiles, hardware and fixtures will be considered and specifically recommended, with the addresses of firms from whom these goods may be obtained. Samples of wall coverings and drapery materials will be sent and selections of rugs and furniture made. When desired, the goods will be purchased and shipped to the inquirer; the lowest retail prices are quoted on all materials.

This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.


## Decorative Cloths

 THE HOLLISTON MILLSUsed by the highest class decorators in the country and found superior to any other wall covering

NORWOOD, MASS.
U. S. A.

Absolutely sanitary-will not hold dust-colors are fast, lasting and match perfectly.

```
New York Office No. 67 Fifth Avenue SEND FOR SAMPLE BOOKS-FREE
```



## MR. C. H. FORBES-LINDSAY

has been bitterly attacked because he dared, before President Roosevelt visited the isthmus, to say that our work at Panama has been well done.
The facts about the canal and its romantic history are ready for you in his book:

## PANAMA

The Isthmus and the Canal
Cloth, 368 pp., 16 illustrations. 2 mapa from latest survers. ONE DOLLAR NET
At all bookstores.
THE JOHN C. WINSTON CO., Publishers, Philadelphia

## BURIED IN A TREE

ONE of the most curious mausoleums in the world was recently discovered in an orchard at the village of Noebdenitz in Saxe-Altenburg. A gigantic old oak-tree, which a storm had robbed of its crown, was up for public auction.
Among the bidders happened to be Baron von Thummel. The Baron, who lives on a neighboring estate had ridden to the auction place quite accidentally. As no one seemed eager to help out the auctioneer, he started the bidding at a small figure. This aroused the peasants' suspicion; they thought there might be some value in this old tree, and the battle raged for an hour, until finally the tree was knocked down to the Baron for fifty dollars. Upon his arrival at the castle he told an old servant of his purchase, describing the tree and its situation. The old servant said he remembered attending the funeral of a Baron Thummel seventy or eighty years ago, and that the body had been buried in a 1,000 -year-old oak, then standing on a plot of ground belonging to the parsonage.

Investigation proved that the orchard had once been the property of the village church, and that at one side of the old oak was an iron shutter, rusty and timeworn, that the people of the village had always supposed to have been placed there by some joker or mischievous boys. This iron shutter proved to be the gate to the mausoleum of Baron Hans Wilhelm von Thummel, at one time Minister of State of Saxe-Altenburg, who died in 1824 and wished to be buried "in the 1,000-year-old tree he loved so well." The oak, which measured about ten feet in diameter, had for over a century been hollow, so it was learned, beginning at a point about five feet above its base. In this hollow Baron Hans caused to be built a sepulchre of solid masonry large enough to accommodate his coffin. The coffin was placed there, as the church records show, on March 3, 1824, and the opening was closed by an iron gate. In the course of time a wall of wood grew over the opening, which had been enlarged to admit the coffin and workmen, and for many years, it has been completely shut, thus removing the last vestige of the odd use to which the old tree had been put.-Exchange.

Vol. XIII.<br>APRIL, 1908

No. 4



Carved and Gilded Mirro of the Adam Period.

## The A. J. Crawford Company

LONDON
NEW YORK
251-255 FIFTH AVENUE and 1 EAST 31st STREET

Jacobean, Elizabethan and Queen Anne Oak Panelled Rooms.

The Largest Collection of English Furniture in America.

Old Carved Wood and Gilded Mirrors in the English Periods.

"The Little Shop"

## VERY FEW LEFT

## American Country Homes and their Gardens

Edited by John Cordis Baker, With An Introduction by Donn Barber
Sumptuously Illustrated

## Plans and Photographs of Houses and Gardens

THIS is a work of serious value, both for the house owner and the architect, as it contains drawings to scale of houses and gardens, in addition to the series of views from photographs specially taken for this work.
Many of the best examples in America are included, and some of great interest which have never before been published. A number of the plates are full page, and all are on such a large scale that the details may be easily studied. The pages care unencumbered with text, save for a brief title under each illustration.
The most recent work of distinguished architects is shown, including Messrs. Carrère \& Hastings; McKim, Mead \& White; Wilson Eyre; Frank Miles Day; Lord, Hewlett \& Hull; C. C. Zantzinger; Percy Ash; Charles A. Platt; Willis J. Polk; Donn Barber and others of equal note:

## To House Owners Present and Prospective

This work is both fascinating and invaluable. Every page is stimulating in suggestion for the improvement of the old home br the development of the new. It is not devoted only to the big estates but to those of moderate and limited size as well, and each is illustrated with equal care and fulness.
The book contains 250 pages printed in the house ${ }^{6}$ Garten manner on a specially coated paper, and is bound dark green cloth, lettered and decorated in dull gold and inks.

Orders Filled as Received Price \$5.00, Express Prepaid
THE JOHN C. WINSTON COMPANY
Publishers of HOUSE AND GARDEN

## FORMING STANDARD SHRUBS <br> SCTANDARD shrubs are not to the liking of everyone. Their artifi-

 cial appearance sometimes jars those who believe nature should be allowed full sway with such growths. For all this, there is a great call for these standards, and the demand will continue for there are positions where the use of standards is much in place, just as much so as are flowering pot plants in our conservatories and dwellings.In the case of shrubs, it is the best plan to cut to the ground some strong plants in early spring, and then select for the standard the strongest shoot of each cut down plant. With many shrubs no stake will be required to insure a straight growth. Very often it is the best way to let the shoot grow at will without pruning for the first season, topping it at the required height the spring following. At the same time the shoots should be cut off from the stem from the ground to near the top where the head is looked for.

Wistarias are beautiful objects when in standard form. Although a vine, the wistaria shoots become as tough as desired in time, quite able to sustain a head of branches and flowers. Any young one-year-old flexible shoot may be tied to a stake and in a few years will be stiff enough to sustain a head. And as in the case of shrubs, a strong plant can be cut down, and its young shoot tied to a stake as it grows. Wistarias are greatly appreciated when in standard form; they are then practically a weeping shrub; and everyone knows how much they are appreciated when in blossom.

There is yet ample time this season to take in hand many of the shrubs and vines desirable for the formation of standards.-Florists' Exchange.

## LUTHER BURBANK

## The Wizard of Fruits and Flowers

LUTHER BURBANK has attracted a vast amount of attention because he has attempted, and to a considerable extent succeeded, in doing something quite novel, at least in this country. He is breeding up plant, fruit and vegetable life. He is the godfather of the sugar prune, a giant in comparison to its ancestor, the French prune, of which California produced $150,000,000$ pounds of the dried product in a year. The

## Bath-room comfort

"Cleanliness is next to godliness," but requires a well-warmed bath-room for its full enjoyment, for only the hardiest men or women can bathe in a cold bath-room without endangering health.

make the bath-room comfortable, healthful, and inviting-give to the whole house a Florida-like climate. Bathing in a bath-room warmed by an AMERICAN Radiator is a pleasure-not a punishment.

In IDEAL Boilers you can use any kind of coal-slack or screenings-wood, coke, gas, oil-anything that will burn. These outfits for Hot-Water or Low-Pressure Steam heating save so much in coal and cleaning, in time and temper, that they soon pay for themselves.

The house is changed into a home, the family health is protected. As the outfit will not rust out or wear out, you get your money back if you sell your property, or $10 \%$ to $15 \%$ increased rental. Money put into these outfits is therefore an investment, not an expense.


Quickly put into OLD buildings, cottages, houses, stores, schools, churches, etc. - on FARM or in town, without tearing floors or walls or disturbing occupants. Prices now usually rule the lowest of the year-and in these less hurried months you get the services of the quickest, most skillful fitters. Don't put it off! Write us kind of building you wish to heat. Sales Offices and Warehouses in all principal cities of America and Europe. Valuable catalog sent free.

ADVANTAGE 13: The joints of an IDEAL Boiler do not
come in contact with the fire comer will they rust. Hence, an IDEAL Boiler outlasts the building-yet because built in sections it is easily increased or decreased in size if building is later altered.

Dept. 10.
CHICAGO


## HARTSHONN SHADE ROLLERS <br> Bear the script name of $S$ ewart Hartshorn on label

 Wood Rollers Get "Improved," no tacks required on Tin Rollers

# Money for Women 



The above amounts represent the earnings for February of five of our lady agents. Many others earned from $\$ 50.00$ to $\$ 125.00$ during the same period.
We want energetic women in every community to represent the House Beautiful Magazine, published in Chicago for eleven years. Exceedingly liberal terms to agents. You can earn a good income during your spare time, and a very large income by putting in all of your time. Write to-day for sample copy and terms to agents. Address

sugar prune ripens earlier and is of immense commercial value.

Burbank is also the maker of the seedless plum, which he accomplished by crossing two varieties of the Prunus triflora.

The white blackberry is another of the wizard of horticulture's triumphs. Sixty-five thousand bushes were used in test before he developed this phenomenon.

He has given to the arid deserts a new species of grass which will grow on the plains without water. He converted the cactus into an edible plant. The wild potato of South America also received his attention. From a single eye of this potato he developed 120 hybridizations and grew a large tuber of good quality.

Mr. Burbank has made endless experiments with the potato. He keeps on his farm at Santa Rosa no less than 10,000 varieties for experimental purposes. He has grown potatoes of every shape and color, round, long, short, square, pure white, pink, crimson, purple and yellow. Burbank potato seedlings have been shipped all over the world. The late Cecil Rhodes planted 10,000 of his seedless plum trees in South Africa, and now they have multiplied into the millions.
"I worked seventeen years to produce a raspberry free from all thorns-without a pricker in it or a particle of rusty brown," he said.

Mr. Burbank has eliminated the fuzziness and acid from the quince-in fact there is hardly a fruit or vegetable that has not been experimented upon by Mr. Burbank, sometimes to their improvement, sometimes unsatisfactorily. In the floral world he has ennobled many flowers.

He has grown a crimson poppy, a Shasta or larger growth of the ox-eye daisy, and he has produced various new colors of roses, notably his latest, the blue rose. These results in plant life are obtained through selection and crossing. He implants the pollen of one upon the stigma of the other. He gathers his selections from all over the world, and when the cross produces a seed he plants it, and experiments until he secures the desired result.

A strawberry is crossed with a blackberry, or one of a species with another. Sometimes thousands of plants will grow when but one develops the ideal desired. From 300,000 apple tree seedlings but
(Continued on page 4.)


## Horses

The woman's horse, the children's pony, the coach-horse, the trotter, the donkey, the farm-horse, etc., will all have their place in the excellent series of articles on "Which Horse?" soon to appear in House and Garden. These articles will stir up many an inquiry on harness, wagons, sulkies, road-carts, farm-wagons, saddles, etc.

Frequent reference will be made to the various needs for barn, stable and manger. Building plans for up-to-date stables, barns and out-buildings will be features, along with handsomely finished photos of wideawake animals, as well as pictures of children, women and the horse-lovers generally.


## Dairy

Many a proud owner of blooded stock is a regular subscriber to House and Garden. We're going to make him a closer friend-make him feel more brotherly, give him some vital points on blooded milkers; and get him to correspond with us; let him criticize, etc.

Here we shall stir up new investors in dairy stock. They will need all the new and old specialties in dairy lines; Stanchions, apparatus of various kinds, books, separators, aerators, etc., etc., Photos of handsome animals, stock farms, their owners. etc., will add interest and pleasure to each article.

We shall stimulate demand by conscientious and judicious advice along all dairy lines that will benefit subscribers and advertisers.


## Poultry

Hens are worth more than our gold mines. Did you know that?

Fresh eggs for the suburban and farm breakfast, as well as for the rest of mankind, make us all brothers.
The pedigreed hen is "coming to her own." Pure-bred stock will be an attraction in this new department of House and Garden. How to own sanitary poultry houses, what sort of fixtures to select, how to keep down lice, how to spray and disinfect poultry quarters, will be discussed correctly by well-informed workers who have made success on their own account. How to caponize, feed chicks, prevent disease; to get eggs, pick and market table poultry-all will be discussed.

## Bees

Flowers, Fruit, Poultry, Honey, make an attractive combination-profitable, too.
This department will enlarge on the value of honey as a food; the simplicity, ease, and fascination in bee culture; the value of bees as pollenizing agents, etc. It will give directions for amateurs, how to start to supply comb honey for the table. It will recommend bee outfits: hives, books, breeds of bees, etc. This department will certainly prove a money-maker for manufacturers of apiarian supplies. Photos of model apiaries, prominent beekeepers, etc., will increase the interest of each article.

## Dogs

Here is a department every one is interested in, whether the owner of a handsome collie, English bull, or a dog of "low degree." Photos of various breeds and cross-strains from the continent and in America will be features of this kennel department.
Well-informed fanciers will contribute practical articles on "How to know and purchase a good dog." They will explain their various natures and value, as watch-dogs, sheep-dogs, coach-dogs, etc.

Photos are on hand of certain types which will illustrate these talks. The advertisers who appear in House and Garden are certain to get reasonable returns.


# Kennels 

## Spotswood Banker

A. K. S. C. B. 78171 FOR SALE Winner of 50 prizes, Mahogany brindle, splendid disposition. Also stud dogs, brood bitches
and puppies, all from selected and puppies, all from selected
pedigree stock. pedigree stock.

Spotswood Kennels,
629 Callowhill St., Phlladelphia, Pa.


NEWCASTLE KENNELS, BROOKLINE. MASS.-Pedigreed and registered Scottish Terriers and bitches; all ages. Information registered Scottish Terrier
always cheerfully given.


SPORTIMG AND PET dOGS FOR SALE.
Also Pigeons, Poultry, Rabbits, Pheasants,
Ferrets, Cattle, Sheep and Swine. Send toc for 88 page catalogue.
Keystone State Kennels, Dept. MR., Reading, Pa.
GREAT DANES-These magnificent dogs are docile, sensible and obedient, but splendid watchers at night. We have some esIdeal dogs for country place. Correspondence solicited. DANICKA KENNELS, Geneva, N. Y.

## Poultry

PARTRIDGES AND PHEASANTS
THE celebrated Hungarian and English Partridges and PheasI ants, the large Hungarian Hares, all kinds of Deer, Quail, etc., for stocking purposes. Fancy Pheasants, ornamental water-
fowl and live wild animals of every description. lowl and live wild animals of every description.

Write for price list.
WENZ \& MACKENSEN, Dept. 27,
YARDLEY, PENNSYLVANIA.


## ORNAMENTAL LAND and WATER FOWL

Swans, Geese, Ducks, Cranes, Pheasants, Peafowl, Quail, Partridges and other rare birds from all parts of the world. All water fowl pinioned to prevent flying. No charge for boxing. Safe delivery of stock guaranteed.
I issue no catalogues or circulars, but would be pleased to quote prices on any birds desired.
G. D. Tilley, Box A, Darien, Conn.


The United States Army:
Its needs and its faults.

## Balloon Experiences of a Woman:

Mrs. Julian R. Thomas, wife of Dr. Thomas, the well-known balloon enthusiast, writes realistically of her many thrilling experiences in mid-air.

## General Furguson's Reminiscenses of West Point:

The General roomed with Fitzhugh Lee back in the Fifties.

## Stories By Robert Hichens,

Tom Masson and many other favorite authors.
The Easter Metropolitan will be full of good Literature and Art.
At all Newsdealers, 15c. a copy. \$1.50 a year.

## Che Metropolitan Magazine

3 W. 29th Street, New York City.

| One <br> Of the Best Novels $\qquad$ <br> For Sale by all Booksellers Price, - - \$r.50 THE JOHN C. WINSTON CO. PHILADELPHIA |  | "NOTABLE." <br> "One cannot rise from reading this book without feeling that it is a notable contribution to current -Philadelphia Inquirer. <br> "Thoroughly original, fresh, earnest, sparkling with wit and humor.' <br> "CLASSIC." <br> "A book which is destined to become one of the gems of modern novels. The plot is deep, strong, graphically told and will not be forgotten as that of many passing as a story of right against wrong which' is destined to bring about a great change in the child labor question. <br> -Birmingham News. |
| :---: | :---: | :---: |

one was selected. From 65,000 bushes but one white blackberry was chosen.

Mr. Burbank's work has been widely recognized, commented upon and not infrequently criticized. The Carnegie Institute of Pittsburg awarded him $\$ 10,000$ a year for ten years for experimental purposes.

Mr. Burbank is a living example of his own theory of transmission of traits. His mother's family included the famous horticulturists Ross and Burpree. From his father he inherited a bent for mechanical inventions. As a boy he lived on a farm and took a great interest in grape growing. He was born in Lancaster, Mass., and educated in the grammar schools, immediately going into the Ames Plow-works, but his love of Nature led him to take up experimental work and he went to California in 1875 to secure a suitable climate.

He started a nursery business to maintain his experiments; acquiring sufficient property and achieving notable success, he gave his whole attention to his great passion. Nature has been his only school, for he is not a book scientist. He lives modestly and is himself a man of the simplest habits and desires. "My aim is to benefit mankind, and if I can improve our fruits it is my duty to fulfill my destiny," he has said.

He is a tireless worker, a man of quick perceptions and keen discrimination. He eschews publicity and seldom leaves his farm, shutting himself up and protecting his time from all intruders. He is fifty-eight years old and a bachelor.

He never uses tobacco or alcohol in any form, believing them both detrimental to intellectual work. The sum total of his theory of plant life is, to use his own words, "That there is no weed which will not sooner or later respond liberally to good cultivation and persistent selec-tion."-L. 7 . Simpson in Technical World.

## WATERPROOF WHITEWASH

AFORMULA for a whitewash which can be applied to lime walls, and which afterwards becomes waterproof, so as to bear washing, is given by a German paper. Resenchek, of Munich, mixes together the powder from three parts of silicious rock (quartz), three parts of broken marble and sandstone, also two parts of burned procelain clay, with two parts of freshly slaked lime,
still warm. In this way, a wash is made which forms a silicate if often wetted, and becomes, after a time, almost like stone. The four constituents, mixed together, give the ground color, to which any pigment that can be used with lime is added. It is applied quite thickly to the wall or other surface, let dry one day, and the next day frequently covered with water which makes it waterproof. This wash can be cleansed with water without losing any of its color; on the contrary, each time it gets harder, so that it can even be brushed, while its porosity makes it look soft. The wash, or calcimine, can be used for ordinary purposes, as well as for the finest painting. A so-called fresco surface can be prepared with it in a dry way.-Invention.

## STARTING EARLY PLANTS

TO have the best success with vegetable and garden plants which must be carried under glass it is better to grow your own supply at home, unless there is some garden in your locality which can be depended upon to furnish healthy plants at the right time and of the varieties you want. Too often plants offered for sale are of weak, slender growth which make a poor start set in open ground. It takes time for them to become strong and they often produce poor fruit owing to their being of bad varieties.

The chief failure with most growers and with some experienced gardeners is, they coddle their young seedlings too much, causing quick, tall, but weak growth, by keeping the plants too warm and not giving them enough fresh air. Another cause of weak growth is allowing the plants to grow too closely together in the seed boxes before transplanting to beds. These slender plants are costly at any price and it is much better to have those grown in much more open beds.

Cabbage, cauliflower, brussels sprouts, kohl-rabi and lettuce require but little heat to start them into growth and as soon as the young plants are well started, should be given ample ventilation, except when there is danger of freezing.

As plants increase in size thin out or transplant so that they are quite open, and remove the sashes except during the most severe nights.

These plants go into open ground

## The Readers' Library

Of Illustrated Handy Pocket Editions of World Famous Books


1. The Type is as large and as clear as the type used in the usual large volumes of Standard Authors.
2. Unabridged. Each work is complete in one volume.
3. The Illustrations are an important feature. Each volume contains from eight to sixteen beautiful illustrations. These illustrations are not the rehashed old-fashioned pictures usually found in standard works but are new and drawn by prominent artists and interpret the stories with great fidelity.
4. The Paper is strong and opaque. In the volumes with a great number of pages imported Bible paper is used. This paper is far superior to India paper because it makes the print clearer and blacker, and the discouraging difficulty of turning the leaves of an India paper book is entirely eliminated.
5. The Binding. The volumes are bound uniformly in flexible leather, with gold stamping on back, and each volume has the author's autograph signature stamped in gold on the side of the book; they have gilt tops and ribbon markers.
6. For the bookcase. The small size of the volumes, the rich binding, the desirable titles, all insure these books a welcome in every library.
Price per volume, postpaid,
\$1. 00


## LIST OF TITLES

Adam Bede. By George Eliot.
American Notes. By Charles Dickens.
Barnaby Rudge. By Charles Dickens.
Bleak House. By Charles Dickens.
Chatnings, The. By Mrs. Henry Wood.
Charles O'Malley. By Charles Lever.
Child's History of England. By Charles Dickens.
Christmas Books. By Charles Dickens.
Cloister and the Hearth. By Charles Reade.
Danesbury House. By Mrs. Henry Wood.
David Copperfield. By Charles Dickens.
Dombey and Son. By Charles Dickens.
East Lynne. By Mrs. Henry Wood.
Great Expectations. By Charles Dickens.
Hard Times. By Charles Dickens.
Henry Esmond. By W. M. Thackeray.
House of the Seven Gables. By Nathaniel Hawthorne.
Ivanhoe. By Sir Walter Scott.
Jane Eyre. By Charlotte Bronte.
John Halifax, Gentleman. By Miss Muloch.
Kenilworth. By Sir Walter Scott.
Last of the Barons. By Lord Lytton.
Little Dorrit. By Charles Dickens.
Master Humphrey's Clock. By Charles Dickens.
Mill on the Floss. By George Eliot.
Martin Chuzzlewit. By Charles Dickens.
Mrs. Halliburton's Troubles. By Mrs. Henry Wood.
Never too Late to Mend. ByCharles Reade. Nicholas Nickleby. By Charles Dickens. No Name. By Wilkie Collins.
Old Guriosity Shop. By Charles Dickens. Oliver Twist. By Charles Dickens.
Pickwick Papers. By Charles Dickens. Pilgrim's Progress. By John Bunyan.
Reprinted Pieces. By Charles Dickens. Scarlet Letter. By Nathaniel Hawthorne. Scenes of Clerical Life. By George Eliot. Shirley. By Charlotte Bronte.
Silas Marner. By George Eliot.
Sketches by Boz. By Charles Dickens.
Stories and Sketches. By Charles Dickens.
Tale of Two Cities. By Charles Dickens. Talisman. By Sir Walter Scott.
Tennyson's Poetical Works.
Tom Brown's School Days. By Thomas Hughes.
Two Years Ago. By Charles Kingsley. Westward Ho. By Charles Kingsley.
Woman in White. By Wilkie Collins.
Wuthering Heights. By Emily Bronte.
OThER TITLES IN PREPARATION
THE JOHN C. WINSTON COMPANY, PUBLISHERS

Philadelphia, Pa.

## THE BARRIER

## By REX BEACH <br> Author of "THE SPOILERS'

First of all this new novel by Rex Beach is a big, buoyant bracing story of the last frontier-Alaska-a story with the dash and swing of "The Spoilers." This is one half of THE BARRIER. The other half is its triumphant love romance. Here the new book far surpasses "The Spoilers."

## THE BARRIER

 There is a new setting, too, but still in the virile air of the North. The new people whom Mr. Beach makes live before vou in the clean cut pages of THE BARRIER are intensely human.
## THE <br> BARRIER

More than one of them will become celebrities in fiction. The story? In the opening chapter of THE BARRIER the reader scents a mystery and is on the eve of a love affair. Old man Gale, a trader at Flambeau on the Yukon, the father of three children, mothered by an Indian Squaw, brings the story on with a rush. His eldest daughter, Necia, a beautiful girl of eighteen, is THE BARRIER'S heroine. Necia falls in love with, and is loved by, Lieutenant Burrell, a young Kentuckian, arrived with a handful of men at the post to act as mounted police. From this critical moment on there is not a dull page to the end. Some quaintly humorous characters are introduced also. In fact, the humor of THE BARRIER is another feature in which it surpasses "The Spoilers." Illustrated. Cloth. Price, \$1.50.

## THE JUDGMENT OF EVE

By May Sinclair. A novel of power-above all a story direct and painstaking. It is the kind of story, too, that one can't get away from. There is no problem and in this it is a refreshing change. A loving wife and a faithful husband, however, may still be subject to the tragic circumstances of life which have to do with hopes and ideals. This is the sort of story Miss Sinclair has told here, and told with intense and amazing veracity. The climax involves one of the most moving sentiments between a woman and a man that have ever inspired fiction or conditioned life itself. Illustrated.

## SANTA LUCIA

By Mary Austin. In this little community, not far from San Francisco, Miss Austin depicts real live people in simple fashion, and moves gradually into a powerful and rapid narrative -a genuine story. It is a pleasure to add that "Santa Lucia" is a book of unusual literary excellence and uncommon literary value as well. There is a distinction in Miss Austin's style that makes "Santa Lucia" one of the best written novels of the year. Post 8vo. \$1.50.

## THE GREATER MISCHIEF

By Margaret Westrup. This refreshing novel takes its heroine, a sensitive girl, through a harsh upbringing by a stern mother. Her refusal to meet the wishes of others in marrying the man she loves brings the story on with a rush. Bright with the spirit of youth. Illustrated.

## SERAPHICA

By Justin Huntly McCarthy. She is a duchess, and the story is the romance of her life in the brilliant days when King Louis XV was a boy, and a regent was on the throne. Seraphica is young. She is gay and saucy, too. A dainty comedy. Illustrated. Price, $\$ 1.50$.

## HARPER \& BROTHERS, Publishers



## HURLBUT'S STORY OF THE BIBLE

 from genesis to mevelationTold in Langunge that laterests Both old and Young.
RECOMMENDED Fer it firmation incertey
 DENOMNATIONS Ao the Buit Hoat on the sub)ect
Hon. David J. Brower-Can heartily commend it to all. Bishop Vincent-An in-
valuable aid to parents. Rev, Russell 1 . Conwall-Written by a master hand valuable aid 10 parents. Rev. Russell M. Conwall-Written by a master hand,
directed by a master mind. Honry. Butis, Prcs. Drew Theological Seminary The absence of doctrinal discussion makesit acreptable to all. Wr. Marten lavrence, Gen. Sccy. International S.S. Asson-Best thing of the Eind. The groatost aid to Pareats, Teachers and all who wish the sible story in a simplified aarrative
Beautilully printed and bound, 762 pases, nearly $\mathbf{3 0 0}$ half-toae
illustrations, 8 in colors. Price Only $\$ 1.50$.
Tor Sale By All Booksellers, or Sent Postpaid on Receipt of Price.
THE JOHN C. WINSTON CO., Depl. $0 \quad 1006$ Arch Street, Philadelphia HE JOHN C. WINSTON CO.". Depl. 0 INTERATIONAL" SERIES OF BIBLES.
PUBLISHERS OF THE "INTE
much earlier than tomatoes and other warmth-loving plants. Seeds can be planted two weeks earlier in the spring, as the growth is slower during the early weeks. If the young cabbage and other hardy plants are transplanted from a warm bed to a cold frame as soon as they are large enough to be handled, the warm, glass-covered bed can be used for starting tomatoes, peppers, egg plants, etc.

Tomatoes should be started six to eight weeks before the weather is warm enough to set them in the garden. Some may be sown in shallow boxes and started in a warm room and later transplanted in the garden. As well as plenty of air, the plants need a good root bed of loose soil, well enriched with stable manure. Nearly all of the seed houses publish leaflets or books giving good advice on the starting of plants. These can be had for nothing and should be studied carefully.-Farm and Home.

## NEW YORK BOTANICAL GARDEN NOTES

$F^{\text {ROM a recent number of the Jour- }}$ nal of the New York Botanical Garden we take the following items:
Professor Murrill illustrates and describes a serious fungus disease of the chestnut the ravages of which have done considerable damage to these trees in the Zoological Park and elsewhere, threatening the extinction of this valuable tree in and about New York City.
The spraying of young trees with copper sulfate solution, or strong Bordeaux mixture, in the spring before the buds open might be of advantage in killing the spores that have found lodgment among the branches during the winter, but the real efficacy of this treatment is so doubtful that it could not be recommended for large trees, where the practical difficulties and expense of applying it are much increased. Nursery trees should be pruned of all affected branches as soon as they are discovered, and the wounds carefully dressed with tar or paint or other suitable substance. Vigilance and care should largely control the disease among young trees. With older trees all dead and infected wood should be cut out and burned and all wounds covered without delay. Particular attention should be paid to water, soil
and other conditions of culture affecting the vitality of the tree; since anything that impairs its health renders it less able to resist fungus attack.

It is possible that the conspicuous ravages of the disease about New York City are largely due to the severe and prolonged winter of $1903-04$, during which many trees of various kinds were killed or injured. The chestnut is peculiar, moreover, in its power to sprout from the stump almost indefinitely, and most of the trees now existing in this region are descendants of trees cut for lumber many decades ago. This repeated coppicing cannot fail at length to impair the vigor of each new generation of sprouts and render them peculiarly liable to speedy infection and vigorous attack. - The Florists' Exchange.

## APOLLODORUS THE ARCHITECT

$I^{T}$T is supposed that Apollodorus was born at Damascus. He obtained the favor of the Emperor Trajan, and was engaged on the architectural and engineering works constructed during his reign. Among them were the square in Rome, with the column in Rome, a triumphal arch, a college, a theatre for musical performances, the Ulpian basilica, a library, baths, temples, roads, aqueducts, the great bridge over the Danube.
His Forum of Trajan excited the envy of Hadrian, and in consequence the architect was driven into exile on some frivolous pretext. The Emperor, in order to convince Apollodorus that he could easily dispense with his services, sent him a design for the Temple of Venus and Rome, and his opinion on it was asked. It had been prepared by Hadrian. Apollodorus answered that the emperor should have made it more lofty, and have introduced accommodation below the ground for the reception, whenever occasion required, of the machinery of the adjoining amphitheatre, and have imparted to the façade of the temple towards the Via Sacra a more imposing aspect. The statues, which were represented as seated, were said to be so disproportionate, that if the goddesses desired to stand up and walk they would not be able. As might be imagined, the artist paid for the freedom of his criticism with his life.-The Architect.

# THE STRAND MAGGAZNE APRIL. 1908. 

## The Pot of Caviare <br> A Complete Story Arthur Conan Doyle

THE PHYSIOGNOMIST AT THE ZOO. By A. E. Johnson.
With Illustrations in Color.
BABIES IN POETRY. With 16 Illustrations in Color.

## HOW NOVELS ARE WRITTEN.

A Symposium of Leading Novelists.
Illustrated with Portraits and Facsimiles of the MSS. of

Mr. Hall Caine
Mr. W. W. Jacobs
Mr. and Mrs. C. N. Williamson
Mr. W. B. Maxwell
Miss Winifred Graham
Mr. Horace Annesley Vachell
Mr. Max Pemberton
Miss Ellen Thorneycroft Fowler
Mr. E. F. Benson

MY AFRICAN JOURNEY. I.-The Uganda Railway. By the
RT. HON. WINSTON SPENCER CHURCHILL, M.P.

## SALTHAVEN, <br> By W. W. JACOBS. <br> With Illustrations by Will Owen.

THE CHARACTER OF THE POLAR BEAR. An Article with many Striking Illustrations.
THE ROMANCE OF AN "IMMORTAL." The Life Story of Denys Puech-Shepherd and Sculptor-who is regarded in France as the greatest sculptor of our time.
SNORKEY TIMMS, HIS MARKS............A Short Story by ARTHUR MORRISON.
THE PERSEVERANCE OF PAUL....A Short Story by MRS. JACQUES FUTRELLEE.
THE WHITE WIZARD...................... Short Story by EDWARD PRICE BELL. THE MAN WHO KNEW.................... A Short Story by MARGARET STRICKLAND. A LETTER OF MARK................................ Short Story by AUSTIN PHILIPS. BRIDGE STORIES. By W. DALTON.
A fine collection of anecdotes which will interest all Bridge players.
A CHILDREN'S THEATRE. By HAROLD J. SHEPSTONE. A fully illustrated account of the Children's Theatre in New York-the only institution of its kind in existence.
THE HOUSE OF ARDEN. By E. NESBIT.
CURIOSITIES.
Price 15 Cents. 120 Pages. Subscription $\$ 1.50$ a Year. _of all newsdealers and


For the convenience of our subscribers our Subscription Department will receive subscriptions for all magazines and periodicals at publishers' rates.


1006 ARCH STREET,
:-: PHILADELPHIA, PA.


## SOME USEFUL BOOKS FOR YOU

KITCHEN GARDENING. By Thomas Bridgman. This work comprises 152 pages, liberally illustrated. 12 mo . Cloth
FRUIT GARDENING. By Thomas Bridgman. Liberally illustrated. 12mo. Cloth, 50c. FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth
MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By Charles Barnard. 12 mo . Cloth
THE STRAWBERRY
Charles Barnard. 12 mo . Cloth - - - - - - - 40 c .
FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12mo. Cl., 40c.
THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia. any of these volumes mailed on receipt of price.

## PAPER INDUSTRY THREATENED

THE paper industry of the United States is threatened by the action of Canadian manufacturers of pulp and paper who have waited on the government in Canada and asked for the prohibition of the export of wood pulp. Manufacturers believe that without Canadian wood pulp American mills would be forced to either close or establish their plants in Canada. This would place them on an equal footing with the Canadian mills, and at the same time add to Canada's industrial importance.
An export duty on pulp wood as suggested would place it beyond the reach of American manufacturers. The Dingley tariff law provides that if any country imposes an export duty on pulp wood exported to the United States the amount of such duty should be added to the duties imposed by the Dingley law. The Dingley tariff on pulp wood is from fifteen to twenty per cent ad valorem. An export duty from Canada at the same rate would bring the tariff to over fifty per cent.

## ASPARAGUS OR LACE FERN

THIS is the name often given to $A s$ paragus plumosus. When the plants seem inclined to make one long vine, rather than a bushy growth, nip out the center when the shoots attain the height of a foot or eighteen inches. Sprouts will then appear from the roots or the nodes of the stem. If a plant fails to grow satisfactorily shift it into a larger pot, and add porous, fibrous loam for the new roots to penetrate. The great beauty of this exquisite foliage plant warrants all the care that can be bestowed upon it. It is really one of the most charming of foliage house plants, and should be one of the first chosen. It has no enemies; its culture is simple, and its propagation is readily affected by seeds, which come up with certainty after they have been in the ground for from three to four weeks.-Park's Floral Magazine.

The lovely flowering apples and crabs are readily increased by budding. The months of July and August usually find stocks in good condition for budding. Bud a good number of Bechtel's crab. -Florists' Exchange.

## STARTING A PANSY BED

WHO does not love pansies with their bright little velvety faces upturned to yours? Everyone ought to have a bed of these old-time favorites, and a bed once started will give pleasure for many a year. If you wish to start such a bed this year, it is well to start the seeds in the house in order to have the blossoms come in good season. If started in March, they should be ready to bloom by the first of July.
It is important to start with good seed. While you can get a package for three or five cents, you will be well repaid if you pay a higher price, by the greater size and variety of the flowers. Plant seeds in a shallow wooden box filled with rich garden loam. Cover thinly with a sprinkling of dirt and press down firmly with the hands. Put in a warm, sunny window and keep well watered, and soon the little plants will begin to appear. When the second leaves come, transplant if they are crowded at all.
As soon as the frost is out of the ground, prepare a permanent bed for them. It should be in a partially shaded location, for they do not thrive well when they have the hot sunshine all day. It should be well spaded up and a good quantity of well rotted manure added. You can hardly get it too rich. The little plants are quite hardy and they can be set in the open ground earlier than most seedlings. In transplanting for the last time, be sure to give each plant plenty of room, for they spread out enough to occupy quite a space, and as it seeds itself, new plants will start up between these another year. Plenty of water and plenty of fertilizer are two requisites. If nitrate of soda is added to water, in the proportion of one ounce to a gallon of water, and given them once a week, the stems will grow longer, and be an advantage when arranging flowers for the house. The flowers should be picked freely, for the more they are picked, the more they will bloom.

Before the first snow comes, in the late fall, give the bed some protection. I like best a few spruce boughs piled lightly over it. When these are removed in the spring, you will find the plants all ready to send forth their buds with the warm, sunny days, while the new plants starting up from self-sown seed will furnish bloom for the late summer and fall. -Farm and Home.


Designers, Illustrators, Photo-Engravers

Three-Color Process for
MAGAZINE, BOOK AND CATALOGUE ILLUSTRATING
218-226 South 11th Street

# Scribner’s Magazine The Trail of the Lonesome Pine 

By John Fox, Jr.

No serial story of recent years has won such instant recognition or appealed to so many readers.

Here is a story that is refreshingly romantic. The scene is the Kentucky mountain region, the land of the feud and "moonshine." There is plenty of exciting action and touches of sentiment and humor that grip the reader's heart. June is one of the most fascinating heroines in modern fiction.

In the April Number will appear the first chapters of

# Vera, the Medium 

By Richard Harding Davis

The first novel he has written for several years. It is in his best vein, full of striking situations and intensely dramatic.

It is distinctly a novel of to-day; a transcript of real life; a story of business greed, designing seekers after an old man's money, spiritualism as practised by clever charlatans; with a strong element of romance.

## Are you reading Scribner's this year? Send for a prospectus.

 25 Cents $\$ 3.00$ a YearCharles Scribner's Sons - New York

THE LARGEST ENGINES IN TIIE WORLD


Keep CHICUGO \& NLTON Trains On Time Between CHICAGO • ST. LOUIS• KANSAS CITY. "The Onlyway",

MOTION OF THE NEVADA LODE

AYEAR ago the Virginia and Gold Hill Water Company's employés repaired a disjointed pipe in front of $\mathrm{Dr}_{\mathrm{r}}$. Cole's drug store and put in a "sleeve" to permit of its expansion. Three days ago they were called upon to lengthen their "sleeve," and readily calculated that the "sleeve" had moved ten inches in one year. In some parts of the town the ground jams or compresses, and in other parts it expands and stretches. To accommodate this action of the lode the water company puts in"sleeves" in its fire and water-mains. The pipe columns that lead water to the electric motors on the 1,600 level of the Chollar mine are also provided with "sleeves." During the process of putting in those pipes the heat expands them to a considerable extent, and when the cold water is turned into them their shrinkage can be observed with the naked eye. It makes a difference of about eight inches in $\mathrm{I}, 700$ feet, leaving so much space between the foot of the pipe and its base. If it were not accommodated with a "sleeve" the action of the water in the pipe would tear everything to pieces. The Water Company's tanks on the side of Mount Davidson are all situated in the "country" formation - off of the lode. They don't move. Pipes lead from the tanks to the moving lode. The point of separation is as distinctly marked as the Chinese wall. The pipe comes to the bank separating the two formations, and at that point a double elbow is put in the pipe, and as the lode lowers away from the immovable country rock, the lower point of the double elbow accommodates itself to the movement. Virginia City Enterprise.

## THE CHIMES OF ST. GERMAIN L'AUXERROIS, PARIS

DWELLERS near the Louvre in Paris are treated twice a day to some old-fashioned music by the chimes of the Church of St. Germain l'Auxerrois. Formerly the bells played tunes four times daily, but as their mechanism went wrong they became silent for years. These chimes have been restored in the tower between the church and the town-hall of the district, where they were before, and they have been formally handed over to the city. The airs, which have been arranged by a (Continued on page 12.)


## HOUSES WITH A HISTORY

66 IONGLEAT," one of the few and purest examples of English Renaissance architecture, has been aptly termed by Old John Aubrey," the most august house in England." While it has not played so prominent a part in the annals of English history as many other houses, which can be classified under the above general caption, yet its magnificent surroundings, its store of rare treasures and art objects, entitle it to the first rank for the student of architecture or of art. P. H. Ditchfield, M. A., F. S. A., furnishes a graphic history of this most stately mansion, from the time when its construction was commenced early in the last half of the sixteenth century, down to recent times.

He adds also much interesting material relative to its furnishings, its great tapestries, its old and valuable paintings, its rich library of priceless volumes and the matchless decoration of the dining-room with Cordova leather. This will be found a most instructive and interesting paper.

## THE SMALL HOUSE WHICH IS GOOD

In the May issue will be shown the most picturesque and attractive home of Architect W. S. Hebbard, located in the "South Westernmost" city of the United States, namely, San Diego, Calif. Its situation on a bluff overlooking the bay gives it a commanding sweep as to views. Its stucco exterior, slightly pitched roof, wide extending eaves and well placed openings, with an artistic grouping of effects, makes in combination, a house which will be much admired and wholly suited for the mild climate of the Southwest. The color scheme as described indicates a most harmonious, restful and pleasing combination.

## A MODIFIED ENGLISH COTTAGE

Elise Gallaudet in writing of a charming house at Los Angeles, California, has some clever suggestions concerning the relation of the house to the garden and vice-versa. The consistent fitness of things she considers of first importance, and that the values may be enhanced each by the other if their proper relations are considered when being planned. The harmonious massing of features produces such marked effects in contrast with the commonplace, haphazard method of house and garden planning that the truths she states may well be considered by every prospective builder.

## THE HOUSE AND ITS FURNISHINGS

Mary Hodges in her article entitled "The House and Its Furnishings" offers many practical and helpful suggestions, both as to the selection of furniture and its proper setting and arrangement. Several interiors are illustrated in some of which the furnishings, though costly, have little connection with the spirit of their architectural setting, and the writer describes what would have been proper to produce more satisfactory results. This article will appeal particularly to the woman who is furnishing or doing over her home.

## DECORATING AND FURNISHING THE NURSERY

"Decorating and Furnishing the Nursery" is the title of an article prepared by Sarah Elizabeth Ruggles. This is replete with information to the woman who is interested in beautifying and making sanitary and attractive this most important room of the home; for the happiness and serenity of the child induced by surroundings free from discordant impressions, directly affect the disposition for all time. Simplicity and refinement, based on true artistic principles, are the essentials. Illustrations of new designs in nursery papers, as well as reproductions of furniture designed wholly for the little people are given.

## HOUSING THE AUTOMOBILE

With the article "Housing the Automobile" House and Garden is taking up another feature of interest to the suburban and country householder. The suggestions made in this article are eminently practical, the garages illustrated being the most inexpensive of their kind.

## SUGGESTIONS FOR THE MONTH

No more perfect demonstration of the truth of the adage, "A stitch in time saves nine" can be observed than is set forth in the direction and care of a house and its garden. To anticipate the proper time for getting the best results is the province of the above named department. The timely topics, for both the dwelling and the grounds surrounding it, considered in the May issue are full of meat and information.

## CORRESPONDENCE COLUMNS

If you desire information about the furnishing or finishing of your house, or about the laying-out or planting of your garden, you can have expert advice and assistance, without cost, by writing to House and Garden.


If you could buy a Mercede at about the price of a good American car would it interest you?
Maja is the embodiment of all the latest discoveries and best devices of the famous Diamler Works, makers of Mercedes.
Maja is very light, but will bear more hard work or abuse than any other car by reason of special new materials, never before used because of their high price.

Maja is a full-sized car in every dimension, appearance, power, speed and carrying capacity.

Sold direct, avoiding the middlemen's profits thereby, though costing more to produce (and sold for more at the factory) than earlier Diamler models, Maja is in price within reach of every user of automobiles.

Maja is now ready for demonstration. Worth a trip to New York.
AMERICAN BRANCH MAJA C0., Limited, 58th St. (just East of Broadway), NEW YORK
maja european touring service ships your car or sells Maja Cars for delivery anywhere in the world, rents cars for European Tours, arranges all licenses, maps, Touring Club Memberships or Customs formalities; secures chauffeurs, saves all trouble and assumes all responsibility. Branches and representatives throughout the world.

Maja Continental Touring Guide and Maps-the only complete source of information printed in English for those who tour abroad. Subscriptions now being received. Write for particulars.

## We are desirous of securing a number of copies of Houseg farden

for January, 1905; July, 1903; April, 1902; June, 1902, and July, 1902, and will pay 25 cents for each copy sent us in good condition.

## CIRCULATION DEPARTMENT <br> Fousebearden

conservatoire professor, are Lulli's "Marche de Turenne," Rameau's "Tambourin," and an old French ballad. These are heard at eleven every morning, and in afternoons at four o'clock. The carillon consists of thirtyeight bells with fifty-two hammers and comprising three octaves. The tunes are evolved by a clock-work mechanism, and the old wooden cylinder has been replaced by one of brass. Arrangements have likewise been made for special holiday airs, such as the "Marseillaise" on July 14, and Christmas chimes on December 25.-Boston Transcript.

WHY SOME STATUES ARE ERECTED M. JULES CLARETIE, in the 1. Paris Temps tells an amusing tale illustrative of the way in which decorations are sometimes obtained in France. M. Pegomas, or some other local busybody, yearning for a cross, a riband, or even the academic palms, calls on a rising sculptor and asks, "Could you do us a statue of Michelet for $£ 300$ ?" The sculptor replies, "If it is for a public square I think I could manage it for $£ 250$." M. Pegomas then posts off to the Ministry of Fine-Arts and relates how his fellowcitizens are anxious to adorn their town with the effigy of an illustrious man at a cost of $£ 500$ if the Government will only pay for the marble. The minister promises $£ 250$, and the trick is done. Should any subscriptions come in they go in advertisements, expenses, refreshments, and gratuities. When the statue is ready a member of the Cabinet, desirous of letting off a speech, comes down to unveil it, bringing, of course, a decoration for M. Pegomas. The sculptor is generally out of pocket, but he gets a good advertisement.-London Cbronicle.

## THE TALLEST TREE IN THE WORLD

THE tallest tree in the world, so far as has been ascertained, is an Australian gum tree of the species $E u$ calyptus regnans, which stands in the Cape Otway range. It is no less than 415 feet high. Gum trees grow very fast. There is one in Florida which shot up 40 feet in four years, and another in Guatemala which grew 120 feet in twelve years. This corresponds to a rise of ten feet in a year, or nearly one foot per month.-Exchange.

## Contents - April, 1908

| Practical Pergolas | Mary H. Northend . . . . . . . 112 |
| :---: | :---: |
| Some Long Island Country Estates: Part II . | Richard Schermerhorn, fr....117 |
| Respite | Claire Wallace Flynn ....... 120 |
| The Quest and Culture of Orchids: Part II | G. Bertrand Mitchell. . . . . . . 121 |
| The Garden of a Suburbanite | C. B. Wynkoop............ 127 |
| Vines and Vine-covered Houses | Charles Alma Byers........ $\mathrm{I}_{3}$ |
| The Shasta Daisy | Georgia Torrey Drennan..... 134 |
| Garden Phlox | W. C. Egan................136 |
| Some Old and New Annuals | W. C. Egan............... 138 |
| Suggestions for the Month | 139 |
| The House | Leila Mechlin .............. 139 |
| The Garden | 7. W. Hall. . . . . . . . . . . . . 140 |
| The Editor's Talks and Correspondence | Margaret Greenleaf.......... 141 |
| To Render Old Floors Serviceable | for a Cottage in the Country |
| Decorative L |  |
| Garden Correspondence | W. C. Egan............... 142 |
| The Stable and Kennel | Fohn Gilmer Speed . . . . . . . . 143 |


| Kindness in Horse Training | By Ernest C. Moses |
| :---: | :---: |
| Scotch Terriers | By J. A. Glasse | | The Virginia Razorback |
| :---: |
| Crossing Breeds |$\quad$ By John Gilmer Speed

Copsright 1908 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Office, June 26, 1901 SUBSCRIPTION PRICE, $\$ 3.00$ A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS
Remittances may be made by money-order or check, payable to the order of House and Garden
Subscribers should promptly notify the publishers of any change in address
Manuscripts and photographs suitable for publication in House and Garden
are solicited. Such as are not available will be returned, if postage is enclosed

PUBLISHED BY THE JOHN C. WINSTON CO. roo6-ıı6 ARCH STREET, PHILADELPHIA


# House and Garden 

Vol. XIII

# Practical Pergolas 

By MARY H. NORTHEND

IN planning the modern suburban or country residence, every architect and every houseowner takes into account the porch, the veranda, and the garden. In any one of these, or in them all, the pergola may enter into the scheme, for its possibilities are boundless, and it will lend itself charmingly to almost any scheme of decoration.

In its simplest form the pergola is a booth, an arbor or a mere trellis for the support of vines. The happy inspiration came to us from Italy, where it originated among the vineyards of the peasantry, and spread from them to the owners of lands and mansions, who were quick to perceive its beauty, and who changed the simple framework, upon which grapes might ripen, into an artistic creation of stucco or marble.

The name, itself, is Italian, derived from the older Latin word, pergula. It means simply an open arbor. Its most common form consists of a double row of columns, perhaps ten feet apart each way, supporting at the top a coarse lattice-work of square beams, over which vines are trained. In Italy, these climbers are usually grapevines, and the arbor furnishes a shady retreat in summer and a sunny walk in winter, after the leaves have fallen.

The Italian scheme of construction is to have the pillars substantial and the color light, in order that it may contrast well with the dark foliage of the vines. The walk is paved with bricks or with Italian tiles, and flanked at each side by
stately lilies or formal shrubs, while roses clamber up the posts, among the grape-vines. As to location, the pergola position, par excellence, is at the end of some walk which terminates in a cliff, from which may be obtained a fine and unexpected view of sea, or mountains, or river valley stretching away between the hills. The pleasing surprise which awaits the stroller enhances the charm.
In our modern days, the pergola has been adapted to all climates sufficiently warm that a part of the year may be passed in the open. We may follow the Italian ideals, if we will. They are sure to be artistic. We may also follow the Persian models, or the Indian; or we may modify them all, and evolve, from the resulting chaos, a plain and unpretending American pergola which shall harmonize with its surroundings. It will yield shelter from the passing breeze and a screen from the too fervid sun; it will furnish for your eyes a continual feast of tender green things growing, and of tendrils climbing ever upward toward the blue. Whether it may be a stately structure, along classic lines, or a rude trellis-work upon which vines may run riot, if those vines are well selected, and so trained as to fulfil their purpose, your pergola is sure to be "a thing of beauty", and "a joy forever."

The types and forms of the pergola are almost endless, and the materials used in construction differ almost as widely as the specimens
themselves. Occasionally one is built partly or entirely of concrete, and often a pergola is seen, in whose case one row of columns is omitted, the missing support being supplied by the garden wall, or by the end of house or out-building. This single sided pergola is particularly satisfactory in grounds where space is limited. It may then be placed at one end or at one side of the garden, where its covering of vines will render it an attractive summerhouse. It will need no furniture except a seat made of material


FIG. 2-MR. A. SHUMAN'S PERGOLA, BEVERLY COVE, MASS. that harmonizes with
that used in constructing the pergola; and even when the vines are bare and the garden buried in snow, it will furnish a pleasant retreat at midday, when the sun is bright.
The primary design of the pergola was to furnish a support for growing vines. It certainly appears to the best advantage when it is put to some such purpose. Yet the pergola shown in Figure 2 was
obviously planned to serve the purpose of ornamentation only. It is an American adaptation of an Italian ideal. We cannot deny that it perfectly fulfils its mission as it terminates the garden walk, and caps the bold bluff at the edge of the beach, with its unobstructed outlook seaward.

In Figure $I$ is shown an admirable specimen copied after Italian models, with rounded Doric columns of concrete,


Fig. 3-AN INTERESTING PORCH PERGOLA brick walk, privet hedges, and a delicate tracery of vines of the Clematis 7ackmani, which merely drapes the classic outlines, with a decorative effect, but which is not sufficiently heavy to veil any one of its attractions from our admiring gaze.

What a transformation is caused, in Figure 7, by the American adaptation of the Italian theme! Here we have the graveled walk, and the simple slatted settee. Great cedar posts furnish both uprights and transverse beams, firmly braced, to


FIG. 5-PERGOLA ON THE GROUNDS OF MR. T. JEFFERSON COOLIDGE, MANCHESTER, MASS.


FIG. 6-A RUSTIC PERGOLA. ANOTHER PART OF THE ONE SHOWN IN THE FRONTISPIECE
increase their strength, that they may uphold a wealth of trumpet-vine, moon-vine, and wistaria. There is no fear of too many vines here, for they will but increase the charm. It is quite practical to construct, at slight expense, pergolas similar to this one, by the use of cedar posts with the bark left on. The upright posts are stripped of their bark for about four feet on the larger end, which is to be set in the ground. This end is then covered with a preservative mixture of creosote and charcoal, and the posts are set. The rafters and crosspieces are made of similar posts, and the result is an artistic pergola which is charming from its very simplicity, when covered with grapevines and flowering climbers.

The position and arrangement of the pergola shown in Figure 3 is both original and charming. The pergola is elevated, so that its floor must be reached by steps, and this arrangement places it practically on a level with the porch and doorway, and converts it into an out-of-door living-room. It is flanked by artistic stone walls, and the whole design is exceptionally artistic. As in Figure 1 , the climbing vines are sufficiently heavy to be effective, while not so luxuriant as to conceal any of the fine architectural lines.

These porch pergolas are very satisfactory with their grape-vine drapery and varied effect in columns. The interesting pergola pictured in the frontispiece extends around two sides of a formal garden. The floor here is of flagstones, between which the grass has grown. The frame is of square beams with rustic posts for uprights, as well as for transverse and longitudinal poles. Potted hydrangeas line the sides, and the draping of vines is very heavy. Figure 6 presents the pergola at the second side of the same garden. Here the flagged walk is only about three feet wide, with a stone curb at each side, flanked by flower beds and potted hydrangeas. The walk ends in a short flight of stone steps, and the corner where the statue stands. The framew ork of the pergola shows more plainly here, as the vines have not yet covered the north side.

fig. 7-a pergola of artistic rusticity

The pergola pictured in Figure 5 stands at the rear of the house, not far from the entrance porch, and leads to a rustic, woodland road which ends at the beach. The walk beneath the trellis is covered with closely clipped turf, while the uprights are square beams, and the transverse poles are rustic posts. Wire netting serves instead of the usual longitudinal pieces. The posts are buried in rambler roses and other blossoming vines, while rows of hollyhocks adorn the outer sides.

These rustic forms are much admired to-day, since they show much of nature and little of art, which is just what we expect in a garden. And just here may be a proper place to make a few suggestions. No matter how rough and rustic the pergola may be, have a care as to its strength and durability. Massive strength is needed to uphold the weight of vines which you hope and expect, to cover the top. If possible, use uprights of rough stone, sink them in a bed of concrete, and let them not be less than eight feet apart across the walk. It is a common fault of pergolas to be too narrow, after the vines have grown, to allow necessary space. Let your wooden crosspieces be very stout, and let them project at least a foot in each direction, to break the deadly straight line. Old oak beams and rafters, taken from some old building which has been torn down, make excellent crosspieces. Strength is the main point to be considered. In a few years, when your vines are grown, you do not want to spoil them by stripping them from their supports, in order to institute needed repairs upon the woodwork. When strength has been secured, there is no limit to the modifications and adaptations to which a clever and artistic builder can apply the theory of the pergola, each suggested by the conditions existing in the particular garden which it is to grace. Where a pergola can terminate at a point commanding an expansive view the effect is doubled. So, too, when it rambles away without any seeming end into a shady woodland path which leads to some charming retreat where communion with nature may not be disturbed.

# Some Long Island Country Estates 

By RICHARD SCHERMERHORN, Jr.

PART II

THE Whitney estate is greater by considerable acres than that of the Mackay's. Its character is different to a great extent, in that the configuration of the country is much more variable, the stretches of open meadow and undulating landscape are much broader and more pronounced. Located on one of the highest portions of the estate, the residence, a most delightful, rambling, many gabled mansion, looks out over a broad expanse of meadow-land toward the ocean. For comfort and pure tranquillity a more satisfactory spot could hardly be realized. The front of the house is unbroken by drives or paths, the main entrance being at the rear, and clusters of the original trees have been preserved, in such manner, however, that vistas from the house itself are unbroken. Thus from a distance the house is almost indiscernible while even closer view gives it the appearance of practically nestling among the trees. On this estate Nature has been considerably let alone, and conditions are such that this is all to be desired. Owing to the great extent of the property many driveways have been built, the most
beautiful being the road to Roslyn which consists of one and one-quarter miles of winding, picturesque drive through the woodlands which enclose the northerly and westerly portions of the estate. On its nay this drive traverses the estates of the Mortimers and Stows, each in turn gaining the benefits, and through which conditions it has been known as the "party road."

As the Whitneys have always been know n for their devotion to horses, it is natural to expect to find this interest predominant here. A most extensive racing stable is on the property, which has sheltered in its time practically all of the Whitney notables of past days. This stable is over 800 feet long, and most substantially appointed. A mile race-track u as built several years ago for exercise, although it has lately fallen from use, and there has been laid out a fine steeplechase course. The other buildings are the old residence, coachman's house and stables, farmhouse and buildings, pumping station, superintendent's house and other minor structures. There is also an excellent golf course on the estate and a gymnasium


THE DURYEA RESIDENCE AND GARDEN


THE PARTY ROAD-WHITNEY SECTION
be located. The original idea was not carried out, however, of establishing this vista exactly on the central axis of the house, as the house location was later changed and the vista now, while perpendicular to the main axis of the house, passes on the side, thus differing from the usual arrangement on other estates. This passageway through the thick native timber is twenty feet wide, carpeted with an exceedingly smooth turf and bordered with a well trimmed privet hedge. Directly back of this hedge on both sides is a formal and regular line of tall cedars. The resulting effect has certainly formed a remarkable picture, the straight formal side lines, the velvety grass carpet and the considerable distance that has been obtained, producing an unusual and attractive contrast against the thick bordering forest of old trees. The house itself is formal in design, fashioned from those of the Louis XVI. period, and is built of brick with stucco of mixed lime and cement. The principal problem here was to blend the building with the landscape. By means of a latticed trellis bordering the formal garden which intercepts the long vista at a point about midway in its length, the leap
with.

The Mackay and Whitney estates are both fitted with all conveniences that any possible requirements could suggest. Each has a private pumping plant, sewage disposal and extensive drainage system.

The Duryea estate is located just beyond the southern boundary of the Whitney property and includes about eighty-five acres. With the exception of the residence and its surroundings the property has been developed unpretentiously, but even the natural features alone would place it in the first rank. The residence is located upon the high portion, and although at a considerable lower elevation than the estates on the hills to the north, the views from this point are still broad and unobstructed. Almost the first work done on the estate was the cutting of a broad vista through the woods on the knoll where the house was to


SERVICE ROAD-WHITNEY ESTATE


RESIDENCE AND GROUNDS OF MR. HARRY PAYNE WHITNEY
but very few will probably ever appreciate the real transformations that have been wrought and the careful study that has been given to bring them to their present state and to provide for their future growth. Who would ever guess that the space between the Mackay residence and the terrace at the beginning of the formal approach had been once a deep ravine; that the original incline to the Whitney house had been almost like a mountain side; that the beautiful stretch of lawn on the northeast of the Whitney mansion was a most disagreeable swamp; that where the Stow mansion and gardens now stand was one of the densest forest sections of the neighborhood; that nobody realized the view toward the ocean on the Dur-
from formal into natural was successfully softened. The trellis is overrun with vines, thus enclosing the garden completely. This formal garden also was designed to act in close relation to the house. A stone lined pool occupies the center and the paths are bordered with straight clipped barberry hedges. On the south side of the house are the tennis courts, sunken somewhat, beyond which is the thick forest grove. The other buildings on the estate consist of stables, farmhouse and several farm buildings, also a private water plant.

This brief description of these attractive estates can do them scant justice. As they grow older, the barrenness which even yet exists in spots will disappear and they will continue to grow nearer to Nature. The average visitor will consider them beautiful and may enthuse over their attractiveness,
yea property before the vistas were cut through and the new house located ? One may view a great bridge or a noble building and his first thought is of the labor it has taken and the money that has been expended. It is very often, however, that the full appreciation of the work of the landscape architect is lost because the visitor does not know what the original conditions have been, or realize what art has accomplished; and the better the art in many cases the more inconspicuous the actual result. Thus it might pay the visitor in adding to his interest, to look closer to these works. Then while he may openly admire such an individual creation as a formal garden with its pronounced beauty, perhaps he may enjoy a glimpse of some quiet woodland more if he strives to imagine or ascertain how it may have originally appeared before art and experience made possible its enhancement.


THE BEAUTIFUL PARTY ROAD


ONCE A SWAMP, NOW A MEADOW


When I shall have a garden of my own,
All wild and free and fair,
Where, for you, as in my heart,
There'll be a corner set apart, My friend, will you come there?

Bring with you, then, into that tangled spot,
Your tender thoughts and brave,
All those gentle things of life
Which wearied of the blinding strife
A sanctuary crave.
And there with love and peace to hedge us in,
The world's unrest may wait;
While from the tired hours
We steal a moment mid the flowers,
Within my garden gate.
-Claire Wallace Flynn

# The Quest and Culture of Orchids 

By G. BERTRAND MITCHELL

PART II

THERE is, some eight miles out from New York City, located on the famous old Plank Road of New Jersey, an establishment whose chief output is the Orchidaceous plant. Here the amateur and the orchid enthusiast may acquire valuable knowledge of the care and cultivation of these tropical imports. Visitors are welcomed and extended every courtesy by the senior member of the firm, a man of forty years' experience, or by his sons, who possess that marked Teutonic trait for floral culture. Of the one hundred hothouses averaging twenty feet in width by one hundred and fifty feet in length, sixteen houses are devoted to the epiphytes alone. These include more than one hundred and fifty varieties and number about fifty thousand plants in stock.

The writer found here immense quantities of evergreens and conifers, box and bay trees, palms, ferns and flowering shrubs-but as he evinced a desire to visit the orchid department, the firm-member's face expressed his pride and pleasure, for this is a "hobby" as well as a specialty of this establishment.

A visit was first made to the houses devoted to the Cattleya family. This and the closely allied genus, Lælia, are perhaps the most popular, useful and showy of the orchids. Among the inexpensive and easily-grown plants of this family we saw the Cattleya lobata, the C. Mendelli and the $C$. Triance a native of Colombia and a splendid winter flower, selling at $\$ 3.00$ a plant. A very beautiful pure white variety, the Cattleya Triance alba, has been flowered in this nursery and is valued at $\$ 50.00$. The blossoms of the Ciattleya Mossia, a native of Venezuela, vary from pure white to rose-purple. The Cattleya gigas, of Colombia, a summer variety, is no doubt the finest of all Cattleyas, giving one of the largest blossoms, eight to nine inches in diameter, but is more difficult to grow and requires a long rest every year.

A charming group of the Cattleya illuminosa, a hybrid crossed from the C. aurea, caught our attention, and the beautiful flowers, swaying in the current of air caused by the opened door, tilled the damp atmosphere with the delicate odor of the tea rose. The


CATTLEYA GIGAS
petals are bluish red, the sepals old rose, and the labellum a deep velvety magenta.
The various Cattleyas differ in habit, but all the flowers are borne on upright scapes with the exception of C. citrina, which is produced from the apex of the pseudobulb and is enclosed (in the bulb state) in a sheath. "Their culture is extremely simple and great numbers are well suited for the In-

house of cattleya triane, general variety termediate house,"
our guide informed us. "As you see, they are placed in pots or pans well drained, and can be selected so that some of a group would be in bloom each month of the year.
"The back bulbs of all the Cattleyas, after blossoming, are of no further use for flowering again. They simply serve as reservoirs for the plants, as they store up nutriment during the growing or wet season for use in the dry season. The old pseudobulbs, or enlarged aerial stems, apparently of no use to the eye of the inexperienced in this culture, are still a part of the plant and continue to render assistance for years." In buying Cattleyas, let us say that the best fully developed bulb should be supported by at least three or four back ones to give strength and nourishment to the new growth. Of the Dendrobium family,
grown chiefly in Asia, a useful and beautiful species, we found the Dendrobium nobile, a native of India, one of the oldest known plants, not expensive and having the advantage that its blooms are formed on the previous year's growth. The Dendrobium Phalanopsis, from North Australia, and well worthy of notice, had as many as twenty to twenty-four delicate pink blossoms on a single spike. This plant, the finest for cutting purposes, delights in an abundance of heat and moisture and is worth from $\$ 2.00$ to $\$ 5.00$. Our guide pointed to a pure white variety of the same plant, remarking - "It is very rare and is worth $\$ 300$."

An accompanying photograph shows a hanging box of the dainty Siamese $D$. infundibulum with its slender bulbs and mass of light pink blossoms.

The Odontoglossums (named from their resemblance to the tooth and tongue) and the


Cattleya mossie Oncidiums, also interesting genera of orchids, were grown successfully under cool treatment and therefore cultivated at moderate cost. Some of these varieties, if grouped together, would furnish a supply of the most charming flowers the year round. The Odontoglossum crispum, already mentioned and the Odontoglossum Pescatorei from New Granada, which produces branched
spikes of white flowers in winter, are deservedly popular.

The Cypripedium, (or lady's slipper,) has no pseudobulbs, and some botanists claim that on that account, is difficult to import and establish, but when once successfully accomplished, it is easy to cultivate, though not as attractive as the species already noted. Yet in this New Jersey nursery there are fifty varieties of this family alone, many of them of course being hybrids, and some suited for a cool temperature. The most common and one of the oldest and most easily
 grown is the Cypripedium insigne, a native of Assam, which flowers in winter and retails as low as $\$ 1.50$. Perhaps the most interesting and distinct form is the C.insigne, var. Sandera whose flowers predominate in white and clear yellow. Indeed to the layman, this entire family presents an interesting formation of blossoms and a great diversity of color. The Lælia family, closely resembling the Cattleya, and very handsome too, was produced here to the number of twenty odd varieties. A group of the noble Lalia purpurata with its showy flowers is worthy of mention, the sepals and petals pure white, the labellum rich crimson to purple. These are natives of Brazil and flower in May and June.

But here we importuned our guide to show us the abode of the Phalænopsis, "queen of the orchids" and commonly known as the moth orchid. Suspended from the roof of the tropical house, these masses of blossoms, twenty or more to the spike, presented so spotless an array of dazzling whiteness that one could but feel that even "Solomon in all his glory was not arrayed like one of these." "The best thing that ever came out of the Philippines,"-remarked the junior partner-a twinkle in his eye.

The curious aerial roots of this plant hang three or four feet below the basket, and beautiful as are the
flowers, more astonishing still are the leaves. Some are rich green, resembling the rubber plant, while others are of a duller tone mottled or streaked with silver. These blossoms are used extensively in bridal bouquets, as are also those of the Dendrobium formosum.

The visitor naturally wishes to see the plants as they are received in their dormant condition. Rough and ungainly in appearance, they resemble a small cactus. Many have been injured if not killed outright, and in the hands of an inexperienced gardener would dwindle and probably perish. Some of the plants we saw seemed to have stood the journey well and looked quite green and fresh, having scarcely lost a leaf. If unpacked and suddenly exposed to strong light and air, the leaves would turn yellow and drop off, thereby weakening the plants-so they are first placed in a darkened house and gradually accustomed to heat, light and moisture, and as soon as a new growth of roots appear they are potted or placed in baskets. From the time they are received and potted, it will take the plants eight months to two years to put forth their first blooms.

In the potting of orchids, care must be taken to avoid breaking the roots. A clean earthen pot is half filled with broken crocks and small lumps of


DENDROBIUM INFUNDIBULUM
charcoal, to form effective drainage. Over this is placed a layer of sphagnum moss and the plant, held in position by one hand, should be lightly packed in, especially in the center between the roots so that no hollow space is left. Over the sphagnum is placed a top dressing. Plants are greatly benefited, especially during the summer, by occasional damping; but full-grown orchids benefit by frequent watering.
"Coming as nearly all orchids do from hilly and mountainous countries, fresh air is vital to them and may be admitted in the greenhouse or


CYPRIPEDIUM CALLOSUM VAR. SANDERE conservatory on all possible occasions." The sunshiny American climate is much better adapted than that of the dull English atmosphere, but the more severe cold means a need of better top ventilation. In our climate an orchid section can be constantly protected by means of ground glass or white lead shading for eight months of the year. Shades and blinds are as useful in keeping out cold at night as the hot sun in the day time, but it must be remembered that with but few exceptions, the orchid "requires and enjoys light and sunlight," but not the sun's direct rays.
"The raising from seed requires considerable patience as several years may elapse in some species after the tiny seeds have germinated, before their flowering stage. The Cypripediums and Calanthes, under good treatment, bloom in three to four years; the Dendrobiums requiring a longer time; while the Cattleyas and Læælias do not bloom in less than from seven to twelve years.
"Hybridization is one of our chief arts," continued our host. "It is absolutely useless to cross flowers belonging to different genera, such as, for instance, an Odontoglossum with a Cattleya, or a Dendrobium with an Oncidium. But genera having a close resemblance in form and structure, as the Cattleyas, Lælias, Sophronites and Epidendrums, fertilize readily. Oncidiums and Odontoglossums cross freely, but few hybridists are successful in raising plants from the seeds. Cypripediums have been crossed


CATTLEYA MOSSIA


THE BEAUTIFUL CATTLEYA TRIANF ALBA
and recrossed to such an extent that the family is almost too numerous to mention.
"What the insect does to aid propagation of the plants in their native state, we do by touching a sharply pointed pencil or instrument to the pollen and then inserting this pollen into the opened seed pod, where it is caught and retained."

The Cypripedium Spicerianum, a native of Assam and Borneo, which a few years ago was worth $\$ 500.00$, to-day sells at $\$ 2.00$. When the flowers of this extraordinary plant expand, they are only about one inch long, but in a few days they extend two feet or more and actually trail on the ground. The sepals and petals are a yellowish brown, the lip a reddish brown. Mr. Ames, of North Easton, Massachusetts, had in his conservatory a short time ago, as many as sixteen varieties of this species.
"Our tiniest blossom is this Oncidium ornithorhynchum, grown in Mexico-its blooms, as you see, are no larger than the finger-tip, its center a salmon tint, and its petals a delicate mauve. The most curious of all is this baby orchid, from Guatemala," a plant we found in the last of the houses. The flower itself resembled the outline of a crab;-yellow-green and spotted with brown, but its_center was an exact
reproduction of a miniature Japanese doll. "And here is the Vanda carulea from North India, its blossoms an azure blue, the only color, botanists have said, which did not exist in the orchid family.
"The story of the Coryanthes, a superb orchid from Santa Comapan, Asia, is interesting. It grows at the tops of trees that lean over ravines or rivulets. Its labellum is shaped like a pitcher, which contains a nectar so delectable that it attracts vast colonies of ants. The natives, fearful of the wasp-like sting of these insects, cut down these trees and drag them to the water's edge, where they are pushed in and allowed to remain until the ants are drowned. But the plant once removed from its natural habitation, refuses to thrive - thus causing us to believe with all good Darwinians, that the ants are absolutely necessary to its existence."

In concluding, let us call attention to the plants that may be grown with cool orchids-such as ferns and small palms, begonias, hydrangeas, azaleas, camellias, and the foliage plant, asparagus.

But the orchids must have always the first consideration and should be given a position that will keep them above the other foliage, insuring in this way the best ventilation and freest circulation of air.


HOUSE OF DENDROBIUM PHALENOPSIS SCHREDERIANUM
126

# The Garden of a Suburbanite 

By C. B. WYNKOOP

ONE morning in the early spring, I was purchasing vegetables for that day's use, and was startled at the prices asked. Making comments about how rapidly vegetables were going upward in price, I was informed that they would be higher throughout the year on account of the backward season. Suburban market prices are from ten to twenty per cent higher than city prices. To live in a suburban town is considered a luxury, as it requires a well-filled pocketbook to keep up appearances. The obliging clerk, who waited upon me, volunteered the information that it would be cheaper to have a small vegetable garden, and grow one's own vegetables than to purchase them
them occupied in a healthy and interesting pastime. The more I thought of the practical and financial side of the garden question, the more the desire grew in me to have one. But the how and where of the question gave me considerable thought, as my husband was a crank upon neatness in regard to the manner in which the grounds surrounding the house should be kept. Every flower bed, shrub and tree was placed in such a position that it would add attractiveness to the place The grass was kept cut and the grounds clean, with every thing in order. To approach him upon the garden question made me have a heart full of misgivings, but, my mind was made up, and on one evening when he appeared to be in good humor, I


THE HOUSE GROUNDS broached the subject to him. He did not take kindly to my suggestion but informed methat a vegetable garden was not an adornment to any place. He could not see how he was going to find the time to attend to it and various other excuses were given. I graciously informed him that I would attend to all the work, and would take all the glory and success of the garden upon myself, causing him no trouble or worry. I had made
at the various market places. I came to the conclusion that he was right in this opinion, and I noticed that most of our neighbors had their own gardens back of their houses. The men seemed to enjoy working in the gardens as they never let a day pass without doing some work, either in the morning before going to business, or in the evening after their return. I gave considerable thought as to the ways and means of getting such a garden started. While glancing over the contents of one of the city evening papers a few days previous I read a very interesting article upon the reasons why suburbanites should have vegetable gardens. It urged upon its readers the necessity of at least giving the children a piece of ground, in which they could dig, plant seeds and raise vegetables as a part of their education and to keep
up my mind that I was going to have a garden, one that would be an ornament to the place if such could be had with careful work. Then, taking into consideration the amount of money that I would save, thereby making it a benefit to the family, I had planned my garden when the thought first came to me some time previous, and decided to plant those vegetables that were well liked and not too many of a kind, as this being my first venture I desired to be conservative and not too liberal in my anticipations as to the number of plants that I was going to raise, because failures do happen to beginners as well as to experts. The garden was measured off in a plot forty by fifty feet, sloping from west to east, in which position it had the sun the greater part of the day. The slope of the grounds kept it
well drained, with a stream of running water the full length of its eastern border which divided our plot from that of our neighbor. How to get my plot into condition for planting rather puzzled me. On one of my daily walks towards the outskirts of the town I came upon a farmer plowing, and the thought came to me, why not get him to do my plowing. It was not long afterwards that I had mustered up enough courage to ask the farmer to plow my vegetable plot.' With a little persuasion I was able to secure him to do the work. One morning soon after he drove up to the house with a plow and soon had his team hitched to it. - Before he started to plow I gave him strict orders to keep the surrounding ground clean as it was before he began work. The plot was marked off with wooden pegs and then plowed. About noontime it was finished. After dinner he returned with a harrow and one load of well rotted stable manure which he scattered over the plowed up soil and then harrowed it until the soil was very fine, and after he had finished and cleaned up, it was a very neat looking job. He charged me $\$ 4.00$ for the day's work. I was elated over the fact that the hardest part of my garden work was accomplished at such a small expense. I was anxiously waiting for the return of my husband that evening. He went out and surveyed the work with his critical eye, but made no comments and I came to the conclusion that every thing was done in a satisfactory manner. As soon as possible, I secured the necessary packages of seeds of the several varieties that I desired to plant, at the total cost of fifty cents.

The following day, as soon as my housework was over, found me planting my seeds and, following the directions given upon each package, I soon had my sowing finished. The rows were made with the use of a garden line to keep them straight, and ran north and south, with eighteen inches between each row. Neatness was one of the main things desired, thus all rows had to be straight, so as to have an attractive looking garden when the plants were in full growth. March 15 th, found the plowing, harrowing and the fertilized garden plot ready for the seeds. April I5th, I planted my onion seeds and in due time thinned the plants to two inches


A view of the garden
the plants. Radishes were sown May ist, allowing two inches between plants and were followed by lettuce June 20th, this being our second sowing of lettuce. Pole beans were sown May 6th, lettuce May roth, allowing six inches between each head, and were followed with a second sowing of radishes July ist, which was our last sowing of this variety of vegetable. One dozen tomato plants were set eighteen inches apart May 20th, and the first tomatoes were picked the last of August. Our early corn was sown May ioth, allowing four kernels to each hill, the hills were eighteen inches apart. I had great satisfaction in working in my garden, and I learned much.

Working in the open air improved my health and gave me the kind of exercise that most housewives are in need of. I derived great enjoyment in witnessing the attitude of my husband. Every morning before going to business, he would go to the garden and look it over from every point of view, but on his return
would offer no criticism and seemed to be in a deep study, so I kept my own counsel. One evening while looking out of the kitchen window I had the pleasure of seeing his lordship talking to our neighbor, who was working in his garden and they seemed to be comparing gardens and were enjoying their talk. All the men evidently enjoyed the work or they would never have been seen in the various gardens, working after their tiresome day's work in the city during the hot summer time. It is not an easy undertaking to get a busy man to work before or after business hours unless he is interested in his garden. My plants were growing rapidly and had made more headway than those planted in the other gardens in our vicinity for which I gave credit to the proper preparation
prices charged at the suburban markets. Then again the outdoor work is a means of improving one's health which is the best paying investment, and to see one's earnest desire actually fulfilled is a most enjoyable factor in garden work. It is not how many beets from the beet rows or the number of cabbages from the cabbage rows, nor is it the large number of quarts of peas, ears of corn, bushels of potatoes or onions, bunches of celery and radishes, heads of lettuce and pecks of spinach gathered from their various rows, although it is pleasant to be instrumental in cutting down the yearly expense account, but the fact that with a little encouragement and inclination for the work, small obstacles can be removed and a great amount of good can be accomplished. Our garden experience proved to be a prof-


ANOTHER VIEW OF THE GARDEN
and the admirable situation of the garden. My husband soon had the fever for working in the garden and early one morning found him with coat off, sleeves rolled up, working with a hoe as though his life depended upon his efforts, and a good garden crop. At night he was at it again and kept it up throughout the summer. The garden work served as a good tonic to his mind. It gave it a rest from office work, causing him to become more cheerful. His conversation was usually as to the merits of this crop or that crop, and this method or the other method of cultivation. The garden seemed to be his garden and not mine. I remained as silent as a clam for fear that the charm would wear off. I was thus enabled with little effort on my part to have the neatest and best growing and producing garden in our vicinity. We had the first of every vegetable planted, which was very gratifying to us. The praise of our friends made the work pleasant and easier to perform. As the various vegetables matured they were gathered and all that we did not need for our own use were given to our friends. They were more than pleased, as fresh vegetables have a flavor of their own that market bought ones do not possess, as they have been picked possibly a week before they reach one's table. Was my garden a profitable venture ? Yes, in a number of ways; especially when we compare the output of the garden at the


SOME OTHER SUBURBAN GARDENS
tomato plants and fifty cents for a peck of seed potatoes. The market clerk's advice should be followed by every suburbanite, who will thus be the gainer, not only in health and pocketbook, but in the indescribable satisfaction which surely comes to those who realize for the first time that they are not merely "consumers" but are themselves " producers."

# Vines and Vine-covered Houses 

By CHARLES ALMA BYERS

All in an oriel on the summer side, Vine-clad, of Arthur's palace toward the stream, They met.--Tennyson

ABOUT vine-clad houses, whether castles, palaces, or cottages, there is a certain romantic charm. It has always been so-since mythological times, at least,-and probably it always will be. Artists have ever pictured for us the crumbling ruins of ancient castles, covered with clinging vines, and when have not the poets and other writers loved to weave romances around a prince and a princess and a vine-clad palace?

Verily, vine-covered houses have always received from artists and authors a great deal of attention. And why? Is it not because the clinging vines give to the house an artistic and picturesque appearance? And was it not because of this that they have woven around such houses the charm of romance? For the probable emphasizing of the answer to these questions, the reader's attention is invited to the accompanying illustrations.

The writer will not undertake, however, to advocate the use of decorative vines for all houses and all locations. That would be to advocate the carrying of the attempt tow ard the creation of "romantic charm" too far. There are any number of styles of houses and any number of houses so located that will not permit, with good taste, the use of such decorations, especially in the matter of homes in the city. At the same time, however, there are, in our opinion, a large number of homes, in both the city and country, that can be greatly improved in appearance by the proper use of decorative vines.

It is, of course, impossible to set down a rule for vine decorations that can always be followed. The best that can be done is to offer a few suggestions. In the first place, vines can often be used to good advantage in covering up architectural blemishes. A plain, uninteresting side of a house can often be made attractive and picturesque in appearance by a


BOSTON IVY COVERING A PALM
few well trained vines. Rough and inappropriate fences and barns and other out-buildings are also often improved in the same way. But vines are not only suitable for the covering of blemishes. They may be used with good taste for decorating parts of the exterior of many houses in which no architectural discrepancies appear. They are particularly suitable for decorating the driveway entrance and may invariably be well used to twine about outside chimneys, verandas and balconies. In fact, the purposes for which they are suitable are most numerous, and therefore the decorator must be left mainly to the exercise of his own judgment.

To name the styles of architecture to which decorative vines are suitable and unsuitable is also a matter difficult to be definite in. Vines have been used for decorations around frame, brick, rock and concrete buildings, and it is impossible to say that they appear more suitable to one style than to another. And even in the matter of the location of the house it is equally difficult to devise a rule to be followed. The most that can well be said on the subject is, that, being used mainly to create or to emphasize an effect of picturesqueness, decorative vines should be used, where, in the opinion of the user, they will really enhance the general appearance of the house without marring the effect of that particular landscape, which is sometimes possible in the city.

There are many kinds of vines used for decorative purposes. The ivies, however, are probably the kind in most common use, and the Boston or Japanese ivy, technically known as Ampelopsis tricuspidata, is very much in favor at present. This is a vine very similar to the Virginia creeper (Ampelopsis quinquefolia), practically the only difference being that the former has a three-lobed leaf and the latter a leaf of five lobes. Both shed their leaves in the


THE FICUS REPENS VINES


THE CLOSE-CLINGING VINE IS BOSTON IVY AND THE CLUMP IN THE CORNER BOUGAINVILLEA GLABRA SANDERIANA. THIS IS A VERY PRETTY COUNTRY HOME AND OFFERS SOME GOOD SUGGESTIONS


the vine covering low wall at entrance, ficus repens, the
CLUMP ON THE ROOF, BOUGAINVILLEA LATERITIA, ON THE

Original from
MICHIGAN STATE UNIVERSITY
fall, and the leaves before falling, change in color, from a dark green to a bright bronze.

The common or English ivy (Hedera Helix) is also very popular as a decorative vine. It is an evergreen shrub of abundant foliage and is especially suitable for walls, fences, trellises and all other places where a climbing vine is desired. The other ivies well known in America are the Kenilworth (Linaria Cymbalaria), the German (Senecio mikanioides) and the ground (Nepeta Glechoma)-all of which are quite popular as basket plants.

Another vine that is very desirable for decorative purposes about a house is the Ficus repens-a sort of creeping barren fig. This is an evergreen vine, and is always graceful and durable. Its leaves are a very dark green, and are heart-shaped, with different sized lobes. By means of small tendrils it clings tenaciously to any kind of a wall, and because of its being so graceful and ever green it is fast becoming the most popular wall vine. Of the Ficus order there are about six hundred varieties, but the Repens variety is the most satisfactory for purely decorative purposes.

For close clinging vines, such as are desired principally for providing a simple green covering for walls, the ivies and the Ficus repens will always be found satisfactory, and they may be grown in almost any part of the United States. If a more elaborate or imposing vine, however, be desired the Bougainvilleas and the Bignonias should be found suitable. Of the former there are two varieties that are grown


DRIVEWAY ENTRANCE COVERED WITH BOSTON IVY


A GOOD SUGGESTION FOR THE USE OF VINES
quite successfully in the Southern States and in Southern California, B. lateritia and B. glabra Sanderiana, both introduced from South America. The first named has brick-red bracts and the latter magenta bracts.

Of Bignonias there are about one hundred species in existence in Argentina and elsewhere, but only two-B. Tweediana and B. capreolata-are used to any great extent in the United States for outdoor decorative purposes. The Bignonias and the Bougainvilleas, however, are not, strictly speaking, climbing wall vines, but they are used quite often in conjunction with the ivies and the Ficus repens to give the decorations a dash of color.

Vining plants should be set out as early in the spring as the weather will permit. This will enable the vines to get a good start the first summer. The ivies and the Ficus repens are not affected by the winters, unless unusually long and severe, but the Bougainvilleas are suitable only for warm climates, while the Bignonias are but little more hardy. To preserve the latter two through the winters in the Eastern and Northern States they will have to be transplanted to hothouses or used as house plants.
An opinion, more or less common, has prevailed for some time that close clinging vines produce damp, unhealthful walls and that they will also injure and sometimes kill trees, which in neither case is true. Instead, a close study of the subject has proven that all such vines as the ivies and the Ficus repens, through their clinging tendrils, draw moisture from the walls.

# The Shasta Daisy 

Chrysanthemum hybridum

By GEORGIA TORREY DRENNAN

AN unusually free-flowering perennial plant. The ray-flowers, pure white with yellow centers, average four inches across, and are profuse from April or May till late in autumn.
The Shasta daisy is one of the triumphs of Santa Rosa. Mr. Burbank regards it as one of his greatest achievements. As a boy he had a chivalrous admiration for our common wild daisy (whiteweed or ox-eye daisy), Cbrysanthemum leucanthemum vulgare. Regarded as an adversary to the soil and an aggressive foe to crops and useful plants, by strenuous efforts the farmers exterminated it in one place but to see it reappear in a dozen surrounding parts; it never knew when it was whipped.
Mr. Burbank, early in life, decided the pretty blossoms and the iron-clad constitution of this cosmopolitan weed, to be admirable. He selected this native American species, in combination with the coarser, larger English wild daisy, and a tall growing
one that Japan produced to begin the hybridization which has resulted in the Shasta daisy. Years of effort were required till among thousands there appeared one daisy exceeding them all in size, beauty and general refinement, withal hardy enough to grow within the arctic circle or under the equator. This is not surprising when the true nature of the wild daisy is considered. The leaves in rosette form lie close and flat to the earth, crowding and shading out of existence hardy grasses and weeds, and are destructive to cultivated plants. A heavy seed bearer and growing upon creeping root stock it spreads inveterately.

Entire fields, and extensive acreages, in many parts have been taken possession of by the ox-eye daisy, the farmers preferring to clear new ground rather than contend with a plant that profits by the culture given the crops planted in the ground it infests. In Canada the fields of ox-eye or wild daisy are


A BED OF SHASTA DAISIES AT SANTA ROSA, CAL., GROWN BY MR. LUTHER BURBANK
generally remarked for their beauty. Acres of white and gold ripple in the sunshine with every passing breeze.

Our Chickamauga, Gettysburg and other battlefields have been white with daisies. They were brought in the Canada oats, for feeding cavalry horses, and in due time naturalized themselves for, apparently, the balance of time. Little wonder the dreaming boy, Luther Burbank, admired them and planned for them a better day. If the green daisy plant is cut in half, root and all, down under the snow in the dead of winter, the flower buds will be found.

They are ready to blossom as soon as the earliest verdure of spring puts forth. So much for one of the ancestors of the Shasta daisy; it is clearly seen where it gets its widely available qualities; the good without the evil it happily inherits. It bears every mark of the highest culture. Every wild, weedy feature has disappeared, and in the very extensive composite class, perhaps no finer flower exists.
The flower stem is slender, but firm, two feet in length, the foliage luxuriant and bright, and the broad white petaled, yellow centered flowers succeed each other so rapidly, that from the beginning till the close of its prolonged bloom-time, beds and borders seem, every passing day, at their beautiful zenith. The long stems are highly available for cut flowers, for which purpose the Shasta daisy is much used with roses.

The plants are easily propagated by root divisions and cuttings. Volunteer plants are rare. Seldom do the flowers self-sow their seeds; never are the seedlings overbearing and aggressive. In this dignified reserve it differs from all wild daisies; even the Swan River daisy (Brachycome iberidifolia), of Australia, and the starwort or aster, so-called, the Michaelmas daisy, are heavy seed bearers that selfsow and produce armies of volunteer plants.


NEW DOUBLE SHASTA DAISY

Daisies rank with asters as valuable flowers for high altitudes. Heretofore there were no daisies that equaled the improved strains of asters. The single-flowered Shasta daisy is not the only one of this unusual strain. The double Shasta daisy is one of Mr. Burbank's most recent developments. That is, the flower has a double and sometimes a triple row of petals. In a strict botanical sense, this is not a double flower. Daisies, asters, chrysanthemums, sunflowers and all the composites owe their claims to being double, to this manner of increasing the rows of the rays that form the corolla.

They are beautiful, at any rate. The double Shasta daisy has not quite the grace and simple elegance of the sin-gle-flowered, yet it is an acquisition. In the course of time, it may be full, fluffy, and pure white, as beautiful as the double chrysanthemum with the added advantage of continuous blooming. This is a relative term. In Southern California where the temperature varies only a very few degrees, continuous blooming means every month of the year; in Louisiana, where the rotation of the seasons is marked, albeit the winters are mild and balmy, ten months, and in all Northern sections, late spring, all summer and early autumn. Throughout its long season of florescence, but one feature mars the bright faces of the daisies, and that is the brown disks when seed formation begins and ends. Every flower that begins to turn brown should be cut. This simple precaution adds very much to the bright silver and gold beauty of the Shasta daisies month after month.

One feature to be admired is that these widespreading, full-hearted flowers never depend, with their own weight. Many flowers so constructed, more or less turn their faces downward. Not so with daisies. Every flower holds its face up, spreading itself to full view; covering the plants, giving very fine expression to the garden.

# Garden Phlox 

By W. C. EGAN

FEW there are, indeed, who do not know and admire the many forms of the garden and wood phlox. For over one hundred and eighty years this flower, as represented by some of its varieties, has been known, and admired, still it has seldom, if ever, received the poet's praise. Its very brightness suggested its generic name as phlox, a Greek word signifying flame.

Most flowers, as popular as this, receive many common names, some of which, in time, supplant the generic one, as instanced by the common bedding geranium which is not a geranium but a pelargonium, but the phlox has seldom been so honored. "Moss pink" for the creeping Pblox subulata, "Pride of Columbia," for a tall Northern California species and "Sweet William" for Pblox ovata and Pblox pilosa embraces them all.

Pblox Drummondi, a Texas annual, which was not known until 1835 , is the parent of the many varieties of annual phlox now grown.

It is an admirable cut flower, easily grown, but if wanted for a continuous supply of cut flowers, several sowings should be made, one under glass in March, and two out-ofdoors; the first as soon as the frost is out of the ground and the second not later than May. Plant or thin to a foot apart and mildew is less liable. Plenty of water during dry seasons prolongs the blooming period.

If planted in masses for effect, do not sow until towards the last of May. It is much better to go the early part of the season without bloom, but have a growing green mass of a promising future, and then, in midsummer, and late into the fall, enjoy their flowers, than to have early flowers and a ragged outbloomed bed before the season ends.

When we come to the dwarf perennial forms, especially the moss pink, Pblox subulata, we reach one of the showiest and most cheerful of our spring blooming plants.

We have had the yellows and purples in the crocus,


NEW WHITE PHLOX, "W. C. EGAN"
Dark green, persistent foliage, early bloomer
and the blues in the chionodoxa, Mertensia, and the forget-me-nots, and are ready for a change. The unfolding blossom buds of the apple trees and a few of the formal hyacinths have suggested a pink, but it remains for the Pblox subulata to present this color in vivid masses. Out of a dense mossy green, rise innumerable short stems, each carrying a dainty, flat, spreading flower, of a delicate pink, emphasized by a darker eye in some varieties, and lighter in others. They literally hide the foliage. There are six or more colors to be obtained of the seedsman, including white, purplish rose, light lilac and rosea, a bright rose.

This phlox is easily grown, even in cold climates if planted where the drainage is perfect in winter. A sloping bank in full sunshine is an ideal situation. The winters often brown the foliage if not protected from the sun. The best way to protect it is to obtain short branches of evergreen boughs and insert the ends in the soil between the plants, placing them in a slanting position. Branches of the oak, cut early in the fall and stored until wanted are also good, as when so cut they retain their foliage all winter. In the absence of these use bushy perennial tops, such as the pompon chrysanthemums. Place these in position before frost. In the spring, remove every other one letting the balance remain a week. This gradually accustoms them to the light.

When done blooming they present a pleasing mass of green and towards fall bloom again but much less freely. If you desire to increase your stock, or your bed has got some troublesome weed in it, hard to eradicate, take them up, clean them of weeds, and tear them up into small pieces, saving those that have some roots attached. Do this right after blooming.

Prepare your bed, having the soil light and rich. For mass effect plant in rows one foot apart. Make a V-shaped furrow, six or more inches wide at the top. In it set your plants quite deeply, just so that
about three inches of the top is above the soil. This will cause some of the green stems to be under ground, which is all right, as the plant will throw out roots all along the stem. Plant about two inches apart in the row, keep them in place until the row is finished by throwing in a little soil. Now stand up, fill in with soil, and with the foot tamp it as hard as you can. Water it well, and then shade it in some manner for a few days. Coarse hay thrown lightly over it will do. There are quite a number of species of spring and summer blooming phlox worthy of cultivation, among them being Pblox amana, a pink purple; $P$. Carolina, of same color; $P$. divaricata, with sweet-scented, lavender-blue flowers; and a white variety, $P$. pilosa, the hairy phlox, with pinkish purple blooms; $P$. reptans, a creeping form, flowers a rose-purple; $P$. Stellaria, growing eight to ten inches and bearing pure white flowers in summer; $P$. ovata; our native $P$. divaricata, and others. A garden might be constructed of them alone that would bloom from spring to frost.

The term "hardy phlox," is generally applied to the different forms of the tall growing and late blooming varieties. All of these are mainly garden hybrids of Pblox paniculata and $P$. maculata, and are so intermingled and hybridized that their parents would not know them. The unpleasant purple and magenta tones of color formerly so predominating, have been eliminated. There are hundreds of named varieties, and being easily raised from seed, some nurserymen send out their own raisings under names they have given them, and if one desires to duplicate any he may see on a friend's grounds, it is well to obtain the nurseryman's name who furnished it and order from him. There are, however, many good varieties imported from European growers who have named them there, and these, being distributed among different seedsmen here, may be obtained true to name from different houses. This class of phlox may be divided into two sections, the summer blooming and the fall blooming varieties. Miss Lingard, a free flowering white, is one of the best of the early blooming ones.

The phlox, "W. C. Egan," here illustrated is a
chance seedling that came up in my garden, and belongs to this section, resembling Miss Lingard somewhat, but differs in having a white eye. It is a strong grower and carries good foliage down to the ground.

Tastes differ so, as to likes and dislikes in colors of flowers and there are so many colors in this group, that I will not attempt to name any of the late blooming ones.

Their requirements are simple but imperative if good trusses of bloom and good foliage are desired. These are a fair amount of sunshine, and a rich, moist ground.

They are shallow rooters, and if the sun dries out the top earth, their flower heads are small and they become bare of foliage at the base. Some varieties are inclined to lose their lower foliage any way, and should be planted behind lower growing material. Mulching benefits them immensely and copious watering overhead is an aid and keeps down the red spider. Very old manure, well broken up, makes a tidy looking mulch, or old leaf mould in which may be incorporated one quarter in bulk of powdered sheep manure, the benefits of which will seep down to the plant at each wetting. Grass cut from the lawn is good, but should not be put on thick enough to mat and heat and thus injure any plant stems in contact with it. They are tall growers and apt to be thrown over by wind and storms; hence, staking becomes necessary.

If the slender points of bamboo, readily obtainable at any seedsman's store, are used, they may be staked without assuming a stiff, unnatural look. Use a thin, brown, wrapping twine, and in tying them or any plant, don't hug them up as you would a prodigal child, but choose four or five strong outer shoots, and set the stakes to them, drawing the plant stems outside the stake and let them run up along it, thus hiding to a great extent, its presence. Tie in place, then run the string around from stake to stake. If the center stems seem to have too much room and are inclined to lop over, run cross strings, and if necessary, loop the string once around the stem after you have placed it in the position it belongs.

Don't mix colors. Choose the one you want and then use it in masses. If used in a bed, with other pinks and reds, be careful of clashing colors. The colors of many of the phlox are pugnacious, and fight with their companions. Remember that there are whites among them that may be used as peacemakers.

If you can't give them proper attention as to a moist situation, plenty of water, etc., in which case they are apt to lose their lower foliage, plant in front of them any lower growing, earlier blooming plant that retains good foliage late in the fall. Iris graminea, which blooms in May, is good for this purpose. It has dark green, narrow grass-like foliage, and is dense in growth.

Reset your plants every other year, renewing the soil or at least add more manure to it, if grown again
in the same position. I consider early spring the best time to replant in this climate. Some prefer early fall. To increase your stock, take up and divide the roots, or early in the fall take off cuttings from the young growth and root them in sand in the greenhouse. Keep them growing in the cooler part of the house and they will bloom well the following summer.

Cuttings may also be made from the new growth in the spring. For winter protection cover with manure or straw.

Young, self-sown seedlings will come up in the group. Remove them to some unoccupied part of your grounds. You are apt to get some good colors among them. Pull up the poorly colored ones, as you may want to use some elsewhere next year and would have forgotten which were the poor ones.

# Some Old and New Annuals 

By W. C. EGAN

THE Australian annual, Helichrysum bracteatum, has been in cultivation since 1799 and is one of the best of the group of everlastings, not only as a dried flower, but for its good qualities in garden decorations. As it is a constant blossomer when of fair size, the seeds should be sown early.

If sown in the greenhouse about the middle of February, and the plants carried on under heat, hardened off, and planted out when all danger of frost is past, it will commence to bloom in June and continue, interruptedly, until frost, reaching a height of over three feet in good soil.

The range of color is extensive, including a fine silvery-white, rose, red and yellow, with intermediate shades. In open, sunny positions in the shrubbery, or perennial beds, it is effective, producing a coloring not inclined to fight with its neighbors. It is easily raised from seed, but the chief point is to start it early.

Flowers intended for dried bouquets should be gathered when half opened, and hung head downwards in a cool shed. There are several varieties of this species to be found in the catalogues, including H. monstrosum.

There is a new annual from South Africa, new in this country, although known since 1871, called Diascea Barbera, bearing continuously small chamois-rose-colored flowers. The name diascea is from diaskeo, in reference to its pretty flowers, and a Mrs. Barber $x$ as honored when its specific name was concocted. Being half hardy its seeds should be sown in the hotbed in March or April and planted out in June. It grows about a foot high, retaining good foliage all summer, blooming freely until frost.

It is one of the class that cleans itself of faded flowers. There is another "warm country" annual whose habit in many respects resembles the above and is well worth growing, but as the color of its flowers-a bright scarlet-does not harmonize with the diascea, they should not be planted near each other. This is the Alonsoa Warscewiczii, brought from Chili in 1858, and presumed to be a variety of $A$. incisifolia, a species much longer in cultivation.
This also is a constant bloomer, and neat in appearance. It does not open many flowers at a time, belonging more to the delicate, than showy order, but its foliage is so bright and clean and its flowers so cheerful and welcome, when many things are ragged and cut down by the early frosts, that it readily makes friends with flower-lovers. It equals the Heuchera sanguinea for giving a dash of color to a bouquet of the Gypsophila paniculata.

There is a new sunflower on the market that will please all those who admire the single forms of this extensive family. It is a hybrid perennial and stood the winter of 1903-4 in Adrian, Michigan, where its originators, Messrs. Nathan Smith \& Sons, reside. They have given it the name of Helianthus sparsifolia.

The flowers are borne on very long, wiry stems, almost devoid of foliage, making them admirable subjects for cut-flower decorations. They are splendid keepers when cut. As near as I can remember its single flowers are a little over three inches in diameter, and a deep, rich yellow in color. It seems to possess a rugged constitution, and a plant that will be permanent and increase. It was very much admired on my grounds last summer.


## THE HOUSE

THIS is a busy month for the householder; for while old Dame Nature is washing the winter's dust off her face a surplus amount of water may leak in the roof or dampen the cellar, and when she shakes out her spring garments all the indoor furnishings will look dull and shabby in comparison. Look out for the roofing, attend to the drains, see that the cellar is aired and free from dampness, but don't make an uproar over house cleaning-do little by little, week by week, and before you know it the house will be in summer dress.

Early in April have the storm doors and windows removed and the exterior paint or stone work cleaned. If your front porch is of stone, and you want it redressed be careful to employ only a skilled workman. This is one of the many cases where it is most economical to obtain the best.

If painting is to be done have it done now, and if any important repairs or alterations are to be made which require carpentry or masonry have them begun without delay. They will cause less inconvenience at this time than later.

As soon as the windows have to be opened take down the lace curtains and put up muslin ones in their place. The dampness which is in the air rots the threads and the dust which blows either out or in makes the process of laundering more hazardous. Never put a curtain away without washing, but do not allow it to be starched. See that all the curtains are rinsed well, but put them in the chest rough dry until fall and then pin them on the frames after wetting in very thin starch water.

A great variety of pretty summer curtains come now-muslin, madras and other materials, which are far from costly and yet add much to the charm and comfort of a room. Linens, plain colored cotton goods, figured cretonnes and the like can also be effectively substituted for heavy inner curtains and draperies if desired. Possibly one will not wish to make the change in April, but even so it is well to determine upon materials at this time and have the curtains ready to go up when the warm days make them seem not only suitable but welcome. If one will give the time to searching or be on the outlook, excellent material for drapery can often be found among the summer dress goods which will be much
cheaper than any to be had of a house furnisher. What one should aim for in all summer furnishing is coolness and comfort; the windows do not by any means want to be swathed in muslins and draperies, but the light screened and the rooms made livable by freshness of material and pleasing color effects. Keep everything as simple as possible, do not unnecessarily multiply folds, and study the quality of the light with which you have to deal.

It is an excellent plan in April to get the furniture covers made and in readiness for use. These can be very attractive if a little taste is exercised in the selection of materials and do not need to be merely utilitarian. To be sure it is best to procure a material which will wash and to test the braid before using in order to ascertain whether or not it is a fast color. The old-fashioned covers which resembled nothing but linen dusters made patriotic by bindings of bright red and blue braid doubtless served their purpose but they did not add to the charm of the home. Figured materials may now be had in low, quiet tones which are really beautiful and no less serviceable.

Do not postpone having the rugs beaten or shaken and sunned, and see that the carpets are especially well swept at this time; for it is now that the moths do the most mischief. An ounce of prevention in the way of cleansing and care in the early spring is worth several pounds of camphor, moth balls and the like, used later.

The fur rugs and garments especially should be put away as early as possible, being first carefully brushed and examined and then securely tied up in newspapers. If it is possible to place them in cold storage for the summer it is of course safer, but if not, vigilant care will commonly prove effectual.

There is no time when flowers will be more welcome in the home or when they are much more readily obtainable. In the cities, street venders' trays offer a tempting array and out of town the garden and roadside invite theft. Do not be content to let the outdoor world have all the blossoms, but do not, on the other hand, be prodigal in your decorations -a little bowl of violets, or a jar filled with arbutus set on a table will be enough for a room, and are sufficiently precious to deserve undivided attention. A few jonquils in a tall vase placed against the right background will give vastly more pleasure than a
tub full of flowers scattered about indiscriminately. Nothing gives the human touch to a room more than flowers and in few ways is taste manifested more patent than in their arrangement.

## THE GARDEN

All roses do better in a rather heavy, firm soil-one containing considerable clay-packed firmly about the roots. Roses set in loose, loamy soil often fail to show any growth and never bloom. While doing better in this firm soil, they require ample fertilization. Ashes worked into the soil are very beneficial. Bone meal is a good fertilizer, but old, well-rotted or pulverized manure cannot be excelled.

Roses require special attention this month. Pruning should be done before growth begins. Remove all old and weak wood. Secure symmetry by pruning to a proper balance the branches. In fact it is well to shorten all the leading branches-that forces the development of side branches and gives larger amount of blooming surface.

You can hardly manure roses too much, and the best manure is that from the old cow-pen. The older the manure the better, even to the extent of being so old that it is black and will crumble at the touch. Pulverized cow-pen products are now manufactured and sold on a commercial basis from the Union Stock Yards, Chicago. Unquestionably that is the best form of fertilizer to use about the roses, and it should be worked into the soil thoroughly.

Blackberries, gooseberries, raspberries and currants, as every gardener knows, should not make a rush growth, but a steady even growth, which means that they should be nourished little and often. An application of nitrate of soda or of pulverized manure every week or ten days, just before a rain, will show surprisingly fine results. Any fertilizer thus used should be such as is ready for immediate assimilation.

If you have not done so in the past, suppose you try a bed of balsam this year. The flowers are as double as roses, beautiful in color, and so frequently produced that the stalks are veritable wreaths of bloom. The profusion of foliage is the only drawback to the balsam, that hides the flowers but it can be obviated by clipping the leaves all up and down the stalk, just before the flowers open. This gives them opportunity to display their beauty to the best advantage.

It will be no experiment so far as results and satisfaction goes, if the yard has a bed of Salpiglossis. There are but few annuals which eclipse it in rich coloring, and gorgeous combinations of color.

Clean pots before using a second time. Bacteria are likely to be in the pores. To clean, give them a hot bath of strong soapsuds. Immerse them in a tub of hot water in which plenty of soap has been dissolved. When the water is cool enough to handle scrub them thoroughly inside and out, with a stiff brush. Another good way is to put them in a washboiler and boil them for ten or fifteen minutes. Very often plants potted in old, slime-covered pots refuse to make healthy growth and being put into new, or cleaner pots, they grow most satisfactorily.

See that arbor posts and strippings are in good condition before the grape and other vines begin to show growth. Be sure that all vines are tied up, that the roots are dug about, and fertilizers applied.

The best method of planting sweet peas is to dig a trench eight or ten inches deep, fill in three or four inches of well decomposed manure and add an inch or so of good soil. This leaves four or five inches of the trench unfilled. Embed the seed about an inch. When the vines are up and growing, gradually fill in earth around them until the surface of the trench is near but not quite level with the top of the adjacent ground. Sweet peas require a good deal of water and planting them below the surface is an aid in supplying necessary moisture. Pick the flowers daily if you desire them to bloom all season.

This is the month in which the surgeon of the yard must operate. Just as the surgeon operates on the human body, so must the gardener use the pruning shears on his plants. Where there is disease or signs of disease, prune without mercy. Cut away all diseased branches if it takes every one. It does not hurt a bush to cut it to the ground-that forces the roots to find an outlet for whatever vitality is left in them. If the roots are diseased, the thing to do is to uproot the plant, the sooner the better, and remove the old earth which lay about the diseased roots.

A good liquid manure for potted plants can be dipped up from the barn-yard after a shower, but in that state it is too strong for the plants and requires dilution to about the color of weak table tea before being applied. It is an easy matter to keep the manure in this form by putting it in an earthen jar or wooden keg and keeping it covered.

Plants require their richest nourishing when their fine spraying rootlets are new and tender. If they do not get it then, the rootlets quickly harden to a small size and will not expand or extend sufficiently for the plants to get full nourishment later on. The loss cannot be made up after the hardening process has set in.

## THE EDITOR'S TALKS AND CORRESPONDENCE



The Editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

## the treatment of walls of new houses

ARECENT letter addressed to this department asks why the treatment of the walls of new houses is not given more consideration. The writer makes the point that during the initial year in the new home the occupants do not enjoy living in unbeautiful rooms, nor the unsettled feeling that necessarily arises when one feels that there is yet an important feature of the house decoration to be attended to. Certainly this department of House and Garden has never advised living in a house with cold, white plastered walls even temporarily. There are so many and such simple and inexpensive ways of treating these walls with really satisfactory results that it seems an unnecessary economy for even the most careful householder.

Many decorators mix their own colors for tinting both in water-color and oil paints. There are now, however, manufacturers who put out excellent colors which are ready mixed for application. In watercolor tinting, many people have objected to the addition of glue to the mixture, claiming it is unsanitary, and to them a wall tint which is entirely without this objection, appeals largely. Beautiful, rich strong colors may be secured in these tints as well as the more delicate tones. Olive and moss green, mulberry red and mahogany reds, leaf brown, and rich orange, are all among the successful colors, which are also sanitary. Soft ecru, pale fawn, turquoise-blue and Colonial yellow are the best of the lighter shades.

Many people favor the rough or sand plaster tinted wall and hold to this finish. It is a simple task to have such walls re-tinted at any time. To avoid the monotony of plain walls for the entire house an effective combination may be made by using an upper third of wall-paper, the joining to be finished by a plate rail or a medium heavy mold, like the standing woodwork of the room. If a side wall-paper of pronounced design is selected, the lower edge can be cut out following the design. This is directly
applied to the tinted wall,giving a most attractive and decorative effect. The additional cost is very little and when the background of the paper, or some part of the figured design is repeated in the color of the wall, the result is harmonious and pleasing.

In selecting the color for the wall tint, the standing woodwork must also be considered. While the sand finish plaster is advised for the walls of the house which are to be permanently tinted, smooth plaster should be provided if it is the intention of the occu-" pant to paper the walls after the "house has settled."
There are many friezes now offered which run from ten to twenty-four inches in width, and are very beautiful in color and design. Among the imported friezes are some of English make: one a blue and white Delft hand blocked frieze costs $\$ 4.50$ a roll of eight yards. This frieze shows, clearly outlined against a gray-blue sky, cleverly drawn fishing boats on ripply blue water. The same design is shown with pastel green boats against a yellow sky. Another marine frieze presents Norsemen's ships in colors gray-blue, old rose, and darkest green. This is a sturdy and most attractive frieze for the room in which mission or Craftsman furniture is used.
Among the less expensive friezes of domestic make are shown some excellent designs and colors. These run in price from fifty cents to $\$ 2.00$ a roll. In shades of yellow, leaf brown, dull green, and blue, is a frieze of poster design, showing straight trees, with a quaint bit of landscape beyond, against a yellow background. Another, suitable for a country house hall or library, has straight boles of mahogany brown trees against a gold ground and leaping deer pursued by hounds. This frieze comes with an extension, showing the same trees and background, so there need only be introduced occasional panels of the deer and dogs. The price of this is $\$ 1.60$ a roll.

A charming frieze for a bedroom shows conventionally symmetrical garlands of roses and leaves held together by floating blue ribbons. The price
(Continued on page 16, Advertising Section.


## THE ARTISTIC ARRANGEMENT OF FLOWERS

IWAS much interested in the article entitled "The Artistic Arrangement of Flowers" in your January issue. It stated that flowers " with soft, slender stems, should always be arranged in low, wide-topped bouls so they can ramble over the sides."

All this is true, but often it is the rule that those in the center lop over against those on the outer rim and cause a lumpy effect.

Perhaps your Garden Correspondent can tell us how that may be remedied.
L. J. E.

Go to your tinsmith and have him make two flat disks of copper or galvanized iron wire, or silvered wire, if expense is no object. Have one slightly less in diameter than that of the inside of your boul-say half an inch below the rim and the other disk to fit at a point one half or a full inch from the bottom. This disk is composed of a circular outer rim, having wires run across so as to form an open mesh about one inch square.

Have three "legs" of stiff wire, running from the larger disk to a half or a full inch beyond .where the bottom disk is attached. This forms two shelves of wire mesh one directly over the other. Flower stems placed within these meshes are held by the wire at two points along their course and are thus held in a comparatively upright position. Any deflection from this position required may be obtained by slanting the lower part of the stem and inserting in the proper mesh in the lower disk.

These wire frames are also very useful when made to fit large vases where any heavy-headed flowers, like peonies, are used. A very decorative arrangement may be had by obtaining a small wicker basket, or some of the fancy vase or urn-shaped waste baskets, and having a water-tight, tin receptacle made to fit, and also a wire frame upon the same lines described above.

Be careful in selecting the baskets, avoiding high colors and endeavoring to obtain a neutral tone. If you see one whose outline suits you, but its color does not,-you can paint it. Some florist who is intimately acquainted with firms whose business is that of wire work, can have the frames made for you.
blooming of columbines and delphiniums
Will columbines and delphiniums bloom the same season they are sown?
A.F. M.

Columbines seldom bloom until the second season, but the delphinium will if sown early. Get Dreer's Gold Medal hybrids or Lemoine's hybrids and sow early, and in a majority of plants you can have two seasons of blooms the same year, if the first is not allowed to go to seed.

## SAFETY OF LIQUID WEED DESTROYERS

Are the liquid weed destroyers for road and walks safe to use?
S. O. P.

Yes, if care is used. Select a day when it is not liable to rain for twenty-four hours. Give the surface to be covered a slight sprinkling with clean water, and then apply the liquid, keeping away from near the roots of the grass or adjoining shrubs. If rain comes and washes the material down hill to plants not desired to kill, trouble is apt to follow.

## WILD FLOWERS FOR THE ROADSIDE

I have a roadway running back to my barn, part of which is through a woods. I would like to have some wild flowers bordering it. Something that would take care of itself. The soil is fairly rich. I don't want to go to much expense.
C. W. E.

Go into the open spaces of the woods and select any flowering plants you see there, mark them so as to identify them for fall removal. Strong growing plants, like asters and golden rod, may be taken up when in bloom, cutting off the flowering stems to within one foot of the ground and giving them a good soaking when planted. They may be heeled in, in some vacant space and well watered and be planted later in the fall or the following spring. Obtain some seed of the Hesperis matronalis and of Rudbeckia laciniata and loosen up the soil here and there and sow them, making informal groups or colonies of them. The former is a perennial with pinkish flowers blooming in the spring and is not at all particular as to soil or situation. The latter is a biennial, but sows itself so freely that you will always have it. It may be termed a fall blooming, improved "Black-eyed Susan."

# The Stable and Kennel 

Edited by JOHN GILMER SPEED


#### Abstract

The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.


# Kindness in Horse Training 

By ERNEST C. MOSES

ALMOST second in importance to the problem which confronts all humankind of finding and practicing the best ways of treating one another, is the problem of how best to treat the animals, especially our horses which play (and work) such an important part in man's pleasures and necessities. While we can indeed most gratefully admit that comparisons between the chronicles of history and current events bring out gratifying evidences of progress in the solution of all the problems affecting the co-operations of men and their treatment of animals, there is yet ample scope for improvement in methods of humane care and control of the lower kingdom. That men do not better understand and better succeed in proving their God-given dominion over the animal kingdom is largely because they do not understand themselves, and their own innate capacity to rightfully influence the animals committed to their responsible charge.

It is indeed demonstrable that man's influence over the animals depends very largely on his own mental habits and attitude, not on the animals, although they do seem to differ in their degrees of responsiveness to man's superior intelligence. When men or boys fail to win the affection and obedience of their horses it is because they have not themselves learned to obey the promptings of a better nature; they have not learned the lessons of the right kind of self-control. In fact they do not get the right results because they fail to grasp and use the right rule of control. When men exercise self-control within, outwardly displayed
in patience, kindness and wise care of the horse, the animal responds most quickly to the master thought, generously repaying the owner or trainer for well directed efforts along this line. I can best illustrate this verity by relating an incident which came under my observation during a visit made to Europe in Igor.

While visiting at the little stone villa of Captain Arthur Fonjallaz in the city of Coire, Canton Grisson, in Switzerland, I was much impressed by a beautiful young gelding, which he frequently rode. My friend was then an instructor in the Swiss Military School of Coire and in keeping with the custom of officials of his rank and position in the institution, his horse was an object of great interest and admiration. My host often spoke to me of the very interesting attachment which existed between the horse and his caretaker (called in Switzerland the domestique), and one day he invited me to visit the stables and witness some demonstrations of this affection between the beautiful animal and his caretaker. The horse came from Northern Germany and answered to the name of "Friede."
In accordance with the custom of the country I had been waited upon in my room and at the table by my friend's man-servant, and was much impressed by his obliging, genial and gentle disposition. In fact he was so quiet, so attentive, and naturally free from servility that I was glad to accept the invitation and observe the influence of a kindly character upon an animal whose appearance and action indicated
the operations of an unusual training. Immediately upon our arrival at the stable the domestique, with unconcealed pleasure at having an opportunity to exhibit his master's horse, led the animal out into the open. While my friend was pointing out the various marks of distinction and value which had justified aninvestment of five thousand francs (a rather high price for a horse in Switzerland), the domestique gently stroked his neck and head in a kindly manner and invited the horse to give him a kiss. The horse responded by nibbling at the cheek of the man in a very affectionate and playful manner, as illustrated in the accompanying engraving made from a photograph of the horse and his friend in this attitude of reciprocal amity. In other ways the horse gave ready evidence of a natural rapport and understanding between him and his genial care-taker. Every action displayed a lien of regard which knew no fear or artificial force, for I was told that the young animal had never been corporeally punished, although other and more sane corrective measures had been exercised.

After a few exchanges of friendly civilities, the domestique suddenly took off the halter and clapped his hands, whereupon the liberated animal with mane and tail in the air, nostrils expanded, and gracefully spirited in every movement, galloped off into an adjoining field rich with meadowgrass and fine grazing. No horse in finest equipage imaginable could have presented a more beautiful sight. Free in every muscle and limb, he gracefully exhibited the charm of animal life in its most interesting expression, - as
in nature, unfettered and free from all artificial trammels.

Finally, after we had witnessed and enjoyed this most interesting scene for a few minutes, as if to focus and fully emphasize the character of the relations which were of common experience between the goodly, simple hearted man and his correspondingly good horse, the domestique gently called the horse by name to come back to him. No effort was made to coax the animal or to conceal the tether. It seemed to be something of a test of this delightful animal's devotion and obedience and it
seemed natural for me to wonder: would he obey the gentle master-voice and leave the rich grazing? Would he desert the opportunity for horse-play and the enjoyable


CAPTAIN FONJALLAZ AND HIS HORSE freedom of a bright, clear September day? But the doubts quickly gave way to intelligent demonstration, on the part of the horse. Almost instantly upon hearing the familiar voice, he stopped his delectable grazing, raised his head in recognition of the summons, and trotted up to his undermaster with an obedience which was very notable for its martial precision and promptness. He submitted to the halter without the slightest indication of caprice or necessity for coaxing, and was led back to his box stall after having played his part in the simple drama with consummate loyalty and devotion to the guiding thought.
It was very evident from the action of the horse that he responded most naturally to the kindness and directive impulse of his trainer. Indeed it was apparent that the horse had no other thought than to immediately obey, for all of his
training had been along this line from the time he was first broken to bit and bridle.

This incident, above all I have ever witnessed in animal life, gave me a clear conception of the love and obedience which the horse in private life, apart from exhibition circles, is capable of manifesting. The exhibition added much stimulus to an underlying belief that the equine friend of man is indeed most responsive to training and treatment, influenced by kindness, mercy, patience and love. When men learn the genuine potency of the gentle methods of treating their fellowmen and animals, their horses will surely be among the first to respond to the more humane training involved. The responsibility for the best development of animal character rests on the exemplary influence of men and women-not on their horses or other subordinate creatures. It is always the prerogative and duty of higher manifestations of intelligence to rightfully influence and encourage the lesser.

This circumstance of the Swiss domestique and his most tractable animal was a spontaneous result accomplished with child-like natural simplicity. And therein, like the wild flora of the rugged Alps, is found the beneficial significance of the encouraging lesson which it illustrates. Our best lessons in animal or human life are not found in ritual, rubric, or in the problems of profound philosophies, but in the unexpected and commonplace occurrences of life which need only to be observed and studied a little to reveal the beauties and fragrance of the inner blossom.

We often observe the effects of concentrated training of animals in exhibitions wherein trainers display the results of continuous specialized attention to horses, dogs, seals and other representatives of the lower kingdom, merely for the purpose of amusing people and illustrating the scope and influence of human intelligence. But these manifestations are the products of expert concentrated attention on animals which act and pose largely for the purpose of amusing children and adults. In these exhibitions of control and training, kindness seems to be used in perfunctory ways, but the whip in hand indicates that it may often play a part in forcing issues which do not illustrate the best methods or bring out results which

are truly beneficial in the higher development of animals.

In the incident herein narrated of the Swiss horse, the whip, or control merely for exhibition purposes were not the strong factors; the circumstance illustrated natural results which were always apparent in the practical every day life of horse and trainer, or horse and master, and go to show the possibilities of better practical relations between man and beast wherever the one serves the other.

At the recent annual meeting of the American Humane Association at Boston, the president, Dr. Stillman, called attention to the two sides of philanthropy, the humanitarian and the commercial. On the one hand, the anti-cruelty movement presents itself as an encouragement and an opportunity to be kind. On the other hand, nothing can be surer than that to the world collectively regard for human and animal life pays. State ornithologists estimate that the wanton destruction of bird life means the loss of crops amounting to the value of $\$ 800$,000,000 each year. The annual loss in cattle and sheep through neglect and exposure is over $\$ 24,000,000$, according to the department of agriculture. Loss is measured more easily than profit, but if cruelty costs this much, kindness must have saved many times as much.

It is estimated that the $25,000,000$ horses and mules in the United States live on an average five years less than if they were treated with greater care. An addition of five years to the life of each of these animals would be worth hundreds of millions of dollars. Much cruelty which cannot be cured by any appeal to sentiment would be stopped if the perpetrators could be made to see how they are injuring themselves financially.

Kindness to animals has its cash value to a community. Kindness to human beings has a greater value. The cost of the machinery for the punishment of criminals is greater than it ought to be. Among criminals some are degenerate or defective mentally, so that no early training could have prevented them from going wrong, but in many other cases a little more attention paid by the State to ignorant and neglected children would have been cheaper than punishment. The State not only loses money
on the criminal classes but suffers a loss from the low vitality of many whose lives are cut short or rendered nonproductive through lack of simple teaching how to live, or lack of State regulation of unhealthful
industries, or other failure of human kindness. If it is true that this is a commercial age, it is well to emphasize the commercial side of philanthropy, using the word in its broadest sense.

# The Virginia Razorback 

By JOHN GILMER SPEED

THERE are some who contend that the razorback hog of Virginia and other parts of the South is a wild hog. If he be wild he is so because he has become so, just as the wild horses of the plains, the mustangs, became wild. There were no hogs in this country when the white people came. They were brought over by the early settlers. Doubtless these razorbacks are descended from the European hogs that were undisturbed in the forest, breeding and feeding as they chose. At any rate they became quite wild and I can recall as a boy seeing boars that seemed to me as good game as any one wanted to hunt. Certainly the flesh has a decidedly game flavor. One of the present writer's ancestors who had been badly crippled by a wound in the War of the Revolution was killed by a wild sow in the woods of his Kentucky estate. Exactly how it happened no one ever knew. In the forests of Virginia these hogs are often encountered feeding upon the acorns and other nuts that fall, burrowing for the roots that they so well know how to find. From the chief packer of these famous Virginia hams-and this establishment was started in Smithfield in 1789-I have a letter describing the kind of hog used to make these world-renowned hams.
"These hogs," he says, " are long legged and lean and feed in the forest in the spring and summer. In the autumn they are turned into the peanut fields and about thirty days before they are killed they are fed on corn. This makes the meat firmer and gives it a sweet flavor. It takes about twelve months to cure and fully prepare this ham for market. Some of our epicures seem to think the ham is better at two years old, but our judgment is it is just as good at one year old as at any other period. We are now shipping to every part of this country and also to England, France and Germany."

I think I hold with those who believe in the older
ham being the better. It has a greater distinction of flavor. I recently came across directions for boiling a ham of this kind prepared by the late Mrs. William C. Bullitt, of Kentucky, a grande dame of the olden time and also a most notable housekeeper. She said: "If the ham is quite old it should be soaked in water over night; if not over a year old this is not necessary. It should be placed in a pot and fully covered with water and the pot put on the back of the stove so that the water will only simmer but never come to an active bubbling boil. It should be permitted to simmer as many hours as there are pounds in the ham, i. e., a twelve pound ham twelve hours. Then it should be removed from the stove, taken out of the water and allowed to cool and drain. When cool the skin should be removed and the ham covered with a mixture of grated bread crumbs, spices and brown sugar and placed in the oven until it has become brown. Then it should be removed and permitted to get entirely cool before it is cut. Never put a knife into a hot or even a warm ham. The juices of a hot ham follow the knife and half the excellence is wasted. The colder the ham is when served the better."

I have seen men use condiments such as mustard or Worcester sauce on such hams as I have described. This is a very great mistake, as either spoils the fine flavor of the meat itself. I suspect any one I see doing this of having a degenerate palate or none at all. An Englishman would do such a thing, of course, but an American-no. I once knew a little girl who was visiting in England. By way of making conversation at luncheon, she said to her hostess: "They eat more mustard in England than we do in America."
"Do you not use mustard in America?" her hostess inquired.
"Oh, yes, but mostly for plasters."

## SCOTCH TERRIERS

## BY J. A. GLASSE

THE Scotch terrier is one of the most useful and amusing pets in the canine family. Useful as a watch-dog and amusing in its wilfulness.

In that interesting book, "Lockhart's Life of Sir Walter Scott," an account is given of how in his early days as an advocate, Scott was unsuccessful in defending a notorious housebreaker.


New Castle Kennels, Brookline, Mass.
After the trial the condemned man asked the young lawyer to visit him in prison. Scott's curiosity took him, and when they were alone in the cell the man said he was sorry he had no fee to offer him but would give him two bits of advice as a legacy. The first was that when he should come to have a house of his own not to keep a large watch-dog out-ofdoors, but to tie a little, tight, yelping terrier within. The second bit of advice was about the lock of the door. Thirty years after, telling this story at a judge's dinner at Jedburgh, Scott summed up with a rhyme:
" Yelping terrier, rusty key,
Was Walter Scott's best Jeddart fee."
I once saw an instance of sagacity in one of these little dogs that showed not only wilfulness but independence of thought. I was in an omnibus in the outskirts of London when a military looking man came in, followed, as he thought, by his dog, a small wiry-haired terrier. Instead of following his master into the omnibus the dog mounted the steps and went outside. Although summer the evening was cool and this, no doubt, was the reason his master rode inside. Perhaps he had been in a warm climate for it was in a western district of

Annual Cost Whole Life Policy


For
LESS MONEY
with
Every Feature Absolutely Guaranteed.

Send your age nearest birthday ior specimen policy. State occupation. Address Dept. 25.
The Prudential
Insurance Co. of America
JOHN F. DRYDEN,
President.
Home Office:
NEWARK, N J.

| Annual Cost |
| :---: |
| Whole Life Policy |
| Per $\$ 1,000$ |
| Age $40=\$ 26.09$ |
| Age $45=31.47$ |
| Age 50 $=38.83$ |
| Age 55 |



Testimonials Speak for Themselves.

## Boston, Mass. <br> Gentlemen: <br> After many years' experience I may candidly say that DEXTER BROTHERS'

ENGLISH SHINGLE STAINS
are unsurpassed for their wearing qualities and artistic effects.
surfaces.
sincerely yours,
Write for Samples and Particulars.
DEXTER BROTHERS' COMPANY
209 Broad Street,
Boston, Mass. AGENTS: H. M. Hooker Co., 128 W . Washington St., Chicago; W. S. Hueston, 22 E. 22 d St., New York; John
D. S. Potts, 218 Race St., Philadelphia; F. H. McDonald, 619 The Gilbert, Grand Rapids; F. T. Crowe \& Co., Seattle, Spokane, Tacoma, Wash., and Portland, Ore.; Klatt-Hirsch \& Co., 113 Front St., San Francisco, Cal.

## FLO-WHITE

The selection of the finish for the walls and standing woodwork in the kitchen, pantries and bath-rooms of a residence is a detail of supreme importance to the householder. To render these sanitary is the first consideration, and to give the walls and woodwork a permanent finish and one which is suitable and pleasing to the eye is the architect's responsibility.

Flo-White, the most recent product of Chicago Varnish Company, fully meets these requirements and has aroused a very unusual interest, and wherever it is specified and used the most enthusiastic praise from client and architect. The many points of superiority of this enamel over products prepared for like uses can readily be seen.

In application it flows easily under the brush, and shows no brushmarks in drying.

Its surface is of wonderful brilliancy, and is hard and smooth like glass.

As a substitute for tile it is especially valuable applied to wainscot or entire side walls.

For Hotels, Cafés, Barber Shops, Hair-dressing and Manicure Parlors it is particularly satisfactory.

In the ideal kitchen of an ideal house, decorated and furnished by Margaret Greenleaf, the consulting decorator of Chicago Varnish Company, Flo- White was used over hard plaster marked off in 6-inch squares before the plaster hardened.

This little kitchen is the pride of the housewife-clean, bright and shining. Its glistening white walls and polished yellow maple floor (left in the natural color and finished with two coats of Chicago Varnish Company's Supremis), make an attractive setting for the brick red range with its spreading copper hood. Blue and white ware and shining long-handled fryingpans decorate the shelves.

The little casement window has diamond panes daintily hung with clear, crisp, white muslin. The whole effect is quaint and charming. Write Margaret Greenleaf for advice on the finish of the standing wood-work of your house; she will recommend a complete color scheme illustrated by samples if you send your plans. No charge whatever is made for the service if you are using Chicago Varnish Company's materials, as this offer is made by the Company only to their customers.

## 35 dearborn avenue CHICAGO VARNISH CO. 36 vesey street Chicago, ill. <br> CHICAGO VARNISH CO. NEW YORK CITY

## AMERICAN NURSERY COMPANY

COMBINING
FRED'K W. KELSEY, New York City. F. \& F. NURSERIES, Springfield, N. J. BLOODGOOD NURSERIES, Flushing, L. I. N. J. \& L. I. NURSERIES.

Hundreds of Acres:
Trees, Shrubs, Evergreens, Roses
Herbaceous Plants, Vines, etc.
Everything for country estates, parks and cemeteries.
Beautiful 1908 catalogue now ready. Consultation and inspection invited.

Complete Estimates Furnished.
Sales Department:
150 Broadway New York


BLACK AND TAN TERRIER, "BEAUTY"
Manchester Kennels, Minneapolis, Minn.
London in which many men who have seen service in India make their quarters. The hardy little dog did not feel the chill of the evening so preferred the top of the omnibus. Sitting down the old soldier looked for his little companion to take him on his knee. Not seeing him he rose from his seat looking as if he would say, "As he won't follow me I must follow the dog this time."

These two examples prove their useful and amusing traits and many touching stories could be told of their faithfulness and devotion.

## CROSSING BREEDS

$\mathrm{O}^{\mathrm{C}}$CCASIONALLY there are owners of flocks who have taken up an unusually deep interest in them and who, for the sake of variety and the pleasure of the pursuit, conceive the idea that some reputation, if not profit, may be gained by the founding of a new breed of sheep, the reputation of which may be connected with their names through long time to come. About thirty years ago there were two distinct efforts made in this direction by well known breeders to combine the good points of some of each of different breeds in such a way as to produce in the progeny a more valuable animal than either of the parents. The skilled art and experience of both of these enthusiasts were brought into requisition for some years, but the labor was in vain, and in both cases the progeny of these sheep quite failed to show
(Continued on page 16.)
Original from

## The World's Finest Nursery Products

ROSES. Our Roses will tell their own story when the blooming season comes. All our bushes are strong and will bloom profusely all the Summer.

SHADE AND FRUIT TREES. No home is complete without these two necessities. We carry a large variety.
PERGOLA VINES. Don't hesitate to place your orders with us at once. We grow them by the thousands; you can see them-that is the only way to buy Nursery products.
HARDY PLANTS. We have the most complete collection of these popular favorites in the country. Our Landscape Department makes a specialty of Old-Fashioned Gardens.
EVERGREENS. We have many thousands from 1 to 10 feet tall, in all the finest and handsomest varieties. The specimens now growing in our Nurseries are conceded to be the finest ever produced in America.

BULBS AND ROOTS. Old-Fashioned Flower Gardens cannot be made complete without their use. A large selection of kinds is growing in our Nursery and described in our catalogue. Our Nursery during the Summer until late Autumn is one vast bouquet of flowers produced by bulbs and roots. Let us estimate on your wants; we have only one grade - THE BEST.

OUR ILLUSTRATED GENERAL CATALOGUE No. 18 will tell you about the above and all our other products for Lawns and Gardens. Ask for it.

You can visit our Nursery by taking the McAdoo Tube Trains to Hoboken, which connect with the White Line Electric Cars passing our Nursery.

## BOBBINK \& ATKINS, <br> Nurserymen and Landscape Architects, RUTHERFORD, N. J.




POSITIVELY THE BEST \& PUREST MADE. PACKED IN LARGE \& SMALL CAKES, CROQuETTES, MINIATURE MILK CANS \& PAILS, STICKS \& $\&$


QUALITY \& FLAVOR STAND UNAPPROACHED. $1 / 4 \& 1 / 2 \mathrm{lb}$. TIN CANISTERS.


At Easter Tide
when custom decrees that men, and especially women,
should look their best, the raw spring winds cause much should look their best, the raw spring winds cause much
damage to tender skins and complexions.

Mennen's Borated Talcum
Toilet Powder
Is then doubly necessary. It soothes and heals the skin,
preventit Chappink Chatink, Prickiv Heat prevents Chapping, Chafing, Prickly Heat, Sunburn shaving it is delightful, and in the nursery indispensable. For your protection the genuine is put up in non-refill-
oble boxes-the "Box that Lox," with Mennen's face oble boxes-the "Box that Lox," with Mennen's face
on top. Guaranteed under the Food and Drugs Act, on top. Guaranteed under the Food and Drugs Act,
June 30,1906 . Serial No. 1642 . Sold everywhere, or by
mail 25 cents. Sample mail 25 cents. Sample free.
GERHARD MENNEN CO., Newark, N. J.
Try Mennen's Violet (Borated) Talcum Toilet Pow
the scent of fresh-cut Parma Violets.

## The Morris Nursery Co.

Offers of their late importation from Holland a fine stock of Iris, Pæonias, Roses and some evergreens; of their own growing a large selection of ornamental and shade trees, evergreens, shrubs, vines and fruit trees. Catalogues sent free on application. Address

## THE MORRIS NURSERY CO., west chester, pa.

any points of value. But what was more disappointing there was nothing to show after several years of patient strife with constant unsatisfactory results but a lot of mongrels, none having any point of value or even promise or probability of it. Thus was history once more vindicated, and the old story told over again "that nature hasits own ways in regard to the breeding of animals and that the evident design of nature in this respect is to preserve all races permanently distinct."

There is a scientific principle involved in this general result in the reproduction of animals, just the same as there is in the same way with plants. Nature seems to have made the rule that species should be continued by making them able only to perpetuate themselves, in their own distinct. line, and that they should be forever unable to mingle with others and in this way upset the distinct peculiarities thus naturally fixed for the preservation of each and all permanently. And to secure this distinct separation it seems to have been made the irrevocable law of Nature that closely related species, singularly, should not have the ability to interbreed successfully and thus wholly undermine the plans on which Nature was originally founded, by rapid deterioration.

Thus the rule is apparently that breeds should be perpetuated permanently and so preserve their most vigorous progeny for the increase of the race, not only by natural selection, but equally by the power and ability to dominate over their companions.

Nature makes no distinctions between great and small, and its laws apply to all alike indiscriminately. It could not be otherwise if the world is to exist permanently. And thus it has been, and is, and apparently ever will be, as long as the world remains.

Now, if these propositions are true, then the changing of natural laws for the advantage or whim of mankind is difficult, uncertain or impossible. And the breeder who tries to turn them from their established course is placed in strife with this invulnerable and irresistible force and is obliged to submit to its laws and rules, and, if otherwise, he is defeated.

If this is the case then we must agree to the inevitable, and once for all establish the rule that any intermixture of related blood in any flock is sure to be disastrous and in the end destructive.

Then when such a proposition is made as this we may ask, "What will probably be the result of breeding together the progeny of the same parents in an effort to establish any uniformity of character in any selected flock, expected to reproduce required characteristics, so as to make in the end a new breed, possessing some valuable new points?" To this we can only say that every rule of natural laws and every occurrence in natural history is inconsistent with any hope of success, and further are all in direct antagonism with such hope.

At about regular intervals there appears some individual strongly imbued with a desire to make a reputation or obtain some notoriety by producing some new breed of sheep, with no other intention apparently than to establish credit for doing a remarkable thing. Just at the present time there are at least two propositions on foot, and having been approached for some possible encouragement, we have to say that it is a hopeless case, as much so as to expect to find a gold mine appear in the morning after one has blasted a hole in the back yard of his home. All experience proves this, even that of those prominent breeders such as Bakewell, the originator of the magnificent Leicester, Webb and other noted improvers of the Southdown, and the few others who in a lifetime work left still much to be done by their successors. In fact, the best sheep breeders find enough to do to maintain their flocks in standard condition without trying experiments in the way of making new difficulties to encounter.

Let us preserve and keep what we have, improving if possible, and when something new is wanted by the world and we know what is wanted, it will be easy to repeat what has been done before.-Ancient Shepherd in the American Sheep Breeder.

The illustration to the article on the Razorback Hog, page 146, was supplied by the Todd Company. Smithfield,

## THE EDITOR'S TALKS <br> (Continued from page 141.)

of this is $\$ 1.80$ a roll. It may be applied on a pale blue, cream, or pastel green or pink wall. There is a dainty side wall-paper which comes with this and is seventy-two cents a roll of eight yards, in color a pale creamy yellow
with a two-toned effect of clustered dots on its surface.
Domestic wall-papers of fresh crisp coloring and really exquisite designs are found at extremely low prices. Among these is a paper showing clusters of richly colored roses against a creamy ground at thirty-six cents a roll of eight yards. A French design of bouquets of small rose buds and forget-me-nots on an oyster white ground is twenty-four cents. Yellow poppies apparently throw $n$ with a careless hand on white ground is twenty-two cents.

Many of the so-called ceiling papers make most attractive side walls, while quite impossible for the ceilings. Speaking of ceilings, the color chosen for the tint, or plain paper for the covering of these, is very important. In many rooms a purely white ceiling is entirely out of harmony with the side walls. There are plain papers made for ceilings at twenty-four cents a roll, which come in a wide range of delicate tints. Also the prepared wall tints to which we have previously referred furnish several acceptable shades for this use.

## DETAIL IN FURNISHING

It has been the intention and endeavor in these talks to strongly urge the necessity of considering every detail in the interior finish of the house. This includes hardware, tiles, lighting fixtures, as well as color and finish for standing woodwork and floors. Equal attention should be given to detail in furnishing. When an acceptable setting and background be achieved, with suitable pieces of furniture well placed, the picture is ready for the final touches which give life and character to the whole. These come in with the selection and grouping of pictures and ornaments for mantel shelf and tables, screens, table covers, covering of cushions and lamp shades, -all can make or mar a room. The arranging of ferns and small plants is an important decorative feature. These must be properly placed in the room and set in jardinieres or bowls, which are entirely suitable to the room, and of plain color whether of pottery, metal or porcelain.

A clever woman has invented a tiny screen to place on the tabourette or low stand holding a palm or fern in its unbeautiful earthenware crock. This screen is made on the lines of a lamp

## Preserve and Beautify Your Shingles



Cabot's Shingle Stains
They are made of Creosote ("the best wood preservative known'", pure linseed oil, and the best pigments, and give soft, velvety
coloring effects (moss greens, bark browns, coloring effects (moss greens, bark browns,
silver grays, etc.) that look better and wear silver grays, etc. others. $50 \%$ cheaper than
better than any other paint.
Send for stained wood samples and catalogue SAMUEL CABOT, Sole Manufacturer 141 Milk Street, Boston, Mass.

A gents at all Central Points
Cabot's Sheathing "0uilt" makes warm houses


What GooiPaintSares
W ${ }^{H E N}$ you paint a house, the cost and the colors have most careful
Before you figure-it-out, a low-price-per-gallon
Bution, paint looks cheapest. But let's see:
Suppose you were going to paint; for instance, a
house like the one above Weil estimate the house like the one above. We'll estimate the
total surface to be covered at 10,000 square feet. total surface to be covered at paint only-the good paint and the cheap paint-assuming the labor to be the same in both cases.
Now good paint-Lowe Brothers "High Standard" -will cover 350 or more square feet to the gallon, two coats, and a paint made ture hand-mixed-byguess" will cover approximately 200 to 250 square feet two coats. This means that it will require 30 gallons of "High Standard" Paint, and of the cheap paint 45 gallons, or 15 gallons more. per gallon more than the cheap-sounds big, doesn't it? Still the cheap paint or "hand-mixed" would really cost at current prices $\$ .25$ more than the Lowe Brothers High Si andard Liquiii Paint
for this work. That isn't all. The Lowe Brothers Paint will last five years and more, and the other not over three.
will cost $\$ 9.75$ per year less than cheap or "handmixed." Worth saving isn't it?
Another thing-with "High Stan
Another thing-with "High Standard" Paint properly put on, there's no chalking or peeling or crack-
ing as with "hand-mixed" or cheap paint - the surface is left in good condition for repainting without scraping or burning-off.
Do you see the advantage
Do you see the advantage of the distinctive wear-
ing quality of "'High Standard" Liquid Paint? ing quality of "High Standard" Liquid Paint? As to color- High Standard" Paint offers the
most durable and beautiful colors, in large variety. If you are interested in the latest fashions, let us send you our color cards. Other Lowe Brothers Products are Varnish,
Stain, Enamel, Floor Paint-just the right Stain, Enamel, Floor Paint-just the right thing
for every requirement. Write for Free Book for every requirement. Write for Free Book,
let-"Attractive Homesand How to Make Them."



You buy a refrigerator once in a lifetime -you buy ice every day. The walls of McCray Refrigerators are scientifically built so that they will keep the cold air in and the hot air out. They therefore use much less ice than others, and soon pay for themselves, besides keeping all provisions pure and in fresh condition.

## orcCray Refrigerators

are thoroughly insulated with mineral wool, the best insulating material known, and have the McCray Patent System of Refrigeration which insures a perfect
circulation of pure, dry, cold air. They are lined with circulation of pure, dry, cold air. They are lined with White Opal Glass, Porcelain Tile, White Enamel or
Odorless White Wood, and are the cleanest, sweetest, Odorless White Wood, and are the cleanest, sweetest,
dryest, most sanitary refrigerators made. No zinc is ever used in their construction, as zinc forms oxides that poison milk and other food and is very dangerous. Let us tell you how easy it is to have a McCray arranged to be iced from the outside, thus keeping the iceman out of the house.

McCray Refrigerators are made in all sizes, ready
Built-to-Order for for immediate shipment, and are Built-to-Order for
all purposes. Every refrigerator is positively guaranall purposes. Every refrigerator is positively guaran-
anteed to give lasting satisfaction.


## The Only SAFE Refrigerator to Use


#### Abstract

HE HEALTH of yourself and family is in danger if you use any other refrigerator than The Monroe. Because The Monroe is the on/y solid porcelain refrigerator. It alone can be kept thoroughly, spotlessly, germless ly clean. cleaned by any means at the housewife's disposal. Here spilled milk, gravies and particles of food collect and breed germs by the million. These germs get into your food and make it poison, and the family has summer complaint or stomach troubles from no traceable cause. rung from to instant by simply wiping it out with a cloth Thing from hot water. This is true of no other ref rigerator in the world. This is why The Monroe is installed in the best flats and apartments, occupied by people who care-and why The Monroe is found today in large majonty of the very best homes in the United States. sake of knowing your food is clean, and to protect the family's health at the same time. So, in your own interest, read carefully our libera ffer below:


The interior is made of one piece of seamless porcelain ware an inch thick (construction patented) with every corner rounded.
Is Sent to You, Anywhere, on 60 DAYS' FREE TRIAL
Lowest Factory Prices. We Pay the Freight.
Write today for The Monroe Catalog. Pick out the size and style refrigerator you wish totry, at the same time convince us in your own way that you are entitled to enjoy our trust and confidence and we ll send it to you
at once, all freight prepaid. You'll not be under any obligation to keep it at once, all freight prepaid. You'll not be under any obligation to keep.
unless you pant to. When the refrigerator comes, use it and test it in unless you mant to. When the refrigerator comes, use it and test it in
your own home for 60 days and prove to yourself in your own way your own home for 60 days and prove to yourself in your own wa
that The Monroe is all and more than we claim. Then decide whether you wish to keep it or not. Remember, all the risk and expense is ours,
not yours. We could not a ford to make this liberal offer unless we knew not yours. We could not a ford to make this liberal offor unless we knew
positively that you'd find every claim true and would keep The Monroe after the trial was over
MONROE REFRIGERATOR CO., Station 3, Cincinnati, Ohio

Period lighting fixtures from classic to modern.

Every detail carefully developed in a most complete line for your inspection.

Architects' designs carefully executed. Sketches submitted on request.

Reading Hardware Co.
Manufacturers,
617 Market Street, Phila., Pa.

should be appropriate to its use. The simple fence here shown is well suited for the small suburban place.
We make fences for every purpose-Iron Rail-ings-Entrance Gates-Wire and Iron Fences for Lawns, Gardens, Stock Paddocks, Poultry Runs, Lawns, Gardens,
Dog Kennels, etc.
Dog Kennels, etc. Arbors for vines and fruit trees, Arches, Plant Supports, Tree Guards, etc

Send for Illustrated Catalog.

## Anchor Post Iron Works

43 Park Row - New York City

## 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 recelve special attention
James Spear Stove and Heating Co.
1014-16 Market Street
Philadelphia, Pa.
screen, three panels lightly hinged. It may be covered in Japanese grass-cloth or bits of quaintly figured brocades, edged about with gold galloon,- the character and furnishing of the room to determine the choice. Where simple lines, plain colors and mission furniture are used, - the Japanese grass-cloth screen is best. If a small table wears a cover of brocade trimmed with the galloon, the effect of using the same in the little screen is attractive.

Where a window seat, chaise-longue, or davenport holds many pillows, the coloring of the covers of these should be most carefully selected. If a figured wall-paper is used in the room, these materials should all be in plain or twotoned color effects. To reproduce the colors shown in the rug of the room is an acceptable scheme.

In this day of shaded lights, no room is complete without its lamp-shades or candle-shades. These may be made of thin soft silk fluted on the large wire frames, which may be purchased for seventy-five cents. A tiny moss fringe should trim the lower and upper edges. A shade of this kind can be constructed at home at very little expense. Also attractive shades may be made from the Dresden silks, showing tiny baskets of flowers in colors on white or cream ground. The silk is stretched smoothly on the frame, and all joinings are covered by dainty gold lace not more than one-half inch in width. There are no more beautiful shades made than those of vellum hand painted. The soft ivory of the vellum makes a particularly effective background for the decoration of Empire or Louis XVI. design.

Quaint bits of brass in book racks, candlesticks, candelabra, jars, and boxes, may be picked up in some of the small Russian shops that are finding their way into all of the great cities. These cost very little and are most decorative.

Where correspondents write to this department in regard to such detail in furnishing, if they will send a bit of the wall-paper used in the room to be considered, or at least a complete color description of the same, we will be able to help them practically.

## CORRESPONDENCE

TO RENDER OLD FLOORS SERVICEABLE
I live in an old Southern house, the floors of which have for many years been covered. As I am particularly anxious to do away with carpets and mattings, I would ask that you suggest some treatment for floors of soft pine, which will make them possible. Also will you advise me in regard to the best covering for a three leaf screen I wish to use in my dining-room, the walls of which are covered with a large figured two-toned green paper. The ceiling is white, the woodwork and furniture of walnut.

Answer: We will send you by mail a formula for mixing paint with which to treat your soft wood floors. Select a Vandyke brown oil paint, and by adding the floor finish of which I send you the name, you will have a surface for your floor which is much better than can be secured by ordinary painting. The cracks of the floor should be thoroughly filled with a crack filler, formula for which we will mail to you. Three coats of paint should be given. Cover the three panels of your screen with a gold fabric paper: this resembles gold burlap. There is a frieze now made which shows the tops of pine trees against a light sky line, the lower edge of which is finished by irregular rows of pine cones in gold and brown. This frieze can be applied to the top of the panel of the screen. Cut out the lower edge so that the pine cones will be applied directly to the gold paper. Mounted on burlap or canvas this will give you a screen covering at slight cost which will wear almost as well as leather. It will be particularly effective in your dining-room with the dark wood and green walls.

CURTAINS SUITABLE FOR A COTTAGE IN THE COUNTRY
My home is in the country all the year round. Our means are very modest and I am particularly fond of beautiful things. As the views from my windows are all that one could desire, I must content myself with simple but harmonious surroundings within doors in my home. My dining-room is papered with a cartridge paper in shade of yellow-tan. The sitting-room, which opens out of it and is of southern exposure, has dull blue for its wall covering. The woodwork in these two rooms


## The Finishing Touch to the Attractiveness of Your Home is the Decoration of the Walls

You can make an old house as bright, cheerful and attractive as it was when new, by decorating your walls artistically with Alabastine.

When the house is new, and the woodwork fresh and clean, you can keep it absolutely sanitary by decorating with Alabastine.

The dainty Alabastine tints make the most pleasing background for pictures, furnishings and furniture, and enable you to have the entire house finished in one complete color scheme so that one room blends into the next. All of the rooms will be brighter, more cheerful, more artistic. The cost will be less, and your satisfaction greater. Any one can easily apply Alabastine by simply following directions on the package.
Alabastine
becomes a part of the wall itself. One tint can be applied over another as often as desired without the bother or expense necessary where old wall-paper or kalsomine has to be first washed or scraped from the walls. This cuts the cost of decorating in half. Alabastine decorations will last longer, for Alabastine neither fades, rubs off nor scales.

Many of the beautiful color effects that can be produced with Alabastine are shown in detail in the book "Dainty Wall Decorations," which contains complete color plans for any home. This book will be sent you postpaid for 10 c in coin or U.S. stamps. It is worth far more to anyone intending to decorate. Tint cards mailed free on request.

## Ask your dealer for Alabastine and insist upon having Alabastine

Alabastine is sold in carefully sealed and properly
labeled packages at 50 c for white and 55 c for tints labeled packages at 50 c for white and 55 c for tints, See that the name "A labastine"' is on each package If yore it is opened, either bv yourself or the painter. If your dealer does not sell Alabastine, write us.

## The Alabastine Company

${ }^{215}$ Grandville Ave. Grand Rapids, Mich. Eastern Office, Dept V, 195 Water Street, New York City.


JULIUS ROEHRS CO. RUTHERFORD, N. J.
Growers, Importers and Exporters ORCHIDS
catalogue on request
Flowering Plants and Orchids always in stock.

Visitors always welcome.


Buy "Kalamazoo Komfort" Now Enjoy that luxurious rest and rolaxation
wiich gives renewed energy and which glves renewed energy and
makes the hot, sultry days cool and delightful. Be truly comfortabie when roal ing, resting or ill. The expense is only nominal. Our Reclining chair, automatically ad-
justing itself to every position will justing itself to every position, will do all
this for you. Write us for free trial offer and catalogue No. 74, showing ten
models of this chair and sixty other models of this chair and sixty other designs of summer furniture. Ask your dealer for Superior Quality lawn furniture and
make your home comfortable, attractive and distinctive KALAMAZOO SLEDCOMPANY
520 3RD STREET, MALAMAZOO, MICH.


For nearly threescore years we have been known as "The Leading Rose Growers of America.' Each year adds to our knowledge and experience in the cultivation of Roses and the best conditions governing their successful growth, so that the "'Dingee Roses'' offered for 1908 are even more beautiful, more varied than ever before. The thirty-ninth annual edition of our

## New Guide to Rose Culture

## For 1908

affords you the latest and most up-to-date knowledge to be had on the subject of Rose growing. It is larger, handsomer and more valuable than ever. Many pages illustrated in color. Describes over a thousand distinct varieties of Roses that we now have in stock-all on their own roots-all strong, hardy plants. Tells how to grow Roses successfully and all other desirable flowers. Contains select lists of flower and vegetable seeds. Mailed free to all who write for it.

## 10 Famous Roses- $\$ 1.00$

The 1908 "Dingee Collection", is offered to those prises ten strong, hardy Rose plants, all on their own
roots, all different anl labelled and tre roots, all different, all labelled and true to name,
including the wonderfu Tausendschonn (Rose of a Thousand Beauties), La France, Killarney, Helen Gould, The Cochets-sent postpaid anywhere for
$\$ 1.00$. Guaranted to reach you safely and to grow and bloom. The greatest collection ever offered.
Orders booked for delivery when wand Orders booked for delivery when wanted. A dollar
bill will bring them. Now is the time to order. THE DINGEE \& CONARD CO., West Grove, Pa

The Leading Rose Grolvers of America
Established 1850.
70 Greenhouses.
Stanley's Ball-Bearing Hinges

## Nothing equals them for hanging doors either in <br> Big Public Buildings or Private Dwellings

Two will frequently take the place of three ordinary hinges, and their action is noiseless and perfect. TMade in Wrought Bronze and Steel.
THESTANLEY WORKS
Myrtle Street, New Britain, Conn. New York Office: 79 Chambers Street
is very ugly, being of pine finished with hard oil. This I wish to remedy. Also I would like a suggestion for curtaining the windows of these rooms. The windows are narrow and of ordinary sliding sash design. I do not like lace curtains.

Answer: It would be a very easy matter to improve the woodwork in your two rooms. Cleanse these with a varnish remover to take off all of the oil in the present finish. When the wood has thoroughly dried apply three coats of white lead, followed by two coats of enamel in a shade of ivory white. This will give you a beautiful smooth finish and one which will be lasting.
The color combination of dull blue and soft yellow is very good, and we are glad to know that you are opposed to lace curtains. Since your windows are narrow in effect, we would suggest that you set rods at the top of the frame, extending about three inches on either side of the wood trim. From this extension, and covering the wood trim, hang curtains of domestic linen taffeta, these to extend only to the sill. In your blue room select a taffeta in a shade of tan with dull blue figures. For the dining-room use plain blue, the color of the walls in the sitting-room. Next the glass hang straight curtains of figured white batiste. The figure should be small and the batiste very sheer in quality.

This does not necessarily mean that it will be an expensive quality, as the coarser weaves are most effective and launder better for curtains. I am sending you samples of this domestic linen taffeta and the batiste. The price of the taffeta is seventy-five cents a yard, fifty inches wide; the batiste varies in price from thirty cents to sixty cents a yard, thirty-six inches wide.

DECORATIVE LOOSE BINDINGS FOR BOOKS "New England,", "A Book Lover,",
and "A Reader," have all asked about
decorative loose bindings for books and
illuminated monograms to be used on
them. These can be obtained in many
of the leading shops, but where spe-
cial designs and something distinctly
personal is desired, they can be made to
order. The illustrations given show
some of the designs, which are partic-
ularly effective. If we are supplied
with a self-addressed envelope, we will be pleased to forward the addresses of parties from whom estimates on this work may be obtained.


A Binding with Thumb Index


A Binding Showing Monogram

Mrs. L., of Boston, a Southern Woman, a Subscriber, and an Interested Reader, will all find reply to their questions embodied in The Editor's Talks for the current month.


Adapted to shore and country houses. Can be obtained unfinished or stained to suit the purchaser, and individual tastes may be gratified.

A request will bring pictures of 200 distinctive patterns.
Visitors are invited to inspect specimen pieces displayed in our warerooms.

## WILLIAM LEAVENS \& CO.,

MANUFACTURERS
32 Canal Street,
Boston, Mass.

## USEFUL HINTS TO HOUSE= KEEPERS.

A COAT of Natural Jap-a-lac applied over old or new linoleum or oilcloth will double its life, by preserving the original coat of varnish which would otherwise soon be washed or worn off.

WEATHER-BEATEN front doors are revived and beautified when coated with Jap-a-lac, and "newness follows the brush." It is best to use the color nearest that of the old finish.

WINDOW and DOOR screens should be coated with Jap-a-lac each spring, using the Brilliant Black on the wire, and the Mahogany, Oak, Cherry or Walnut on the frames. It gives them new life and the wire cloth is protected from rust.

PORCH FURNITURE should be protected and beautified each spring with Jap-a-lac. It is best to use the color of the old finish; but if you wish to change the color, use Red or Green Jap-a-lac.

JAP-A-LAC is a household necessity, and can be used in a hundred and one ways, from "cellar to garret," and is especially adapted for finishing old or new floors and woodwork. Ask your paint dealer.


## Solving the Greenhouse

## Question


"There are a hundred and one things which you no doubt want to know about this greenhouse question, before deciding definitely upon it. At just this state of the question, we can be of incalculable assistance to you. Just write us what you have in mind.'

HITCHINGS \& COMPANY
1170 Broadway,
New York

In writing to advertisers please mention House and Garden.


## Russell \& Erwin Manufacturing Company

NEW BRITAIN, CONN.

No. 26 West Twenty-Sixth Street, New York
No. 1201 Chestnut Street, Philadelphia

'FFireplaces should be put in all available rooms, including chambers," says a writer in Country Life in America. They are the best ventilators. Our Brick Mantels are approved by all admirers of good art. We will mail you a book of photographic plates upon application.

Philadelphia and Boston Face Brick Company,
165 Milk Street,
Dept. 46
In writing to advertisers please mention house and garden.


## Hot Water You

 Don't Have to Wait forWhen you want hot water for the morning tub-for shaving-hot water in the kitchenin the laundry-and plenty of it-you simply turn the faucet -just as easy as touching a bell-button. No fires to light-nothing to wait for-but hot water in ten seconds if you have a

## RUUD

 Automatic Water HeaterControlled from any hot water faucet in the house. Starts itselfchecks itself automat-ically-the most wonderful water heater ever invented. Least fuel expense. Clean and simple. Easy to attach in your basementtothepipealready installed. Write for free booklet and names of people in your town who use the Ruud.
RUUD MFG. CO., Dept. F.
Pittsburgh, U. S. A.
(Branches everywhere)
AGENTS WANTED
We want a bright active agent to represent HOUSE AND GARDEN permanently in every city and town in the United States. We have a special offer, covering both new subscriptions and renewals, by which a permanent and profitable business can be established with little work. Experience not necessary. Write for our Special Offer.

Subscription Department

## 

1006 Arch Street


It blankets the walls and keeps out dampness and cold. Its cost is insignifcant as a building expense, but it adds great value to your house when built-important if you keep it, important if you sell.

Draughts mean discomfort-sickness and doctors' bills. Build right -refuse cheap substitutes for Ne -ponset-papers that split open and let in the draughts. Watch the work -make sure Neponset waterproof sheathing paper is used.
Write our special Department of Building Counsel for free samples and advice on any building subject. We are helping many; we can help you. Write now.

Building Counsel Department


## TREES <br> Fruit and Ornamental

 Shrubs, Evergreens, Roses, Hardy PlantsLargest and most varied collections in America at best prices, direct from the grower. We have no agents.
FREE on request.

ELLWANGER \& BARRY
Mount Hope Nurseries, Rochester, N. Y.

HIGH GRADE PRESSED METAL SASH PULLEYS


Made with Plain Axles, Roller Bearings and Ball Bearings
Combination Groove for Chain or Cord catalog sent upon request
The American Pulley Co. 29th and Bristol Streets PHILADELPHIA $\therefore \quad$ PA.

THE BEST SASH CORD MADE
SINGPBAKFA

EVERY FOOT IS STAMPED IN RED SILVER LAKE "A"


Detail of Fountain by C. J. Barnhorn, Sculptor Made by
ROOKWOOD POTTERY COMPANY CINCINNATI
Eastern Office, 1 Madison Ave., New York
$e^{\text {In writing to advertisers please mention house and Garden }}$

## - The Standard of Excellence -



With Correct Designs in all the Leading Schools of Art is found in the productions of

## P. \& F. CORBIN

N. W. Corner<br>Eighth and Arch Streets PHILADELPHIA<br>FACTORIES<br>New Britain, Conn.



New York Belting and Packing Company, Ltd., 91 and 93 Chambers Street, New York City

Chicago: 150 Lake Street.
St. Louls: 218-220 Chestnut Street. Philadelphia: 118-izo North 8th Street. San Francisco:
Cakland:
CAKLAND:
E. IIth Street and 3d Avenue. $\}$

Boston: 232 Summer Street.
Indianapolis, Ind.: 229 South Meridian St.

Baltimore: il4 West Baltimore Street. Buffalo: 600 Prudential Building. rittsburgh: 913-915 Liberty Avenue. Spokane, Wash.: 163 S. Lincoln Street.

Sole European Depot, Anglo-American Rubber Co., Ltd., 58 Holborn Viaduct, London, E. C.
n writing to advertisers plase mention Holse and Garden.

The colors run from delicate balsam or tender rose through the intermediate shades of bright rose and carmine, with white, yellow and various other indescribable tints showing. There is no


The Thousand Beauties Rose
other rose in cultivation like it. It is a strong grower, with but few thorns, magnificent foliage, impervious against mildew and absolutely hardy in the open ground everywhere. It has created a veritable sensation, and has been awarded numerous medals. For climbing over porches, bowers, pergolas or trellises, or for single specimens or pyramids, it will please you from the day you plant it. We pronounce it the most remarkable rose of its kind in the world.

Those interested may obtain full information about this sensational rose by writing to the Dingee \& Conard Co., West Grove, Pa., for particulars, or by asking for their rose catalogue, the
"New Guide to Rose Culture for 1908 ."

## ABOUT MAIDENHAIR FERN

W
$E$ often hear it said: "I love the maidenhair fern, but I cannot do anything with it." To those disappointed ones I want to say: "You can, for I have, and for at least twenty years I have had magnificent specimens, the delight and admiration of my friends.
"It is true, these ferns can be grown successfully only in the greenhouse unless one studies the situation, and goes at it intelligently. In preparing the soil,


What, how and when to plant vegetables, grasses, flowers, plants, bulbs, ferns, palms, roses, shrubs, vines, berries, aquatics, etc.; also tools to use, insecticides, fertilizers, etc.

A complete Garden Guide and Reference Book for both amateurs and professionals, listing the best strains that are grown. 248 large pages, profusely illustrated with hundreds of photo-reproductions of
worthy novelties and dependable standbys in vegetables and flowers. Mailed to anyone on receipt of request mentioning this publication.
Henry A. Dreer, 714 Chestnut Street, Philadelphia


The man who buys any other Typewriter always HOPES it will be as good as the

## REMINGTON

Remington Typewriter Company 110 S. Ninth Street, Philadelphia, Pa.


## The Best Women Use Creme Tacoma

The Best Dealers a Jar

## Creme Gacoma

is not mere cold cream. It is totally unlike any other cream you have ever used.
And it produces wonderful results. It is a skin food-cooling, healing, nourishing.
It prevents chapping and chafing; will smooth out wrinkles and crow's feet; and relieve all rough and disagreeable conditions of the skin-producing a clear, beautiful and healthy complexion. Creme Tacoma is pure and antiseptic and will not promote the growth of hair.
We want you to know the wonderful value of Creme Tacoma by actual test, and if you will write us we will send you a trial jar free.

## IRON CITY CHEMICAL CO.

313 Carson Street, Pittsburgh, Pa.

Creme Tacoma is a delightful
after-shaving cream for men.

COUPON Creme Tacoma THE IRON CITY THE IRON CITY
CHEMICAL CO. 313 Carson St., Pittsburgh, Pa. You may send me, absolutely
FREE, a trial size packase of
Creme Tacoma, free copy of your B ook of Beauty, Sugsestions, Etc. My dealer's name is
His address is $\ldots \ldots \ldots \ldots \ldots \ldots$...................
(Do not fail to answer in this opace whether your
dealer does or does not sell Creme Tacoma- Yes . "Noaler does or does not sell Creme Tacoma-"Yes"


## VARNISH

FRENCH'S
ESTABLISHED 1844 PHILADELPHIA
U. S. A.
"RELIABILITY" "DURABILITY"
Ives Patent Window Stop Adjuster


PATENTBD.
The only Stop Adjuster made from one piece of metal with solid
ibs and heavy bed that will not cup, turn or bend in tightening ribs and heavy bed that will not cup, turn or bend in tightening
the screw. Manufactured only by The H. B. IVES CO.. New the screw. Manufactured only by The H. B. IVES C0.. New
Haven, Conn., U. S. A.
(Fifty-page Catalogue Mailed Free.)

In writing to advertisers please mention House and Garden.
have at least one-half woods earth or leaf mold, with a good sprinkling of sand mixed in and no manure. Have at least two inches of charcoal or broken crock in the bottom of the pot, with a little moss or fibre to keep the soil from washing out.
"This gives perfect drainage, which is essential. Do not allow it to dry out, but water freely. The pot can be raised slightly by putting something in the bottom of jardiniere or saucer, thereby keeping the vent in bottom of pot open, allowing surplus water to run off freely, though I doubt if standing in water would do harm. That, however, is a theory. A north or east window is best. I give what morning sun they can get, and fresh air often. This is another essential, but avoid drafts. A dish of water on the stove or heater gives a little moisture, which they need, and I have found a low stand near the floor works admirably, giving them the coolest, purest air in the room, and the chance to 'look up' toward the light, as they do naturally in their native or wild state, but not so low as to preclude a good, strong light, and a morning kiss from the sun."-Farm and Home.

## ALGERIAN MOSQUES

$\mathrm{O}^{\mathrm{F}}$ $F$ the more than one hundred mosques which formerly existed in the city of Algiers, only five now remain. The most interesting of these are Djamäa el-Kebir, the grand mosque, in Rue de la Marine, Djamäa el-Djedid, or the Fisher Place mosque, also in the Rue de la Marine, and the enchanting little mosque of Djamäa Sidi Rhaman, overlooking the garden of Marengo, and taking its name from the marabout, or Mahometan priest of most venerated memory, Sidi Abd-el-Rhaman, who died in I47I and is interred here within an inner sacred chapel or khouba, surrounded by several pachas and deys. Two distinct and zealous sects, the Maleki rite and the Hanefi rite, worship respectively at the Grand mosque and the Fisher Place mosque; while at the Sidi mosque all are on common ground; it is the shrine of the more aristocratic Moslems, and on certain days of the week it is thronged with men and women, the latter, from an old and lax custom, predominating. Indeed, it is at this little mosque, if reverence is assumed and discretion exercised, that one will secure
more glimpses of Arab women of the finer type than offered by all other possible opportunities in Algiers. The Grand mosque dates from the eleventh century. From the Rue de la Marine it presents a façade of splendid white marble columns. These support an arcade, in the center of which is a tremendous fountain. Before all mosques stands the fountain, for all Moslems perform extraordinary ablutions before entering for worship. The interior, as with all mosques, is extremely plain. Stately, monumental pillars, supporting the universal Moresque arch, provide numerous series of arcades. A few inexpensive lamps are suspended from the roof. The pulpit is plain, and the attached gallery to it is of the severest pattern. A little niche, without ornamentation, is set into the wall, called the mihrab, which is found in all mosques, and indicates the east, the direction of the sacred Mecca. Mattings are hung about all columns and the side walls, lest they suffer defilement at the touch of sacrilegious Christian. The one sumptuous thing to be seen is in carpeting. The floor is completely covered with the richest of old Moorish carpets. For no Moslem, and no Christian unless he have no sense of regard for cherished religious custom and tradition, will ever enter one of these edifices without first removing his sandals or shoes. The windows are invariably small, set high in the walls, colored, and the effect of the dim, subdued light and the peculiar Eastern incense, is exceedingly impressive. Under the same roof is the highest Algerian court of the Algerian Mussulmans, the superior tribunal of the mufti, to which appeals are frequently taken from the lower court of the cadi; for it has been the wise policy of the French provincial rule in Algeria to foster and preserve all Mohammedan customs, religion and institutions, not positively inimical to French civil law.Commercial Advertiser.

## THE WATCH AS A COMPASS

AFEW days ago I was standing by an American gentleman, when I expressed a wish to know which point was the north. He at once pulled out his watch, looked at it and pointed to the north. I asked him whether he had a compass attached to his watch. "All watches," he replied, "are compasses."


## What

THIS LABEL appears on every piece of genuine "Standard" Porcelain Enameled Ware-the model bathroom equipment for your home. This label means that the bathtub, lavatory, closet, or any fixture bearing it, is a guaranteed fixture-guar-

## PORCELAIN ENAMELED WARE

is a perfect unity of iron and porcelain enamelthe strongest and most durable combination ever produced in a sanitary fixture. By a secret process of manufacture these two elements become amalgamated - each is made an integral and inseparable part of the other. "Standand" fixtures have thus the indestructible strength of iron with the snowy elegance of fine china. This extraordinary wearing quality of "Standand" Ware is only one of the reasons why these beautiful fixtures afford more years of satisfactory service per dollar of cost than any other plumbing equipment dollar of cost

WRITE TO-DAY
for our free 100-page book," Modern Bathrooms" -the most complete and beautiful book ever i ssued on the sanitary subject. "Modern Bathrooms'" illustrates sanitary equipment of every style and price and contains valuable information on how to plan, buy and arrange your fixtures in the most economical and attractive way. Every householder should have a copy. Send for it at once (enclosing 6 c postage), giving name of your once (enclosing 6 c postage), giving
architect and plumber, if selected.
anteed to be thoroughly sanitary, and with ordinary care to be a practically indestructible fixture; guaranteed by the makers to be in every respect a strictly first quality fitting. The "Standard" "Green \& Gold" Label is your protection against the substitution of inferior goods. For the sanitary equipment of your home it pays to specify the most reliable equipment your money can buy. It pays to specify "Standard" Porcelain Enameled Ware. Specify "Standard" Fixtures, which cost no more than those made by inexperienced manufacturers, and look for the label to make sure you are getting the genuine.

Address, Standard Sanitany Mfg.Co。Dept. 40, Pittsburgh, Pa., U. S. A.
Pittsburgh Showroom, 943 Penn Avenue.


## THE BARDSLEY

## Improved 1904 Pattern

Can be applied to either a right-hand or a lefthand door, or either side of a door without any change whatever. It has a coiled wire spring, the most durable form of spring known, and is the easiest of Door Checks to apply.
JOSEPH BARDSLEY, 147 to 151 Baxter St.i. $\underset{\text { New }}{\text { York City }}$
Boston, 19 Pearl St. Chicago, 88 Lake St. St. Louis, 404 Security Bldg.
Cincinnati, 3135 Epworth Avenue
San Francisco, 519 Mission Street


## GARDEN POTTERY

ITALIAN FLOWER POTS

## SUN-DIALS VASES

STATUARY BENCHES
WINDOW BOXES ETC.

CATALOGUE ON REQUEST
WM. GALLOWAY, 32d and Walnut Streets, Philadelphia

## A Lifetime Without Repairs

Asbestos "Century" Shingles will Outlive the Building without either Paint or Repairs



Illustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Illinois, Prof. F. M White, Architect, roofed with Asbestos "Century" Shingles, laid French Method.

Exposed to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such, defy all changes of climates, and thus become greatly superior to other forms of roofing.

Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.
ASBESTOS "CENTURY" SHINGLES
REINFORCED ASBESTOS CORRUGATED SHEATHING

## FACTORS :

THE KEASBEY \& MATTISON CO., AMBLER, PA.

Then he explained to me how this was. Point the hour-hand to the sun, and south is exactly half-way between the hour and the figure XII on the watch. For instance, suppose that it is four o'clock. Point the hand indicating four to the sun and II on the watch is exactly south. Suppose that it is eight o'clock, point the hand indicating eight to the sun, and the figure X on the watch is due south. My American friend was quite surprised that I did not know this. Thinking that very possibly I was ignorant of a thing that every one else knew, and happening to meet Mr. Stanley, I asked that eminent traveller whether he was aware of this simple mode of discovering the points of the compass. He said that he had never heard of it. I presume, therefore, that the world is in the same state of ignorance. Amalfi is proud of having been the home of the inventor of the compass. I do not know what town boasts of my American friend as a citizen. - Labouchere in London Truth.

## BAYBERRY CANDLES FOR GIFTS

B
B ABERRY candles as Christmas gifts to numerous friends was the happy thought of a young woman who had been able to gather plenty of the wax during her summer vacation. The fragrant berries impart a faint aromatic odor to the wax that is delightfully reminiscent of olden times, and lends a decided charm to the delicate green candles.

A pair, or several of the candles in their Christmas wrappings of tissue paper, holly and red ribbons, makes a very pretty and acceptable gift. With the accompanying card attached to the ribbon, a sentiment or verse may be written as: "Let me light a candle of love in your heart that will never burn out." "Thy modesty's a candle to thy merit." These candles are supposed to bring good luck if burned before the end of the year.

The picking of the bay or candleberries is very pleasant work. As the young woman referred to was spending her vacation in the country, stopping at a hotel, she could not make her candles there, but simply gathered the wax. She placed the berries in a kettle with plenty of water and kept them boiling fast. As the wax rose to the surface she skimmed it off and threw it into a small
pail of hot water and when this cooled, it left the wax in a compact cake on top.

When taken home these cakes were melted and run into ordinary candle molds. These bayberry candles give a steady flame, a pleasing fragrance and burn much more slowly than ordinary candles. If only used on special occasions they will last a long time.

Old-time silver candlestick holders make a suitable setting for bayberry candles, or if you do not possess any of these heirlooms, try something unique. The prettiest and most attractive kind of a holder may be made with rosy cheeked apples. They should be of uniform size and a hole hollowed out to set the candle in, so it will stand firm. Place a wreath of holly around it on the white cover.-Farm and Home.

## ROSES

PLANTED too close to a porch or dwelling, especially in a partial shade, and without free circulation of air, roses are likely to be attacked by mildew. A sudden drop in the temperature, especially after a humid season, subjects roses to subsequent mildew as quickly as the same cause does with indoor roses. For outdoor roses under an attack of mildew syringe thoroughly both canes and foliage with the following: One pound hard soap, one-half pound of flour of sulphur, ten gallons of water. Dissolve the soap in boiling water, stir in the sulphur, then add cold water sufficient for ten gallons. Keep constantly stirred while using. This is a perfect cure and far surpasses the method of dusting with sulphur. The latter answers for light attacks and is applied when the plant is thoroughly wet with dew or water.

## PAY OF THE GRECIAN ARCHITECT

IN 1897 the French school at Delphi unearthed two slabs of limestone which bear an inscription which is of great interest, dating, as it does, from the fourth century before Christ. This inscription, which consists of about two hundred lines, gives the price of work for building operations in Greece at the period named, and from it we learn that an architect was paid at the rate of under $£ 30$ per annum. This is not a great sum, even if its purchasing power is multiplied, as it should be, by five or six.-Chambers's 7ournal.

## J. FRANKLIN WHITMAN CO. <br> INCORPORATED <br> DECORATIVE SCULPTORS


$A N D$
MANUFACTURERS AND IMPORTERS

Natural and Imitation Stone and Marble
Art Furniture and
Novelties for Gardens and Halls

Upon receipt of one dollar in stamps we will send to any address our beautiful illustrated portfolio on Garden Furniture containing over 400 cuts. Credit will be given on first order.

## STUDIOS

Twelfth St., Hamilton and Noble
PHILADELPHIA
216-218 E. 42d Street NEW YORK CITY


## The Nursery Exchange 155 Milk Street, BOSTON, MASS.

We are expert and reliable Nursery20 years' experience.
WE will fill any orders West, South, East or North, for TREES, SHRUBS, EVERGREENS, HERBACEOUS PLANTS, or any other Nursery Stock, including any Novelties of whatever description, at a saving of from 20 of whatever description, at a saving of from 20
to 35 per cent from ordinary rates. We act as experts in the selection of stock, for our clients, filling all orders at lowest prices known, giving careful attention and guaranteeing satisfactory and prompt delivery.
On all questions of Landscape planting, we send expert men to advise at low cost. Plans and estimates for construction, etc., made with saving to clients.
OUR CATALOGS AND SPECIAL CORRESPONDENCE WILL INTEREST YOU

## Landscape Architects and Engineers

Plans for the development of private estates, parks, cemeteries and boulevards made and executed. sOUTHERN WORK a SPECIALTY. Established 1856 P. J. BERCKMANS CO., Augusta, Ga.


The broughton self-closing basin cocks have been in use for several years. many of the largest hotels and public buildings in the united states are EqUIPPED WITH these GOODS. ::: ::: MADE IN BRASS, NICKEL OR SILVER PLATED, AND IN SOLID SILVER-METAL.

## EVERY ONE WARRANTED

Manufactured only by

## E. Stebbins Manufacturing Co.

 SPRINGFIELD: MASSACHUSETTSWorks at Brightwood



## Decorative

 Cloths THE HOLLISTON MILLSUsed by the highest class decorators in the country and found superior to any other wall covering
NORWOOD, MASS.
U. S. A.

Absolutely sanitary-will not hold dust-colors are fast, lasting and match perfectly.

New York Office No. 67 Fifth Avenue SEND FOR SAMPLE BOOKS-FREE

## A GREAT FRENCH ETCHER

CCHARLES MERYON-born in 182I-was brought up to the navy, going first in 1837 to the Naval School at Brest. As a youth, he sailed round the world. He touched at Athens; touched at the then savage coasts of New Zealand; made sketches, a few of which, in days when his greater work was most of it done, he used as material for some of his etchings. Art even then occupied him, and, deeply interested as he soon got to be in it, he seems to have had a notion that it was less dignified than the profession of the navy, and after a while he chose deliberately the less dignified-because it was the less dignified. He would have us believe so, at any rate; he wished his father to believe so. And in 1845 , having served creditably, and become a lieutenant, he resigned his commission. A painter he could not be. The gods, who had given him even in his youth a poetic vision and a firmness of hand, had denied him the true sight of color; and I remember seeing hanging up in the salon of M. Burty, who knew him, a large impressive pastel of a ship cleaving her way through wide, deep waters, and the sea was red and the sunset-sky was green for Meryon was color-blind. He would have to be an engraver. He entered the work room of one M. Bléry, to whom, in after times, as his wont was, he engraved some verses of his writing-appreciative verses, sincere and unfinished-"á toi, Bléry, mon maître." The etchings of Zeeman gave him the desire to etch. He copied with freedom and interest several of Zeeman's neat little plates, and addressed him with praises, on another little copper, like the one to Bléry-"to Zeeman, peintre des matelots."-Pall Mall.

## ACETYLENE GAS AND PLANT LIFE

ONE of the advantages now claimed for acetylene gas is that the products of its combustion are not at all injurious to plant or animal life as is the case with coal-gas. A test was recently made with acetylene in a greenhouse, and absolutely no effect was produced, whereas the coal-gas worked a distinct and readily seen injury to the growing plants. On this account, the new gas is recommended to photographers for their dark-rooms which do not have the best of ventilation.-N. Y. Evening Post.

## THE PHONOGRAPH AND DEFECTIVE MACHINERY

Ainteresting instance of the diversified uses of which the phonograph is capable is afforded in a recent experience by the Knowles Steam Pump Works, of New York City. The company had put up one of its large pumps for the Ricks Water Company at its pumping station at Elk River, Cal. After several years of use something evidently went wrong with the pump, and in a letter of advice to the works regarding the trouble, which took the form of a phonograph cylinder, advantage was taken of the cylinder to record the sounds of the pump in running, precisely as the stethoscope is used by the physician in examining the action of the heart or lungs of the human body. The manager of the water company spoke into the phonograph receiver, describing the symptoms of the ailing pump, and then moved the receiver so that the pulsation of the pump would be recorded on the wax roll. When the cylinder was put into the machine in New York the voice of the Californian was heard first, giving in a clear, precise and distinct way the symptoms of the pump, and then he asked the listener to pay attention to the pump's action. The experiment proved successful, and by means of the roll the disease was diagnosed. The proper remedy was suggested, and the pump is running once more, and the time and expense of sending an expert to California was saved-Pbiladelphia Record.

## MALARIA BANISHED BY ARTESIAN WELLS

OUR correspondent at Lake City, Williamsburg County, reports that there are now eighteen artesian wells in the village, and adds: "Before the wells were bored the people suffered a great deal with fever and malaria, but now it is a rare thing, indeed, to hear of a case of either." This is very decided testimony to the value of pure water for the redemption of malarial districts, and Lake City's experience and example should not be lost on other places where the water is bad and health no better. There was a "great deal" of fever in the village when the wells were shallow. Now a case of it is "rare." That is sermon enough for people in other fever-haunted places.Charleston (S. C.) News and Courier.


Illustrations rom our new Booklet (a work of art) showing our line of
WHEELOCK RUST PR00F


CLOSE MESH TREE GUARD

Guaranteed Rust Proof
Trelilis and flower bed GUARD
$13^{\prime \prime}$ and $19^{\prime \prime}$ Wide $16^{\prime \prime}$ and $22^{\prime \prime}$ High
Fences for all purposes. Send for one to Dept. W.
WRIGHT WIRE COMPANY, WORCESTER, MASS.
For sale by up-to-date dealers Demand WHEELOCK RUST PROOF Accept no substitute

Do You Appreciate the Advantages in Using Tiling in Home Building?

Its DURABILITY saves the costs of repairs and replacing. A tiled floor or wall never has to be oiled, varnished, painted or papered. Dirt or liquid matter of any kind will not stain it. The steel nails of the shoe cannot scratch or wear it.

Its SANITARY QUALITIES and the facility with which it can be cleaned gives assurance that the bath-room, kitchen, butler's pantry, laundry, vestibule and other places where it is used will always be in a clean sanitary condition.

Its DECORATIVE POSSIBILITIES permit the execution in tiling of ceramic mosaic of any possible design or color scheme on the floor or wall

Tiling is fire-proof, germ-proof, waterproof, damp-proof and vermin-proof.

For interesting booklets on tiling, distributed free, write Information Bureau of the

## TILE INDUSTRY

318 Corcoran Bldg. Washington, D. C.



Mercer Boiler for Steam and Hot Water Heating

# Our Heating Boilers and Radiators 

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

The efficiency of our apparatus makes this always possible.

## MILLS SAFETY BOILERS

## THE H. B. SMITH CO.

Factory, Westfield, Mass. 728 Arch St., Philadelphia

For the convenience of subscribers our Subscription department will receive subscriptions for all magazines and periodicals at publishers' rate.

Flouseठffarden

1006 Arch Street, Philadelphia

VITREOUS CHINAWARE
FOR THE HOME BATH-ROOM


## PLATE 986-K

THE bath-room for your home should receive the most careful attention of any room in the house. Absolute sanitation is the aim of civilized people, and the sanitation of your home bath-room is your first consideration. Without sanitary fixtures this object cannot be reached, no matter how good the workmen may be who instal the bathtub, washstand or closet bowl and flush tank.

For reasons of cleanliness and durability solid white vitreous chinaware is firmly established as the nearest possible perfection in bath-room sanitary equipment. For many reasons vitreous china closets and closet flushing tanks, as above illustrated, demand your serious consideration. Being made of a solid white vitreous chinaware, they are impervious to the action of water or acids, having no seams there is no danger of warping, and the surface being a clear hard glaze baked into the body of the ware as an integral part, paint and varnish troubles are eliminated. No metal lining is needed, therefore the dangers of corrosion are not to be feared, and the cost of vitreous china fixtures does not exceed that of a closet with the usual metal-lined wooden tank.

Of the hardness of rock, simplicity of operation, ease of cleansing and beauty of design, vitreous china closets and closet flushing tanks are acknowledged the ideal fixtures for the home bath-room.

We are the largest manufacturers in the world of these fixtures, and will gladly send further information if you will write us.

## The Trenton <br> Potteries Company

Main Offices and Works,
Trenton, N. J., U. S. A.
The Canadian-Trenton Potteries Co., Ltd., ST. JOHN'S, QUEBEC.

## NEW YORK'S ABANDONED FARMS

THE railroads declare that they can employ 200,000 more men than they now have. Factories and commercial pursuits have drawn men away from the farm. The result is that in some of the older States, including New York, not only has there been a reduction in the proportion of farm labor to all labor, but there has been an actual decline in the number of men engaged in agriculture. In New York it is placed at 25,000 . The National Department of Agriculture has reported in New York 12,000 abandoned farms and a lowering of land values.

This is due partly to the far Western movement, to the increased production in Canadian farm lands as well as to the attractions of the cities.

On the other hand, it is to be considered that the use of farm implements and farm machinery goes far to make up the loss in farm labor. It is said that the saving in the United States from the use of improved machinery in the cost of production of the seven chief crops amounts to 681 millions of dollars in a single year.-Home and Farm.

## WHY ST. ANDREW UNDERSHAFT WAS SO NAMED

THERE is a church in Leadenhall Street, London, bearing the strange name of St. Andrew Undershaft. It seems that some 400 years ago, every May Day, a very high shaft or pole was set up opposite the south door of St. Andrew's and adorned with flowers. This pole was actually higher than the church steeple, which was, therefore, literally under the shaft for the time being, and led our ancestors to bestow upon the church a name which is quite unintelligible to those of their descendants who are ignorant of the history of the locality.-Invention.

## IXIAS

THESE little bulbous flowers are regarded by some as valuable as Freesias. They are of various bright colors, and a dozen or more bulbs should be placed in a shallow, eight-inch pan of leaf-mould and sand. The plants resent a stiff, tenacious clay soil. Get and plant the bulbs as early in autumn as they can be procured, and treat them just as you would treat Freesias. Avoid over-potting.-Park's Floral Magazine.

In writing to advertisers please mention House and Garden.

Houses with a History-Longleat Furnishing and Decorating the Nursery A House and Its Garden

The House and Its Furnishings
Housing the Automobile Stable and Kennel

Vol. XIII<br>MAY, 1908



THE JOHN C. WINSTON CO. Original from


Chinese chippendale pagoda cabinet. THE BORGHESE OR CAMPANA VASE BY WEDGWOOD ABOLT 1790

## The A. J. Crawford Company

LONDON NEW YORK
251-255 FIFTH AVENUE and 1 EAST 31st STREET

Choice Examples of Old English Furniture and Decorations. Jacobean, Charles II., Queen Anne, Chippendale, Adam, Hepplewhite, Sheraton.
Reproductions of exclusive models in above periods at moderate prices.
"The Little Shop"


## WELL HEADS

Fountains, Statuary, Columns, Pergolas, Balustrades, Standards, Sun-Dials, Pedestals, Benches, Tables, Vases, Wall Fountains, Lions, Sphinxes, Etc., in Marble, Stone and Pompeian Stone which successfully withstands the American climate.
Illustrations Furnished on Request. Catalog of 400 Italian and Classical Models of Garden Furniture 25 cents. THE ERKINS STUDIOS Five West Fifteenth Street, New York

## Peerless Rubber Tiling

## Cushion Back

The Most Durable and Economical Floor Covering Made
Beautiful Designs
Effective Colorings
Noiseless, waterproof and non-absorbent
Peerless Rubber Tiling is made in large continuous sheets, and is impregnable to dirt and moisture.

It is sanitary, beautiful and a durable rubber floor covering.
Beware of cheap substitutions and imitations purporting to be sheet rubber tiling.

Send for our catalogue illustrated in colors.

## Prices on application

Manufactured exclusively by
The Peerless Rubber Manufacturing Co. 88 Chambers Street and 16 Warren Street New York

## RAISING LOCUST FOR FENCE POSTS

THE timber of the locust has found extensive use as fence posts, ribs of vessels, tree nails, telegraphic insulator shanks and in the manufacture of vehicles, says a writer in "Forestry and Irrigation." It has also been used somewhat for railroad ties and telegraph poles. Its great durability in contact with the soil makes it very valuable for use in the ground, and its toughness and elasticity adapt it to use where great strength is required. On account of its tendency to produce a short trunk and numerous branches it is not well suited for use as telegraph poles, and seldom produces one of good length, but if planted thickly and pruned while young it will produce straight poles eighteen to twenty feet long.

It is most commonly used for fence posts, for which purpose it is extensively grown. The ease with which it is handled, its rapid growth while young and its ability to endure extremes of heat and drought add to its usefulness for this purpose. A post of four to five inches in diameter can be produced on good soil in seven or eight years, and when used in the ground will last from eight to fifteen years. Unlike many timbers, the young wood is almost as durable in the soil as the old, on account of the large proportion of heartwood. Many farmers and ranchmen have established plantations to supply the posts and poles required in keeping up fences and sheds, in this way saving themselves a very substantial amount a nnually.

The locust is propagated easily from root cuttings and from seed. The latter is the most common method. The seed retains its vitality for a number of years if kept in the pods or buried deep in the ground, in the latter case having been known to grow after seven years; but seed out of the pods will not germinate well after two years. The pods ripen about July or August and the seed can be sown immediately, when it will generally come up and make a considerable start the same season; if kept for spring planting it is advisable to keep the seed in moist sand in a cool place during the winter. Old seed and that kept dry over winter is best handled by soaking in warm water for a day or two immediately before planting. The seed when once soaked should not be allowed to dry

## Plan the right heating

If you are newly building, don't discredit your property at the start by putting in old-fashioned forms of heating. Whether planning a new house or intending to move, don't overlook the great importance of a modern heating equip-
 ment. There isn't any other feature of the home which will save you so mandergic MNERCAN DDEAL you equal comfort as in coal savings, lessened laber, abse of repairs and low abs, absence of repairs, and low insurance. All ash dust, smoke, soot, and coal-gases are kept out of the living-rooms-reducing


This small, plain, perfectly smooth Radiator is one of severaizes of AMERICAN Radiation made to fit any architectural needs. It is so clean and cleanable-suited to narrow halls, bathrooms, nursery, etc. house-cleaning one-half and saving the wear on carpets, decorations, and furniture.
If property is sold you get back their full value, or they attract and hold best tenants at $10 \%$ to $15 \%$ higher rental. The saving of but one ton of coal in a year will meet the interest upon $\$ 100$, and this sum will nearly cover the difference in the cost of IDEAL Boilers and AMERICAN Radiators as compared with a hot-air furnace for a good-size cottage.
IDEAL Boilers and AMERICAN Radiators are annually replacing thousands of hot-air furnaces and stoves that have been found wasteful and wanting in OLD cottages, houses, stores, churches, schools, etc. Ever heard of any one going back to other forms of heating once they have tried our way? Any argument in that to you? Please let us tell you the full why, how, and present attractive price. No tearing-up necessary-and in these less hurried months you get the services of the most skillful, quickest fitters! Ask for free valuable booklet. Inquiries cordially welcomed.

DEPT. 10
AMERICANR ADiator Company




The best place for rest or recreation or recuperation at this season is

## ATLANTIC CITY

and the new Fireproof

## CHALFONTE

> is especially well equipped to supply the wants of those who come to secure them

> Write for Illustrated Folder and Rates to

THE LEEDS COMPANY
ALWAYS OPEN
ON THE BEACH


## AGENTS WANTED

We want a bright active agent to represent HOUSE AND GARDEN permanently in every city and town in the United States. We have a special offer, covering both new subscriptions and renewals, by which a permanent and profitable business can be established with little work. Experience not necessary. Write for our Special Offer.

Subscription Department
HOUSE AND GARDEN
1006 Arch Street
Philadelphia
out, but should be planted immediately while in a moist condition.

The seed should be sown in well pulverized, rich loam soil in early spring. If hand cultivation is to be given, the seed may be sown in drills twelve to fifteen inches apart in a bed, but if horse cultivation is to be practised it should be sown in rows three and one-half feet apart. The seed should not be covered more than one half to three-quarters of an inch. A pound contains about twenty-eight thousand seed and is sufficient for a row nine hundred feet long. The seedlings will be large enough to set out in their permanent sites the following spring or fall.

The method of management adopted in a plantation of locust largely determines its usefulness and value. Thick planting should be the rule in order to force the tree into straight, tall growth. In most cases four by four or three feet are suitable distances.

If the trees are planted in a solid block and surrounded by a few closely planted rows of older trees there will be no difficulty from sprouting. Sprouts do not grow where the ground is shaded.

Every effort should be used to keep the trees in thrifty growth for the first twelve or fifteen years. Borers seldom -injure the trees that are growing rapidly, but confine their attacks to those of less vigor. If damage from borers is apprehended the trees should be cut for use before they cease rapid growth. By this method of cutting a crop of posts can be produced every ten or twelve years.

The best result usually results when the locust is grown mixed with some other heavy-foliaged tree, as its own shade is not dense enough to keep out grass and weeds. As accompanying or nurse trees, the Osage orange, Russian mulberry, hardy catalpa and white elm do well, as they cast heavy shade and do not grow rapidly enough to overtop the locust. The associates need not occupy more than one-third of the spaces in the mixture. The locust is a good tree to plant with the black walnut where the latter is desired as the permanent stand. The two may be planted alternately in the rows. Within 15 years the locust may be cut for use as fence posts, leaving the black walnut for the final stand.

The growth of the locust is very rapid, especially in rich soil, where during its early growth it makes an average annual
(Continued on page 4.)


## Horses

The woman's horse, the children's pony, the coach-horse, the trotter, the donkey, the farm-horse, etc., will all have their place in the excellent series of articles on "Which Horse ?" soon to appear in House and Garden. These articles will stir up many an inquiry on harness, wagons, sulkies, road-carts, farm-wagons, saddles, etc.

Frequent reference will be made to the various needs for barn, stable and manger. Building plans for up-to-date stables, barns and out-buildings will be features, along with handsomely finished photos of wideawake animals, as well as pictures of children, women and the horse-lovers generally.


## Dairy

Many a proud owner of blooded stock is a regular subscriber to House and GarDEN. We're going to make him a closer friend-make him feel more brotherly, give him some vital points on blooded milkers; and get him to correspond with us; let him criticize, etc.

Here we shall stir up new investors in dairy stock. They will need all the new and old specialties in dairy lines; Stanchions, apparatus of various kinds, books, separators, aerators, etc., etc., Photos of handsome animals, stock farms, their owners, etc., will add interest and pleasure to each article.

We shall stimulate demand by conscientious and judicious advice along all dairy lines that will benefit subscribers and advertisers.


Hens are worth more than our gold mines. Did you know that?
Fresh eggs for the suburban and farm breakfast, as well as for the rest of mankind, make us all brothers.
The pedigreed hen is "coming to her own." Pure-bred stock will be an attraction in this new department of House and Garden. How to own sanitary poultry houses, what sort of fixtures to select, how to keep down lice, how to spray and disinfect poultry quarters, will be discussed correctly by well-informed workers who have made success on their own account. How to caponize, feed chicks, prevent disease; to get eggs, pick and market table poultry-all will be discussed.

## Bees

Flowers, Fruit, Poultry, Honey, make an attractive combination-profitable, too.
This department will enlarge on the value of honey as a food; the simplicity, ease, and fascination in bee culture; the value of bees as pollenizing agents, etc. It will give directions for amateurs, how to start to supply comb honey for the table. It will recommend bee outfits: hives, books, breeds of bees, etc. This department will certainly prove a money-maker for manufacturers of apiarian supplies. Photos of model apiaries, prominent beekeepers, etc., will increase the interest of each article.

## Dogs

Here is a department every one is interested in, whether the owner of a handsome collie, English bull, or a dog of "low degree." Photos of various breeds and cross-strains from the continent and in America will be features of this kennel department.
Well-informed fanciers will contribute practical articles on "How to know and purchase a good dog." They will explain their various natures and value, as watch-dogs, sheep-dogs, coach-dogs, etc.
Photos are on hand of certain types which will illustrate these talks. The advertisers who appear in House and Garden are certain to get reasonable returns.


## Kennels

## SCOTCH COLLIES

SCOTCH COLLIES-Scotch Collie Pups bred in the purple, $\$ 10.00$ each. Charles C. Schneider, N. Detroit, Mich. R.F.D

## Spotswood Banker

A. K. S. C. B. 78171 FOR SALE
Winner of 50 prizes, Mahogany brindle, splendid disposition. Also stud dogs. brood bitches and puppies, all from selected pedigree stock.

Spotswood Kennels,
629 Callowhill St., Philadelphia, Pa,


NEWCASTLE KENNELS, BROOKLINE. MASS.-Pedigreed and registered Scottish Terriers and bitches; all ages. Information always cheerfully given.

## SPORTIMG AND PET DOGS FOR SALE.

Also Pigeons, Poultry, Rabbits, Pheasants, Ferrets, Cattle, Sheep and Swine. Send roc for 88 page catalogue.
Keystone State Kennels, Dept. MR., Reading, Pa.
GREAT DANES-These magnificent dogs are docile, senslble and obedient, but splendid watchers at night. We have some es pecially handsome young stock at present. Best blood extant ldeal dogs for country place. Correspondence solicited.

DANICKA KENNELS, Geneva, N. Y.

## Poultry

WHITE WYANDOTTE EGGS for hatching. Thoroughbred, $\$ 2.00$ WHITE WYANDOTTE EGGS for hatching. Thoroughbred, $\$ 2.00$
for $1 \overline{5}$. CHARLES C. SCHNEIDER, North Detroit, Mich., R. F. D.

PARTRIDGES AND PHEASANTS
THE celebrated Hungarian and English Partridges and Pheasants, the large Hungarian Hares, all kinds of Deer, Quail,
etc. for stocking purposes. Fancy Pheasants, ornamental wateretc., for stocking purposes. Fancy Pheasants, ornamental water fowl and live wild animals of every description Write for price list.

## WENZ \& MACKENSEN, Dept. 27,

 YARDLEY, PENNSYLVANIA.
## ORNAMENTAL LAND and WATER FOWL

Swans, Geese, Ducks, Cranes, Pheasants, Peafowl, Quail, Swans, Geese, Ducks, Cranes, Pheasants, Peafowl, Quail, All water fowl pinioned to prevent flying. No charge for
boxing. Safe delivery of stock guaranteed. boxing. Safe delivery of stock guaranteed.
I issue no catalogues or circulars, but would be pleased to quote prices on any birds desired.
G. D. TILLEY, Box A, Darien, Conn.

## Horse for Sale

BAY MARE- $15 \frac{3}{4}$ hands -9 years old. Style, action, breeding all that could be desired. Has been used for driving and station work. Low price. Address B, care House and Garden.

## THE

METROPOLITAN MAGAZINE

For May On Sale April ${ }^{5}$

Common Sense in Exercise

By Chas. H. Cochrane

"The Lighted Candles"
Begun in April, concluded in May; by Robert Hichens
The Implements and Methods of
Modern Warfare
Fighting "The Silver King"
An article on Tarpon Fishing, by Louis Rhead
Gardens and Their Care
The Second Lesson, by Lieut. Hugh 11. Kelly
GOOD STORIES
THE BEST IN ART
LIVE UP=TO-DATE ARTICLES
All Newsdealers, 15 c . a copy. \$1.50 a year.
Ghe Metropolitan Magazine
3 W. 29th Street, New York City.

| One <br> Of the Best Novels $\qquad$ <br> For Sale by all Booksellers $\text { Price, - }-\$ \mathrm{I} .50$ <br> THE JOHN C. WINSTON CO. <br> PHILADELPHIA |  | "NOTABLE." <br> "One cannot rise from reading this book without feeling that it is a notable contribution to current hiterature. <br> "Thoroughly original, fresh, earnest, sparkling with wit and humor." -Chicago Record-Herald. <br> "CLASSIC." <br> "A book which is destined to become one of the gems of modern novels. The plot is deep, strong, graphically told and will plot is deep, strong, graphically told and will not be forgotten as that of many passing novels, but will be cherished as a classic, as a story of right against wrong which in the child labor question. -Birmingham News. |
| :---: | :---: | :---: |

increase of two to four feet in height and one-quarter to one-half inch in diameter. After the first twenty-five or thirty years the average accretion both in height and diameter lessens, and by the fiftieth year usually almost ceases. When the tree is once established it sprouts vigorously from the root, so that coppice growth is easily maintained. The trees usually attain a height of forty to eighty feet, with a diameter of two to three feet.

The largest and best locust tree is generally found in well drained, deep clayey lowland soil, but it grows successfully on sandy and gravelly soils, and is said to produce more durable timber there than in better situations. On wet soils it is of slow growth and short lived. Its roots are shallow, and where the soil is poor reach out to great distances to obtain nutriment. The habit of shallow rooting is in part accountable for its sprouting tendency as well as for its rapidity of growth and its adaptability to soils underlaid by tenacious subsoil. With favorable soil conditions locust trees grow almost as well on slopes and hillsides as on level land.-New York Herald.

## WATERING AT PLANTING

AQUESTION that even good gardeners often ask is, whether trees should be watered at planting. Recollecting that a tree cannot live without water, the question is an easy one to answer. A tree is not best planted when the ground is very wet, because the soil then goes in lumpy, and does not settle nicely around the roots. It is better for the soil to be rather dry so that it can be worked in well around the roots-an important point. When planted in this way, the soil rather dry, and then a good soaking of water given it, this carries the soil in close contact with the roots, just what the aim should be. The water should be poured in when the hole is about half filled with soil, and when it has soaked away the rest of the hole filled loosely. Watering in this way saves ramming the soil. Men laying water pipes in streets understand this and flood their filled in trenches with water when a quick settling is wanted.

After trees have started to grow, and through the summer, they do not want perpetual waterings. Constant floodings of water often kill them. Unless
droughts come the trees need no watering, save an occasional one in dry times. -Florists' Exchange.

## FORESTS OF STONE

$S^{T}$TONE forests are found in various parts of the world. In many cases they are hardened by some peculiarity of the atmosphere and are found standing just as they were when clothed with green foliage thousands of years ago. The little Colorado River, in Arizona, has long been famous as a locality for such finds. At one place more than 1,500 cords of solid stone, tree trunks, sections, limbs and logs, were found by the government surveyors. Most of them were silicified, many seven to ten feet in diameter and from twenty to eighty feet in height. Geologists say that the petrified trees of the Little Colorado were once covered with marl over I,000 feet in depth. Some of the trees have been changed to jasper and have assumed various hues; others resemble opal, and when broken open the core is often found lined with crystals of the most beautiful tints.-Exchange.

## SWALLOWS AS ALLIES OF THE FARMER

THE Department of Agriculture of the United States Government has issued a bulletin, setting forth the great value of the swallows to the farmer. The following excerpts make interesting reading:
The Biological Survey of the United States Department of Agriculture has hit upon a somewhat novel method of aiding the Southern cotton planter in his war against the boll weevil. As is well known, this insect invaded the State of Texas several years ago and has damaged the cotton crop to the extent of millions of dollars annually. Despite efforts to stay its increase, it is spreading at the rate of about fifty miles a year and unquestionably in time will extend its ravages into all the cotton States.
The Survey has been investigating the pest in Texas for several years and finds that no fewer than thirty-eight species of birds feed upon the insect. It is not claimed that birds alone can check the spread of the weevil, but it has been demonstrated that they are an important help which the farmer can not afford


PHOTO-CHROMOTYPE ENGRAVING COMPANY

Designers, Illustrators, Photo-Engravers

## Three-Color Process for

## MAGAZINE, BOOK AND CATALOGUE ILLUSTRATING

218-226 South 11 th Street

Philadelphia


## Do You Take Subscriptions?

The Franklin Square Subscription Agency offers to one person in each community an opportunity for dignified and profitable employment. We change mere canvassing into a business opening, yielding regular and greater remuneration, and giving dignity and permanent standing to the business.
We furnish the means of reaching a greater field effectively and quickly, with the best equipment for success. Our plan is co-operative - not competitive. Our prize money is distributed monthly.

The best magazine agents in the country belong to our Franklin Square Association.

Write To-day for Details
Franklin SQUARE SUBSCRIPTION AgENCY Franklin Square, New York


## HURLBUT'S STORY OF THE BIBLE

 from genesis to revelationTold in Language that Interests Both Old and Young. RECOMMENDED For its Froshness and Accuracy
DENOMINATIONS For its Mumerous and Appropriate Illustrations O Don As the Best Work on the Subject
Hon. Darid J. Brewer-Can heartily commend it to all. Bishop Yincent-An in-
valuable aid to parents. Rev. Russell H. Conwell-Written by a master hand, valuable aid to parents. Rev. Russell A. Convell-Written by a master hand,
directed by a master mind. Henry. Butts Prcs. Drew ThcologicalSeminary The absence of doctrinal discussion makes it acr eptable to all. Mr. Marion Lawrence, Gen. Sccy. International S.S. Asso n-Best thing of the kind. The greatest aid to Parents, Teachers and all who
wish the
Bible story in in
implified narrative
Beautilully printed and bound, 762 pages, nearly $\mathbf{3 0 0}$ halli-tone
illustrations, 8 in colors. $\mathbf{P r i c e} \mathbf{0 n l y} \$ 1.50$. For Sale By All Booksellers, or Sent Postpaid on Receipt of Price. THE JOHN C. WINSTON CO., Dept. ${ }^{\text {G }} 1006$ Arch Street, Philadelphia publishers of the "international" Series of bibles.
to ignore. Hence an appeal is made to the Northern farmer to aid in the work on the ground that the insect enemy of the farmer of every district is the common enemy of the country, and that a full measure of success is to be obtained only through co-operation. The importance to the cotton planter also of colonies of swallows is emphasized, and the best means of increasing their numbers in the Southern States is set forth.
Among the foremost of the useful allies against the boll weevil are swallows. As is well known, the food of these birds consists almost exclusively of insects, and hence to the agriculturist they are among the most useful of birds. They have been described as "the light cavalry of the avian army." Specially adapted for flight, they have no rivals in the art of capturing insects in midair, and it is to the fact that they take their prey on the wing that their peculiar value to the cotton grower is due.
Other insectivorous birds adopt different methods when in pursuit of prey. Orioles alight on the cotton bolls and carefully inspect them for weevils. Blackbirds, wrens, and flycatchers contribute to the good work, each in its own sphere, but when swallows are migrating over the cotton fields they find weevils flying in the open and wage active war against them. As many as forty-seven boll weevils have been found in the stomach of a single cliff swallow.

The idea is to increase the number of swallows both at the North and the South. The colonies nesting in the South will destroy a greater or less number of weevils during the summer; while in the fall, after the local birds have migrated, Northern-bred birds, as they pass through the Southern States on their way to the tropics, will keep up the war.

Swallows are not as numerous in the North as they used to be. The tree swallow, for instance, formerly abounded, but of late years its numbers have greatly diminished, owing to persecution by the English sparrow. This unscrupulous foreigner turns the swallow out of its nest in order to have a place for its own eggs. When swallow nests contain eggs or young, the murderous sparrow kills the helpless nestlings or throws out the eggs.

The barn swallow also is diminishing in numbers, owing partly to enmity of the sparrow, but more, perhaps, to the
(Continued on page 8.)

# HOUSE AND GARDEN FOR JUNE 

## " THE HOUSE OF SEVEN CHIMNEYS"

ATWO part description of what is probably the most unique home in America will begin in the June issue under the above title.
The house is a wooden one, so protected against fire in its construction that, although located in a town which has no fire department, the insurance rate is lower than that asked for brick dwellings in large cities. Can you fancy a house which has been made of three other houses and a barn, connected each to each? Would you like to have the privilege of looking out of 217 windows in one house and entering or leaving it through any one of seventeen doors, all front doors? Think of having seventy-two closets in a house, besides countless chests of drawers-cedar drawers at thatbuilt into and actually a part of your home! The story is illustrated, and well illustrated, by photographs made expressly for this article by the author, Mr. C. H. Claudy.
It is hardly likely that anyone will ever duplicate this place in its entirety, but there are a thousand little things about it which can be absorbed with benefit by those about to build, and which can be incorporated into houses of other designs with profit to the builder. No one who is interested in building houses that are designed to be homes-in every sense of the word-can afford to miss reading it.

## DISCARDED FAVORITES REINSTATED

Fads and fashions are as noticeable in gardens as anywhere else. A flower which to-day is held in great popular esteem, may to-morrow be relegated to less conspicuous places and finally drop out of notice. As the memory of it becomes misty with years, there arises in the heart of the grower a longing for the old familiar flower. Its beauty is recalled and its final re-entry into the front ranks again is hailed with rejoicing, by the same influences which through a former lack of full appreciation drove it into obscurity. Mr. Eben E. Rexford writes of several such reinstated favorites and tells how to grow and care for them.

## ENGLISH MANOR-HOUSES OF THE EARLY RENAISSANCE

Mr. B. C. Flournoy presents a most interesting description of old country houses, a majority of which date from the great Elizabethan building epoch when the unprecedented prosperity in trade, and other causes gave such an impulse to the erection of fine houses, that the England of that period has been described as "one great Stone Mason's yard." The recital teems with interesting facts and historical incidents. It suggests architectural possibilities for to-day and artistic embellishments which are sure to be seized upon.

## THE ART OF PRUNING

Mr. C. L. Meller points out that "Pruning" is an art learned only by long study and careful practice. Trees are numerous, he says, that have been rendered permanently unsightly because the man with the saw lacked all knowledge of their nature or needs, and was unable to appreciate the difference between lumbering and pruning.

Mr. Meller goes into details of why and how certain trees and shrubs should be pruned, and if only a few trees are saved from disfigurement by reason of this article its mission will have been accomplished.

## A CEMENT BLOCK HOUSE

A very attractive house will be portrayed and described in the June issue which is built of cement blocks. Homer Kiessling is the architect and his description indicates a house of exceedingly livable qualities. He figures the cost of this form of construction to be cheaper than a framed stucco house, a shingled or a clap-boarded house, and possesses the advantage of being less inflammable than any of them. The description is accompanied by plans and views.

## WALLS AND THEIR COATINGS

What is best for wall covering will always be a question for discussion. Wall-papers, tapestries or stuff coverings, oil paints and water-color tinting, each has its admirers and upholders. Claudia Q. Murphy in an article bearing the above caption advocates the tinted wall as being most sanitary and most artistic. Especially is this true, she claims, when the material used permits the wall to be carefully cleaned and requires no additional preparation for recoating. The color or shade of tint on the walls has much to do with the comfort as well as actual health of the occupant of the room and scientific tests along this line seem to bear out this assertion. It is an interesting subject and deserves careful consideration.

## WINDOW BOXES

What clearer index is there to the character of the dwellers within a house than the garden thereto? Conditions of life in the congested districts of our cities make the desire to bring into the home the freshness and color of plants a difficult one to attain with full success. Nevertheless the window box idea has grown into a factor of marked decorative importance. Whether, as the author Helen Lukens Gaut, writes, it is of pumpkin or tomato vines, growing on the window ledges of the adobe houses of the Mexicans in the Southwest, or rare vines and exotics forming embellishments of costly houses on balconies, porches or window ledges; or scanty plants of sickly color in tiny pots and cans clinging to the sill of the window of the cramped quarters of the tenement house-each possesses artistic value proportionate to the means possible for its development. How to construct them and what to plant in them make the article timely and full of instructive information.

## A STABLE CONVERTIBLE INTO A GARAGE

A. Raymond Ellis, Architect, presents drawings and description of a stable erected at Hartford, Conn., where the future conversion into a garage was part of the problem to be solved. How well this was done will be explained by the plans and the descriptive text. The harmonious blending of the widely varying requirements of a stable and a garage has been skillfully encompassed.

# Free Advice on Decoration 

THE unprecedented growth of the Correspondence Department of "House and Garden" has necessitated the opening of a new Department which will be devoted to the interest of those who are building, decorating or furnishing their homes.

Beginning with the new year "House and Garden" offers its readers a House Finishing, Decorating, Furnishing and Purchasing Service which is complete in detail and thoroughly practical. Full color suggestions for the exterior of the house will be supplied with recommendations of proper materials to obtain the results. For the interior, the treatment of standing woodwork and floors, the selection of tiles, hardware and fixtures will be considered and specifically recommended, with the addresses of firms from whom these goods may be obtained. Samples of wall coverings and drapery materials will be sent and selections of rugs and furniture made. When desired, the goods will be purchased and shipped to the inquirer; the lowest retail prices are quoted on all materials.

This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.

## SOME USEFUL BOOKS FOR YOU

KITCHEN GARDENING. By Thomas IBridgman. This work comprises 152 pages, liberally illustrated. 12 mo . Cloth
FRUIT GARDENING. By Thomas Bridgman. Liberally illustrated. 12mo. Cloth, 50c.
FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth

50 c .
MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By Charles Barnard. 12 mo . Cloth

12 mo
40 c.
THE STRAWBERRY GARDEN: HOW IT WAS PLANTED. WHAT IT COST. By Charles Barnard. 12 mo. Cloth - - - - - - - 40 c .
FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12mo. Cl., 40c.
THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia. any of these volumes mailed on receipt of price.
fact that the modern tightly built barn denies it friendly shelter, and it finds no substitute places in which to nest. The cliff swallow, whose curious pouchshaped mud nest used to be a common sight under the eaves of barns and outbuildings throughout the Northern States, has now been entirely banished from many localities under the mistaken impression that they are undesirable neighbors because of certain parasites which infest their nests. These have been supposed to be bedbugs, and hence the nests have been destroyed and the birds driven away. This is an error, for although related to the above objectionable insect, these parasites are peculiar to birds and are not to be feared by man. Of all the swallows the martin is considered the most important to farmers, and suggestions are given for increasing its numbers by the erection of additional boxes and of increasing its range by the transportation to new localities of boxes containing old birds and half-grown young, in the belief that the old birds will be induced by the presence of their young to remain and feed them. If they do not, the only alternative is bringing the young up by hand, which has been successfully done by feeding them meal worms, grasshoppers, and the like.

Migratory birds-and most American birds are migratory-are the property of the Nation rather than of individual States, and co-operation between the several States for the preservation and increase of insectivorous birds is a principle worthy of universal adoption.

Circulars of the Survey treating of this subject (No. 56, "Value of Swallows as Insect Destroyers," and No. 57, "Birds Useful in the War Against the Cotton Boll Weevil") will be furnished free upon application to the United States Department of Agriculture.

## LUTHER BURBANK

THIS is the man who has done more to propagate new and valuable fruits and beautiful flowers than any other man in America. He originated the great Burbank potato, and during the past few years has astonished the world with the results of his plant breeding. Andrew Carnegie has provided a fund for Mr. Burbank's support in order that he may continue his work without being harassed by the difficulties of making a living.-Home and Farm.
woriting to advertisers please mention Houst and Garden.


## Contents - May, 1908



Copyright 1908 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Office, June 26, 1901 SUBSCRIPTION PRICE, $\$ 3.00$ A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS
Remittances may be made by money-order or check, payable to the order of House and Garden
Subscribers should promptly notify the publishers of any change in address
Manuscripts and photographs suitable for publication in House and Garden are solicited. Such as are not available will be returned, if postage is enclosed

## PUBLISHED BY THE JOHN C. WINSTON CO.

 roo6-ror6 ARCH STREET, PHILADELPHIA

PART OF THE SALOON-LONGLEAT

Original from
MICHIGAN STATE UNIVERSITY

# House and Garden 

Vol. XIII
MAY, igo8
No. 5

# Houses With a History <br> LONGLEAT 

By P. H. DITCHFIELD, M.A., F. S. A.

OLD John Aubrey aptly called Longleat "the m.ost august house in England." It has not played so prominent a part in the annals of English history as some others of the great houses but illustrious names are associated with Longleat, and its noble architecture, its magnificent surroundings, its store of rare treasures, abundantly entitle it to a place in this series. It belongs to the English Renaissance or Elizabethan style of architecture, and displays greater knowledge of the art of building, but less originality than many productions of that prolific age. The house was begun in 1567 and $u$ as only partially finished in 1580 . The masons of those days were somewhat leisurely in their ways. They thought nothing of spending fifteen or twenty years over the construction of a house. Now we build quickly, and are impatient until the last stone is laid. We run up immense houses in a year, but will they weather the storms and stress of centuries, and then look as fine and noble as Longleat looks to-day?

Where the house now stands there was in early days a Priory of Black Canons of the order of St. Augustine, founded in 1270 by Sir John Vernon, the Lord of the Manor of Horningsham. It was quite a small monastery, sheltering only a prior and four
or five monks. Like many other similar institutions it fell into decay and $w$ as dissolved in 1529 . The remains of the priory and the site were sold to Sir John Horsey, who sold them in 1540 to Sir John 'Thynne in whose family it has remained ever since.

This gentleman was one of the fortunate courtiers of the reign of Henry VIII., who amassed wealth and lands and honors, and shared in the spoils of the monasteries, and had special facilities for so doing, inasmuch as he was the secretary to the Earl of Hertford, afterwards the Earl of Somerset, the famous Protector, who was an unscrupulous robber of ecclesiastical property, a personification of greed. Some crumbs were bestowed by the Protector upon his faithful secretary. By grants and purchase John Thynne acquired a large estate. He fought against the Scots at Musselburg and was knighted in 1547. Perhaps with some eye to her wealth, a year later he married the heiress of Sir Richard Gresham, one of the famous merchant princes of the city of London. He found favor in the eyes of Queen Elizabeth, and before her accession was the controller of her household. But the air of courts was dangerous in those uncertain times; so, being a prudent man, he retired to the country, reared two large families, and then


THE HOUSE AND PARK-LONGLEAT

Copyright, 1908, by The John C. Winston Co.


THE HALL
began to rear the splendid house with which his memory is ever associated. The noblemen and country gentlemen of the Elizabethan age had a great knowledge of architecture, and a genuine liking of art. The general level of taste was certainly higher than it is now, and Sir John Thynne took a keen and personal interest in the erection of his house, and did not leave everything to his architect. As to the identity of that individual there has been much controversy. The older authorities attribute the work to that mysterious person John of Padua, whom Walpole designates "the Devizor of His Majesty's buildings," an Italian whom Henry VIII. brought to England to improve our native style. I need not repeat the arguments in favor of this view or tell how Protector Somerset employed John of Padua in the building of old Somerset House, a famous mansion which stood on the site of the great edifice where now our wills are stored: and how, as Sir John Thynne was the Secretary of the Protector, he would doubtless employ the same architect. Mr. Bloomfield Jackson, the great authority on Renaissance art, says that 'the stonework of Longleat shows
knowledge of Italian detail, but it has none of the distinctive character which marks the work of the Italians imported by Henry VIII., and to hazard a guess, it is more probable that it was the work of an Englishman who had traveled in Italy."

The name of Smithson occurs in the building accounts of Longleat as "Free Master Mason" of the works. He was employed also by Sir Francis Willoughby at Wollaton, Northamptonshire, an elaborate Elizabethan house, which bears a strong resemblance to Longleat, though it is less satisfactory. We notice the same pilaster treatment, but at Longleat the ornamental pilasters are confined to the projecting bays. In both there is the same use of orders above orders, the same proportion of the windows, but at Wollaton, erected later in $1580-88$, the design is more ornate and less satisfactory, and it has a great towering erection in the center probably designed by another builder.

The house was built on the site of the old monastery, which was converted into a manor house in the time of Edward VI., when a fire occurred in 1567, necessitating rebuilding. The old walls of the inner
court were used again, and still form part of the present mansion, though they are for the most part concealed behind passages that have been added in modern times, but the original walls and windows can be seen in places, and bear some apparent traces of fire. Some rude coffins containing skeletons have also been found in modern times under the floor near the grand staircase, which suggest the possible existence of many ghosts.

So Longleat was built, one of the few and purest examples of English Renaissance architecture, which has remained to this day, externally at least, unchanged since its erection. I will tell the story of the house before describing its leading characteristics. Queen Elizabeth paid Sir John a visit in 1575, which must have been somewhat inconvenient to him, as an army of workmen must at that time have been engaged in building, but the good queen was not accustomed to consider the convenience of her hosts, or the heavy cost of her entertainment. Five years later Sir John died, having erected the outer shell of the mansion, leaving its adornment and
completion to his successors. His son, Sir John Thynne, continued the work. The oak screen wainscot and mantelpiece of the hall were part of his additions, and these are evidences of German influence, which was in the air, and predominant in the latter part of Elizabeth's reign. The name of the plasterer and designer of the beautiful ceilings was Charles Williams, one of the most famous of our native craftsmen, who had studied the work of the foreigners in Italy, and did some of the wondrous plastering for the palace of Henry VIII., called Nonsuch. The first Sir John secured his services for his noble house. The fame of his brilliant workmanship traveled far, and soon Sir William Cavendish and his lady, the renowned "Bess of Hardwick," are begging Sir John to send to them the cunning craftsman who, they hear, had made "dyvers pendants and other pretty things and had flowered the Hall at Longleat."

The famous architect of St. Paul's Cathedral, Sir Christopher Wren, left his mark on Longleat by designing for Sir James Thynne, the fourth owner,


THE SALOON SHOWING MANTELPIECE

a new staircase and a hall door, which subsequently was removed. The "Merry Monarch" accompanied by his Queen and his brother, the Duke of York, afterwards James II., visited him in 1663 . Then the estates passed to a nephew, Thomas Thynne, the friend of the Duke of Monmouth. Enormously wealthy, great and powerful, his life ended in tragedy, and would furnish a strange story for some historical romance. Dryden in his poem, or political satire, "Absalom and Achitophel," alludes to this wealthy commoner, called from his riches "Tom of the Ten Thousand." Dryden styles him Issachar, and when telling of Monmouth's triumphal progress in the West, and the enthusiasm which he aroused among the Wiltshire squires, the poet sings:-

> But hospitable treats did most commend Wise Issachar, his wealthy western friend.

Here, in this hall, the squire of Longleat often entertained the errant Duke, and over their winecups they talked veiled treason and hatched plots for the future rising. But in spite of many gay scenes that were enacted in the hall of Longleat, tragedy was in the air. Of the fate of Monmouth I need not speak. His friend the Squire was soon engaged to be married to a fair young widow, Lady Ogle, then only fifteen years of age. They married early in those days. The Squire prepared Longleat for his bride, "drawing-room, dining-room and alcove chamber" being specially decorated for the occasion. The marriage took place, but the bride for some unexplained reason desired to stay for a year with Sir William Temple, English Ambassador to Holland, and his lady, before settling down at Longleat. She seems to have met a fascinating person, one Count Konigsmark, a Swedish noble, who so admired the young bride, that he determined to murder her husband. Three assassins were engaged, and they waylaid the poor victim as he was driving in his coach along Pall Mall, and a Pole named Borosky shot at him through the window of the coach and mortally wounded him. By court favor the Count escaped, but his three desperadoes were executed. Thomas Thynne was laid to rest in Westminster Abbey, and on his tomb is a bas-relief representing his assassination. His bride soon consoled herself by marrying the Duke of Somerset, and became the great favorite of Queen Anne. Swift, in his " Windsor Prophecy," thus satirized the court beauty :-

> And, dear Englond, if ought I understond. Beware of Carrots from Northumberlond. Carrots sown Thynne a deep root may get. If so be they are in Somer set:
> Their Conyngs mark thou; for I have been told
> They assassine when young, and poison when old.

It is needless to say that the lady had red hair, that she was the daughter of the Duke of

Northumberland, and that the names of her two husbands and her lover are but thinly disguised. Swift lamented his lampoon, as it cost him a bishopric.

The estate then passed to a cousin upon whom court favor shone, and who was created Baron Thynne and Viscount Weymouth. The Longleat gardens now began to assume the formal character of the then fashionable Dutch pattern. Everything was made stiff and stately, with chequered flower-beds and geometric figures. During this period ( $1682-1714$ ) the chapel was finished, and a long raised terrace erected before the front door. The Viscount was a life-long friend of Ken, Bishop of Bath and Wells, and when Ken and many other conscientious men did not see their way to take the oath of allegiance to William III., and formed the party known as Non-jurors, being deprived of his bishopric, he retired to Longleat and found there "a shelter, affluence and rest." We shall see presently the large upstairs room known as Ken's library, where for many years he wrote and read, composed hymns, sang them to his viol, prayed and died. His sojourn at Longleat imparts additional historic interest to the house, and another figure, dear to the hearts of the lovers of English literature is associated with Ken. Here Isaac Walton, Ken's nephew, and the son of the author of "The Compleat Angler," was a frequent visitor. There is a book in the library bearing the autograph "Iz. Wa." (Izaak Walton). One of the daughters of the house was Frances, afterwards Countess of Hereford, a famous patroness of poets. Dr. Watts named her Eusebia, and Mrs. Elizabeth Rowe, a constant visitor to Longleat, Cleora; and Pope and Thomson piped for her, until the latter grievously offended her ladyship by showing a preference to her husband's port, rather than to listening to her poems. The atmosphere of Longleat must, however, have been literary which could have developed such cultivated tastes in the fair Eusebia.
After this time Longleat suffered from a long minority and the absence of a resident owner. The third Lord Weymouth, when he came of age in 1754, brought back its former glories He first set to work on the gardens. It was the unhappy era of the landscape gardener, and of course Capability Brown was called in, and at once destroyed all remains of the sweet old-fashioned Dutch garden. Clumps of trees arise, and vistas are formed, and the little stream that turned the prior's mill is fashioned into a lake. The noble owner became Marquis of Bath in 1789. King George IV. and his court visited him, one hundred and twenty-five persons slept in the house; there was a mighty provision of oxen, fat bucks, game and other good things; and 30,000 people assembled in the park to cheer the monarch.

At the beginning of the last century Wyatt, the


A CORNER OF THE STATE DRAWING-ROOM
arch-destroyer of many of our cathedrals, was employed by the Marquis of Bath to improve Longleat. His destructive hand happily fell lightly on the beautiful mansion, and beyond the construction of a grand staircase and some galleries, and the reconstruction of the north side of the house, which had been for some years in a ruinous state, he did nothing to mar the beauty of this noble dwelling place. The situation of Longleat is a fitting framework to the picture of the mansion. A noble avenue a mile in length leads to the south front. There is a portico with a flight of stone steps leading to the entrance door. Over the door are the arms of the Marquess of Bath. The front is 220 feet in length, the width of the house being 180 feet. There are three stories, and one is struck by the numerous large mullioned windows. There are four slightly projecting bays, which agreeably break the line of the wall. The surface of the wall is adorned with pilasters and between the rows of windows are busts in medallions. A parapet surmounts the wall, and on it stand four
colossal figures. The hall is shut off by a screen from the entrance passage, and as I have said this screen and the fine chimney-piece were erected by the second Sir John Thynne, and show signs of German influence. The hall is adorned with some fine old Flemish tapestry of fifteenth century work manship, and some eighteenth century paintings of hunting scenes by John Wootton. On the gallery are the arms of the Thynne family, impaled with those of the families connected with them. The carving is said to have been executed by Grinling Gibbons. Some old armor and the horns of an Irish elk are also preserved here. We pass into the corridor where is a fine gilded dower chest, and some family paintings.

Longleat is rich in literary treasures and has a noble library. First we visit the ante-library. The ceiling of this chamber and of other rooms was redecorated about thirty years ago by the late Marquess. The doors are beautifully inlaid Florentine work. The green library has a fine, early Jacobean ceiling and some pictures by Holbein.

## Longleat



ANOTHER PART OF THE SALOON

Among the books are several incunabula, amongst which I noticed Caxton's "Historie of Troy," the first book printed by William Caxton in the English language, probably at Bruges in 1474; Caxton's Cbaucer (in black letter, a very early edition), the De Consolatione Pbilosopbia by Boethius, Caxton's Polychronicon, four of the earliest editions of Shakespeare's works, and Grafton's Bible of 154I. This copy was presented to Sir John Thynne by royalty, and contains the entries of the births and deaths and marriages of his family.

Amongst the portraits are those of Bishop Ken by Lely (this worthy is represented in full canonicals and wears a black skull cap); Holbein's portrait of Edward Seymour, the first Duke of Somerset, executed in 1552 (he wears a black gown with fur, a black cap and jewel and collar of the Garter and St. George); Van Dyck's portrait of Lucius Cary, second Viscount Falkland, killed at the battle of Newbury; Edward Sackville, fourth Earl of Dorset (1590-1652) by Cornelius Jansen; Henry Rich,

Earl of Holland, by the same painter (he was executed in 1649), Henry VIII. by Holbein, taken when the King was fifty-four years of age, and Thomas, Lord Seymour of Sudeley by Holbein, executed in 1549. It is astonishing how many of the originals of these portraits were executed, not only in oils, but also on the scaffold.
The red library has a very elaborate Jacobean ceiling and portraits of Lord Thurloe by Sir Joshua Reynolds, Lady Cromer, sister to the Marquess of Bath, by Watts, and of Dr. Johnson. In the small dining-room are portraits of the Dowager Marchioness by Watts, of the second Marquess and of Frances Howard, Duchess of Richmond by Van Dyck. In the dining-room appear the late Marquess by Richmond, Sir W. Coventry by Lely, and Lord and Lady Weymouth, the friends of good Bishop Ken. There is also a portrait by Holbein of Sir John Thynne, the builder of Longleat; Sir Thomas Lawrence's painting of the first Marquess of. Bath, and of Thomas Thynne, the story of whose
tragic murder I have already told. The ceiling is very elaborate, almost too elaborate, and fine marble fireplaces adorn the chamber.

We now ascend the noble staircase, which is Wyatt's work, guarded by two stuffed bears, and domed with a lofty lantern. Here are seen the painting of Rubens representing the fight with lions, Lely's portraits of Charles II. and his queen, John Fisher, Bishop of Rochester, Lord Arundel (1558), Sir Thomas Gresham, the uncle of the bride of the founder of Longleat, James II., Archbishop Juxon, who attended the martyr-king on the scaffold, and Archbishop Laud.
The state drawing-room is a noble room of fine proportions and irregular plan. It is panelled with old Spanish velvet brocade. The door composed of inlaid marble came from one of the temples at Delhi.

The most striking picture is one by Libri, an allegorical painting of Circe and Ulysses. The saloon is hung with Gobelin tapestry. The fireplace is a copy of one in the doge's palace at Venice.

The doorways are of alabaster. Rare china and old bronzes adorn the room, and the furniture is upholstered with old Venetian red silk. The ceiling is somewhat too heavily gilded.

The walls of the upper dining-room are panelled with Cordova leather. There is a rich frieze representing cupids and some landscapes. The ceiling is curious, old paintings being let into the panelling. It is copied from one in the doge's palace, the arms of the Marquess of Bath being added.

Perhaps the most interesting room at Longleat is Ken's chamber in the attics, a fine large room of irregular shape, full of books and paintings and the accumulated treasures of an ancient family. In this room we can imagine the good bishop reading and
writing, sometimes mourning over the frowns of fortune and yet meeting his disappointments with pious resignation.

Behind the panelling there are secret rooms, staircases and passages, which were extremely useful in troublous times as hiding places and means of escape. Ken's portrait is here, and those of Sir Thomas Moore and John Dernan and other worthies; and a vast collection of books, many of them amassed by the first Lord Weym.outh (died in 1714) the friend of Bishop Ken. There is a wondrous store of the controversial theology of the latter part of the seventeenth century,-tracts, answers, rejoinders, refutations, and a great collection of civil war tracts. Of manuscripts, too, there is a fine collection, amongst which I saw Wycliffe's English translation of the Bible (fifteenth century), a Latin psalter (fourteenth century), some old monastic registers, and endless deeds and letters. The editor of the "Report of the Historical Manuscripts Commission on the Papers at Longleat," states:-
"The collection of the Marquess of Bath is a wonderfully complete and vivid illustration of our civil, military, naval and ecclesiastical history, and from the earliest times. Its value for historical purposes can scarcely be overrated."

With a glance at the beautiful Italian or winter garden, with its formal beds and the noble lake fashioned by Capability Brown, out of the little stream that turned the prior's mill, the arboretum on the walk to Horningsham, the fine prospect of the spot well named as "Heaven's Gate," the variety of scenery in the extensive park, the venerable oaks, the remnant of the New England larch, or Weymouth pine, first naturalized in these woods from North America by the first Lord Weymouth in 1705, we bid farew ell to the noble house of Longleat, one of England's most stately homes.


THE SOUTH FRONT OF THE HOUSE
156

# A House and Its Garden 

By ELISE GALLAUDET

"ABEAUTIFUL house in a fair landscape is the most delightful scene of the cultivated earth, and all the more so if there be an artistic garden."
The chief charm of Southern California is conceded to lie in its perpetual gardenry, and Addison, indeed, might have $u$ ritten of this lovely sunny country as he did of Italy, "sometimes our road led us through groves of olives or by gardens of oranges."

But given the most favorable conditions of soil and climate, yet what fearful jungles of gorgeous vegetation and what hideous set patterns in the midst of superb lawn one may find there. There is no reason why we should not have true art in the garden, nor that we should not learn from Nature the best use of airy spaces, and the massing and grouping of trees and shrubs, and to accept the varied slopes she may offer.

That the Italians understood gardening in the purely artistic sense is shown in some of their very old gardens-the Giusti Gardens at Verona for example-where trees in their natural forms are preserved to lend their peculiar beauty. They loved
the "divinely settled" form of tree or shrub or flower beyond any possible expression of man's misguided efforts with shears, such as we see in old Dutch prints, now and then. They realized also the charm a bit of water adds to a garden, and so introduced fountains and pools, being careful to avoid any impression of crowding when vegetation was placed in the water. The aim of this sketch is not only to uproot the idea of a set-garden-pattern at one side of a house, but more especially to show how a mass which is thoroughly artistic may appear to spring of itself out of the very earth. This is the inevitable result where house and garden harmonize perfectly.

The accompanying illustrations are of a Southern California house fashioned after the English thatch roofed cottage, the thatch idea being very cleverly carried out by the architect in the lines of the main roof.
As we approach the house from the street, by the red brick pavement and the bricked terrace we are reminded of the closed gentian of far-away New England hills whose inner recesses do not reveal themselves to the casual observer: for it is not until


A SOUTHERN CALIFORNIA RESIDENCE


THE LIVING-ROOM WITH FIREPLACE
we peep beyond the somewhat formal entrance that we realize its hidden charms. A certain straightforward simplicity and directness are written in every line of this fascinating home, and the threshold once crossed, what warmth and hospitality prevail throughout!

Somewhat contrary to the prevailing popular mode we find ourselves in a comparatively restricted entrance hall, which leads into a group of livingrooms. Passing through the living-room we come out upon a bricked terrace overlooking the garden at the rear of the house.

Here, nestled in the green, are two pools bordered with red brick, full of flamboyant water-lilies, white, pink and blue.

Potted plants and shrubs add their charm to this enchanted spot, and again suggest Italian gardens.

What a perfect place for a sun-dial! In the center of this mass of foliage under the deep clear blue of Southern California skies where for at least six months out of every year no cloud intercepts the glorious sunshine; where "the sly shadow steals away upon the dial, and the quickest eye can discover no more but that it is gone!"

Zinnias, dahlias, cosmos, roses, daisies, gladioluses, chrysanthemums and cacti bloom here in profusion the year round. Over beyond the pools, a pergola


A PERGOLA ON THE CREST OF A HILL
laden down with flowering vines surmounts the crest of an abrupt hill at the base of which runs the road leading to the garage.

The beautiful pepper trees add decoratively to the delightful scene, their delicate lacey outline is silhouetted against the clear sky and their delightful usefulness is plainly demonstrated in the rest


First Floor Plan

## A House and Its Garden

and comfort afforded by their shade, overhanging as the branches do a charming little balcony which looks out upon the side street from which leads the road by easy grade into the garage.

The other photographs show respectively: the livingroom with far view of music-room; the liv-ing-room with fireplace and stairs leading to the balcony out of which open the nurseries and bedrooms; the musič-room with glimpses of the door beyond portière leading into the receptionroom; and the dining-


THE LIVING-ROOM WITH MUSIC-ROOM room, looking through which we see the living-room and music-room, and in the foreground a door leading into the pass pantry, thence to the kitchen. Most attractive indeed, is the kitchen-garden whose savory herbs aromatize the already scent-laden air. The scene has a beautiful old-time quality, and who shall say it is without romance, for we recall "I knew a wench married in an afternoon as she went to the garden for parsley to
stuff a rabbit!" The dominant note of the lower floor is its woodwork, the unique treatment of which deserves special mention. Exposed beams of Oregon pine are used, while the pillars are of California redwood, both pine and redwood having been burned to a brown black, then waxed. They are really charred wood, rubbed down.
The walls throughout the house are rough plastered and tinted; a delicate gray is used in the living-room, and a warm brown in the dining-room. In the reception-room a yellow "oil" stain is used which is quite irregular and very effective. The hangings throughout these rooms are red in winter and yellow in summer. Much brick red is used in the living-room, and old blue in the musicroom. Indeed the general color scheme may be said to be old blue, ivory and brickred, blending most delightfully with the woodwork as described and the hardwood floors, which are
dark golden brown waxed and polished. Large sums of money are spent on beautiful houses as well as on gardens surrounding them, but in too many instances the tout ensemble is unsatisfactory, while a modest dwelling of comparatively moderate cost may become the very acme of artistic feeling in its harmonious surroundings, convincing one of the truth of my opening quotation.
For years our gardens have suffered at the hands of charlatans in the professions of landscape architecture, and landscape gardening; more espe-
cially is this true of the latter. The underlying tenets of these professions spell beauty-picturesque-ness-repose. Hence, familiarity with the forms and habits of flowering plants, of shrubs and trees; the conditions of their most favorable growth and most effective combination; their massing or setting to enhance their own beauties as well as to form an


THE DINING-ROOM
integral part of the whole; a true appreciation of the values of unbroken stretches and vistas are some of the requirements of the successful landscapist. To encompass these results, under the most discouraging condition of nature and environment, proves the true artist, and his meed of praise should be in direct ratio, as is the magnitude of the obstacles overcome.


REAR OF THE HOUSE, WITH GARDEN
160


A Portion of "The Children's Frieze"

# Furnishing and Decorating the Nursery 

By SARAH E. RUGGLES

IT is only within recent years that the furnishing of the nursery has received serious consideration. In many homes where the decorations of the living-room, dining-room and chambers were all that could be desired, the nursery was a room unworthy of the uses to which it was put. The theory that the environments of a child are of great educational value are undoubtedly correct and it is therefore highly essential that the child's own room, above all others in the house, be furnished and decorated with great care. Poor art and bad taste should not be permitted in this apartment. In the days happily now passed, the nursery was supplied with a crib, high-chair and some odd and unlovely pieces of furniture which had passed their usefulness in the several chambers of the house.

The high-chair was always a necessity both for the table and helping the little hands to reach the high shelves where his treasures might be stored In those days the general feeling $w$ as that the child was too small to notice or appreciate his surroundings, a most mistaken idea, for it cannot be denied that bright harmonious colors in anyone's surroundings will tend to greater cheerfulness and make for the happiness of the occupant. It is then a real debt of gratitude that the little ones of to-day owe the designers who have interested themselves in the decoration and furnishing


THE BAR HARBOR CHAIR
of their rooms. Most of the cleverly wrought wall-papers and friezes are imported from England. Everyone knows and recognizes Kate Greenaway's children, and the wall-papers of her designing are no less attractive than her picture books. The same charming little figures have been utilized by the manufacturers of chintzes and cretonnes. We are again indebted to England for Cecil Alden who, too, has supplied us with many fascinating nursery friezes and panels. His children and animals fairly bubble over with life and joy. The accompanying illustrations will serve to give some idea of the quaintness of the friezes for this season's work seen in the shops.

To the child who adores Maud Adams' Peter Pan, is now offered a choice selection of Peter Pan posters. These may be set about as a paneled frieze or may be used directly above the low wainscot or chair rail. While we acknowledge our indebtedness to England in this field of nursery papers and friezes, we have a home product in the line of nursery furniture which is unexcelled. One of the leading firms in New York has realized the necessity of supplying the nursery with furniture suitable to the needs of little children. Chairs, desks and tables of proportionate sizes, well and sturdily built, of good design, can be secured from this firm. All sizes and conditions are considered. A tiny crib for

the wee baby and for the toddling child, a chair bearing the motto, "When little feet grow weary," may be found in this collection.

Wicker furniture of diminutive size finds much favor for nurseries on account of its light weight as well as its durability. When these chairs are supplied with seat cushions and back pads, covered with some appropriate material, they will be found comfortable, inexpensive and, best of all, suitable; for instance, a nursery Bar Harbor wicker chair here illustrated can be purchased for $\$ 3.00$. This is just twenty-seven inches high, measuring to the top of the back, and eighteen inches in width.

The Grantham chair and the Wimbledon lounge, always find favor with the children.

The makers of china and silverware have also learned how much is to be gained by catering not only to the real wants but to pleasing the fancy of the child and as a result we have a bewildering array of china and silver for the little ones. In china we have cups and bowls and plates decorated with the much loved Mother Goose rhymes and pictures. Manufacturers of china have also taken advantage of the great


THE GRANTHAM CHAIR vogue of Peter Pan andwe find the dishes telling this delightful fairy story.

For the wellfilled purse, there are some fine designs in table service of solid silver for the children. These are etched in attractive de signs, some showing the
alphabet, others the Mother Goose pictures. Table covers and lamp-shades are also decorated fittingly for the nursery. In fact, a diligent search will reveal articles suited to the child's room in almost every line of furnishing.

A woman who had in her heart the desire to make her children happy with a room particularly their own, confesses that she has not found such pleasure in fitting or furnishing any of the other rooms of her house. She decided that two rooms were necessary for the children, one for the day nursery and the other for the night nursery. For the first named she chose a room of southern exposure, rightly feeling that its brightness and cheerfulness would make not only for the happiness but health of her children. Under the three large windows of this room she had the old colony chair built a window-seat. This
was eleven inches high with a hinged lid, so that the inside of the box seat could be utilized as a place to store the toys when not in use. On the top of this was a three-inch tufted cushion covered with plain green denim. One most unusual feature of this room was its wainscot. This was formed of panels of ground glass set in the green stained oak woodwork, extending about three feet in height. The glass was backed with a dark green felt, thus supplying these happy children with washable drawing-boards where they could exercise their artistic ideas with white or colored crayons to their hearts' content. There was no single feature in the decoration of this play room that gave more unmitigated pleasure to the children. Above this, the thoughtful mother had the walls covered with a soft green paper which supplied an excellent background


A PORTION OF "THE CHILDREN'S FRIEZE"
for the nursery panels. The ceiling was tinted ivory white. At the windows were hung green and white embroidered muslin curtains. A long low cabinet for books and toys was placed at one end of the room, the shelves within easy reach, supplying the children with much entertainment in the arranging and rearranging of their belongings. This cabinet was stained and finished to match the standing woodwork of the room in a beautiful shade of green. Most of the chairs were of wicker, stained green, the same shade as the woodwork and the cushions covered with bright colored chintz.
There was also a small table and a few small mission chairs in dark oak. The rug showed shades of green and tan. It was not possible in this particular case to have the day and night nursery connected. This was of no great importance as the latter was used only for sleeping purposes. The character of the decoration here differed greatly from that of the day nursery.

The room was worked out in the daintiest and most sanitary fitments. On the walls were hung a rich deep cream paper with a frieze showing garlands of pale pink roses and green leaves. This was set close to the ceiling line. At the lower edge of this frieze - around the garlands of roses and leaves,-the paper was cut out, forming an irregular line against the wall covering. White muslin curtains, embroidered in dainty effects of pink and green, were hung next to the glass of the windows. These curtains were made with tiny frills and caught well back on either side of the window.

The miniature furniture was finished with ivory enamel as was the

standing woodwork of the room. One small upholstered wing chair was covered with a rose figured cretonne which was also used as over draperies at the windows. These draperies were a special feature of the room. They hung straight and fell from the top of the window to the lower edge of the sill. They were lined with a cream colored satin exactly matching the wall covering and were finished about the lower edge and up the front with a tiny moss cotton fringe showing pink, white and green. These curtains were run by a casing on a rod set under the eight-inch valance of the same material which finished this drapery at the top. These curtains slipped readily on their rods and were cosily drawn at night. A washable cotton rug, in tones of old rose and deep ivory, was the floor covering used here. An open fireplace gave additional charm to this quite perfect room. The brass firescreen and fire-irons were decorative as well as useful and the high fender was topped by a cushion seat made possible by the effectual screening of the fire.

In homes too small to allow a day and night nursery, these two rooms may be combined in one. In every home, however, the child should have a room which is wholly its own, and the child should be encouraged in the occasional rearrangement of the contents of it. This will develop in it an appreciation of values of the different effects, resulting from the varying combinations of form and color. Careful direction and advice should be given at such times. As will be seen by the illustrations accompanying this article, thefurniture and fitting of such rooms need not necessarily be extravagant.

# The Small House Which is Good <br> A PICTURESQUE HOME 

W. S. HEBBARD AND IRVING J. GILL, Architects

THE picturesque house of W. S. Hebbard is located in San Diego, California, which has the unique distinction of being the "Southwesternmost" city of the United States, on the bay of San Diego. The bay is sheltered by the Peninsula of Coronado, which extends from the mainland like a mighty arm encircling the bay in its grasp, its end flattening out like the palm of the hand whereon is located the city of Coronado and the famous Hotel del Coronado. Over this panorama of ocean, bay and headland look the windows of the residence above mentioned, it being on the brink of a cañon which gives it an unobstructed view.

The exterior of the house is of cement stucco, quite severe in outline, depending for its effect upon its colors, the heavy open timber cornices, the window openings and chimney. The roof is covered with cedar shingles which weather to a beautiful gray, the cornices are of rough redwood which weather to a deep reddish brown, no stain being used on either shingles or cornices. The stucco is left in its natural cement color. The sash are a deep brown harmonizing with the cornice, making altogether a subdued, but very pleasing color scheme, which is enlivened by the deep tones of the brick and by the foliage.

One enters the house from an open terrace paved with red quarry tile and inclosed by a low parapet
wall of clinker brick of which also the immense chimney is built. These clinker brick were secured from a kiln where they had been left as worthless, having run together into large blocks necessitating their being built into the wall like stone masonry.

Entering the hall we have on the right the large living-room and library, sixteen feet by thirty-five feet in size, opening to the pergola on the east through French windows, and on the left of the hall opens the dining-room, off of which is the conservatory. The floors are of oak, stained dark, and the woodwork of redwood, treated with a red water stain and then glazed with black, which being wiped off produces a beautiful soft mahogany effect. The walls of the living-room are a chocolate brown with a ceiling of warm tan bordered with a strip of burnt orange. The dining-room has a Chinese blue side wall with a ceiling of burnt orange between beams. The hall is in olive tints. The chambers, of which there are four, have papered side walls and tinted ceilings and white enameled woodwork. The color schemes throughout were arranged and superintended by Mrs. Hebbard and have received much favorable comment. The kitchen, servants' quarters and bath-room, have all woodwork flush with the plastering, and together with the high cement wainscoting are finished in white enamel.


A VIEW OF THE HOUSE FROM THE SOUTHEAST
16.4

The Small House Which is Good


First Floor Plan


Detail of the Inviting Pergola


Second Floor Plan

## House and Garden




THE HOUSE FROM THE NORTHEAST

Original from
MICHIGAN STATE UNIVERSITY

The Small House Which is Good


THE DINING-ROOM AND CONSERVATORY


THE LIVING-ROOM, SHOWING FIREPLACE

# The House and Its Furnishings 

By MARY HODGES

Tattain something like picturesqueness in house decoration, one has to be neither very rich, very much at leisure, nor very familiar with the art of decoration. The market affords such a variety of good things that it narrows down, after all, to merely a question of selection.

Every day the class which has no individuality is becoming smaller, and the latitude of choice offered individual taste is becoming wider, so that anything more than mere suggestion seems unnecessary. This wide range of selection is sometimes confusing but with ordinary taste and judgment, and with the attractive designs to be had to-day in crafts furniture, in Colonial mahogany, as well as the seventeenth and eighteenth century reproductions, there is no reason why a house may not be furnished at a moderate expense which will give real satisfaction.

However, even if each element of furnishing be beautiful or tolerable in itself their concourse may be fortuitous; their ensemble inharmonious. An effort to give unity of design and impression is the first principle of a harmonious whole,-such unity is the elementary requirement of art. The furnishing of a room should be designed as a whole; from floor to ceiling every object should stand in relation to other objects and every individual effect whether of form or color, should be subordinate to the general result.

Simplicity in furnishing has been heretofore one of the exclusive privileges of the wealthy. This quality, which is to be desired above all others, has been found only, in the most expensive models. To the person of moderate means, this evidence of design in the furnishing of their rooms is possible only when


THE PRESIDENT'S PRIVATE OFFICE AT THE WHITE HOUSE
the designers and cabinet-makers have "gone to school to the artists" and this is true of the presentday designer and cabinet-maker more than ever before. A room which is architecturally bad is, of course, more difficult to furnish than one which even when empty gives perfect satisfaction in form, lighting and architectural detail.

A room lacking in architectural finish may often be greatly improved by the addition of a cornicemoulding, which may be of either plaster or wood. Such a moulding, in good reproduction of the best ancient ornament, may be bought in light-weight wood. A wood moulding, as well as the plaster, is treated like the ceiling, the side-wall being papered up to its lower edge.

An excellent example of the decorative value of such a moulding is shown in the President's private office in the
 White House. This cornice is of plaster, and is an important part of the architectural detail of the room.

There is no wall treatment so satisfactory for the decoration of a house of medium cost as ordinary wall-paper, and no greater stride toward perfection has been made in any part of house decoration than is shown in wall-paper. Domestic papers may be had from thirty-five cents to one dollar a roll, in designs and textures most artistic. Imported papers run in price as high as $\$ 5.00$ and $\$ 6.00$ a roll, and higher, but some are shown in wonderful colorings at the intermediate price of from $\$ 1.00$ to $\$ 2.50$, giving background to a room which makes the assembling of the furniture a delight.

The fashion of using fabrics on a wall is expensive
and not wholly satisfactory from a standpoint of service, except where expensive fabrics are used and when they are handled by experts. Panelling walls with wood is charming in many houses of unpretentious proportions but is also expensive. Japanese grass-cloth, bookcloth and similar textiles are attractive in many places, but for all-around, everyday use, the excellent wall-papers the market affords are most desirable.

There is a preparation made in soft, useful tints which may be applied over wall-paper, or to the plain, plastered walls. In a house with walls too new to paper, or in a room where an insupportably ugly wall-paper must remain, this preparation often offers relief.

The lighting fixtures of a house are of extraordinary importance. They, in fact, go far toward the making or marring of the general effect. Where permanent residence is contemplated the utmost generosity in expenditure for lighting fixtures is desirable. Stock fixtures are often good, and are constantly being improved, but where it is possible to have the fixtures specially designed, or at least made especially for the room in which they are placed, the difference is apparent and justified.

Side lights give much the most effective form of illumination and are "becoming," but the danger in placing lighting fixtures on the side walls of a room lies in the fact that the direct light in the eyes may be unpleasant. In rooms of medium height ceiling, where the fixtures are relatively located, this may occur.

In wiring a house for electricity, outlets in the baseboards should be arranged, making possible an effective lighting by means of standards or lamps. Where the character of the room permits, if a chandelier is used the best results may be attained by so designing the fixture that the arms turn down, rather than up; the light from such a fixture is not only greater, but casts fewer shadows and is consequently more effective.

Where possible, let the lighting fixtures be handsome, no detail of the room is more important to the


A MODERNIZED COLONIAL HALLWAY
general result. The hardware used in a room is a detail of decoration which, though apparently minor, is quite important. All trimming hardware should be most carefully selected. With the architectural finish of a room satisfactory; the light fixtures and hardware used, suitable and artistic, it is very difficult to spoil it with the furniture. That it can be done, however, is evidenced by the fortuitous assembling of pieces of furniture of different meaning as in the old Colonial hall shown here, -a hall which is the main entrance of a famous country-seat, but which is conspicuously out of harmony. Architecturally speaking, it is an excellent example of an early Colonial hall, and if, instead of an indiscriminate assembling of Colonial mahogany, Georgian walnut, and wicker furniture, it had been treated simply and sparingly (for bulky pieces are not only ugly, but inconvenient, in a narrow hall), with the davenport, pier table and glass shown on the next page, with an added chair or two, the effect would have been restful as well as artistic. The lighting fixtures in this hall are also incongruous.


SUGGESTIONS FOR COLONIAL HALLS
These mistakes can be avoided only by a close study of form and an intelligent comparison of the offerings of the market. In these days of multitudinous newspapers and magazines there is no reason why one living, even at a distance from the centers, should not be informed of the possibilities which the market affords.
Keep the entrance hall to your house as dignified as is consistent with the use which it must have. No impression on the mind of an outsider is more lasting than that made by the first glimpse of an entrance to a house. There is an elegance to a hall used simply as a passage to other apartments which can never be given to one used as a semi-living-room.
Treating the windows of a hall like this is most difficult. The window cut off by the stairway is awkward and unsightly. When possible, such a window should be eliminated entirely. If it must be dealt with, a plain
 grill of the prevailing woodwork, set flush with the window casing, is an effective treatment, or an entire change of the window sash may be made, using small wood muntins and small panes of glass. When neither of these alternatives is ebony or dyed wood, se practicable, a sash-curtain of raw silk may be used. The transom over the door should be similarly treated. Venetian slat-shades are charming and quite suitable in such a hall and heavy overcurtains made of old-fashioned rep silk or damask could be used. An inexpensive substitute for this more expensive material may be had in cotton fabrics in excellent color, in prices ranging from fifty cents to a dollar and a half. A fifty inch cotton rep comes at fifty cents a yard,--an Egyptian cloth at one dollar. Various weaves of practically the same material appear each year in the market under different names, any of which would be effective for curtains in such a hall.

The modernized Colonial hall shown is another instance where furnishings do violence to an otherwise pleasing effect. Architecturally, this hall is good, with the exception of the treatment of the ceiling and selection of the lighting fixtures, but in the furnishings, the girandole, and that alone, is correct.

The Empire period so distinctly implies elegance that an attempt to produce it on an inexpensive scale and to use it in a Colonial hall necessarily makes for bad results.

The genuine Empire furniture when used in a room architecturally suitable, is, of course, charming.
No good reproductions of this type of furniture are to be found in this country, - there apparently being no worthy followers of Percier and Fontaine, who designed this furniture in such perfection in the latter part of the eighteenth century. This method of enlivening massive pieces by an inlay of metal on ebony or dyed wood, seems particularly adapted to the nature of the mahogany furniture so much in use at that time. The greatest degree of nicety was shown in the mechanical process, - the metal ornament and the ground of stained wood in which it is inserted, being stamped and cut out together. But even when in itself perfect this type of furniture is hardly suitable to a modern


American house built on unostentatious plans. Many a piece of antique furniture may be picked up at a trifling cost in comparison to its real value,but its value to the purchaser depends upon whether or not he has a room in which it will "fit."
So far modern art has no originative power and must look backward, but there were in the past as now, bad models,-models in themselves unworthy. Old models, even though they be worthy, are not always adapted to modern requirements. As a consequence only "good taste" can decide the question of the adaptability of a given style of furniture to a given place. The selection of furniture coverings, draperies and rugs is a most vexatious question to one who must furnish pleasingly on a little money.
Among the reasonable fabrics come the cotton velvets, which may be had in excellent colorings fifty inches wide from \$1. 60 a yard up. Madras curtains -sash lengths,-make a most attractive drapery for either living or dining-room, and madras cloth may be had in such a variety of colorings that it is not difficult to make a selection. Plain Russian net trimmed with a simple Renaissance braid makes very attractive sash curtains. The display of fabrics in large shops frequently offers suggestions, but when such shops are not accessible samples may be had direct or through purchasing agents. Goods
purchased in this way are not more expensive to the consumer than if bought directly from the shops, as these agents get their commission from the shops and ask only the retail price. The lovely flowered cretonnes and taffetas which are so effective in informal living and drawing-rooms are expensive in imported goods, but the domestic may be had at prices ranging from forty cents a yard up-and while the coloring is not so satisfactory they are improving each year. These fabrics used as curtains, portières, and loose covers on wicker furniture are wholly satisfying in effect. Glazed chintz, so distinctly an English textile, is, if used properly, very charming. The mistake of "buttoning" such cushions, when using glazed chintz on wicker, is often made. The English never do this, the desired impression being of unupholstered freshness, and easy and frequent change.

The problem of floor covering is very simple when one may have Oriental rugs, and need look no further. But leaving Oriental rugs, and going down the scale of prices and quality, the question of how to treat a floor is a trying one. Axminster, French Wilton and Smyrna offer varying advantages and disadvantages. What one finally selects must be determined by the individual requirements of each case. Cotton rugs for bedroom use are being shown every season in increasingly attractive designs and colors.

# Housing the Automobile 

By HARRY B. HAINES

Tthe man who has invested several hundred and perhaps several thousand dollars in the purchase of an automobile there is no more important question to be considered than that of the proper storage and care of the car. This resolves itself into a choice between storing the machine in a public garage or hiring or building a private garage. Either course has its advantages and its disadvantages.

The storage charges in public garages range from $\$ 12$ to $\$ 75$ a month, the rate being controlled by the size of the car and the population of the city in which the garage is located. In cities like New York medium sized machines are stored for $\$ 40$ a month. This includes washing the machine, polishing the brass and keeping the tanks filled. It is safe to say that with tips and the incidental expenses attendant upon keeping the car in a public garage, the yearly cost will amount to $\$ 550$. This allows nothing for the time charges for repairs, small replacements and other little expenses that the owner of an automobile must meet. The man who stores at the public garage gets into the habit of ordering things done to his car in the way of small adjustments and repairs that he would do himself if he had his own place. Of course, the mechanics' time is charged up on all of these items and amounts to no small sum in the course of a year.
Eliminating the man to whom money is no object and dealing with the question of storage from the standpoint of the owner of a medium class car who wants to keep his expenses down to a reasonable figure, there is no doubt that a private garage is a desirable and profitable investment.

Placing the annual storage cost of a car in a public garage at $\$ 550$, it is easy to see that this sum is the yearly interest at five per cent on \$ I 1,000 , and when one realizes that a private garage fitted for the


Garage built with walls of rough field stone backed with reinforced concrete and roof of reinforced concrete Benjamin A. Howes, Engineer
storage of two cars can be built and equipped for less than $\$ 1,500$, it will be apparent that a considerable saving can be effected at once in this one item.

Conceding that the matter of expense is in favor of the private garage for the man who likes to work around his car and is not afraid of soiling his hands in keeping the machine clean and in good operating condition, the next consideration of importance is what sort of a garage to build.

It may be said with equal advisability to the man with the runabout or the owner of a touring car: Do not build your garage too small. The cost will not be much greater for a garage that will accommodate two cars instead of one, and even if you never expect to own two machines yourself, it is often very convenient to be able to quarter a friend's machine over night. If possible the garage should be large enough so that the car can be turned around inside of it, but if space will not permit this, a turntable may be installed. But it is not even necessary to go to that additional expense, as the car can be turned in the street and backed into the garage so that it will face in the direction to start out again.

A primary essential is to select a suitable site for the garage. Many men have made the mistake of thinking that any vacant spot will do and that the building should be as far from the owner's dwelling as possible.

A garage, unlike a stable, is clean and no offensive odors come from it. Use of a buried gasoline tank minimizes the danger of fire, and the structure, instead of being designed on the lines of a shed, should have some architectural merit. If the cost is not too great, a very attractive effect is secured by having it resemble the general style of architecture of the home of the owner.

Select, if possible, a site where there will be a good approach to the garage, endeavoring to erect the house where it will not be necessary to nego-


Garage built entirely of reinforced concrete Benjamin A. Howes, Engineer


Frame garage, shingled, and having planked foor Cost about $\$ 600$ Note the numerous windows
tiate a steep incline in entering or leaving it. Accessibility is an important point to consider. It is a very good idea, if conditions will permit, to have the garage so situated and built that the car can be driven directly through it by large doors on either side. Another important point sometimes overlooked is to provide room enough to move around your car freely when at work upon it.

Many owners have improvised various sorts of storage places for their machines, often converting sheds or small stables to the purpose. One man, at a cost of less than $\$ 150$, fixed up a storage place under a high veranda which made a very satisfactory garage. For the same sum of money a small portable house may be purchased, while twice the amount will procure avery comfortable one. Some of these are now made of galvanized iron and are practically fireproof.
Where a portable house is used it is well to have the site to be occupied covered with half a foot of cement which will make a floor for the garage. Small gutters may be left outside the house to carry off water. It is well to provide a place for washing the car which is an inch or so lower than the floor proper of the garage so that water used for washing the machine will be confined to this space and run off through a properly arranged drain. As there is always some


PORTABLE GARAGE
possibility of fire, a few tubes of fire extinguishing powder and a pail or two of dry sand placed convenient to hand will prove invaluable. The house may be wired for electric lights, but where an extension light is to be used it is good practice to place the socket near the floor so that the wires will lie on the floor and not be constantly tripping the feet or catching you by the neck. Steam is best for heating the garage, but if this is not available, a small room should be built at the side of the garage where a furnace or small stove can be installed so that the element of danger from gasoline explosion can be eliminated. Care should be taken to so arrange this that fumes from the gasoline cannot reach the stove. There is no room in the portable house or in any other small sized garage for a pit, nor is a pit essential; in fact, every pit is a trap for dirt and combustible waste or oily rags. It is possible at a very small expense to build a platform of foot-wide planks onto which the automobile can be run so that a man can stand beneath it to work, just as in a pit. When not in use this platform can be taken apart and stored in some out-of-the-way place.

Concrete blocks provide an inexpensive and very suitable material for garage construction. They are made in various ornamental patterns, are durable and (Continued on page i1, Advertising Section.)


## THE HOUSE

IT is, after all, the change of seasons which gives the householder occupation. Where there is perpetual summer or unending winter the home can be arranged once for all, but where the climates of the torrid, temperate and frigid zones are all experienced in a single year it is necessary to make special adjustment. When Nature changes her gown the house also must be redressed. In October how welcome are the carpets and heavy curtains, but in May how glad one is to have them removed! Perhaps it is the brilliancy of the sun, or the brightness of the flowers, which puts all else to shame, but surely those things which have worn an air of genuine respectability during the winter months look quite disreputable when spring arrives. Some cynic may suggest that the winter's wear tells then, but it is not only this-the newness of the outdoor world seems to require newness within. If, therefore, the house is situated where there is a marked change from winter to summer, the householder will feel real joy in displacing all those things which suggest warmth and storing them away. If the house is a winter home merely there will be much to do in the way of packing and cleaning in order to close it without injury. Under these conditions the utmost caution should be taken to prevent accident by either fire or water. No greasy waste, used, for example, to polish furniture or floors; no shavings, or oily rags, should be left in closets, or elsewhere, and the water, gas and electricity should be turned off of the house. If, for any reason, this cannot be done, have the electric wires all thoroughly examined in order to make sure that the insulation is perfect, and do not put stoppers in the tub drains, so that if a faucet leaks or is left accidentally turned on there will be no overflow. Gasoline, cautiously used, and newspaper wrappers, are the best preventions against moths, and borax put on pantry shelves and around water pipes will drive away insects which are apt to put in an appearance when the house is unoccupied. Pains should also be taken with the door and window catches, screw bolts being probably the best fasteners for the one, and metal pegs run through both sashes the safest for the other. These are of course the obvious things, but they are the ones most frequently overlooked. If, however, the
merely practical things are done the rest can be left. Cleanliness, common-sense, and ordinary caution, are all that are needed to safeguard the home against all its enemies including dust and common thieves.
If it is a summer home which is requiring attention the problem is reversed and instead of placing it in order for a period of vacancy it must be prepared for habitation. Little repairs must be made; rugs put down-not woolen ones if possible-curtains hung, cushions gotten out, and the myriad little things done to make the house homelike and comfortable.

Perhaps, however, it is, after all, an all-the-year-round-house, in which case both situations will be embodied in one. And whether it be a town or country residence it will make little difference, the same changes must be made, the same conditions coped with.

Screens must be placed in the windows and doors, and without delay. Those of a metal mesh which do not rust or require painting are decidedly best and least expensive in the end, but the others are very acceptable. If it is found when the screens are gotten out of the storeroom or cellar that they have rusted and they are otherwise in fair condition they can be painted and made to look very satisfactory. Make the paint very thin and put in plenty of drier or it will clog, and while they are still wet do not let them come in contact with dust.

If there are outside shutters it is well to have them painted at this time, and if the outside shades are light in color take them down and put up dull green ones instead. Venetian blinds are very good for summer use as they screen the light and yet admit the air.
Awnings may be put up at the same time the screens are put in though they probably will not be needed until June. In purchasing these care should be taken to get colors which cast an agreeable shade as well as those which look well from the outside. They should be so hung that they protect the window or piazza from the sun and heat but do not cut off all the air. They can be a great comfort but they may be a nuisance, according to how they are constructed and placed.
The floors naturally will require attention. Matting makes a good covering, but the finished floor and such rugs as come now for bedroom and cottage use
will be found very attractive. Even if the floor is not of hardwood it can be given an excellent finish of transparent stain followed by two coats of floor finish. This will leave it with a half-dull surface, which while hard preserves the elasticity so desirable. This surface is not slippery, nor will it hold dirt as closely as some other kinds of floor finish. When some places wear light through constant use such as the treads of stairs, a little stain should be applied before the finish is brushed on in order that the surface color be restored. Once gotten in good condition a wood floor is comparatively little trouble to care for, and is, without question, the most sanitary of all.

The preserve closet may well be attended to at this time also, either carefully renovated or rebuilt. It should be in some cool dry place, not the top shelf in a large pantry, but a series of shelves specially segregated and arranged.

## THE GARDEN

PREPARATIONS for gardening should be completed. In fact during the month much actual gardening may be done provided, of course, the frost is out of the ground. If during the past or former months the parts of the yard on which flowers and other plants are to be grown was not thoroughly broken, it should now be done. Evenf if heretofore broken up and heavy rains have fallen, the soil will be only in the better condition for planting if given another spading and then thoroughly clodded or pulverized.

In laying off rows or in the construction of beds use a line for the purpose of measuring distances. Do not trust to the eye either for straightness of line or equality of distances. Only a little additional time will be required to secure straight lines and the final results will fully compensate.

Keep a watch on the shrubbery which will now begin to show vitality if not actual growth. Do not permit the strong growing plants to overgrow the weaker ones. Cut the former back to retain uniformity and symmetry. In fact if any pruning has been neglected, finish up before there is any new growth. Let the plants all start off with new growth. Both foliage and flowers will be the more luxuriant.

It is about time to begin transplanting-removing the plants from the hotbed to the open yard and putting out new stock from the nursery. As weather conditions are uncertain, regard must be had therefor. All frost must be out of the ground or else the plants will become chilled and early and vigorous growth much retarded.

It is best to take plants up with a trowel, leaving a good sized ball of earth about the roots which should be pressed to keep it intact. The ground being ready for the plants, make a hole with a single stroke of the trowel, insert the plant and firm into place. Do not set the plants too close to each other -leave room for proper ventilation, sunshine, and cultivation.

For setting trees or plants of larger growth, it is well to observe these directions:

When received from the nursery heel them in and work fine dirt in around the roots and water well. Let them remain thus until ready to set out in permanent positions.

In setting out permanently, dig the holes from four to six inches deeper than the tree or plant is to be set. Fill this extra depth with fine surface soil. Do not set the roots, which should be straightened, on a hard clay bottom. Let the plants set about two inches deeper than in the nursery, slightly lean the stem to the southwest, work fine dirt about the roots. When the roots are covered, firm the whole with the feet and finish with loose dirt. Let the surface earth slope slightly towards the plant.

Before putting the tree in place remove all bruised and broken roots with a sharp knife, cutting from the lower side upwards, leaving smooth, sound ends. Cut off at least two-thirds of the last season's growth. Head the plants low and as near as practicable of uniform height.

Do not start the garden by leaving rubbish lying about in heaps-such untidy places are the breeding abodes of insects and vermin.

There is nothing gained by trying to garden when the soil is so damp that it sticks to the shoe, or the hoe. The stirring of soil about plants when such dampness exists is an actual detriment to growth and to the soil which such cultivation causes to crust and bake.

It is almost impossible to grow any annuals in shaded positions. Pansies do well when protected from the hot afternoon sun, but if they are surrounded by continuous shade the growth is usually straggly while blooms are small. About the only thing to plant in very shady positions are herbaceous plants or shrubs.

There are four absolute essentials to flower growing. The plants must breathe; they must drink; they must feed; and they must have proper environments. To supply these essentials must be a part of the work programme.

Plants not only breathe through the leaves but (Continued on page 13, Advertistng Section.)

## THE EDITOR'S TALKS AND CORRESPONDENCE



The editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

IHAVE been asked by a number of correspondents to suggest the proper pieces of carved oak furniture to use in such halls as are frequently found in the city house built some ten or more years ago. Fortunately for the comfort of the occupants and the beauty of the house, in the most modern city residences these narrow halls have been done away with. However, it is not always the modern house that can be considered. Therefore the pieces shown in the illustration are suggested as being suitable and beautiful for use in the more constricted halls, as well as in those of better proportions.
Where there is but little money to spend, much simpler pieces, those which will cost less money, may be used adhering to the idea of chairs and table showing somewhat similar design.
The clock shown is an adjunct which may or may not find an appropriate place in the hall. It is offered, however, as a very beautiful example of its $k$ ind.
In response to the many letters we have received from our readers, asking for further suggestions regarding the importance of the small things in the scheme of decoration for a room, we are pleased to continue our line of talk of last month.
We will quote one correspondent who has written
that while she could not re-decorate her entire din-ing-room; she has a small amount of money to spend on such accessories as table covers, lamp and candle-shades, pictures, screens and plants. The description she sends of this room is, in a way, typical of rooms of like character in many homes of average means. Excerpts from this letter, with the description of the room and suggested treatment for its improvement, are here presented that our readers may realize what can be done in the way of rejuvenating and making harmonious and artistic a room which seems truly unpromising. The grateful letter we have received from this woman who has followed our suggestions, empowers us to give this information for the benefit of other readers.
She said, "My furniture, unfortunately, is of golden oak, the walls are treated with a nondescript yellowtan paper, showing a figure in darker tan outlined with gold. The window draperies and portières of this room are of silk and wool damask, showing two tones of $\tan$, but are not the same shade of tan as the wall-paper and do not look well with it. My idea was to buy some good fruit pieces, colored prints of course as I cannot afford the real thing, and frame them in gilt frames to liven the side walls, then
(Continued on page 14, Advertising Section.)


## GFTTING RID OF CUT WORMS

NEARLY every year my plants have been troubled with cut worms. In the morning I find the wilted shoots they have cut. A neighbor had me try poisoned lettuce leaves, but it did no good. Limited space allows me to grow but few plants and I don't like their being taken from me. Is there any way of trapping the worms?

Mrs. C. W. B.
Often three or four cut worms may do considerable damage, so much so that one imagines there is an army of them. They work during the night, and in the day time may be found at the base of the injured plant or of its neighbor, an inch or so-below the soil. A few minutes search for a few mornings generally cleans them out. Push the soil away from the base of the plant and look keenly for them as they are generally similar in color to the soil.

## REPOTTING FERNS

When is the best time to repot ferns? I have some that are doing fairly well, but have been in the same pots for a long time.
I. C. H.

Wait until towards spring when they will form new roots more readily. When the time comes secure some rotted sod containing plenty of fibrous grass roots adding some leaf mould and sand. Place plenty of broken crock at the bottom for drainage. Take the old ball out, and with a sharp stick pick out and remove a good deal of the soil at the top of the old ball, as well as at the sides and bottom. See that the new soil is firmly pressed in between the old ball and the sides of the pot, using a thin label for the purpose.

## GROWING CHINA ASTERS

Should China Asters be grown in the same place year after year?
S. E. P.

No, a complete change of situation is advisable. Try to select a place where asters have not been grown for several years. If compelled to use the same soil, you can help matters by liming it. About two weeks before setting out the plants spread unslaked lime over the soil so as to make a layer
about one inch thick. Let it lie a few days to slake, then dig it in, mixing it thoroughly with the soil. Sweet peas are also benefited by change of soil. Sometimes small gardens have but one situation to grow sweet peas in. When this is the case, dig out and carry away enough soil to cause a trench eighteen inches wide and deep, and refill from another part of the garden.

## SWEET PEA NOVELTIES

I tried some of the sweet pea novelties last summer and was quite disappointed, many failing to come up. I never had any trouble with the old mixed kinds. Have the new varieties any special methods necessary to success with them ?

No and yes. The old mixed varieties were composed of those most easily raised, and thus naturally those of the most robust constitution. The new varieties are almost as easily raised, the only care being not to sow the white seeded kind until the soil becomes somewhat dry and warm. Cold, wet-soil is fatal to them, causing rot and decay.

## VINES FOR A PERGOLA

We have rented an elegant old Virginia home, built some seventy years ago, house right on street, running way back, four rooms deep, twenty feet square; side yard forty feet wide (with an iron fence on side walk) to end of house, when it widens. From back porch there is a grape arbor in perfect condition, it must be some sixty feet long, and quite wide, brick paved walk through it, but not a vine of any description. I see dead grape vine roots. I call it my pergola. Please tell me what to plant to cover it completely. As it is so long, I did not know whether to have nothing but scarlet rambler or this,-plant four scarlet ramblers at the first two posts on each side, forming an archway, and then other roses the rest of the way. I want a beautiful shady walk. The whole thing is seen plainly from the street. Any and all suggestions will be greatly appreciated. This arbor ends at a building, which I want to entirely cover, except windows and doors. I thought to cover this with blue moon flower. Can you think of anything better?. Then the stable is near, off to one side, right in front of street. The lot is two
(Contınued on page 19, Advertising Section.)


## Edited by JOHN GILMER SPEED


#### Abstract

The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.


## Arabs and Barbs

NEVER go into print on the subject of Arab horses without the knowledge that I will draw upon myself a whole lot of undeserved criticism. When I say that the Arab horse is the basic stock from which all safely reproducing equine types have come, I am sure to be misunderstood by some quarrelsome or cranky fellow who chooses to construe what I modestly say, into an assertion that the Arab is the only type that is in the least worth while. I have never said that, and I never expect to say such a foolish thing. If racing be worth while the thoroughbred is worth while and though the thoroughbred is directly descended from the Arab and the Barb and other Oriental strains he can run all around the Arab, because he has been developed for speed. If we wish only heavy horses for draft purposes the Percherons of France are not to be excelled. They are also of Arab origin. And what is more, all of the

" METEOR MORGAN" AND "ROY MORGAN"
Owned by H. P. Crane, Wild Rose Farm, St. Charles, Ill.
fixed types between the English thoroughbred at one end of the line and the French Percheron at the other extreme are Arabs, and to keep them up to the mark, I believe collateral strains of Arab blood should be commingled with them. The governmental breeding experts in France, Germany, Austria and Russia recognize this necessity. But in America, the greatest horse producing country, the very name of Arab is anathema.

Men who never read ten books, including novels, and who never got five hundred miles away from the place of their nativity will tell us all about horse breeding and the various types of the world. What do they know? Old Bill Rysdyk, a hired man on Drover Seeley's farm in Orange county, New York, in trying to write a name for Abdallah's son wrote Hambletonian in the effort to achieve Hamiltonian. And of such are most of the rest of them. The promoter of the


ARAB MARE "WADDUDA" AND STALLION " MASOON"
Owned by Homer Davenport, Esq.

Hambletonian heresy was an uneducated Irish peasant who never gave a thought to horses till he was in middle life. Then he used them to advertise a vulgar weekly paper, a combination of the holier-than-thou type, and the blood and thunder hair-raiser.

But neither ignorance nor vituperation can affect established facts. The Arab is the oldest purely bred type and has been the most useful; he is just as useful to-day as in the days of Solomon or Mahomet. That our famous Vermont Morgans are descended from him was proved last summer when Mr. Homer Davenport exhibited his Arab stallion "Haleb" at the Rutland Horse Show in the class for the best horse of the Morgan type and carried off


ARAB STALLION " HALEB" Owned by Homer Davenport, Esq.
the blue ribbon. I have never had any doubt that "Justin Morgan," the founder, was of Arab blood. He was not quite so large as "Haleb" nor probably so highly finished. "Haleb" is fourteen hands two inches in height and weighs 950 pounds. Contrast him with Mr. Roosevelt Schuyler's "Rob Roy" whose portrait was in a recent number of House and Garden and with Mr. Crane's "Meteor Morgan" and "Roy Morgan" here reproduced and it will be seen that the type is the same.
The two other Arabs pictured here are also the property of Mr. Homer Davenport. The one ridden by Colonel Cody (Buffalo Bill) is the gray stallion "Masoon" and the other the chestnut war mare "Wadduda" ridden by a Bedouin groom, Said Abdalla. This mare and the groom also were given to Mr. Davenport by the sheik Akmut Haffez. The horse is a Kehilan and the mare is of the Seglawieh Al Abed breed.

## THE OLD ENGLISH SHEEP DOG

By H. W. Berryman
Secretary of the Old English Sheep Dog Club

$\mathrm{I}^{\mathrm{\Sigma}}$N a rather pretentious book on dogs, Mr. James Watson attempts to check the growing popularity of the Old English sheep dog by casting imputations on the purity of the type and laying particular stress upon a denial of the antiquity of the breed. It is likely that Mr. Watson knows much more about kennel management than about dog history and literature. Stonehenge recognizes the type (and Stonehenge is surely as good an authority as Watson); he says in "Dogs of the British Islands:"
"Until within the last half-century sheep dogs without tails were exempt from taxation, it being supposed that no one would keep a tailless dog who could afford to pay the tax. As a consequence almost every sheep dog had its tail cut off and owing to this cause the tailless sheep dog, still met with in some localities, is supposed to have arisen."

The real authorities say that the bobtail has existed in England for the last hundred and thirty years. They come to this conclusion from an engraving of a painting, here reproduced, of the Duke of Buccleuch with his dog, by Gainsborough, ${ }^{1} 77 \mathrm{I}$, also from the reproduction of a painting by Philip Reinagle published in the "Sportsman's Cabinet" in the year 1803 .

In 1835 Sidney Cooper painted a picture of a bobtail, wonderfully well proportioned throughout, in fact the type of the dog we are trying for at the present time.

It was not until i 888, however, that much interest was taken in the breed. In that year a few enthusiasts headed by Mr. W. G. Weager formed the Old English Sheep Dog Club with Mr. Freeman Lloyd as secretary. Since then the bobtail has been pushing himself into prominence in England and with the help of the Old English Sheep Dog Club of America,
will soon be one of the popular breeds of this country. He is probably a descendant of the bearded collie, of Scotland, except as regards the tail, which, in the sheep dog, is generally a matter of a mputation. The custom, it is said, originated with the drovers who cut their tails to avoid the tax and the continued practice resulted in dogs being frequently born without tails. This is disputed by biologists, but the fact remains that Old English sheep dogs are born with and without tails even in the same litter. Three fourths of them, however, are born with tails.
'He is sagacious, and with early handling, will make an excellent drovers' dog, either for cattle or sheep, being an ideal companion and having innate good manners. He is devoted to his master, an excellent guard and house dog, and is endowed with a gentlemanly instinct for moving about a room with the least possible noise or fuss. His heavy coat is a drawback, but his comradeship is well worth the five minutes trouble of giving him a rough dry before he settles himself on your hearth-rug. In his quaint, unobtrusive way he will make himself at home in a draw-ing-room, railway carriage, hansom cab or on the show bench, being sensible, even tempered, picturesque and never ridiculous. He is courageous and


OLD ENGLISH SHEEP DOG After Gainsborough


SHEEP DOG " DOLLY GRAY"
An English Champion
yields his love for love's sake, not as an act of submission. He gives his all, but in return expects that kindly consideration due to his allegiance. Open hearted, honest and true, his devotion is unbounded, and he is incapable of a mean action.

The pictures in this magazine of "Dolly Gray" and "Kenvil Blinkers" show us the true type of dog according to English ideas. Our judges are too much inclined to consider size rather than quality, some of the recent awards to dogs with almost greyhound heads is entirely contrary to the right type of dog. The Sheep Dog Club's scale of points says "a long narrow head is a deformity." Also that he should be absolutely free from legginess, which is so often evident in a large dog.

## SOMETHING ABOUT CATS

THE Felida, or the great family of cats, contains those beasts of prey which are the most perfect in organization, attractive in appearance and terrible in destructive power. The catalogue of the great family begins with the lion (Felisleo) and ends with the common house cat (Felis domestica). Existing records seem to prove that the cat has been tamed and kept by man in a domestic state as far in the remote past as 2000 to 2500 years before the Christian era. In Egypt, which supplies us with the major part of the evidence of the cat's antiquity, the animal was of the utmost importance, being in many sections worshipped as a deity and everywhere treated, with great respect. Herodotus says that nothing was more remarkable than the respect paid to their sacred animals by the Egyptians; and when a cat died every inmate of the house shaved off his eyebrows; and if a dwelling burned the cats were to be saved at every hazard. Diodorus Siculus relates that a Roman soldier once killed a cat by accident in Egypt and the people were so infuriated that the soldier had to be killed to placate the mob. This happening was when the country was under Roman dominion.

From Egypt the domestic cat was probably introduced into Italy and Greece. A fresco painting of a cat was found in Pompeii. No end of evidence could be given to prove the antiquity of the domestic cat. It is probably a fact that the original domestic cat was derived from several wild strains of Felida. In the Middle Ages, according to


Mivart, great value was set upon the cat and in certain European countries a heavy fine was imposed upon any one who killed this animal, the compensation being as much wheat as would form a pile sufficient to cover the animal to the tip of its tail when held vertically with its muzzle resting on the ground.
The domestic cat crosses readily with any or all of the wild species with which it may come into contact; and the hybrids thus produced are also fertile. Indeed the domestic cat may be said to have great gifts as a breeder. The female begins to breed at about a year old and the period of gestation is fifty-five days. Three litters a year would not be remarkable. There are many races of domestic cats, some of which are distinguished by peculiarities that are apparently restricted to certain countries only. Some of them are:-the tailless cats with lengthened hind legs, of the Isle of Man; those with truncated tails, inhabiting the MalayanArchipelago, Siam, Pegu and Burma; cats with drooping ears from China. Some races also are noted for lengthened fur, like the Angora or Persian breed. The colors of the domestic cats are numerous, consisting of black, white, striped black on a gray ground, tortoise-shell, gray, mouse color, sandy and brown. Black cats generally have yellow eyes; white ones have sometimes blue eyes, and are then usually deaf; sometimes their eyes are different in color-one blue, the other tinged with green. Tortoise-shell cats are mostly females, a male of this color being a great rarity.

The actions of the domestic cat in approaching, springing upon and seizing a mouse exactly portray, on a greatly reduced scale, those of its large relative the tiger when attacking its prey in the jungle. The same graceful motions of the lithe body are seen in both creatures; and the stroke from the armed paw is delivered by both animals alike. The sense of smell in the cat is not well developed; and its chief reliance in catching prey is quick sight, astonishing rapidity of movement, together with sharp claws and teeth. As a rule the domestic cat is more attached to buildings or certain localities than to persons; but it is frequently possessed of an affectionate disposition and quickly recognizes any one from whom it has received kindness, evincing its pleasure by loud purring, and with elevated tail endeavoring to rub itself against the individual whose attention
it solicits. In its habits the cat is cleanly but it hates water.
The utility of the cat is exemplified in many ways but in none more curiously than by the fact that were there no cats there would be no clover. In "Origin of Species" Darwin explains it thus:"Clover, in England, is fertilized by bumblebees. Field mice are very fond of the nests and combs of these insects and destroy many of them. Cats in their turn prey on field mice and keep them from undue increase; so if there were no cats, field mice would multiply so greatly that they would destroy all the bumblebees, and consequently clover from want of fertilization would become extinct."

THE OTHER SIDE OF NATURE-FAKING WHAT about the effects of naturefaking upon the nature-faked? Only the spread of misinformation among humans has been touched upon. The real peril lies elsewhere. Inspired by the tales almost daily related of their ferocity, courage and lethal powers, the creatures of meadow, wood, and stream are coming to think themselves mightier than man. How else explain the attack last month, perpetrated by a flock of crows, upon Paul Niles of Freeport, Illinois?
According to a widely circulated despatch, the raucous birds descended, en masse, upon the luckless Mr. Niles, who "was knocked down and pecked about the face and eyes and beaten almost insensible." Shall we pick up our paper one day to read that the Hon. Grover Cleveland, incautiously stepping into a stream which he was whipping, had his left leg bitten off by an angry trout, or that that mighty hunter, Theodore Roosevelt, while stalking the shy and timorous grizzly, disturbed a sleeping rabbit, which dashed him to the ground with a loud roar, and fanned him to death with its ears? Our stricken fancy beholds the meadows resonant with the shrieks of helpless agriculturists, fleeing in terror from hordes of maddened butterflies, the coppices crowded with naturalists seeking refuge from infuriated toads, while the fugitive who, pursued by a rabid angleworm, is fortunate enough to escape from the perilous open into his house, finds but a momentary respite before being penned


The longer you put it off the harder it will be. If the future of your wife, your daughters, your sons, yourself,-is to be provided for,-the best time to make that provision is NOW.

WRITE TODAY FOR RATES<br>The Low Cost will Surprise You.<br>State age, nearest birthday, and occupation.

## The Prudential

## Insurance Company of America

Incorporated as a Stock Company by the State of New Jersey
JOHN F. DRYDEN, Prest.
Dept. 25
HOME OFFICE: Newark, N. J.


Testimonials Speak for Themselves.
 DEXTER BROTHERS ENGLISH SHINGLE STAINS are unsurpassed for their wearing qualities and artistic
effects. I now use them exclusively on all shingled surfaces. Sincerely yours, Eugene L. Clark, Architect.
Write for Samples and Particulars.
DEXTER BROTHERS' COMPANY 209 Broad Street,

Boston, Mass. Agents: H. M. Hooker Co., 128 W. Washington St., Chicago; W. S. Hueston, 22 E.' 22 d St., New York; John D. S. Potts, 218 Race St., Philadelphia; F. H. McDonald, 619 The Gilbert, Grand Rapids; F. T. Crowe \& Co., Klatt-Hirsch \& Co., 113 Front St., San Francisco, Cai

## FLO-WHITE

The selection of the finish for the walls and standing woodwork in the kitchen, pantries and bath-rooms of a residence is a detail of supreme importance to the householder. To render these sanitary is the first consideration, and to give the walls and woodwork a permanent finish and one which is suitable and pleasing to the eye is the architect's responsibility.

Flo-White, the most recent product of Chicago Varnish Company, fully meets these requirements and has aroused a very unusual interest, and wherever it is specified and used the most enthusiastic praise from client and architect. The many points of superiority of this enamel over products prepared for like uses can readily be seen.

In application it flows easily under the brush, and shows no brushmarks in drying.

Its surface is of wonderful brilliancy, and is hard and smooth like glass.

As a substitute for tile it is especially valuable applied to wainscot or entire side walls.

For Hotels, Cafés, Barber Shops, Hair-dressing and Manicure Parlors it is particularly satisfactory.

In the ideal kitchen of an ideal house, decorated and furnished by Margaret Greenleaf, the consulting decorator of Chicago Varnish Company, Flo-White was used over hard plaster marked off in 6-inch squares before the plaster hardened.

This little kitchen is the pride of the housewife-clean, bright and shining. Its glistening white walls and polished yellow maple floor (left in the natural color and finished with two coats of Chicago Varnish Company's Supremis), make an attractive setting for the brick red range with its spreading copper hood. Blue and white ware and shining long-handled fryingpans decorate the shelves.

The little casement window has diamond panes daintily hung with clear, crisp, white muslin. The whole effect is quaint and charming. Write Margaret Greenleaf for advice on the finish of the standing wood-work of your house; she will recommend a complete color scheme illustrated by samples if you send your plans. No charge whatever is made for the service if you are using Chicago Varnish Company's materials, as this offer is made by the Company only to their customers.

## 35 dearborn avenue CHICAGO VARNISH CO. chicago, ill. new yesey street

up in a corner and trampled to a pulp by his own domestic water-bugs!Collier's Weekly.

## PURE BRED AND HALF BRED MORGANS

Statesville, N. C., Feb. 14, 1908

DEAR MR. SPEED: Two or three months ago you wrote a very interesting article in House and Garden on the subject of the Morgan horse. We have some friends here who are interested in Morgan horses, and we think about four of these might be sold here.

Now, according to our understanding there are two or three types of this horse, one of which is a very small horse and is known more as the oldfashioned Morgan, and we believe is full-blooded. Now, the other types referred to, according to our understanding are about half bred, are larger and have more speed.

Our friends here who are interested in Morgan horses want horses who are nice roadsters, and who are also able to walk rapidly under saddle and have a good canter. While the idea would be to use them principally for roadsters still they should be saddle-broken and be able to walk and canter. We, of course, understand that they do not show the fancy gaits like the Kentucky saddle horse, but if they would walk rapidly and canter easily they would be perfectly satisfactory.

Is not the old-fashioned Morgan very small and more like a pony? Their powers of endurance, we understand, are great and they are also, we believe, stylish and have fine action.

One of our friends interested in Morgan horses is a doctor and he would buy a pair if suitable horses could be found.

What type of Morgan horse would you recommend, and will you be so good as to put us in touch with some reliable breeders or dealers located in different parts of the country? Do you think there is any special advantage in going to Vermont for these horses ? We know they originated there but think they are now being bred in different parts of the country.

Now, what type of Morgan horse would you recommend for general all around purposes - the old-fashioned Morgan or the half bred horse ?

Won't you please tell us the publishers of your new book "The Horse in America."
If you will write us fully about this horse matter it will be highly appreciated, and we know you can give us reliable and unbiased advice. We have been corresponding with a gentleman in Rutland by the name of R. W. Goodrich, who tells us the type of Morgan horse in his section is not pure bred but came through "Black Hawk," "Daniel Lambert" and his sons.
Any information you will give us about this matter will be greatly appreciated.
G. E. French.

Answer: I unquestionably prefer the pure bred Morgan. There was a portrait of one in the March number of House and Garden. While the Morgan is not large, he is not small as he is blockily built and has good weight. What are called Morgans are bred in many parts of the country but there are few of the purely bred outside of Vermont. The United States Government is not breeding the pure Morgan but is attempting to restore the type by the same method used to destroy it. Morgan horses are excellent under the saddle, but horseback riding is not much practiced in Vermont at this time, so few of the horses there are trained under the saddle.

## HOUSING THE AUTOMOBILE

(Continued from page 174.)
fireproof, and are an aid to quick building.
An ideal garage for two large touring cars should be about twenty feet wide and twenty-five feet long. This will allow room to turn the cars and to walk around them. It should have large double doors each five feet wide, which swing inward and back against the front walls where they will be out of the way when opened.

The proper equipment would consist of a wash rack with overhead washing machine, a suitable drain to carry off waste water and gasoline, a sunken gasoline tank outside the building with a gasoline pump inside. The building should have at least four large windows, so that it can be aired and quickly cleared of foul smoke and gasoline vapors. Coils of steam pipe or hot water pipe two or three feet above the

M. ® M. PORTABLE HOUSES

Special Open Air Cottages for Tuberculosis Patient
Summer Cottages, Automobile Houses, Children's Play Houses, Hunters' Cabins, Photograph Gallories, Etc.
Made by automatic machinery where the wood grows. Better built and better looking than you can have constructed at home and
at much less cost. Wind and water tight. Artistic in design. Conat much less cost. ind and water tight. Artistic in design. Con-
structed on the Unit Syslem. (Panels interchangeable.)
Houses shipped complete in every detail. Can be erected and ready for occupancy frome 6 to 24 hours after arrival at destination, according to size of house

NO NAILS,
NO STRIKES.
Everything fits. Any one can erect them.
Write to-day for catalogue. Tell ns what you want and we will give you a delivered price at once. Please enclose 2c stamp in your
MERSHON $Q$ MORLEY COMPANY


400 Broadway. Saginaw. Mich.

## Leonard Cleanable Porcelain Lined Refriqerators




YOUR ICE BILLS CUT IN HALF
There are 9 walls to preserve the ice (see cut below ).
Price I less than tile or glass lining and the refrigerator is Price
better. For sale by the best dealers or shipped direct from the factory. 30 days trial. Freight prepaid as far as the
Missisoip, i and Ohio Rivers. Reware of mitations made of white paint.
Write for free sample of porcelain lining and catalogue showing 30 other atyles and prices. G. R. REFRIGERATOR CO., 32 Ottawa St., Grand Rapids, Mich.


MENNEN'S mair niow TOILET POWDER


VARNISH
ENAMEL
FRENCH'S
ESTABLISHED 1844 PHILADELPHIA
U. S. A.
"RELIABILITY" "DURABILITY"


Putting the Car in Commission
When you put your car "in commission," you want it to "stay put." Good lubrication is almost the first requirement. Avoidance of carbon deposits is of prime necessity. Both are accomplished by the use of ZEROLENE, the new friction-proof, trouble proof, carbon-proof oil.

## ZEROLENE

## Auto-Lubricating Oil

is made in only one grade. This one grade works perfectly in every type of gasoline engine, in both summer and winter. Leaves practically no carbon deposit, and keeps cylinders and spark plugs clean.

Sealed cans with non-refilling spout protect against substitution of inferior oils. Also put up in barrels for garage trade. Sold by dealers everywhere.

```
STANDARD OIL COMPANY
``` (Incorporated)

floor will be out of the way and will furnish sufficient heat.

The repair shop can be located at one side. An ideal equipment is a work bench with necessary hand tools, a lathe, a drill press and an emery wheel. With these almost any ordinary repair job can be done by a man of mechanical bent. If an electric motor is installed, a power pump and compressed air tank will be found valuable, as the compressed air can be used not only for inflating tires but for cleaning the machinery and upholstery of the car. An equipment of this sort would probably represent an investment of \(\$ 1,800\).

Horse stables can be easily converted into garages without a great deal of expense. The first consideration is to tear out all the stalls and get as much clear floor space as possible. It is money well spent if posts or other supports can possibly be removed and other ways devised of placing supports to bear the strain. A garage should by all means have a cement floor; a wooden one is dangerous, as it may easily take fire if gasoline is spilled on it. The washing arrangements for carriages will do equally well for the automobile, while the feed bins may be cleaned out and used for storage purposes.

In all garages it is well if possible to have a track suspended from the ceiling on which a block and tackle can be placed so that the body of the car can be raised and shifted to one side or any heavy piece of machinery removed. Where this is not possible, heavy hooks set into the walls or beams at the corners of the room can be used to advantage.

In general, it may be said that any ordinary building of sufficient height can be renovated and made to serve for the storage of an automobile, often at a very low cost, but in most cases it will be found necessary or desirable to build a garage especially for the purpose; and while there is no limit to the expense to which one can go in having a stone, brick or concrete garage designed and built, a structure that will serve all reasonable requirements can be built for the housing of one or two cars at small expense in one of the ways mentioned. And the man who cares for his own car or has it cared for under his personal supervision will derive the greatest success and pleasure out of automobiling.

\section*{SUGGESTIONS FOR THE MONTH (Continued from page 176.)}

\section*{THE GARDEN}
must have a necessary supply of air about the roots. Constant stirring of the soil is the only means of permitting the supply of oxygen to reach the plant roots. By the same action noxious gases are permitted to escape, given off by the plants. The cultivation of the soil not only admits air to the roots of the plants, but it makes the soil more porous and therefore the more capable of the absorption of water.
The fact that the root of a plant is absorbent for food or water only at the tip, for a small fraction of an inch from the tip, the necessity for water and food reaching that part becomes apparent.

Plants must feed; they must have proper food, and receive it regularly if they are to thrive. Shredded cow manure appears to meet all the requirements, but in using it the gardener must keep in mind the fact that it is at once available and that it is about 300 per cent stronger than that gathered ordinarily from the barn. Bone meal and crushed bones make lasting fertilizers, but the pulverized or shredded manure is more rapid in action.

Give flowers proper and pleasant surroundings; just such as an individual wants to be at his best. In selecting places for the beds, select parts of the yard where the best sun is available, especially the morning sun. Do not put a bed under the dripping roof and expect the plants to accomplish that which no form of nature can do-prosper under such conditions.

In all probability the lawn needs some attention now. The winter coating of manure should be raked off in order to remove any undissolved portions or lumps which would show unsightly and obstruct the free actions of the mower.

If there are any bare spots showing up, they should now be re-sodded or seeded in order that the grass can get rooted before the weather gets warm. Get the mower in order, for its active use must be commenced at an early date.

Your Country Cottage
should be made to harmonize with nature and fit Into the landscape, by staining it with the soft, artistic colors of Cabot's Shingle Stains Cheap, handsome, preservative and lasting, as proved by over
twenty years' use from Bar Harbor to San Diego, from Jamaica twenty yead
to Hawaii.
Samples of stained wod and color
chart sent ore on request
SAMUEL CABOT, Inc., Sole Manufacturers,
141 Milk Street Boston, Mass. Agents at all Centrul Points
Cabot's Sheathing Quilt-for warm houses


TOU can't figure that this-much White Lead,
and that-much Linseed-Oil, make a gallon and that-much Linseed-Oil, make a gallon
of paint. You've got to figure-in the gaint-

> er's time-the mixingAnd a cood Painter's

And a good Painter's time is worth from 40c to 70.
or more an hour.
Now. the Painter mixes by-rule-of-thumb, by
judgment, by guess-he thins and he thickens untl he judgment, by guess-he thins and he thickens untl he
thinks it's right-but he nevergets two batches auite alike- - right-but he nevergets two batches auite
And he mixes by hand-that's necessarily slowand Painters' time you know, soon counts-up in costAnd hand-mixing can't be thorough-Can't thor oughly combine the pigment and oil-
hat haven't united.
The result is a mixture that won't work right under the brush-runs heavy here and light thereIt takes the Painter longer to put-on that kind
of paint-More Painter's time for you to pay forof paint-More Painter's time for you to pay for-
High-priced Painter's-time that you can save by
using Lowe Brothers High St ant ard LiquiidPaint
If's a paint that's all-ready-for-the-brush-It's grownd by special paint-grinding machinery.
Ground and reground-first the dry pigmentsthen in oil-then in more oil-
Until all the paint-pigment is thoroughly combined with the oil-Until every minute drop of the -And that's the best paint.
That kind of paint-pirigh Standard"Paint-works right-"runs" smooth-andeven - "spreads" better covers more surface-takes less Painter's time to
put it on-And you get a better painting-job. put it on-And you get a better painting-job. years or more - That's two to four years longer than any cheap paint will last.
There's a PHigh Standard', Paint, Fnamel and Yarnish for every purpose-On every can there's a Write for our free Booklet-"Attractive Homes, and How to Make Them."

The Lowe Brothers Company



You buy a refrigerator once in a lifetime -you buy ice every day. The walls of McCray Refrigerators are scientifically built so that they will keep the cold air in and the hot air out. They therefore use much less ice than others, and soon pay for themselves, besides keeping all provisions pure and in fresh condition.

\section*{JCcCray
Refrigerators}
are thoroughly insulated with mineral wool, the best
insulating material known, and have the McCray Patinsulating material known, and have the McCray Patent System of Refrigeration which insures a perfect circulation of pure, dry, cold air. They are lined with
White Opal Glass, Porcelain Tile. White Enamel or Odorless White Wood, and are the cleanest, sweetest. dryest, most sanitary refrigerators made. No zinc is ever used in their construction, as zinc forms oxides that poison milk and other food and is very dangerous. Let us tell you hnw easy it is to have a McCray ariceman out of the house.
\[
\begin{aligned}
& \text { Mceman out or the house. } \\
& \text { Mefrigerators }
\end{aligned}
\]

McCray Refrigerators are made in all aizes, ready
for immediate shipment, and are Built-to-Order for for immediate shipment, and are Built-to- order for
all purposes. Every refrigerator is positively guarananteed to give lasting satisfaction.
Send Us Thls Doempon
 McCray Refriderator Co. 694 Company, 694 will Streel




Period lighting fixtures from classic to
Every detail carefully developed in a most complete line for your inspection. Architects' designs carefully executed. Sketches submitted on request.


\section*{Entrance Gates}

Simple, dignified, unpretentious and efficient, these gates show how good an effect may be accomplished at a modern outlay.

We make fences for every purpose Iron Railings-Entrance Gates-Wire and Iron Fences for Lawns, Gardens, Stock Paddocks, Poultry Runs, Dog Kennels, etc.

Send for Illustrated Catalog.
Anchor Post Iron Works
43 Park Row - New York City

\section*{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

\section*{THEEDITOR'S TALKS}
(Continued from page 177.)
to dyemy draperies a rich red ard have the same color in plush for a table cover to use during the day when the table is not set. I had thought also of buying a fern dish of porcelain or majolica ware, something in red flowers and green leaves, or several shades of green and brown, such as the majolica ware comes in. I can buy a new rug for the floor if this can be obtained for \(\$ 35.00\). The room will require one in size nine by twelve. I have Nottingham lace curtains at my windows; these extend to the floor as do the overdraperies. I have noticed that you advise curtains to the sill. What would you suggest here? I can turn the Nottingham lace curtains over at the top and thus save cutting them.
"I have neglected to say that the woodwork of the room is walnut in a rather dark shade of brown and shows no varnish. I could have this finished with a gloss varnish if you think best."

We suggested to the writer that she have her tan colored door curtains dyed a shade of dull rich blue which harmonizes particularly well with tans and browns. To introduce blue as the dominant color in this room would be more satisfactory than if the red were used, particularly as the room is of southern exposure and very well lighted.
It was recommended that the Nottingham curtains be removed, and curtains of ecru net run on small brass rods by a casing at the top and hung next the glass, be substituted. These curtains should extend only to the sill and be finished with a three inch hem. As this material is 108 inches wide and ninety cents a yard, it can be split, the selvage edges used at the back, the front edge finished by a very narrow hem neatly made. The over-draperies can also be reserved for some other room and curtains of blue flax or coarse linen at \(\$ 1.00\) a yard be substituted. The lower edge of these curtains should be worked with heavy cotton floss (of an ecru shade) in conventional design.

For the table cover, ecru flax exactly matching the color of the paper should be used. If the top of the table is sufficiently good to have a portion of it exposed, we advise a scarf for the center
about three-fourths of a yard in width, this to be finished with a hem-stitched border three inches in width, the hemstitching done in blue, the color of the over-draperies. Instead of the porcelain dish, a shallow brass bowl of flaring edge and flat bottom was recommended and could be purchased for \(\$ 2.50\). This should set on a small teakwood stand four inches in height, making an attractive center piece. In this bowl should be placed a sectional flower holder. These are made from twisted lead ribbon two inches wide and come in various sizes; one having from about six to eight openings, is most satisfactory.

In each section can be thrust the stem of some upright and rather formal looking leaves and flowers such as narcissus or flags or tulips, any of this type of flower or greenery is acceptable. This holds the stems in water and in an upright position, apparently springing from the center of the bowl.

We heartily advised her against the purchase of any pictures, as in a room of this character such decoration is not essential. It was suggested that one of the deep windows be fitted with three sh lves to hold ferns and blooming plants. A rug, the best grade of Brussels could be bought for less than \(\$ 30.00\) and should show a small close pattern in colors of ecru, dull blue and brown. This would serve to bring the entire color scheme of the room into harmony. A screen with dull blue Japanese grasscloth covering the three folding leaves and with large brass headed tacks as its only decoration, would give a finishing touch to a most attractive and livable room. The woodwork should be left in the dull finish she was advised.
In working out this room, she was told first, to find the rug, after that, the flax or linen for her over-draperies, and the grass-cloth for the screen. This secured, she should visit the best dyeing house in her locality and supply them with a small piece of the curtain material on which to experiment as well as a piece of the linen for color sample. She will undoubtedly be able to secure the desired tone and the mass of blue of the door curtains will be most effective. We furnished her with the address of a decorative company from whom she obtained the brass bowl and teakwood stand with the flower holder and several other brass and copper bits for her room.


You can make your home brighter, more cheerful and more sanitary by decorating the walls with Alabastine, and you will then have the most artistic of all backgrounds for your pictures and furnishings. The soft velvety Alabastine tints are both dainty and restful.

You can have your entire home decorated in one harmonious color scheme, carrying out your individual taste and ideas in each room, and making the walls blend perfectly with the woodwork, rugs and furniture.

You can avoid the dirt and bother of kalsomine, the sameness of wall-paper patterns and the unsanitary condition that invariably follows ther use, by having your home decorated with

\section*{Alabastine The SanitaryWall Coating}

Alabastine is less expensive than wall-paper and far more satisfactory than kalsomine. It will neither fade, rub off nor scale, and it affords no breeding place for insects or disease germs. Anyone can apply Alabastine with a flat wall brush. Alabastine comes in sixteen tints and white. These tints can be intermixed to form an endless variety of shades.

Alabastine can also be used in relief work-raised decorative motifs-effects that cannot otherwise be obtained. Alabastine hardens and becomes a part of the wall itself. You can therefore apply a new tint right over the old Alabastine, without washing and scraping, as is necessary when wall-paper or kalsomine has been used, or is used again.

Alabastine is sold in carefully sealed and properly labeled packages at 50 c for white and
55 c for tiots, by all Paint, Drag, Hardware and General Stores. See that the name
Alabastine", is on each package before it is opened either by yourself or the painter.
Send 10c in coin or U. S. stamps for the book "Dainty Wall Decorations," which contains complete plans in color for decorating homes, churches and school houses in dainty Alabastine tints. Sample tint cards and descriptive circulars mailed free on request.
The Alabastine Company, 921 Grandville Ave., Grand Rapids, Mich. Eastern Office, Dept. V, 105 Water Street, New York City.

\section*{SOMETHING NEW}

With the article "Housing the Automobile" House and Garden is taking up a feature of interest to the suburban and country housekeeper. The suggestions made in the article are eminently practical, the garages illustrated being the most inexpensive of their kind.-New York Commercial, A pril 4, Igo8.

The John C. Winston Co.,
Publishers
n writing to advertisers please mention hocse and Garden.


The broughton self-closing basin cocks have
been in use for several years. many of the largest hotels and public buildings in the united states are equipped with these GOODS. ::: ::: MADE IN BRASS, NICKEL OR SILVER PLATED, AND IN SOLID SILVER-METAL. ::: :;:

EVERY ONE WARRANTED
Manufactured only by
E. Stebbins Manufacturing Co. SPRINGFIELD: MASSACHUSETTS Works at brightwood
Stanley's Ball-Bearing Hinges
Nothing equals them for hanging doors either in

\section*{Big Public Buildings or Private Dwellings}

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

\section*{THESTANLEY WORKS}

Myrtle Street, New Britain, Conn.
New York Office: 79 Chambers Street


\section*{USEFUL HINTS TO HOUSE-} KEEPERS.

WICKER FURNITURE coated with Mahogany, Ox-Blood Red, Malachite Green or Gloss White Jap-a-lac, looks better than new.

WATER PIPES, furnace fronts, radiators, hot water tanks and iron fences are preserved and beautified with the use of Jap-a-lac. Use the Gold, Aluminum, Dead Black or Brilliant Black.

PICTURE FRAMES, candelabra, gas fixtures, lamps, etc., given a coat of Gold, Aluminum or Dead Black Jap-a-lac, are renewed almost beyond belief;-the Dead Black produces that beautiful wrought-iron effect.

OLD AUTOMOBILES, carriages, wagons, agricultural implements, etc., Jap-a-lac-ed with either Brilliant Black, Red, Green or Empire Blue, look Brilliant Black, Red, Green or Empire Blue, look
\(100 \%\) better, and are given new life. The cost is nominal, and the work can be done by an inexperienced person.

JAP-A-LAC is a household necessity, and can be used in a hundred and one ways, from "cellar to garret", and is especially adapted for finishing old or new floors and woodwork. Ask your paint dealer.
Perfect Water Supply Service for your Country or Suburban Home. Send for our 64 page catalogue No. 44. Sce our advertisement in April issue. Kewanee Water Supply Co., Kewanee, Illinois.

\section*{AMERICAN HARDY RHODODENDRONS}

The Right Way to Grow Them. Just Published. FREE.
harlan P. KELSEY, Owner, Salem, Mass. Highlands Nursery 3800 ft. elevation in the Caro-
lina Mountains, and Salem Branch Nursery.

Frequently-following the strenuous spring cleaning and process of elimination which so often accompanies it, there comes a reaction against the stern resolve to do without, rather than have useless, unbeautiful articles of furniture, and so-called decoration in our houses.

It is, however, a wise woman who refrains from returning to its place between the curtains of the parlor windows the unstable brass stand, the onyx top of which is deemed unsafe to hold even a valued book, the porcelain lamp with high colored floral decoration or the figured over-draperies which she has always felt conflicted violently with her wall-paper. To replace these by degrees is possible to any housewife and to have only things which are useful, suitable and therefore beautiful, about one insures an attractive and livable home.
Simple lamps of under glazed pottery in dull greens and blues, can be purchased for less than \(\$ 5.00\) and as was told in last month's talk, it is a very easy matter to make attractive shades for these. The color selected for the shade should be found in either wall-paper, rugs or draperies of the room. For instance, if the wall covering is of twotoned brown, with underlying yellow tones, the lamp-shade should be made from orange colored thin silk. A cushion cover or two should show the same shade and a rug of Brussels or Wilton could easily be found introducing dull orange in its coloring. If Oriental rugs are used, this peculiar orange color is frequently found in them.
If harmony with the wall covering which clashed with the figured draperies is under consideration, the new draperies should be a plain fabric of quiet tone. For certain living-rooms of the house a coarsely woven material somewhat resembling burlap but much heavier in quality, is much favored now. This is sold under the trade name of arras cloth. It comes in excellent colors, is fifty inches wide and sells for \(\$ 1.25\). This may be used for door curtains and for large windows as over-draperies.

\section*{CORRESPONDENCE}

TREATMENT FOR CRACKED WALLS
I am living in an old house in which the walls are badly cracked although in no danger of cracking further. I do not feel it would be wise to paper these.

Is there any material I can use which will be stronger than paper? I do not care for the rough surface of burlap. I should like something showing a good color as I wish to make my rooms attractive with as little expense as possible.

Answer: There is a material for filling in cracks in the walls which you can obtain from the address I am sending you. This should be used before any covering is put on your wall. If you desire to cover them with a material which will hold as well as burlap, I would suggest a fabric which is like buckram in effect. It is very strong and has an attractive surface, one which is not entirely smooth, but nearly smooth. This comes in a good selection of colors and also in white and can be tinted with water color or oils, if a color other than the shades to be obtained is desired.

REGARDING REFRIGERATORS
I live in a small apartment and find it necessary to place my refrigerator in my dining-room. Can you suggest any kind that I can buy which will not be an objectionable piece of furniture ? That is, which need not necessarily look like a refrigerator. I enclose a self-addressed envelope for reply.

Answer: We have sent you by mail the address of a firm from whom you can obtain very satisfactory refrigerators. While these show clearly in appearance for what they are intended, they are much more satisfactory than one of more pretentious exterior could be. As the refrigerator is so important a factor in the health and comfort of a family, I would suggest that you use one of the kind recommended. A three or four leaf screen can be used in front of this, even in the smallest apartment. Select a screen, the frame of which matches the woodwork of your diningroom and fill in the panels with burlap of the same color as your wall-paper.

\section*{SUITABLE TABLE COVERS}

I wish to find something in a silk or silk and wool brocade from which I can make myself a table cover to use on my dining-table between meals. I would like something without fringe if possible. I have tried to find a brocade material

\section*{Cottage Music Cabinet}
(A Suggestion)
Our Specialty is Cottage Furniture
A DAPTED to shore and country houses. Can be obtained unfinished or stained to suit the purchaser, and individual tastes may be gratified.

A request will bring pictures of 200 distinctive patterns.

Visitors are invited to inspect specimen pieces displayed in our warerooms.

William Leavens \&́ Co. Manufacturers \(\begin{gathered}32 \text { Canal St. } \\ \text { Boston, Mass. }\end{gathered}\)


\section*{Metal Garden ORNAMENTS}

\author{
Lawn and Park Fountains \\ Drinking Fountains \\ Railings and Entrance Gates \\ Gas and Electric Light Posts and Lamps \\ Stable and Cattle House Fittings Flower Vases in Cast Iron and Bronze Statuary Settees and Chairs Tree Guards \\ We issue separate Catalogue of each of the above which will be sent upon request.
}

\section*{The J. L. Mott Iron Works Ornamental Dept.}

Fifth Ave. \& 17th St. New York

\section*{HAVE A GREENHOUSE}


If only a leanto against a garden wall. You can grow grapes, flowers or vegetables, whichever you like. Now is the time to build. Send for our greenhouse booklet.

HITCHINGS \& COMPANY
II70 Broadway, New York


\title{
Russwin Hardware
}

\author{
Lancaster Design
}

School Elizabethan

Booklet of designs will be furnished on request

\title{
Russell \& Erwin Manufacturing Company
}

NEW BRITAIN, CONN.
No. 26 West Twenty-Sixth Street, New York
No. 1201 Chestnut Street, Philadelphia


Look behind your pictures where the paper is fresh. Even good wall paper fades so rapidly that pictures once hung cannot be changed.

SPRING is here - it is re-papering time. Don't use wall paper and be disappointed again. Use SANITAS - the wall covering which has the beauty of fine wall paper and keeps it. SANITAS is sun-proof and cannot fade. SANITAS is water-proof - all soiled places can be wiped away with a damp cloth.

Write to our special Department of Home Decoration. State which
rooms you desire to decorate and receive, free,
rooms you desire to decorate and receive, free, special samples and
suggestive sketches of clever new interior treatments.
\(W\)
STANDARD OIL CLOTH CO.


You can have the cheerful rays of sunlight in your rooms all winter by building one of our Brick Open Fire= place Mantels. Send for our catalogue. Address

PHILADELPHIA \& BOSTON FACE BRICK COMPANY 165 MILK STREET, - - BOSTON, MASS., Dept. 46
such as you have mentioned in these columns, but have not been successful in finding anything wide enough and I do not like the idea of a seam down the center.

Answer: The material from which table covers are made, such as you desire, can be secured from shops where upholstery materials are carried. There are a number of places where one can secure the sample lengths. These are fifty inches square and have a selvage all around. We will take pleasure in sending you the prices of these materials and the address from whom you can obtain the goods. Table covers made from these lengths, should be trimmed about with a gold galloon or a gimp showing the same colors as the brocade, or sometimes a narrow moss fringe-less than an inch in width-is preferred.

\section*{EXTERIOR COLOR FOR A HOUSE}

I am building a house of eleven rooms, the upper story of which is shingled, the lower story is of rough clinker brick. I do not wish to stain the shingles but would like them painted. Will you suggest the color and also advise me what paint to use ?

Answer: Paint your shingles a shade of dull red, a triffe less dark in tone than the clinker brick. I am sending you the address of a manufacturer from whom you can obtain this color. The paints made by these people are absolutely good, and while they are not the cheapest, as far as first cost isconcerned, it is much more economical to use a paint of this quality than one of cheaper grade, as a good paint lasts very much longer. Stain the shingles of your roof, either gray or moss green. I am sending you also the address of a firm from whom you can obtain samples of shingles showing the color.
covering for bath-room walls
I am anxious to use something on the walls of my bath-room as a covering. I do not wish the glazed paper. This room has a tile wainscot five feet in height. What would you suggest and should I paint the ceiling?

Answer: I take pleasure in sending you some samples of a washable wall
covering which will, I know, be satisfactory. I send samples with both dull and glazed surface. This material, you will see, is printed on strong muslin and is durable. It is readily cleaned. Paint or tint your ceiling the ivory white of background.

\section*{heating the home}

Will you advise me as to the best method and the best plan to install for heating my residence which is now being planned. I appeal to you feeling that your extensive experience will be valuable to me.

Answer: I am sending you the address of several firms who can supply you with literature in regard to heating your house, also estimates. Any one of the methods recommended will be satisfactory to you as we are very careful to advise only such as we know have been tried for years under varying conditions giving the best possible results.

\section*{GARDEN CORRESPONDENCE}
(Continued from page 178.)
hundred and fifty feet deep. We have made a lattice in front a little way, about six feet high. Now what would you have over this screen?

Mrs. G. W. B.
The first thing to do is to root out all the remains of the old grape vines, and renew the fertility of the soil. Carting away part and bringing in virgin soil from a pasture, and adding to it some well decayed manure, would be the ideal course to pursue. The removal of one foot in depth in the space required would do, but the more the better. At the posts, where you plant, have at least nine square feet well prepared, digging it at least two feet deep. The deeper it is dug, the more luxuriant the growth will be.

When you obtain your roses, or any vine used, it is best to cut them back to within one foot of the base, and depend entirely upon new canes for future embellishment. You will have much better effect the second year than if left uncut. If you desire to hasten the bushy effect, plant two roses at each post, cutting one back as above suggested and cutting all canes but one of the stronger plant.


Here's a plain sketch to illustrate a point. Study the course the arrows take. They show the usual distribution of heat in houses where poor sheathing is used.

Note the failure of this heat to reach the exposed walls of the rooms because of draughts that filter through cheap sheathing paper, impossible to change once the house is built.

\section*{NEPONSET SHEATHING PAPER Keeps Houses Warm}

Don't be argued into using rosin papers and cheap tarred felts - they split open and let in dampness and draughts. Insist on NEPONSET waterproof sheathing paper-see that it's used-it soon earns its cost in the coal it saves.
Write our special Department of Building Counsel for free samples and advice on any building subject. We are helping many and can help you. Write now.


\section*{Late Planting}
of hardy perennials, shrubs, trees, vines, etc., can
be done with good results by sending into Northbe done with good results by sending into North-
ern Vermont for Horsiord's Hardy Plants for cold climates-best in quality, lowest in price. Plants from the NORTH may be set long after the Southern nurseries have finished shipping. F. H. HORSFORD, Charlotte, Chittendon Co., Vt.


\section*{HIGH GRADE PRESSED METAL} SASH PULLEYS


Made with Plain Axles, Roller Bearings and Ball Bearings
Combination Groove for Chain or Cord catalog sent upon request
The American Pulley Co.
29th and Bristol Streets PHILADELPHIA \(\therefore \quad\) PA.

THE BEST SASH CORD MADE


EVERY FOOT IS STAMPED IN RED "SILVER LAKE A"


Detail of Fountain by C. J. Barnhorn, Sculptor. Made by
ROOKWOOD POTTERY COMPANY CINCINNATI

Eastern Office, 1 Madison Ave., New York

\title{
- The Standard of Excellence -
}


\section*{in Builders'} Fine Hardware

\section*{With Correct Designs in all the Leading Schools of Art is found in the productions of \\ P. \& F. CORBIN}
N. W. Corner

Eighth and Arch Streets PHILADELPHIA factories New Britain, Conn.

Interior view of the First Church of Christ, Scientist, Boston, Mass., in which we laid 30,000 feet of Interlocking Rubber Tiling, in a solid color, to harmonize with the stone finish.

\section*{Interlocking Rubber Tiling}

Noiseless, non-slippery, restful to the feet sanitary, extraordinarily durable. The finest floor for use in public buildings, banks, offices, theatres, hospitals, libraries, kitchens, laundries, billiard rooms, bath rooms, stairways etc., etc.
Samples, estimates, and special designs fur nished upon application.
Beware of infringers. Patented.
Manufactured solely by


\section*{New York Belting and Packing Company, Ltd.,}

\section*{91 and 93 Chambers Street, New York City}

\author{
Chicago: 150 Lake Street. \\ St. Lours: 218-220 Chestrut Street. \\ Philadelphia: 118-120 North 8th Street. San Francisco: \\ \(\left.\begin{array}{l}\text { CARLAND: } \\ \text { E. Ith Street and 3d Avenue. }\end{array}\right\}\) Cal \\ Boston: 232 Summer Street. \\ Indianapolis, Ind. : 229 South Meridian St.
}

\footnotetext{
Baltimore: il4 West Baltimore Street. Buffalo: 600 Prudential Building. Yittsburgh: 913-915 Liberty Avenue. Spokane, Wash.: i63 S. Lincoln Street.
Sole European Depot, Anglo-American Rubber Co., Ltd., 58 Holborn Viaduct, London, E. C.
}

You mention the scarlet rambler, I presume you mean what is catalogued as the crimson rambler. The main objection to this rose is its poor foliage and its tendency to mildew. Use it at the lower end of the arbor where its foliage defect is softened by the distant view. There are many good new ramblers-Dorothy Perkins, a charming pink, sweet scented, is one of the best. It is a strong grower and has beautiful shining foliage. Mandas hybrids are good, as are the following: Thalia, white; Aglaia, yellow; and Euphrosine, a pink. They are all ramblers. Aglaia takes some time to become established. Lord Penzance's sweetbrier hybrids are fine and some of them retain the delightful perfume of foliage characteristic of the type - Annie of Geierstein, one of them, is a beautiful dark crimson, they are stiffer growers than the ramblers-send for catalogues and choose those you like. You say you want a shady arbor. Your roses will give it in time, but like all permanent plants, they take a few years to get up and cover space. I presume that the "blue moon vine" you mention is the Ipomaa rubra carulea, generally known as the Heavenly blue moon flower or morning glory. This will cover the house towards the end of the season, and will bloom better and earlier if planted in a sunken box, so as to confine the roots. However, if you want a strong, quick growth of foliage and flowers late in the season, do not plant in a box; you will have to plant every year. Ipomaa pandurata, a hardy perennial "moon flower," having fairly large white flowers with a purple throat, that remain open all day-might be used. If you were to remain a series of years I would suggest planting a permanent covering and name Euonymus radicans, as a cover plant. It is a broad leafed evergreen and clings to stone or cement walls like an ivy. If your walls are of wood, you could paint them and while the paint is wet, sand it heavily. The vine will then cling to it.

Akebia quinata, from Japan, if a proper trellis were provided, would make a beautiful covering, nearly evergreen. It is somewhat slow in starting, but when once established will grow rapidly. Its flowers are more curious than ornamental, but its foliage is clean, handsome and free from insect attacks.
writing to advertisers please mention House and Garden.

Vitis odorata, the sweet-scented wild grape, would do well there.

There are several things suitable to be grown on the six foot lattice work in front of the barn. Lophospermum scandens, an annual, or at least treated as one, planted about eighteen inches apart, would soon cover it, and until late in the fall produce numerous trumpet shaped pink flowers. You would have to get some florist to start the plants for you.

The annual gourds might be interesting in such a situation, Loeb's climbing nasturtiums would cover it and be bright in color, but they might lose their lower foliage unless well cared for.
Here again I would suggest something permanent. Forsythia suspensa (golden bells) is a rapid growing shrub, with drooping, slender branches, which in early spring are entirely covered with golden bells. These come before the foliage and entirely cover the plant. It would reach the top of the trellis and droop out and down.
Among the climbing honeysuckles are some choice things, hardy in your climate. A mixture of planting of Hall's Japan honeysuckle, Lonicera Halleana, and L. Faponica would cover it well, produce sweet-scented flowers nearly all summer and their foliage would be almost evergreen. Tecoma radicans var. grandiflora, an improved form of the trumpet flower would do.

\section*{CHAPTERS IN RURAL PROGRESS*}

THE increasing interest in rural matters, springing from the renewed devotion to outdoor life, and now including the technical aspects of modern agriculture, is gradually being broadened to embrace the field of economical and social investigations. At present the literature regarding the sociological phases of rural life is particularly meager.

President Butterfield's book emphasizes the social aspects of rural communities and describes some of the newer movements resulting in the expansion of country life. The book offers no complete analysis of the rural problem, but presents some of the more significant phases of it, and describes some of the agencies at work in solving it. To the sociologist it will be of deep interest.
*Chapters in Rural Progress," by Kenyon L. Butterfield, President of the Massachusetts Agricultural College. Chi-
cago: The University of Chicago Press. Price \(\$ 1.00\), net.

"Standard" "Green \& Gold" Label Fixtures, because of their smooth, nonabsorbent surfaces without joint or crevice, their one-piece construction, and the indestructibility of their snowy enameling, are sanitary to the highest degree and safe-guard the health of your home as no other fixtures can. Genuine "Standard" Ware lasts longer, is more beautiful, and gives greater satisfaction in use than any other plumbing system in the world. You can equip your home throughout with "Standard" "Green \& Gold" Label Fixtures for the same price you would pay for unguaranteed and unsanitary equipment.

There is but one way to solve your sanitary problem-satisfactorily-economic-ally-and for all time. Equip with genuine "Standard" Porcelain Enameled Ware and look for the label to make sure you are getting what you specify.

> Send for our free 100 page book-"Modern Bathrooms"-the most complete and beautiful book ever issued on the sanitary subject. Write today, enclosing \(6 c\) postage, giving name of your archilect and plumber if selected.
> Address, Standard Sanitary Thfo.co. Dept. 40, Pittsburgh, Pa., U. S. A.
> Offices and Showromsin New York: "atandard" Building, 35-37 West 31 st Street.

\section*{A 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


\section*{A Lifetime Without Repairs}

\author{
Asbestos "Century" Shingles will Outlive the Building without either Paint or Repairs
}


Illustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Illinois, Prof. F. M. White, Architect, roofed with Asbestos "Century" Shingles, laid French Method.

Exposed to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such, defy all changes of climates, and thus become greatly superior to other forms of roofing. :: :: :: :: :: ::

Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.
ASBESTOS "CENTURY" SHINGLES REINFORCED ASBESTOS CORRUGATED SHEATHING

\section*{FACTORS:}

THE KEASBEY \& MATTISON CO.,
AMBLER, PA.

To the country born but city bred professional man, contemplating a return to the "simple life," it will prove immensely valuable as it contains a presentation of the many changed conditions now existing in rural districts which will be well for him to very carefully digest before being brought face to face with them. To the farmer himself, the book cannot fail to be of absorbing interest. To him it points the road to success with no wavering of the arrow. We mean the "New Farmer" who enlists in his service the scientists of the world and who conducts his farm with the same careful business methods that the great merchant and manufacturer employs in his establishment or in his mills.

\section*{OUR TREES: HOW TO KNOW THEM*}

IN the preface to the above work the writer states that the intention of the book is to furnish an opportunity for a more intimate acquaintance with our American trees. The illustrations (nearly 150) are from photographs taken direct from Nature, and have been brought together in such a way that the non-botanical reader can recognize at a glance either the whole tree or the leaves, flowers, fruits or winter twigs and thus be able to identify with ease and certainty any unknown tree to which his attention may be called. In the discussions of the text especial attention has been given to the distinguishing characteristics of the various species, as well as the more interesting phases of the yearly cycle of each and the special values of each for ornamental planting.

\section*{INSECTICIDES FOR CHEWING INSECTS}

BULLETIN iI8, of the Purdue, Ind.,
University Station, gives the following formulas for the best insecticides and directions for preparing them:

First-Arsenate of Lead: This preparation is used for much the same purposes that other forms of arsenic are; that is, a stomach poison for chewing insects. It has some advantages over other arsenicals in not being easily washed off the tree, and of not burning the foliage. There are some commercial preparations of this insecticide on the market which may be used, such as Disparene and Swift's arsenate of lead,

\footnotetext{
"Our Trees: How to Know Them. Photographs from Nature by Arthur I. Emerson, with a guide to their recog-
nition by Clarence M. Weed, D. Sc. Philadelphia: J. B. Lippincott Co. Price \(\$_{3} .00\).
}

In writing to advertisers please mention House and Garden.
or it can be prepared at home. It is more costly than Paris green and must be used much stronger, four to six pounds being required per 100 gallons of water. To prepare at home dissolve four ounces of arsenate of soda, eleven ounces of acetate of lead, each in two quarts of warm water. Mix and dilute to twenty gallons. A white precipitate is formed (the arsenate of lead) which remains in suspension in the water.
Second-Arsenate of Soda: This is a very cheap and safe insecticide, but it lacks the advantage of the warning color which Paris green has, and hence must always be carefully labeled. To prepare it use four pounds white arsenic, four pounds carbonate of soda (washing soda). Boil in a gallon of water till the arsenic dissolves, which will be in about fifteen minutes; then add water to make two gallons. This is a concentrated stock solution and will keep indefinitely. For spraying, use one quart to fifty gallons of water. Arsenate of soda is frequently used in connection with Bordeaux mixture, the same as Paris green. If used with water only, slake two pounds of lump lime and add to every barrel (fifty gallons) of water with the quart of the stock solution. The lime is applied to prevent the free acid in the arsenical mixture from burning the foliage.

Third-Paris Green: This is the commonest and usually the safest form in which to use arsenic in small quantities. Lime is added to it to prevent burning of the foliage and to cause it to adhere better. The strength of the spray must depend somewhat on the kind of tree, the foliage of the peach and plum being more easily injured than that of the apple. Paris green is often combined with Bordeaux mixture, making a dual-purpose spray equally effective against apple scab and coddling moth. Whether used alone or in combination it is well to mix the Paris green first with a small quantity of water into a thin paste, so that it will dilute uniformly. A good agitator is needed for the spray work because the Paris green is heavy and tends to settle rather rapidly. The formula is one pound Paris green, two pounds of lime, roo-250 gallons of water.

Fourth-White Arsenic: This is the most concentrated of the stomach poisons. It may be used with Bordeaux mixture

\section*{The World's Finest Nursery Products}

ROSES. Our Roses will tell their own story when the blooming season comes. All our bushes are strong and will bloom profusely all the Summer.
SHADE AND FRUIT TREES. No home is complete without these two necessities. We carry a large variety.
PERGOLA VINES. Don't hesitate to place your orders with us a once. We grow them by the thousands; you can see them -that is the only way to buy Nursery products.
HARDY PLANTS. We have the most complete collection of these popular favorites in the countryOur Landscape Department makes a specialty of Old-Fashioned Gardens.
EVERGREENS. We have many thousands from 1 to 10 feet tall, in all the finest and handsomest varieties. The specimens now growing in our Nurseries are conceded to be the finest ever produced in America.
BULBS AND ROOTS. Old-Fashioned Flower Gardens cannot be made complete without their use. A large selection of kinds is growing in our Nursery and described in our catalogue. Our Nursery during the Summer until late Autumn is one vast bouquet of flowers produced by bulbs and roots. Let us estimate on your wants; we have only one grade-THE BEST.

OUR ILLUSTRATED GENERAL CATALOGUE No. 18 will tell you about the above and all our other products for Lawns and Gardens. Ask for it.

You can visit our Nursery by taking the McAdoo Tube Trains to Hoboken, which connect with the White Line Electric Cars passing our Nursery.

\section*{BOBBINK \& ATKINS, \\ Nurserymen and Landscape Architects, RUTHERFORD, N. J.}


The man who buys any other Typewriter always HOPES it will be as good as the
REMINGTON
Remington Typewriter Company 110 S. Ninth Street,

Philadelphia, Pa.


\section*{Ives Patent Window Stop Adjuster}
 ribs and heavy bed that will not cup, turn or bend in tightening the screw. Manufactured only by The H. B. IVES CO.. New
Haven, Conn., U. S. A.
(Fifty-page Catalogue Mailed Free.)
 Columns furnished by us
60,000 columns at an average of \(\$ 5.00\) each, or 6000 at \(\$ 50.00\) each, gives you an idea of the annual capacity of our plant. We own the largest factory building in the world devoted
exclusively to the manufacture of high grade column and exclusively to the manufacture of high grade column and porch work. and pedestals.

HARTMANN-SANDERS COMPANY Sole Manufacturers of
Koll's Patent Lock Joint Columns Elston \& Webster Aves., Chicago, IIl. Eastern Office, 1123 Broadway, N. Y. City.

The best columns for porches, pergolas or interior use.

\section*{Landscape Architects and Engineers}

Plans for the development of private estates, parks, cemeteries and boulevards made and executed. southern work a specialty. Established 1856
P. J. BERCKMANS CO., Augusta, Ga.
n writing to advertisers please mention house and garden.


Colonial Massage Cream Would you like to be ten years younger in appearance?
each evening wing applied regularly lines, build up hollow cheeks, scrawny neck and shoulders, and set the clock back ten years in your appearance. Price 50c. If your druggist doenn't have Colonial Massage Cream, write us. 313 Carson Street - Piti Pittsburgh, Pa.

Creme Tacoma is unlike any other complexion cream you have ever used. It is better and produces more pleasing results.
With its use any woman can enjoy a beautiful complexion.
It soothes and nourishes the skin, prevents chapping and chafing and allays all irritation.
Creme Tacoma is delightfully refreshing and pleasant to use. It contains no oil or grease ; is absorbed instantly, and cannot injure even the most delicate complexion.
Price 50 c . If your druggist does not have
Creme Tacoma, write us.


We are desirous of securing a number of copies of Housesefarden
for January, 1905; July, 1903; April, 1902; June, 1902, and July, 1902, and will pay 25 cents for each copy sent us in good condition.

CIRCULATION DEPARTMENT
Houseberarden
in the same way as Paris green, except that not so much is required, one pound being sufficient for from 300 to \(400 \mathrm{gal}-\) lons of Bordeaux. If not used with Bordeaux it must be combined with lime in some other form. To prepare it boil two pounds freshly slaked lime, one pound white arsenic, two gallons of water.

This concentrated solution contains sufficient arsenic for 300 to 400 gallons of water. When ready to use add one pound of slaked lime to every twentyfive gallons of water used. The advantage of white arsenic lies in its cheapness. It costs much less than Paris green. It is dangerous, however, on account of its innocent color and must be carefully labeled.
Fifth - Hellebore: This material, made from the powdered root of a plant, loses strength soon after applying, hence may be used on fruit when nearly ripe. It is used both in the dust and liquid form. For use as a dust, mix thoroughly with three to four times its weight of plaster or flour. For a liquid spray, use one pound to twenty-five gallons of water. Its principal usefulness is in combating some of the enemies of small fruits in the garden.-Home and Farm.

The illustrated, descriptive catalogue of the American Nursery Company, New York City, for 1908, is an attractive book of nearly one hundred pages, and is full of information and advice as to the selection and planting of trees, shrubs and plants. It is a handy and valuable book of ready reference and can be had for the asking.

\section*{PHOTOGRAPHY IN WEAVING}

ASCENE memorable in the annals of the weaving industry was, says the correspondent of the Daily Cbronicle, witnessed on January ioth at the Vienna Technical Art Museum. Herr Jan Szczepanik, the famous young inventor, presented the Emperor Francis Joseph with the first web produced by means of his new photographic process. The silk-woven Gobelins is made from a picture by Henryk Rauchinger. It is about two square metres in size, and gives an allegorical representation of homage to the Emperor. The work contains 200,000,000 crossings, 120 silk
threads filling one centimetre. Two hundred square metres of pasteboard cards would have been necessary to produce this web according to the present method, and designers would have required many years to carry out the work. Now the designer is abolished, and the work was done in five hours. The Emperor was struck by the marvellous plasticity and delicacy of the picture which nobody would believe to be woven. Herr Szczepanik demonstrated the process at the Emperor's desire, and His Majesty accepted the gift, and congratulated the inventor.-Invention.

\section*{COSMOS A LATE BLOOMER}

ANY ONE who has never tried cosmos will be fully repaid for planting some of this very beautiful flower this summer. Cosmos is an annual, propagated from seed. It is of slow growth at first, and blossoms very late, often not till after the first frost. Ordinarily it will blossom anywhere south of the Great Lakes, and frequently much farther north. It is very hardy, and will blossom after two or three frosts.

Cosmos will grow, mature and blossom in poor soil, but responds magnificently to rich soil and good treatment.


White cosmos
The seed may be planted in early summer in most any spare place in the garden, and the young plants, which look very much like ragweeds, may be transplanted any time desired, up to the middle of July, or even later. We have

JOSEPH P. McHUGH \& COMPANY OF NEW YORK: ESTABLISHED 1878

\author{
Design, Make, Import Homelike, Agreeable Things For Decorative Furnishing in the Night or Day Nursery: \\ THE ORIGINAL McHUGH \\ Mission, Willow, Easy Furniture: \\ PIERROT POSTER PICTURES by PRINCE PALEOLOGUE (Pal.)
}

Kate Greena way, Aldin-Hassall Wall Papers, Friezes, Posters; Chintzes, Dimities, Linens:

\section*{RAGSTYLE CARPETS, RUGS:}

Will mail for 25 c . in Stamps (to be allowed on first purchase) THE PORTFOLIO OF 1000 SKETCHES, Illustrating Quaintly Unusual FURNITURE OF ORIGINAL DESIGN. Descriptive price list included.

> \begin{tabular}{c|c} 9 W .42 d St. & Sign of the \\
> Opposite Library & "Popular Shop" \end{tabular}

Do You Appreciate the Advantages in Using Tiling in Home Building ?

Its DURABILITY saves the costs of repairs and replacing. A tiled floor or wall never has to be oiled, varnished, painted or papered. Dirt or liquid matter of any kind will not stain it. The steel nails of the shoe cannot scratch or wear it.

Its SANITARY QUALITIES and the facility with which it can be cleaned gives assurance that the bath-room, kitchen, butler's pantry laundry, vestibule and other places where it is used will always be in a clean sanitary condition.

Its DECORATIVE POSSIBILITIES permit the execution in tiling of ceramic mosaic of any possible design or color scheme on the floor or wall
Tiling is fire-proof, germ-proof, waterproof, damp-proof and vermin-proof.

For interesting booklets on tiling, distributed free, write Information Bureau of the

\section*{TILE INDUSTRY}

318 Corcoran BIdg. Washington, D. C.


Mercer Boiler for Steam and Hot Water Heating

\title{
Our Heating Boilers and Radiators
}
are made for the home where the Architect and Owner demand uniform heat in all weather.
The efficiency of our apparatus makes this always possible.

\section*{MILLS SAFETY BOILERS}

\section*{THE H. B. SMITH CO.}

Factory, Westfield, Mass.
728 Arch St., Philadelphia
For the convenience of subscribers our Subscription department will receive subscriptions for all magazines and periodicals at publishers' rate.

Fouse 6 farden

\author{
1006 Arch Street,
}

Philadelphia

VITREOUS CHINAWARE

\author{
FOR THE \\ HOME BATH-ROOM
}


\section*{PLATE 986-K}

THE bath-room for your home should receive the most careful attention of any room in the house. Absolute sanitation is the aim of civilized people, and the sanitation of your home bath-room is your first consideration. Without sanitary fixtures this object cannot be reached, no matter how good the workmen may be who instal the bathtub, washstand or closet bowl and flush tank.

For reasons of cleanliness and durability solid white vitreous chinaware is firmly established as the nearest possible perfection in bath-room sanitary equipment. For many reasons vitreous china closets and closet flushing tanks, as above illustrated, demand your serious consideration. Being made of a solid white vitreous chinaware, they are impervious to the action of water or acids, having no seams there is no danger of warping, and the surface being a clear hard glaze baked into the body of the ware as an integral part, paint and varnish troubles are eliminated. No metal lining is needed, therefore the dangers of corrosion are not to be feared, and the cost of vitreous china fixtures does not exceed that of a closet with the usual metal-lined wooden tank.

Of the hardness of rock, simplicity of operation, ease of cleansing and beauty of design, vitreous china closets and closet flushing tanks are acknowledged the ideal fixtures for the home bath-room.

We are the largest manufacturers in the world of these fixtures, and will gladly send further information if you will write us.

\section*{The Trenton Potteries Company}

Main Offices and Works, TRENTON, N. J., U. S. A.
The Canadian-Trenton Potteries Co., Ltd., ST. JOHN'S, QUEBEC.
transplanted them in July when the plants were more than two feet high. They grew to be over seven feet high at maturity and blossomed very freely in the autumn. In transplanting such large plants, choose a wet, cloudy afternoon, and lift them with a garden spade, taking all the soil that will possibly cling to the roots, and set them into a deep hole, firming the soil well about the roots and watering freely for two or three days.

Cosmos blossoms are single but very beautiful, resembling daisies and single dahlias in general appearance. As cut flowers they will last for a long time when kept in a vase of water in a cool room. They have been kept fresh for more than three weeks.
Late one fall we carried a loose bunch of the blossoms on a \(250-\) mile railway trip. At the end of the journey they were badly wilted, but on being placed in water in a cool room, they revived, buds continued to open, and they lasted for nearly two weeks.

Blossoming so late as they do, when scarcely a flower is to be seen outside, together with their good keeping qualities, make them a late plant worth cultivating. A few vases of these delicate blossoms and feathery foliage will brighten the shortening days long after common blossoms have all died and gone.-Farm and Home.

\section*{LONDON LANDMARKS}

ONE of the few remaining landmarks in Whitehall, London, passed out of existence recently. This was Vanbrugh House, in Whitehall yard, which was built by Sir John Vanbrugh in 1696 , and familiarly known as "The Pill Box," in consequence of its diminutive size. Prior to 1831 it was the residence of Lord Stuart de Rothesay, but in that year it was taken over by the then recently established United Service Institution, which together with its famous museum of naval and military relics, was housed there until 1895, when the queen granted the use of the historic banqueting house of the Palace of Whitehall. The old building, which stands on the site of the quarters allotted to the officers of the Jewel House, has now been demolished to make room for the erection of the new War Office on ground formerly occupied by Carrington House.-Exchange.
"The House of the Seven Chimneys" English Manor-Houses
Window Boxes

A Stable Convertible into a Garage
The Art of Pruning Stable and Kennel

Vol. XIII JUNE, 1908
No. 6



THE JOHN C. WINSTON CO.
\(\$ 3.00\) Yearly COO COHcago
PHILADELPHIA


THE gardenia or cape jasmine (Gardenia florida) is a waxy white flower that rose and fell in popular favor with the camellia, but unlike the camellia it has exquisite fragrance, and can be cut with long stems, so that it has become the favorite boutonnière at the tables of the rich.
In the South hedges are made of the cape jasmine, which grows to six feet high and blooms from May till September. It is hardy even to Virginia.

As a conservatory plant young, full budded specimens can be forced into bloom in January and February. As cut flowers gardenias are in great demand in exclusive circles and bring rich prices in winter. As a boutonnière this flower is without a rival.
The most magnificent tree of the subtropical regions of the world is Magnolia grandiflora. Each twig of this tall, stately evergreen tree lifts above the polished, leathery leaves one single, creamy white, wax petalled, fragrant blossom, which is at least six or eight inches across, while there is a cultivated variety with blossoms fourteen inches across when fully opened. Another beauty of the tree is the under side of its leaf, which is coated with a felt of rusty brown hairs.

This tree can be successfully grown as far north as Long Island if sheltered from winter winds, but it is there only a shrub and the trunks must be wrapped with straw. It is not happy north of Washington, D. C.

Speaking broadly, the broad leaved evergreens are costly and slow growing. All of them must be planted in the spring, never in the fall. As a class they require shelter from winter winds and winter sunshine. The members of the heath family (rhododendrons, azaleas, laurel, fetterbush) are lime haters, and in a limestone country the soil should be dug out to a depth of three or four feet and replaced by soil free from lime. All the broad leaved evergreens are best mulched both summer and winter. Cover the ground with litter to protect the surface roots from thawing and heaving in winter and to keep them cool and moist in summer.

These plants want a deep, rich, well drained soil, moist but never stagnant. Mix well rotted manure with leaf mould or peaty soil and you have an ideal loam

\section*{Plan the right heating}

If you are newly building, don't discredit your property at the start by putting in old-fashioned forms of heating. Whether planning a new house or intending to move, don't overlook the great importance of a modern heating equip-
 ment. There isn't any other feature of the home which will save you so


These outfits for Low - Pressure Steam or Hot Water will soon repay their cost in coal savings, lessened labor, absence of repairs, and low insurance. All ashdust, smoke, soot, and coal-gases are kept out of the living-rooms-reducing


This small, plain, perfectly smooth Radiator is one of several thousand patterns and sizes of AMERICAN
Radiation made to fit any architectural needs. It is so clean and cleanable-suited to narrow halls, bathrooms, nursery, etc. house-cleaning one-half and saving the wear on carpets, decorations, and furniture.
If property is sold you get back their full value, or they attract and hold best tenants at \(10 \%\) to \(15 \%\) higher rental. The saving of but one ton of coal in a year will meet the interest upon \(\$ 100\), and this sum will nearly cover the difference in the cost of IDEAL Boilers and AMERICAN Radiators as compared with a hot-air furnace for a good-size cottage.
IDEAL Boilers and AMERICAN Radiators are annually replacing thousands of hot-air furnaces and stoves that have been found wasteful and wanting in OLD cottages, houses, stores, churches, schools, etc. Ever heard of any one going back to other forms of heating once they have tried our way? Any argument in that to you? Please let us tell you the full why, how, and present attractive price. No tearing-up necessary-and in these less hurried months you get the services of the most skillful, quickest fitters! Ask for free valuable booklet. Inquiries cordially welcomed.
AMERICANRADIATOR COMPANY
CHICAGO


Wood Rollers
Tin Rollers


See that the label on each Roller bears this script signature for your protection.
Get " Improved," no tacks required.
Hartshorn Shade Rollers


\section*{THE STRAND MAGAZINE}

\section*{Summary of Contents for June, 1908.}

\section*{The Wonderful New Color Photography}

An intensely interesting account of the new process of photographing in Colors, discovered by Monsieur Lumiere of Paris, illustrated by five specimens of his work reproduced in colors, including the photograph of a lady taken from life by this process, reproducing all the delicate shades of tint of hair, eyes, complexion and dress. It is a wonderful achievement.

\section*{Summer Fiction Number}

Being the first of our Summer Numbers the June Strand will be exceptionally strong in Fiction. There is a good instalment of
> "Salthaven," by W. W. Jacobs

Mr. E. P. BELL, a new author, is introduced who at once takes front rank as a short story writer His story is called 'ZZory's Race." W. HAMILTON OSBORN is splendid in "Inside Information," a story having stock market affiliations. "The Chop House," by DOROTHY DEAKIN, and the "Last Hope," by JOSEPH KEATING, will be enjoyed by the reader. There is also a very entertaining bunch of Dog stories.

The Articles include a second instalment of
Reminiscences and Reflections of Sir John Hare
the Actor. Written with a force and style that
compels the interest of the reader in every line.
My African Journey. III.-The Highlands ol East Arrica. By the Rt. Hon. Winston Spencer Churchill, M. P.

We have also some talk of the champions who compete at the forthcoming Olympic games. Also an article telling how artists "compose" their pictures. And an item for nature lovers that deals with "Catkins."

The House of Arden. Puzzles From Games. Curiosities, Etc., Etc. Do not fail to get the JUNE STRAND.
The "STRAND"-the Magazine with a Distinct Indiaiduality.
15 Cents a Copy - - 81.50 a Year.
Of all Newsdealers and


For the convenience of our subscribers our Subscription Department will receive subscriptions for all magazines and periodicals at publishers' rates.


1006 ARCH STREET, :-:

PHILADELPHIA, PA.
for them. If your soil is stiff or limy dig it out and make a bed two and a half feet deep on a shaded northern slope, with an under layer of gravel to insure drainage; then fill in with the made soil that is to feed the plants. Carloads of rhododendrons and laurel are brought from the mountains and planted in woodlands on estates in the Northeastern States. In trained hands the percentage of loss is very slight.
In winter protect the foliage from sun and wind, both of which rob the broad leaves of moisture at a time when the roots are unable to make good the loss. It is a good plan to stand boughs of conifers among the clumps of rhododendrons, which give partial shade and act as a wind break. Bank the roots with leaves and hold them down with evergreen branches.

Use the low shrubs like fetterbush for bordering beds of the tall kinds, like rhododendrons. Their foliage will conceal the spindling bare branches of the taller shrubs and bring the mound of green down to the sod whatever the time of year.

It is worth a pilgrimage to the South just to see its broad leaved evergreens, and a very impressive time to make the trip is in the dead of a Northern winter, when other glorious members of this group which we can never hope to grow in the North burst upon the delighted vision of the visitor. \(-N_{e w}\) York Herald.

\section*{WOOD PRESERVING IN SWITZERLAND}

A SIMPLE, effective and cheap way of preserving wood from decay is practised in Switzerland in the preparation of posts for the telegraph service. A square tank, having a capacity of some two hundred gallons, is supported at a height of twenty feet or twenty-five feet above theground by means of a light skeleton tower built of wood. A pipe drops from the bottom of the tank to within thirty inches of the ground, where it is connected with a cluster of flexible branches, each ending with a cap having an orifice in the center. Each cap is clamped on to the larger end of a pole in such a manner that no liquid can escape from the pipe except by passing into the wood.
The poles are arranged parallel with one another, sloping downwards, and troughs run under both ends to

\footnotetext{
(Continued on page 4.)
}


\section*{Horses}

The woman's horse, the children's pony, the coach-horse, the trotter, the donkey, the farm-horse, etc., will all have their place in the excellent series of articles on "Which Horse?" soon to appear in House and Garden. These articles will stir up many an inquiry on harness, wagons, sulkies, road-carts, farm-wagons, saddles, etc.
Frequent reference will be made to the various needs for barn, stable and manger. Building plans for up-to-date stables, barns and out-buildings will be features, along with handsomely finished photos of wideawake animals, as well as pictures of children, women and the horse-lovers generally.


\section*{Dairy}

Many a proud owner of blooded stock is a regular subscriber to House and Garden. We're going to make him a closer friend-make him feel more brotherly, give him some vital points on blooded milkers; and get him to correspond with us; let him criticize, etc.

Here we shall stir up new investors in dairy stock. They will need all the new and old specialties in dairy lines; Stanchions, apparatus of various kinds, books, separators, aerators, etc., etc., Photos of handsome animals, stock farms, their owners, etc., will add interest and pleasure to each article.

We shall stimulate demand by conscientious and judicious advice along all dairy lines that will benefit subscribers and advertisers.


\section*{Poultry}

Hens are worth more than our gold mines. Did you know that?
Fresh eggs for the suburban and farm breakfast, as well as for the rest of mankind, make us all brothers.
The pedigreed hen is "coming to her own." Pure-bred stock will be an attraction in this new department of House and Garden. How to own sanitary poultry houses, what sort of fixtures to select, how to keep down lice, how to spray and disinfect poultry quarters, will be discussed correctly by well-informed workers who have made success on their own account. How to caponize, feed chicks, prevent disease; to get eggs, pick and market table poultry-all will be discussed.

\section*{Bees}

Flowers, Fruit, Poultry, Honey, make an attractive combination-profitable, too.
This department will enlarge on the value of honey as a food; the simplicity, ease, and fascination in bee culture; the value of bees as pollenizing agents, etc. It will give directions for amateurs, how to start to supply comb honey for the table. It will recommend bee outfits: hives, books, breeds of bees, etc. This department will certainly prove a money-maker for manufacturers of apiarian supplies. Photos of model apiaries, prominent beekeepers, etc., will increase the interest of each article.

\section*{Dogs}

Here is a department every one is interested in, whether the owner of a handsome collie, English bull, or a dog of "low degree." Photos of various breeds and cross-strains from the continent and in America will be features of this kennel department.

Well-informed fanciers will contribute practical articles on "How to know and purchase a good dog." They will explain their various natures and value, as watch-dogs, sheep-dogs, coach-dogs, etc.

Photos are on hand of certain types which will illustrate these talks. The advertisers who appear in House and Garden are certain to get reasonable returns.


\section*{Kennels}

SCOTCH COLLIES
SCOTCH COLLIES-Scotch Collie Pupe bred in the purple,
\(\$ 10.00\) each. Charles C. Schneider, N. Detroit, Mich. R.F.D
Spotswood Banker
A. K. S. C. B. 78171

FOR SALE
Winner of 50 prizes, Mahogany brindle, splendid disposition. Also stud dogs, brood bitches and puppies, all from selected
pedigree stock

Spotswood
Spotswood Kennels,
629 Callowhill St., Philadelphia, Pa.


NEWCASTLE KENNELS. BROOKLINE. MASS.-Pedigreed and registered Scottish Terriers and bitches; all ages. Information always cheerfully given.

\section*{SPORTING AND PET DOGS FOR SALE.}


Also Pigeons, Poultry, Rabbits, Pheasants,
Ferrets. Cattle Ferrets, Cattle, Sheep and Swine. Send roc
for 88 page catalogue,
Keystone State Kennels, Dept. MR., Reading, Pa.
GREAT DANES-These magnificent dogs are docile, sensible and obedient, but splendid watchers at night. We have some es pecially handsome young stock at present. Best blood extant Ideal dogs for country place. Correspondence solicited

DANICKA KENNELS, Geneva, N. Y.

\section*{Poultry}

WHITE WYANDOTTE EGGS for hatching. Thoroughbred, \(\$ 2.00\) for 15. Charles C. SChNEIDER, North Detroit, Mich., R. F. D.

\section*{PARTRIDGES AND PHEASANTS}

HE celebrated Hungarian and English Partridges and Pheas-
ants, the large Hungarian Hares, all kinds of Deer, Quail, ants, the large Hungarian Hares, all kinds of Deer, Quail, etc., for stocking purposes. Fancy Pheasants, ornamental waterfowi and live wild animals of every description. Write for price list.
WENZ \& MACKENSEN, Dept. 27.
YARDLEY, PENNSYLVANIA.

\section*{ORNAMENTAL LAND and WATER FOWL}

Swans, Geese, Ducks, Cranes, Pheasants, Peafowl, Quail, Partridges and other rare birds from all parts of the world.
All water fowl pinioned to prevent flying. No charge for All water fowl pinioned to prevent flying. No charge for
boxing. Safe delivery of stock guaranteed. I issue no catalogues or circulars, but would be pleased to quote prices on any birds desired.
G. D. TILley, Box A, Darien, Conn.

\section*{Horse for Sale}

BAY MARE-15 \({ }^{3}\) hands -9 years old. Style, action, breeding all that could be desired. Has been used for driving and station work. Low price. Address B, care House and Garden.


Price 15 Cents a copy
Another Remarkable Issue of an Exceedingly Popular Monthly

\section*{THE NATIONAL CONVENTIONS}

By Charles Wadsworth Camp
CHRISTIAN SCIENCE
By Mrs. Eddy's Secretary

\section*{JEFFERSON DAVIS AT WEST POINT}

By Prof. Walter L. Fleming of the Louisiana State University
SHORT STORIES
By A. T. Quiller-Couch, Herbert A. Sass, and Others

\section*{Art CONTRIBUTIONS in color and in black and white}

Gibbs, Bull, Taylor and Others
THE WORLD AT LARGE and the DRAMA

\section*{Che Metropolitan Magazine}

3 W. 29th Street, New York City.
One
catch drippings. When all is ready a solution of sulphate of copper, which has been prepared in the tank, is allowed to descend the pipe. The pressure produced by the fall is sufficient to drive the solution, gradually of course, right through the poles from end to end. When the operation is ended, and the posts dried, the whole of the fibre of the wood remains permeated with the preserving chemical.-London Work.

WINDOW GARDENS AND OTHER BITS OF GREEN

THE common white petunia makes a really charming plant to use in a shady window. It is one of the most easily cultured plants.

Lime will drive insects out of pots when everything else has failed. Be sure to use fresh lime.

Do not let the plants in the window garden become one-sided by being drawn toward the light. Turn them about at least once a week that all sides of them may have an equal chance at the sunshine.

It is a good plan to arrange the smaller ones in front near the glass, and the larger ones at the sides and rear. This enables all of them to get the benefit of the light, as they would not if the larger ones were given places near the glass, with the smaller ones tucked into the shady places between.

Be sure that plants in hanging pots and baskets get all the water they need. Because they are near the ceiling, where the temperature is much higher than at the window sill, they will dry out much more rapidly than ordinary plants. They are also exposed on all sides, and this accelerates evaporation.

Rubber plants constantly require nourishment, and a simple fashion of filling this want is occasionally to pour a tablespoonful of castor oil into a little gully dug close around the stalk. Cover the oil with a light layer of earth and you will find that the plant soon greedily absorbs the unpleasant medicine.

The most inexpensive plants for a window garden are hardy perennial shrubs, dwarf trees, or vines. It is,
of course, more costly to plant a succession of flowers, such as tulip or hyacinth bulbs in the spring, and geraniums for the balance of the season. At the same time the fresh beauty of the latter repays the outlay of time and money.

The small white worms that sometimes infest the surface soil of pot plants may be destroyed by applying a mixture of wood soot and sulphur in equal proportions as a dressing and working it into the soil.-New York Herald.

\section*{PALMS}

THE use of palms for outdoor decorative effects during the summer has wrought the ruin of many a nice and valuable specimen. The practice, at all times a risky proceeding, very closely resembles reckless sacrifice. The gratifying results of many years of skilful labor and careful watching have often thus been thrown to the winds of one short season. It is an error to think that cultivated palms, home grown and reared under artificial conditions, must still be set down as natives of torrid zones, children from the sun-scorched and wind-swept coast stretches of tropical climes. There I have seen them, stumbled over their roots for days and, sorry to say it, failed to be gushingly impressed with their imposing grandeur. I beheld them with the eyes of the Northern gardener, compared these hoboes in their rags and tatters, with those proud aristocrats in our conservatories and became well satisfied that a free and help-thyself existence greatly impairs the dignified bearing of any one of the many members of this royal family.
Why palms are so often employed in outdoor plant arrangements, especially on private places-mostly against the will of the gardener in charge - is easily explained by their great effectiveness either as single specimens or parts of a compact group. In such a case, a set of damaged and weather-beaten plants, if such there are, will do service for several seasons. It is hard to thus kill a palm outright, which would open a welcome way of ridding the place of some of the most unsightly of the lot. Instead they remain, for the greater part of the year a disgrace to the palm house. Such a state of affairs with no suggestion of hope for anything in the way of justified disposal of the unsightly


\section*{BOOKS FOR BOYS AND GIRLS}

\section*{Lost in the Forbidden Land River and Jungle The Hunt of the White Elephant by Edward S. Ellis}

These new books by the most popular boys' author, comprise the "Foreign Adventure Series," and are sold at \(\$ 1.00\) each, or \(\$ 3.00\) for the set, neatly boxed.
A Heroine of the Wilderness By Love's Sweet Rule
by Hezekiah Butterworth
by Gabrielle Emilie Jackson
A touching and sympathetic story
for girls. Price \(\$ 0.75\)
THE JOHN C. WINSTON COMPANY, Philadelphia PUBLISHERS OF "INTERNATIONAL" BIBLES

stock, should never be tolerated on any commercial place. The damage done to faultlessly grown, perfect palms of the medium and larger sizes in the decoration of halls, churches and houses for the various festive occasions coming our way, is slight and usually well paid for, and cannot be compared with the great loss sustained by their use in all summer lawn adornments. To lend out palms for the purpose at a small recompense is unwise; to induce customers to buy them outright looks more like real business.
At this season palms do their best growing and the cultivator's chief aim now must be to prevent this growth from becoming too soft and flabby, which under a too densely shaded glass and with an overplus of stagnant humidity in the house is only too likely to occur. Abundant ventilation day and night is therefore now in order. A fumigating now and then with any one of the different nicotine preparations will do no harm and is the safest means of keeping down most insects of the minute species; while forceful syringing prevents others from gaining a firm foothold. Badly infested plants should be given a thorough cleaning and be set by themselves. A scale ridden plant of any kind, laid on its side over an ant hill, is the cleanest thing on earth when taken up a few hours after.

If there is anything else that ants are good for I do not know it, but I know of several things good for ants; slug shot, arsenical mixtures, heavily charged manure water, water all alone in oftrepeated drenchings, all will make life a burden to ants and either kill them or drive them away.
Palms of advanced age and size, being excessively root-bound, should now be repotted, if this operation, owing to pressure of work, had to be postponed earlier in the season. There should be no excuse for crowding these into closely packed quarters now, while vegetation is most active. A spreading and thinning out will expose moss-clad, mucky nooks and recesses to the wholesome free play of light and air. Young stock requires spacing, repotting, sorting into different grades and sizes and resetting at frequent intervals right along until early fall, when a brief let up in the work from then until about February marks the end of one and the beginning of another season.-Florists' Exchange.

\section*{M. RECLUS'S GREAT GLOBE}

A CCORDING to Professor Elisée Reclus's recent paper, read before the Royal Geographical Society, he is still bent on the production of a great globe. Cartography, Professor Reclus says, has done fairly well, but the globe as we have made it amounts to little or nothing. Make a globe six or twelve feet in circurference, and then the loftiest peak of the Himalayas is only represented by one twenty-fifth of an inch in height-a mere nothing, hardly perceptible. As to other fairly tall elevations, they would not be indicated at all. Pseudo relief-maps, Reclus says, are, for the major part, silly exaggerations, magnifying what are the actual elevations. When a globe is constructed large enough to show at least onemillionth part of the earth in real proportions then we may try to represent heights and depths as well as the planimetric dimensions. Even then highlands of 3,000 feet would barely appear, but when we made summits of 10,000 or \({ }^{12,000}\) feet these would be distinctly visible. A huge globe on the scale of I to 100,000 is what M. Reclus wants. A skilled Swiss cartographer and reliefmaker proposes making such a relief of Switzerland, and it is possible that it will be shown at the coming Paris Exhibition. What the distinguished geographer wishes to bring about is a co-operative plan for the construction of such a globe, each country to produce its own section, keeping to the proportions of the Swiss one. Then at some time in the future all the parts are to be joined in one harmonious whole. Of course, there will be many gaps. Looking over the reports of the Geographical Society relative to this gigantic globe, the exact size, in fact, of it is not mentioned. Mr. Alfred Russel Wallace long ago proposed a hollow globe, but, as it would have to be seen from the inside, we think details would escape observers. How insignificant would be the Eiffel Tower alongside of this huge ball, if it is ever to be constructed! and a Ferris Wheel would be but as a child's hoop. Geography and cartography have notably improved since Dean Swift's time, when he wrote:-

\footnotetext{
"Geographers in Aftic maps
With savage pictures fill their gaps
And o'er inhabitable downs
Place elephants for want of towns."
}


PHOTO-CHROMOTYPE ENGRAVING COMPANY
Designers, Illustrators, Photo-Engravers

Three-Color Process for
MAGAZINE, BOOK AND CATALOGUE ILLUSTRATING
218-226 South 11 th Street


\section*{Until You Have Read The Great Vacation Number of "Recreation."} june "recreation" will be a great big special number of this SPLENDID MAGAZINE, FULL OF LARGE AND ATTRACTIVE ILLUSTRATIONS AND PRACTICAL SUGGESTIONS TO ALL OUTDOOR PEOPLE
VACATION TRIPS will be given considerable space, and this number will give you a vast deal of practical information about real, common-sense, health-giving vacations, whether you have much or little to spend.

\section*{INFORMATION FREE TO READERS OF "RECREATION"}

WHERE TO GO. We believe that "RECREATION'S INFORMATION BUREAU" has more valuable information at its command concerning various places for vacations, with all the good and bad points of each place, what it will cost, and other details, than any other organization

\section*{RECREATION'S POPULAR "BEEN THERE" STORIES}

RECREATION'S Popular "Been There" stories are written by people who have "been there" and know whereof they write. They tell all about vacations spent in widely varying sections of the country. They save you the usual "experimental first trip," and start you right. They tell you how, when and where to go, what to take and what it costs.

\section*{A Few of the Leading Articles in June "Recreation"}

CANOEING ON THE CHARLES RIVER A SYMPOSIUM OF VACATION TRIPS—BUILDING RECREATION HOUSES-LIVING IN A HOUSE TEN'T-A NEW GAME FISH-OLD FASHIONED BASS-SWIMMING STROKES—RECREATION TRIPS ON HORSEBACK. A DOZEN OTHER ARTICLES, AND ALL BEAU'TIFULLY ILLUSTRATED.

\section*{ON ALL FIRSTCLASS NEWS STANDS 25 CENTS A COPY}
"A PACK OF FUN" * These booklets, which will delight the reader, are jam "THE FISH THAT GET AWAY" full of good, practical information and interest to out"CAMPING OUT WITH A BABY" door lovers, Freely illustrated, io cents each, the thre for 25 cents, by mail postpaid.
SPECIAL OFFERS T-To introduce "RECREATION" to new readers, we will send it from TO YOU June to December inclusive for \(\$ 1.00\). June and December numbers are 25
cents each. We will also send FREE to every one accepting this offer the three booklets named above. Subscribers in Canada add 25 cents for extra postage.

2-If your newsdealer cannot supply you with the June number, send us 25 cents and we will mail the copy to you. If you will give us the name of the dealer who cannot supply you the June number when you send your order in, we will send you free any one oi the booklets named above.
Address: "RECREATION,"
E-4 West 22nd St., New York City


\section*{HURLBUT'S STORY OF THE BIBLE FROM GENESIS TO REVELATION}

Told in Language that Interests Both Old and Young
RECOMMENDED \(\quad \begin{aligned} & \text { For its Freshness and Accuracy } \\ & \text { For its Simplicity of Language }\end{aligned}\)
BY ALL For its Mumerous and Appropriate Illustration DENOMINATIONS As the Best Work on the Subject
Hon. David J. Brewer-Can heartily commend it to all. Bishop Vincent-An invaluable aid to parents. Rev. Russell \(\boldsymbol{H}\). Conwell-Written by a master hand, directed by a master mind. Henry A. Butts, Prcs. Drew TheologicalSeminary The absence of doctrinal discussion makesit acc eptable to all. Mr. Marion Lawrence, Gen. Secy. International S. S. Asso n-Best thing of the kind. wish the Bible Story in a simplified narrative
Beautifully printed and bound, 762 pages, nearly 300 half-tone illustrations, 8 in colors. Price Only \(\$ 1.50\). For Sale By All Booksellers, or Sent Postpaid on Receipt of Price. THE JOHN C. WINSTON CO., Dept. G 1006 Arch Street, Philadelphia PUBLISHERS OF THE "INTERNATIONAL" SERIES OF BIBLES.

\section*{HEMLOCK HEDGES}

ONE visiting the older estates in the midst of us will hardly fail to find thereon a hemlock spruce hedge or the remains of one. It and the Norway spruce and Arbor-vita were the evergreens a hedge was chosen from. There is to-day no better evergreen for a hedge than the hemlock. Always beautiful, it is especially so in early summer when its lovely pendant shoots of green foliage are displaying their lengthening growths. As a hedge or as a single tree, there is absolutely no evergreen that equals it in beauty.

Many gardeners prune it twice a year, but unless desired of an exceedingly level outline, once a season is sufficient. This should be done when the new growth is nearly completed for the season. The little made later will really thicken the hedge. Many plant with the idea that the hedge can always be kept at the same height, say four feet; but this is not possible. Both height and width must advance a little, or the hedge would die. So prune as one will, a hedge will become very large in time. There are some hemlock hedges in this vicinity over fifty years old. There is life in them yet, but pruning has been so severe of late years, trying to keep back extension, that the vitality of the plants is low. Such old hedges should be taken out, fresh soil put in and young plants set.

When hemlocks can be had with balls of soil attached to the roots, not one should fail. And even without the ball, there need be but little loss in transplanting, if care be exercised that not a root be allowed to dry. It is the drying of the root that causes the loss of so many evergreens. Spring, or very early fall, is the best time to plant.-Florists' Exchange.

\section*{INVENTION OF THE TELESCOPE}

ONE day nearly three hundred years ago, a poor optician was working in his shop in the town of Middelburg, in the Netherlands, his children helping him or amusing themselves with the tools and objects lying about, when suddenly his little girl exclaimed: "Oh papa, see how near the steeple comes!"' Anxious to learn the cause of the child's amazement, he turned towards her, and saw that she was looking through two lenses, one held close to her eye, the
other at arm's length; and calling her to his side, he noticed that the eye lens was plano-concave, while the other was plano-convex. Taking the two glasses, he repeated his daughter's experiment, and soon discovered that she had chanced to hold the lenses at the proper focus, thus producing the wonderful effect that she observed. His quick wit saw in this a wonderful discovery, and he at once set about making use of his new knowledge of lenses. Ere long he had fashioned a tube of pasteboard, in which he set the glasses at their proper focus, and so the telescope was invented.Chambers' Journal.

\section*{FLORAL HELPS}

THE easiest way to make a kerosene emulsion is to dissolve a good tobacco soap, a bar to two quarts of boiling water, then stir in one teaspoonful of kerosene. Use this occasionally to sprinkle the flowers with.

For worms on petunias apply a weak solution of hellebore.

Throw away bulbs which have been forced. They are lacking in vitality and seldom give a good crop of flowers the second season.

Here is a very good method of making liquid manure fertilizer. Take a small sack like the one salt comes in, put the manure in dry, tie it up and put it in a can or bucket and pour boiling water over it. Let it set until it looks as strong as tea, and then water the flowers with it. One should remember however, not to apply a fertilizer of any kind until the plants show signs of growth.

Begonias are well worth cultivating. They are in some respects among our most beautiful flowers - picturesque, free-blooming, and not difficult to raise if only care is bestowed.

It seems to be the general opinion that young geranium plants will bloom best and give the greatest satisfaction. The fact is that old plants in a healthy condition, are far preferable to young plants for winter blooming. It takes at least a year to make a geranium into a fine plant, and on this account it will be readily understood that it is impossible to get much returns florally while it is under training.

\section*{The Readers' Library}

\author{
Of Illustrated Handy Pocket Editions of
} World Famous Books

1. The Type is as large and as clear as the type used in the usual large volumes of Standard Authors.
2. Unabridged. Each work is complete in one volume.
3. The Illustrations are an important feature. Each volume contains from eight to sixteen beautiful illustrations. These illustrations are not the rehashed old-fashioned pictures usually found in standard works but are new and drawn by prominent artists and interpret the stories with great fidelity.
4. The Paper is strong and opaque. In the volumes with a great number of pages imported Bible paper is used. This paper is far superior to India paper because it makes the print clearer and blacker, and the discouraging difficulty of turning the leaves of an India paper book is entirely eliminated.
5. The Binding. The volumes are bound uniformly in flexible leather, with gold stamping on back, and each volume has the author's autograph signature stamped in gold on the side of the book; they have gilt tops and ribbon markers.
6. For the bookcase. The small size of the volumes, the rich binding, the desirable titles, all insure these books a welcome in every library.
Price per volume, postpaid,
\(\$ 1.00\)


NEW STYLE Handy volume, thin paper, large
clear type. Size \(4 \times 6\) ins. Weight clear type.
about 8 oz .

\section*{LIST OF TITLES}

Adam Bede. By George Eliot. American Notes. By Charles Dickens. Barnaby Rudge. By Charles Dickens. Bleak House. By Charles Dickens.
Chaunings, The. By Mrs. Henry Wood.
Charles 0'Malley. By Charles Lever.
Child's History of England. By Charles Dickens.
Christmas Books. By Charles Dickens.
Cloister and the Hearth. By Charles Reade.
Danesbury House. By Mrs. Henry Wood.
David Copperfield. By Charles Dickens.
Dombey and Son. By Charles Dickens.
East Lynne. By Mrs. Henry Wood.
Great Expectations. By Charles Dickens.
Hard Times. By Charles Dickens.
Henry Esmond. By W. M. Thackeray.
House of the Seven Gables. By Nathaniel Hawthorne.
Ivanhoe. By Sir Walter Scott.
Jane Eyre. By Charlotte Bronte.
John Halifax, Gentleman. By Miss Muloch.
Kenilworth. By Sir Walter Scott.
Last of the Barons. By Lord Lytton.
Little Dorrit. By Charles Dickens.
Master Humphrey's Clock. By Charles Dickens.
Mill on the Floss. By George Eliot.
Martin Chuzzlewit. By Charles Dickens. Mrs. Halliburton's Troubles. By Mrs. Henry Wood.
Never too Late to Mend. ByCharles Reade. Nicholas Nickleby. By Charles Dickens.
No Name. By Wilkie Collins.
Old Curiosity Shop. By Charles Dickens. Oliver Twist. By Charles Dickens.
Pickwick Papers. By Charles Dickens.
Pilgrim's Progress. By John Bunyan.
Reprinted Pieces. By Charles Dickens.
Scarlet Letter. By Nathaniel Hawthorne.
Scenes of Clerical Life. By George Eliot.
Shirley. By Charlotte Bronte.
Silas Marner. By George Eliot.
Sketches by Boz. By Charles Dickens.
Stories and Sketches. By Charles Dickens.
Tale of Two Cities. By Charles Dickens. Talisman. By Sir Walter Scott.
Tennyson's Poetical Works.
Tom Brown's School Days. By Thomas Hughes.
Two Years Ago. By Charles Kingsley.
Westward Ho. By Charles Kingsley.
Woman in White. By Wilkie Collins.
Wuthering Heights. By Emily Bronte.
OTHER TITLES IN PREPARATION
THE JOHN C. WINSTON COMPANY, PUBLISHERS

Philadelphia, Pa .

\section*{B A C K N U M B ERS}

This is a complete list of the back numbers of Ronseoflarten that we can supply. These will be sent either in volumes, bound or unbound, or single copies, as desired.

\section*{DATE}

December, 1902. Volume 2 January, 1903. " 3
February,
March,
August,
September.
November,

PRINCIPAL ARTICLE WITH PIANS
The Gardens of the Villa Lante, Italy
The Gardens of " Avonwood Court," Haverford, Pa. .
Long Island Country Places.
The Restoration of the White House
A Novel Grouping of Greenhouses :
"El Fureidis." Montecito, California
"Longcroft," a House and Garden at Mamaroneck, N. Y
Rotherfield Hall, England.
Barrow Court, Somersetshire, England
The Gardens of the Villa Gamberaia, Italy
The Garden of "Weld"
A Small Formal Garden Near Philadelphia
Lake Forest, the Beautiful Suburb of Chicago
The Gardens of the Alcazar at Seville.
The Villa Palmieri, Florence, Italy.
The Villa Corsi-Salviati, Italy
Berrydown Court, Hampshire, England
Indian Gardens
"Kate's Hall," a Residence at Chestnut Hill, Philadelphia
The New Gymnasium of the University of Pennsylvania.
The Borda Garden in Cuernavaca.
The Royal Garden of La Granja.
The Gardens at " Blair Eyrie".
"La Rochelle," a Summer Home-Bar Harbor, Me.
Some Seacoast Bungalows
Residence of F. L. Potts, Esq., Bryn Mawr, Pa.
Community Life in Tuxedo Park, N. Y.
A House Costing Less than \(\$ 6,000\)
A Residence in St. Louis, Mo., for Mr. J. P. Duncan
" Kildysart," a Summer Home at Deal, N. J.
A Well-Planned Country House .
A Garden at "Chelten," Jenkintown, Pa.
The Terraces and Landscape Work of the U. S. Capitol at Washington
The Private Garage, its Design, Arrangement and Cost
The House and Its Site.
Improvements to an Old House at Chestnut Hill
Franklin Park, Boston.
An Interesting Example of Sewage Disposal.
Residence of F. E. Platt, Esq., Scranton, Pa.
German Model Houses for Workmen.
"Fairacres," the Residence of J. W. Pepper, Esq., Jenkintown, Pa.
How to Hang Pictures
"Airlie" the Estate of H. C. Groome, Esq. . .
The Ellicott House near Baltimore.
A Colonial Residence at Chestnut Hill, Philadelphia
To Paint the Landscape O'er.
A House on a Sixty-foot Lot
A New Colonial House in Salem, Mass.
The Cost Involved in Building a House
Bungalows, What They Really Are.
A House Built for \(\$ 4,500\).
Unique Residence at Flushing, Long Isiand, N .
The Chevy Chase Club, Washington, D. (...
A Problem in House Building.
A Cottage at Kansas City, Mo.
"Hillside," a Country Residence at Greenwich, C'omm
Small Houses Which Are Good
Practical Pergolas.
A House and its Garden.
PRICE
\(\$ 1.00\) a copy
." "،
". ".
".
". . ". \(\$ 1.00\) a copy .. \({ }^{.}\).. .. ..





\section*{LANDSCAPE GARDENING IN JAPAN}

THE convincing artistic effects coupled with a subtle Oriental symbolism found in the gardens of the Japanese, have made them interesting studies always. Japanese paintings by ancient artists enshrine the valor of their Samurai ancestors for over two thousand years and speak to her sons of to-day of the glorious history of their unconquered land, while in their landscape gardening ancient traditions and legends are preserved. The lanterns, stone or wood, the shrine, the basin and the brook or pool, each tells a story, while the relative positions of the guardian stone, the cliff stone, the worshipping, waiting, seat of honor, pedestal and idling stones, which form a part of every complete garden, all have a definite place in the general scheme.

Mr. Edmund Buckley in a most comprehensive article on this subject tells us that a garden is "planned to accord with the sentiments of its owner. It may be the self-denial of the monk or the courage of the ancient Samurai. Or, again, the garden may suggest by means of natural or historical associations, such sentiments as those of peace, prosperity, connubial felicity, and longevity. Many of the subjects familiar to us solely as Japanese art motives have also an inseparable symbolism in the land of their birth. Thus the plum signifies the renewed vigor of old age: the lotus signifies purity, perfection and peace: and Mount Fuji the serenity of greatness." It is a most interesting study charmingly told and graphically illustrated.

\section*{NEW YORK'S IMPROVED TENEMENTS}

The July number will contain the first of two articles on "New York's Improved Tenements" by John W. Russell. The article will describe general tenement house conditions in New York City shortly before the Tenement House Act of 1901, and will be illustrated by views of a tenement house block at that time, as well as of models of a block of the old "dumb bell" or "double decker" type of tenement and of the improved type brought into existence by the new law. The effect of the latter since January 1, i902, has been most beneficial and far-reaching. The recent Exhibit of Congestion of Population, which was held in New York, illustrated tenement conditions in that city in a striking way, and the article emphasizes the points thereby suggested. The strict enforcement of the law of 1901 is also discussed especially with regard to tenements built under the former law, and a summary of results is given.

\section*{JAPANESE GARDENS IN AMERICA}

The construction of typical Japanese gardens in the form of "condensed landscapes," is a comparatively new feature in American gardening. While splendidly developed types have appeared on various California estates, the gardens of the East have reached still greater perfection. Mrs. Phebe Westcott Humphreys has given the subject of Japanese gardening careful study; being well acquainted with the symbolisms of the art of Japanese gardening, and having visited and photographed characteristic types both in the East and the West, she is considered an authority on the subject. She will describe in a series of articles the American gardens that have most nearly approached Japanese perfection, beginning with one of the first to be introduced in the East-the Homer garden of Lansdowne, Pa. From this series many valuable lessons may be conned for applying the principles of Japanese gardens to American conditions; and the working plans of the Oriental craftsmen will be fully portrayed.

\section*{"THE HOUSE OF THE SEVEN CHIMNEYS"}

The interesting account of that unique home "The House of the Seven Chimneys" by C. H. Claudy will be continued in the July issue. Additional pictures will be published showing further details both inside and out. There are few houses which can approach this one in uniqueness of design or in the multitude and variety of the quaint and curious ideas incorporated in its building. After reading the second part of this fascinating account, our readers will feel that the house is one with which they have been acquainted for years.

\section*{TYPES OF AUTOMOBILES FOR SUBURBAN USE}

The family that lives in the suburbs is in the best possible position to get the most use and enjoyment out of an automobile with the least expense, provided judgment is exercised in the selection of a car. Points to be considered in making a choice are touched upon in a practical article by Harry Wilkin Perry, illustrated with carefully selected photographs.

\section*{STABLE AND KENNEL}

In Mr. John Gilmer Speed's Department, "Stable and Kennel,", will be found interesting and instructive articles on "Rabies in Dogs" by George H. Hart, Pathologist of the Bureau of Animal Industry, Department of Agriculture; "The Influence of 'Indian Chief' and 'Harrison Chief, blood in harness and saddle horses" by Mr. Speed and "Dachshunds" and "French Bulldogs" also by Mr. Speed. These articles will be profusely and beautifully illustrated.

\section*{Free Advice on Decoration}

T
HE unprecedented growth of the Correspondence Department of "House and Garden" has necessitated the opening of a new Department which will be devoted to the interest of those who are building, decorating or furnishing their homes.

Beginning with the new year "House and Garden" offers its readers a House Finishing, Decorating, Furnishing and Purchasing Service which is complete in detail and thoroughly practical. Full color suggestions for the exterior of the house will be supplied with recommendations of proper materials to obtain the results. For the interior, the treatment of standing woodwork and floors, the selection of tiles, hardware and fixtures will be considered and specifically recommended, with the addresses of firms from whom these goods may be obtained. Samples of wall coverings and drapery materials will be sent and selections of rugs and furniture made. When desired, the goods will be purchased and shipped to the inquirer; the lowest retail prices are quoted on all materials.

This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.

\section*{SOME USEFUL BOOKS FOR YOU}

KITCHEN GARDENINO. By Thomas Bridgman. This work comprises 152 pages, liberally illustrated. 12 mo . Cloth
FRUIT OARDENING. By Thomas Bridgman. Liberally illustrated. 12mo. (loth, 50c.
FLOWER GARDENING. The work comprises 166 pages, liberally illustrated. 12 mo . Cloth - - - - - - - - - - MY TEN ROD FARM, OR HOW I BECAME A FLORIST. By (harles Barnard. 12 mo . Cloth

40 c .
THE STRAWBERRY GARDEN: HOW IT WAS PLANTED. WHAT IT COST. By
Charles Barnard. 12 mo. Cloth - - - - - - - . 40 c .
FARMING BY INCHES; OR, WITH BRAINS, SIR. By Charles Barnard. 12mo. Cl., 40 c .
THE JOHN C. WINSTON COMPANY, Publishers, Philadelphia. any of these volumes mailed on receipt of price.

\section*{CONTRASTS IN NAPLES}

ONE of the strangest contrasts in Naples is to walk from the royal palace, with its fine marble staircase, up the new Corso Rè d'Italia, and to climb into the steep streets around the Church of San Soverino e Sosio. These streets are the dwelling-place of the dyers, and one steps from regal magnificence into a crowd of semi-naked people, who are busily dipping great hanks of cotton or wool into seething caldrons. As elsewhere the work is carried on in the street, and little streams of water-red, yellow, brown and black-pour over the rough stones, and gather in multicolored pools, while on low benches against the walls women are washing clothes, standing in the dirty, soapy water that splashes over from their tubs. The passers-by walk heedlessly through the dye and soapsuds, while the children find pleasant occupation in throwing mud of every variety of color at anybody who chances to be wearing light colored garments. It is a veritable feast of color from the merely spectacular point-of-view, but a visit to these streets leaves a bodily as well as a mental impression. Very often in the depths of these sordid alleys one comes across a forgotten old palace, built when carriages were unknown, its great court of honor crowded with booths, its vast halls filled with a heterogeneous collection of men, women and children, fowls, goats, sheep and occasionally a donkey, all living together in the happiest proximity The massive old walls are hidden beneath centuries of dirt; the woodwork has, for the most part, disappeared, the rooms that once knew the revels of Angevin nobles now shelter the haphazard existence of laz-zaroni.-The Ludgate.

Kelreutcria paniculata, a Japanese tree, deserves to be better known than it is. Its compound leaves are pretty all summer, but its immense panicles of yellow flowers, which come in midsummer, give it its chief value.

Crepe myrtle, Lagerstramia Indica, can be increased by soft wood cuttings made and placed in the greenhouse in summer, as well as by hard wood cuttings set out in early spring. In the South, where the plants seed freely, they are easily raised from cuttings.-Florists' Exchange.


\section*{Contents - June, 1908}
"The House of the Seven Chimneys": Part I C. H. Claudy ..... I 84
Discarded Favorites Reinstated Eben E. Rexford. ..... 191
English Manor-Houses of the Early Renaissance B. C. Flournoy ..... 195
The Small House Which is Good Homer Kiessling, Architect ..... 201
The Art of Pruning C. L. Meller ..... 202
Walls and their Coatings Claudia Q. Murphy ..... 204
Window Boxes Helen Lukens Gaut ..... 205
A Stable Convertible into a Garage A. Raymond Ellis, Architect ..... 209
A \(\$ 5,000\) Garage Andrews, 7 aques \(\mathcal{E}^{\circ}\) Rantoul, Designers ..... 210
The Editor's Talks and Correspondence Margaret Greenleaf ..... 21 IEnamel for WallsWall-paper Samples
Suggestions for the MonthSelection of MantelsLighting Plants for the Country Home Curtaining Casement Windows
Leila Mechlin and 7. W. Hall. ..... 212
Garden Correspondence W. C. Egan ..... 214
Stable and Kennel John Gilmer Speed ..... 215

The Breeding of Fowis In Behalf of the Greyhound By Mrs. H. C. Kelley The Conformation of the Horse By George M. Rommel, B. S. A.

Copyright l908 by The John C. Winston Co. Entered as Second Class Mail Matter at the Philadelphia Post Office, June 26, 1901 SUBSCRIPTION PRICE, \$3.00 A YEAR IN ADVANCE. SINGLE NUMBERS, 25 CENTS
Remittances may be made by money-order or check, payable to the order of House and Garden
Subscribers should promptly notify the publishers of any change in address
Manuscripts and photographs suitable for publication in House and Garden are solicited. Such as are not available will be returned, if postage is enclosed

\section*{PUBLISHED BY THE JOHN C. WINSTON CO. 1006-IoI6 ARCH STREET, PHILADELPHIA}


THE STUDIO FIREPLACE-"THE HOUSE OF THE SEVEN CHIMNEYS"

Original from MICHIGAN STATE UNIVERSITY

\title{
House and Garden
}

Vol. XIII
No. 6

\title{
"The House of the Seven Chimneys"
}

\author{
By C. H. CLAUDY
}

PART I

OVERLOOKING Bass River, an arm of Nantucket Sound, and located in the beautiful village of South Yarmouth, Massachusetts, stands "The House of the Seven Chimneys," perhaps the most individual country home in America. It is the summer residence of Charles Henry Davis, mine owner and engineer. It is constructed-built is not the word - of three houses and a barn, and possesses some features which make it entirely unique among houses which are homes first and monuments to the expenditure of money and brains afterwards. For "The House of the Seven Chimneys" is first and foremost a home. While the visitor cannot help but be impressed with the cleverness which has utilized every bit of space for a purpose, and provided heating arrangements and plumbing facilities which are
both modern and models, what stands out most clearly as a memory is that the money and effort spent have produced a place to live in, and enjoy the living, not a palace which is all for show and splendor and not at all for comfort and peace.
To what is known as "The Old House," a typical Cape Cod structure, was connected the barn, both at present occupying the same positions they did when built, some seventy years ago. The connection, now known as the wood room, or well-way, was once occupied by the well supplying the "Old House" when it was a home in itself. Such a connection is, in Cape parlance, a "porch," and what is generally understood to be a "porch" is here a piazza. Thus, what was the stable to the barn is now a "piazza," or as Mr. Davis calls it, the screenway,


THE APPROACH TO THE HOUSE FROM RIVER STREET
 with picture on picture on the walls by this and that famous artist. The room is furnished simply but comfortably with divans, a desk, a chest, some old furniture and rugs, and with the same uneven, hilly floor it always had. True, a new floor underneath supports the old and makes it firm, but to the eye and to the foot the old barn is still the barn, although a barn metamorphosed.

To these two structures was moved first the "Aunt Maria" house, so named from Mrs. Henry Matthews, who under that pet diminutive was known from end to end of Cape Cod, and who owned and lived in it. This house was moved four hundred feet at a cost of sixty dollars! Then the farmhouse was moved nearly to the Aunt Maria house and connected thereto with an entirely new structure. Here, then, was the beginning; three old-fashioned Cape houses, in various stages of repair, moved together and connected each to each, with a barn to complicate matters. And from this, to some it would seem unpromising material, the owner, architect and builder has evolved a structure which is the wonderment and admiration of all who have the privilege of going through it, or, better still, of stopping in it.

It is a summer residence, but that does not mean that it is not to be used except in summer. The heating arrangements are both novel and ample and in any weather, at any time of the year, the entire house is entirely comfortable. Seven enormous



PLAN OF THE PLACE
junction with a wall, is filled with a mixture of broken bricks and mortar flowed with liquid cement. Every wall and every floor, ordinarily a flue for the spread of fire, is here a fire trap, stopping the spread of any possible blaze as effectually as if each room were an iron safe. Every lamp in the house is protected above with a brass shield; low ceilings and flaring lamps can do no fire damage here. The oil for the lamps is kept in a copper tank surrounded with slate facings and with a slate oil sink. This sink drains directly to the main sewage line, so that kerosene can be run in the pipe to cut out a greasecaused stop-up without trouble. Mr. Davis once experienced a fire from an oil rag on the end of a broom. So here he has a fireproof, cement


THE ENTRANCE HALL
broom-closet with asbestos door. It is a case of the "burned child."
The house itself, as a whole, is built on the northeast, southwest diagonal; it gets the force of the prevailing winds at the kitchen end in winter, thus tending to warm the house, and in the summer, the prevailing winds from the other end, thus keeping smells from the kitchen from open windows, and getting the cool breezes from the water when and where they are wanted. With the possible exception of the cellar windows, every one of the one hundred and ninety - one windows in the house gets sun at least three hours every day in all the year, and most of them for half the day; there are no dark rooms in the house. And the windows are
grouped, not separated, at once furnishing the rooms and providing the maximum amount of uninterrupted sunlight and air. And if you suppose that three large furnaces take a deal of coal, you will be surprised to learn that they are in themselves a source of economy. The fires in them are banked night and day, no matter what the weather. "Remember," says Mr. Davis, "a large volume of moderately heated air, not a small volume of very hot air, is the principle."

There is not in the entire house, saving the stairs, any passage way which could by any stretch of the imagination be called a flue. Eighty per cent of fires come from flues of one sort or another, defective or unintended, as in the case of an open inner wall space. There being nothing of this sort in the house, eighty per cent of the fire risk is gone. The result is that one-fifth of one per cent for five years is the extraordinary low rate asked by the fire insurance companies for a very large insurance.

The sewage and water pipes all run up through cement lined brick shafts, accessible at all times. These shafts run to the roof and are there bricked over. They are shafts only in name, not in effect, where fire is concerned.

Eight bath-rooms provide comfort for the family, guests and servants. Three are private, one for Mr. Davis' room, one for the nursery and the nurses'


THE SOUTHWEST SIDE OF THE STUDIO


THE NORTHEAST SIDE OF THE STUDIO
room, and one for the servants; the remaining five are arranged with reference to the rooms as in a hotel, so that one or two rooms can be thrown en suite with the bath. The plumbing is the heaviest modern hotel plumbing which could be bought, almost noiseless and to wear forever. All the tubs and lavatories are of porcelain or marble, and every bath-room, from brick, felt lined walls is absolutely sound proof. The hot water comes from a central boiler by a two pipe system, and at any instant and on the instant, hot water can be drawn from any or all the faucets in the house. The water supply, from two wells with wind-driven pumps, one aided by a gasoline auxiliary when the wind is not sufficient, give a supply so ample, and through piping so conceived that all the faucets in the house, in all the tubs and all the lavatories can be opened at once and a plentiful supply of water will run at all times. The plumbing, of course, is all open. But not content with the ideas of the master plumbers who made it, Mr. Davis has provided improvements. For instance, the heavy cylinder traps have their openings, cap closed, facing down and out, instead of up. The bath-room plumbing provides a drip pan in every room, with a constantly open stop-cock opening into the room below. "If something leaks," Mr. Davis will tell you, "it will spoil something, the floor, or a rug or whatever the stop-cock drips upon, but I find it out! It doesn't go on and on and produce sewer gas and

\section*{"The House of the Seven Chimneys"}


THE STUDIO WITH A CORNER OF THE FIREPLACE
unhealthy conditions; it is bound to be noticed as soon as it occurs." Well, if one can afford a new floor or a new rug if the old one is spoiled in discovering a leak, who wouldn't have such an arrangement of automatic detection?

Then, again, Mr. Davis has introduced a new element into house building; it may not become popular with builders, but it worked in his case. He paid his plumber a stated sum to do the work, and footed the bills for supplies himself. The plumber had nothing to gain and nothing to lose in ordering material, he turned his purchasing profits over to Mr. Davis. And he was tied up with an iron-clad guarantee that he would keep his work in repair for two years free of charge, no matter whose the fault if anything went wrong. "You can bet he isn't coming five miles and spending half a day fixing a leaky trap if good work at the start could prevent," laughs Mr. Davis, "and so far I haven't had any trouble."

South Yarmouth has no sewage system, as have larger towns. The waste from "The House of the Seven Chimneys" goes to three closed cesspools, and from there overflows into four open ones,-"open" meaning open-work stone, from which the waste water leeches into the sandy soil. Why so many? Because of two things; first, it is much better to have too ample a sewage system than one not large enough, and,
second, Mr. Davis' house is so arranged that any part of it can be shut up and cut off from the rest. Mr. Davis, his wife and children, servants and two or three guests could not possibly spread themselves through thirty-six rooms, use eight bath-rooms, look out of one hundred and ninety-one windows, or enter and leave through seventeen doors! So when the family is small, the old house and the farmhouse, or one of them, is cut off. The water is shut off, the heating is stopped, the doors are locked and Aunt Maria's house alone holds the inmates. When more guests come, another furnace is started up, water is turned on, and two houses become as one, and the same again with the other house when still more friends arrive. "No use having a big house and no guests" the owner will say, "but no one wants guests all the time. So I increase or decrease the size of my living quarters to suit the needs of the family under my roof."
Guests at "The House of the Seven Chimneys" are comfortable. In every guest's room is a large fireplace, and a register to keep the air comfortable. As explained, a bath-room can be thrown with each of every pair of rooms. In every guest room is a red cedar closet, in natural wood finish, and a set of cedar drawers built in. The amount of red cedar used completely cleaned out Boston at the time. There are seventy-two closets in the whole house, Mr. Davis' room having


THE STUDIO
eleven, ranging in size from a tiny one, for a bottleof medicine-to a young room with a window in it, for clothes. Every spare inch of room is a closet or a set of shelves or a built-in chest of drawers. Under every eave, wherever a dormer window cuts off head room, there is a closet. How the owner and his wife remember which of the sev-enty-two they put any particular thing away in, must remain a mystery to one whose conception of the height of luxury is a whole closet all to himself, but doubtless the feminine readers of this will protest that such a problem is far easier of solution than that of getting the seventytwo closets in the first place.

And this brings me to the way the thing was done. Mr. Davis had plans, of course, distinct plans, both in his head and on paper, but no finished, finally settled blue prints were handed to a builder with instructions to "go ahead." Mr. Davis was "on the job" a great deal himself, and when he saw a place for a closet, there a closet was put. When some architectural feature of one of the old houses stood in the way of the completion of his plans, out it
came. A stairway where no stairway was wanted?
"Brick it up and put in a chimney, or a hot air pipe (brick of course)." A door where no door should be in the new scheme? There no door was, a wall taking its place. A roof with too steep a slant, and a house not wide enough? A new roof, with less slant extending further, and built right over the old one, solved the difficulty. A hard problem in connecting house and barn without moving either? Not at all. "Just enclose it all in glass, and make a sun parlor" and the thing was done-the present "screenway" is the result. Studio floor not firm enough? "Don't touch it,-just put a new floor underneath." Not room enough in this bathroom for a tub? "Build an addition to the bathroom, into the hall, and put tub in that." This room not large enough for a bed ? "Widen the house enough here for a single bed, and we will put a single man guest in it, for luck." This method was followed throughout the entire period of construction and the result has proven a success.
(To be Continued.)


THE STUDIO BY FIRELIGHT

\title{
Discarded Favorites Reinstated
}

\author{
By EBEN E. REXFORD
}

THOSE of us who have a fondness for old plants are always glad when discarded favorites find their way back into public favor, as they are sure to, sooner or later, for genuine merit wins its way in the long run.

One of the old-time greenhouse favorites, Daphne odora, is now much sought after, but is hard to find. Finding little sale for it some years ago, because newer candidates for favor had crowded it into the background, florists ceased to propagate it, as formerly and the limited stock has been drawn on by those who remain faithful to old friends, until now few dealers can supply it. But here and there we find a few plants of it, and these are being bought up at good prices.

The Daphne has the merits of being attractive all the year round. Out of bloom, its rich, thick glossy foliage makes a plant of it extremely ornamental. In bloom it is exquisitely lovely, with its thickpetalled flowers, produced in clusters, showing with charming effect against the dark foliage. Few flowers have a more delightful fragrance. It generally blooms in spring and its flowers last for a long time. It is of shrubby, compact habit of growth, if pinched back when small and made to take on a bushy form. It does best in a soil of loam and sand, into which considerable vegetable matter has been thoroughly worked. It should be given good drainage. It requires only a moderate amount of water at its roots, but delights in frequent showering of its foliage. While most successfully grown in the greenhouse, it is quite well adapted to culture in the living-room, if the red spider is kept from injuring it, as he can be by the liberal use of water on its foliage. Old plants, three and four feet high, and well branched, are extremely ornamental when in full bloom, and those who see such specimens will be eager to own one. It does best in partial shade, and a comparatively low temperature.

The Bouvardia is another old-time favorite which ought to be found in every collection, but which, of late years, has almost dropped out of notice. There is some reason for this neglect, I admit, for few plants are more susce ptible to injury from the mealybug. The aphis will attack a Pelargonium in preference to any other plant, and the mealy-bug has quite as decided a liking for the Bouvardia. But I have found it quite an easy matter to keep this pest under control by the use of the home-made insecticide I so frequently and so confidently recommend for general use-ivory soap, melted, and mixed with water, and applied in the form of a spray. If it is used once a week, throughout the season, few mealy-
bugs will be found on your plants--never enough to do any damage.

The Bouvardia is not a showy flower, because it lacks size and brilliance of color, but it is a very beautiful one. Its blossoms are shaped very much like those of the lilac, being tubular, and having four petal-like divisions at the tip. They are borne in clusters of ten to twenty, at the extremity of the branches. The season of bloom is from January to March, under ordinary culture. The plant does best in a soil of rich loam. It is not much given to branching. As a general thing, it sends up several stalks from a sort of crown, and these stalks, by judicious pruning, can be made to throw out a few side branches, but one must depend on a quantity of shoots sent up directly from the roots, for flowers, rather than on the results of pruning. Therefore cut away none of these shoots as they appear, thinking to throw the strength of the plant into the production of many branches from one stalk.

There are four colors represented in the Bouvardia family-white, rose, scarlet and pale yellow. The pure white and the rose varieties are grown much more extensively than the scarlet and yellow ones, though the latter are really fine, in all respects, and a large collection of plants ought to include them. There are double and single forms, in the white and pink varieties. Which form is loveliest it would be hard to say, for both are extremely beautiful. For choice cut flower work, we have few better plants. I would be glad to have my flower-loving readers procure a specimen of either the pink or white variety, and grow it on for winter use, for I know they would be delighted with it. A cluster of Bouvardia makes a most charming corsage decoration, and is equally as desirable for buttonhole use.

How do you treat your callas during summer? Some keep them growing the year round, but complain that they get very few flowers from them. Others put them out in the garden, where they grow well, but when they are lifted in the fall, the plants get a setback from which they do not recover until late in the season. The fact is, the calla is one of those plants which will live on, indefinitely, under almost any treatment you see fit to give it, but living is one thing, and blooming quite another. My plan of growing it is this: In June or July, I take the pots out-of-doors and turn them down on their side, under a tree. There I leave them until about the middle of September, giving them no attention whatever. Of course the old foliage dies off, because the soil becomes dry, but this does not matter. The root is taking a rest. That is the main thing to be


DAPHNE
and from that time on, they are seldom without flowers, often as many as three or four to a plant, at one time. That depends, however, on the number of crowns the roots have. If you remove all offsets, as they form, you keep your plant pruned down to one crown, and cannot expect but one blossom at a time. I allow small plants to form about the old root, because I like the effect of a good deal of foliage, of different sizes. The illustration which accompanies this article shows how the calla is grown in California, in summer. The treatment I have advised above results in plants very similar in appearance to these, in winter-strong, sturdy, with a large quantity of foliage, and twice as many flowers as I have ever secured from plants grown in any other way. After buds appear, I use a liquid fertilizer at least once a week. This gives unusually large bloom, and keeps the plants vigorous throughout the season.

The Eucharis is one of the plants that we
considered at this time. In the fall, I shake the roots out of the dry, hard soil, and repot them in a fresh compost of muck, loam, and sand, made rich with considerable old cow-manure. At potting-time I water them well, and set them away in some sheltered place to make feeding-roots, and get a start. As soon as leaves appear, they are taken to the house and water applied in more liberal quantities. I do not believe, however, in planting them in water-tight crocks or jars, as many do, nor do I advocate the use of hot waroots stand in terthey are becomediseased, and hot applications force a rapid and unhealthy development which is sadly lackinginstamina. A slower, more substantial growth is what gives fine flowers. If plants are kept growing the year round, they throw all their energies into the production of leaves, and these will be inferior in all respects to those of the plants which have been given a good, long resting-spell. Indeed, my plants, grown after the plan outlined above, have such strong, luxuriant foliage-often three to four feet tall-that visitors ask if I have not a new and improved variety. These plants generally begin to bloom in January,

admire, when we see it growing at a greenhouse, or find a specimen of it in the bouquet a friend sends us, "on special occasions," but we seldom attempt to grow it for ourselves, even if we own a greenhouse. The reason for this, is: that we have been told by some one who has "experimented" with it in amateurish fashion, that it is "a hard plant to grow; you can't do anything with it, so don't try. I've tried it, and I know."

Like most plants, it is rather hard to grow unless you understand its peculiarities. But, these understood, and proper care given, it is not hard to grow. It is a plant that requires considerable heat-and this most all living-rooms furnish-and a moist - atmosphere, which is not usually found in our dwellings. But by frequent showering, the evaporation of water on stoves and radiators, and the use of sphagnum moss or sand among the pots, kept saturated with water, we can secure
the necessary humidity. The soil that suits this plant best is one of strong loam, made friable with coarse sand, and well enriched with old, rotton cow manure. See that drainage is good and use a good deal of water while the plant is growing. Do not separate the plants, but allow them to grow on together until you have a mass that entirely fills the pot or tub. The red spider will do great harm if not kept down by frequent showering. Be sure that moisture gets to the lower side of the foliage, where this pest lurks. The flowers of the Eucharis are as fragrant as they are beautiful. They are borne in clusters of three to five, on stalks thrown well above the foliage. Few flowers are of a purer white, or a daintier
case. The essentials of a really good plant-room are, plenty of light, warmth enough to keep out frost, and an ability to keep the atmosphere moist. Such a room can be built for a small amount of money, and in it you can grow just as fine plants as the millionaire grows in his house that cost thousands of dollars. I know this, because my first plant-room was simply an enclosed veranda, with a glass roof. I have never seen finer plants than I grew there. I had sash made to fit the spaces between the posts. I had the old shingle roof removed, and one of glass substituted. Ample provision was made for ventilation, both at the sides, and overhead. Glass doors were hung between it and the living-room, and this


EUCHARIS AMAZONICA
texture. Their peculiar form is faithfully shown in the illustration.

Those who grow flowers in the living-room have to fight against many difficulties, and these difficulties are not always overcome. How often have I heard flower-loving people say: "Sometime I mean to have a place expressly for plants. Not a big greenhouse, for I haven't time to care for a great number of plants, but a room where a few of the best can be grown as I'd like to grow them."

Most of these persons labor under the impression that a "place expressly for plants" will cost so much that they cannot afford it. They know that most greenhouses are expensive structures, and from this they argue that almost any kind of a plant-room must be beyond their reach. But such is not the
enabled me to keep the atmosphere in it at any desired degree of moisture. I could shower my plants whenever they needed it without inconveniencing anybody, or doing harm to curtains or carpet. The plants were no more delighted with it than I was. Red spider was a thing unknown, and the aphis had no more terrors for me, for a little tobacco smoke put an end to his mischief. I do not believe anyone ever got more pleasure out of a great conservatory than I got out of that eight-by-twelve room. I heated it in winter by an oil-stove, on which I kept a pail of water to give off moisture to counteract the dryness which such a stove imparts to the atmosphere. On very cold nights, when I feared the stove lacked power to keep out frost, the doors between the plant-room and the living-room were
opened, thus letting in enough extra warmth to make sure of safety for my pets. Here I grew many plants which I had failed with in the window garden, because it was impossible to make conditions favorable there. I had flowers throughout the entire season,--all that I wanted for myself, and many to give away to friends who were so unfortunate as to be without a plant-room. I think I pitied everybody who did not have one, so much did I enjoy the possession of this "place expressly for plants." I felt that they were losing the best part of life. Since then, I have owned two large houses, where everything was as convenient as it was possible to make it, but they gave me less pleasure, I think, than that little plant-room did, and I know I grew no better plants in them. Therefore-if you love flowers, and want to grow them to better advantage thian is possible in the living-room, fit yourself out with a little plant-room this summer, and go in for improvement all along the line. The expense will be less than you think. Give the work over to some good carpenter, and tell him that you insist on one thing, and that is-that not a crack or crevice shall be left for the admission of cold. If you enclose a veranda, be sure to have a wall built under it, to prevent cold coming up through its floor. A southern exposure is best, but an eastern one is good. A glass roof is not absolutely necessary, but it lets in so much sunshine that I would always advise it. Be sure to have a portion of the side-sash so arranged that it can be opened for the admission of air in mild weather, and have a ventilator in the roof, to let out heat, when there is too much of it, on sunny days, even in mid-winter.

One of our prettiest annuals is Nicotiana. This plant belongs to the tobacco family, and some may object to it on that account, but a season's experience with it will remove whatever prejudice exists. Itsleaves may have an objectionable odor if handled, but let alone, they give off no odor whatever. Its flowers are delightfully fragrant, especially after nightfall. They are shaped like some varieties of lilies, and are so freely produced that a bed of the plant is always a cen-


NICOTIANA
ter of attraction in the garden, or on the lawn. We have two varieties, one a creamy white, the other, a soft carmine. This latter sort is not extensively grown, as yet, being of comparatively recent introduction, but it is one of the coming plants. In combination with the white variety, it will prove wonderfully effective. The white Nicotiana makes an excellent house-plant for winter. Take up as small a plant as you can find, in September; cut away most of its top. In a short time it will throw up new branches, and by the holidays it will begin to bloom, and from that time on to May it will give you flowers by the score, and it will make the living-room as fragrant as a garden.

Be sure that your dahlias are fastened to stout stakes. If they are growing as rapidly as they ought to their stalks will be brittle, and a sudden storm of wind or rain may do a great deal of damage among them. Use strips of cloth, in tying them, rather than string, as the latter is likely to cut into the wood. Give the plants all the suds from washing-day, you cannot grow fine dahlias without plenty of moisture at their roots.
And do not neglect to stake your chrysanthemums, whether in pots or the garden bed. They have such brittle stalks that a sudden jar often breaks them, especially after they have formed a good-sized head, and are top-heavy. Be constantly on the watch for the black beetle. This voracious pest is likely to make a sudden appearance, do his deadly work, and take his departure before you suspect mischief. Therefore, look your plants over daily, and as soon as a beetle is seen, prepare a strong infusion of sulphotobacco soap, and apply it liberally, taking care to see that it gets to the underside of the foliage. Repeat the operation next day, and keep it up as long as a beetle is to be seen. Often this pest attacks the annual aster. If you find him on this plant, give the treatment advised above. And give it promptly. I have known plants to be so damaged, in a few hours' time, that they were practically ruined. You cannot afford to procrastinate when you have this enemy to fight.


Restoration House, Roch:ester

\title{
Houses With a History
}

\title{
ENGLISH MANOR-HOUSES OF THE EARLY RENAISSANCE
}

\author{
By B. C. FLOURNOY
}

"THE greatest advantages men have by riches are, to give, to build, to plant and make pleasant scenes." So wrote Sir William Temple, the cultured diplomatist, philosopher and garden lover of the time of the last Stuart kings and William III. And from the number of delightful old country houses set amid pleasant scenes to be found in England to-day, we may infer that many other Englishmen, long before Sir William's time, held in part at least, the same opinion as to the advantages of wealth.
Macaulay gives a very unflattering picture indeed of the old English country squire, but in his endeavor to make out his case against those who cried up "the good old times" he must have been drawn into exaggeration or was totally unappreciative of the artistic merits of the old country seats. Is it possible that men so ignorant and crude could have built houses bearing evidence of such good taste, so full of grace and charm and surrounded by such rare
blendings of art and nature as are displayed so often in garden and park? And it is not, as a rule, in the greatest mansions, the vast piles erected by the great nobles of the court that we find such artistic qualities, but most often in the smaller manorhouses of the baronets and squires. Certainly many highly cultured people of Macaulay's time and our own could learn a great deal from them of the art of making beautiful homes.

Most of the houses shown in our illustrations date from the great Elizabethan building epoch, when the untold wealth of the monasteries, which had been distributed among the aristocracy, the plunder of gold laden Spanish galleons and the unprecedented prosperity in trade gave such an impulse to the erection of fine houses that the England of that period has been described as "one great stonemason's yard." The great noblemen and gentlemen of the court were filled with the desire for extravagant display and built such clumsy piles as Wollaton


BROUGHTON HALL, MARKET DRAYTON
and Burghley House, importing Flemish and German artisans to load them with bastard Italian Renaissance detail. Nothing could be worse than some of these vast structures, with their distorted gables, their chaotic proportions, and their crazy interpretation of classic orders. But what may be called the typical Elizabethan mansion, whose builder's means or good taste would not permit of such a profusion of these architectural luxuries, is unequaled in its combination of stateliness with homelikeness, in its expression of the manner of life of the class for which it was built. And in the humbler manors and farmhouses the latter idea is even more perfectly expressed, for houses were affected by the new fashions in architecture generally in proportion to their size.

Timber was the material most generally used, except in the great stone districts, before and during the early part of Elizabeth's reign. William Harrison, an old chronicler of that time, says that most of the houses were of timber, though stone and brick were beginning to be used by the great nobles, the latter, however, being very expensive. Harrison's
statement was probably based on observation in his own neighborhood, as in some parts of England stone had been generally used long before his time. In the thickly wooded districts, what is sometimes called the "black and white" style was brought to its perfection. Heavy timbers were used and the framing made very strong and stout, so that houses of this kind have in many cases lasted better than those of stone or brick. The spaces between the timbers were filled with a sort of basketwork of osiers and plastered thickly within and without, flush with the framing. With these white surfaces contrasting with the fanciful patterns of the dark woodwork, the effect of these houses was very quaint and picturesque, as is seen in the fine example of Carden Hall, Cheshire. Where wood was not so plentiful the timbers were smaller and more widely spaced and the plaster surfaces larger. It was this type of house which so astonished the Spanish Ambassadors in Mary's reign when they compared these abodes of Englishmen with their profuse diet. "These English," they said, "have their houses made of sticks and dirt, but they fare commonly so well as the king."

\section*{English Manor-Houses of the Early Renaissance}

Half timber houses were often plastered entirely over as is seen in a quaint old house at Market Drayton called Broughton Hall. Plastered houses are to be found quite often in country towns and this type of construction continued to be used well into the eighteenth century long after the "black and white" style had died out. Many of the oldest and best preserved houses in Oxford are of this type, a testimony to the protecting value of the plaster.

There is no more attractive example of the plastered house than old Avebury Manor in Wiltshire. The irregular roof line, the gables, the white barred windows and the contrast of the white walls, with the rich green of the vines and surrounding trees combine to make a


WAIMEL HALL
picture of rare beauty. The low wing on the right is of timber construction, and is evidently the older part of the house. The higher part on the left is of stone, covered with a thin coat of plaster to make it conform with the other. This treatment of masonry or brick walls may not be altogether right, but in some old houses it certainly produces a very pleasing effect.

This is the case in Waimel Hall, another westcountry manor-house, but it is not its stuccoed walls that are responsible for its distinctive charm. The solid rectangular mass of the house, with the great


AVEBURY MANOR, WILTSHIRE
chimney stacks at the ends, the dignified simplicity of the three gabled front and the proportion and spacing of the mullioned windows are its greatest architectural merits. The little Renaissance gateway, giving entrance to the forecourt, is a charming feature of the surroundings. The high, vinecapped walls which shut the house in, give it an air of melancholy seclusion which is intensified by the gnarled old trees that stand guard around. Seen in the late autumn, when yellow leaves are slowly falling across the dark green of the ivy, the old house seems to be brooding on its past, on the generations that have lived and died within its walls. As it is customary to think that the typical old English house owes its picturesqueness mostly to its being low and rambling in form, it is worth while to notice that Waimel Hall, which is as purely English as possible, is almost four stories high.

Another house of unusual height, but a very different one from the preceding, is Fountains Hall in Yorkshire. This is a Jacobean house, built of the silver gray stone taken from the grand old abbey, the ruins of which stand a little way farther down the beautiful valley. The forecourt, with its ruined walls and gateway, is laid out with stone-flagged walks, bordered by high


COLDHAM HALL, SUFFOLK
hedges of box. The house fronts south and is sheltered from the chill winter winds by the steep hillside at its back. The situation accounts for the unusual height of the front, which, with its crenellated parapets, curved gables and many mullioned windows, still filled with the old leaded glass lights, is of an unreal, almost fairy-like beauty. The tendency of the larger Elizabethan and Jacobean houses was toward an excess of windows. Lord Bacon said of them that there was no comfortable place to be found in them either "in summer by reason of the heat, or in winter by reason of the cold." But admitting this to be true, it cannot be denied that some of them are very charming to look upon. St. John's House, Warwick, is one of the finest examples of stone houses of this type. The perfectly symmetrical façade is evidently the work of
a careful designer, who kept within the lines of old tradition in building. The curved gables at the ends accentuate the importance of the fine bay windows under them. The stone balustrades which crown the latter and the square entrance porch are of excellent design, well-worked out and though they are distinctly of the Renaissance they are in perfect keeping with the rest of the house.

One of the many expedients to get money out of their subjects resorted to by Charles II. and his brother James, was the notorious window tax and so heavily did this fall upon the owners of some Elizabethan houses that the poorer ones were driven to the necessity of walling up some of the windows which their ancestors had provided with such prodigality. An instance of this is seen in the Manor Farm, Beanacre, where traces of blocked up windows may be seen in the left wing and on the sides of the porch.

This is one of the many substantial old stone manor-houses to be found in the west of England, which were built by rich sheep raisers and cloth manufacturers when that section of the country


FOUNTAINS HALL, YORKSHIRE
was at the high tide of prosperity. These houses are remarkable for the way in which they preserved the Gothic building traditions quite late into the Renaissance period. This is evidenced in the Beanacre house by the simple gable treatment and the label mouldings over the windows beside which the treatment of the entrance door seems rather out of place. The form of composition of this house, consisting of advancing wings at the ends with a projecting porch in the center, is one that is frequently seen in mansions of Elizabeth's time and was once thought to have been originated as a compliment to the great queen. But it has been proved conclusively that houses were built on this E shaped plan long before Elizabeth came to the throne and


ST. JOHN'S HOUSE, WARWICK
that it developed naturally from the traditional arrangement of kitchen offices and servants' quarters at one end and the family apartments at the other of the great hall, which served as a general living and dining-room.

Coldham Hall is quite a contrast to the humbler manor-house just discussed and illustrates the great effectiveness of the E shaped plan when applied to larger mansions. The air of noble dignity possessed by this fine brick house is increased by the broad sweep of level lawn in front and the groups of giant trees at each side. While the front is so well balanced as to satisfy the eye completely, it will be noticed that there is no attempt whatever at exact symmetry. There is still less attempt


MANOR FARM, BEANACRE
at symmetry in the front of Restoration House, Rochester, which is celebrated as the "Satis House" of Dickens's Great Expectations. The peculiar charm of this old house is mainly due to its irregularity and its quaint windows with their white painted wooden frames and mullions which contrast so pleasantly with the crumbling brickwork and the luxuriant draperies of ivy.

A fine example of the Carolean manor-house is seen in Moyles Court. Here again we have a delightful combination of vine-grown, red brick walls and white wooden window frames. The width of the latter as well as the size of the brick quoins and the chimneys serve to emphasize the sturdy character of the house. Its high pitched, hipped roof and dormers are very effective. There is none of the cold and dull formality of the later Renaissance about it and it represents a type of English domestic architecture most worthy of study and capable of development. Altogether it is so charming that one does not feel inclined to criticise it for being set so low on the ground without a visible base of any kind. This is a failing common to most old English houses and in some of the simpler, more picturesque kind it contributes much to their attractiveness. A house that is set low on the ground certainly has an appearance of more intimate relationship with its surroundings than when a considerable flight of steps has to be climbed to reach the ground floor. It is better, however, on the
score of hygiene, if of nothing else, to have the floor at least a step or two above the level of the ground and it is probable that these old houses were built so; their present condition being due to several centuries of gradual settling or the accumulation of soil about them as in the ruins of ancient cities.

Very different are these old houses from some of our modern suburban abominations which seem to have no closer relation to their surroundings than would a Pullman car or a newly painted piece of machinery.
The effect of age on the latter cannot be said to be improving. But the old English houses were built solidly of good rough materials that belong out of doors, so that while vines have clothed their walls and the green lawns about them have grown smoother and thicker, the passing of the centuries has served to tone them down and bring them into closer harmony with nature. With their garden walls and hedges, they almost seem to have grown in their places as did the great trees which stand near-by. There is nothing of the uneasy look of the parvenu about them. They have an air of calm and dignified repose; the spirit of ancient peace seems to rest upon them and all their surroundings.


CARDEN HALL, CHESHIRE-GARDEN FRONT

\title{
The Small House Which is Good A CEMENT BLOCK HOUSE
}

\author{
HOMER KIESSLING, Architect
}

B'Y reason of its location as well as the greater cost of wooden construction, the house depicted herewith is designed to be built of cement blocks with the exterior walls plastered with a cement coat. In this form of construction all wood framing, which is a large item, is dispensed with.
A stucco house costs a little more than a shingled or clapboard house, but this house of cement blocks is much under all in cost and also approaches fireproof construction.

This house is designed to be built on a hillside and faces due northwest, by which means the most important rooms face the south. The roof shingles are stained red, and green blinds are used at the windows.

The interior treatment of

the first floor is very simple. The hall which is central to all the rooms is finished in white wood stained a deep brown, while the plaster ceiling is tinted green.

A large and inviting living-room opens up well from the hall. The inglenook breathes an air of hospitality and for entertaining the living-room could not be surpassed. The finish of this room is white wood stained chestnut brown, with plastered walls tinted green. The ceiling is plastered between the wood beams which are stained same as other wood finish in room.

The diningroom has a southeast exposure and contains a delightful flower bay, which has a glass roof and a builtin sideboard with glazed doors and cupboards below. The wood finish


Front Perspective


Garden Perspective

\section*{House and Garden}
is of whitewood, painted cream white, with a simple cove blending into a warm yellow ceiling. A generous serving-room is off the dining-room and thence to a large and airy kitchen where all woodwork is stained brown with a blue tinted ceiling. The kitchen contains a pantry in which are many shelves and an ice box, a dresser and sink. An entry and rear porch lead to the service yard.
An ample piazza with concrete floor off livingroom looks into a quaint old-fashioned garden.
The second floor has its chambers well located, airy and of comfortable size, all woodwork is stained a deep brown and walls and ceilings tinted cream white. In the attic is a servant's room and storeroom. In the basement is a laundry, a toilet, coal bins, storeroom and preserve closet. Floor throughout the cellar is of concrete. The house covers an area of about twelve hundred square feet, is two and a half stories above grade and its cost \(\$ 5160\), not including the fee of the architect, which was five per cent on that amount. The rooms of this house while

not large are well proportioned and well planned for the purposes for which they are to be used. Ample closet room is provided, a very luxurious bath-room, fireplaces of generous dimensions, while the finish of wood and walls is most attractive and harmonious.

\title{
The Art of Pruning
}

\author{
By C. L. MELLER
}

\(I^{\top}\)T is often heartrending to observe the manner in which so many people disfigure and impair their trees and doubly aggravating is the air of self-complacency with which such people view their finished barbarity. How sure they are of commendation when nothing would fit their case better than a sound thrashing. Had they restrained their ardor it would have been better for the tree and their appreciation of a tree. Sawing cordwood and pruning are two distinct operations between which the average man does not appear able to discriminate. To such, wood is wood whether it is green and sappy or dead and dry. They know nothing of the structure of a tree, yet take it upon themselves to correct faults of which they cannot possibly know the cause nor is their knowledge of how to proceed anything more than a vague and foggy generality. A dogged belief seems to possess some people that a vigorous cutting back of its branches will stimulate the growth of a tree. The trees are numerous that have been rendered permanently unsightly because the man with the saw lacked all knowledge of their nature or needs and could not appreciate the difference between lumbering and pruning.

Pruning is an art that must be learned by practice and study. These are a few fundamental principles, a thorough knowledge of which is positively essential to a rational exercise of this art. If you meddle with a thing of life, then it is of vital importance that you
know at least where the seat of life is, so that you do no harm where your endeavor is to do good. Few, when they saw a limb realize the necessity of the wound healing properly, yet hereon rests the success of the greater part of the pruning. There is a right and many a wrong way of cutting off a branch. To clearly comprehend this it will be necessary to have at least a somewhat definite idea of the structure of the tree.

The vital part of a tree resides in what is known as the cambium layer directly underneath the bark, which is in function somewhat analogous to the veins and arteries of an animal. It is proportionally a very small part of the entire tree, yet if it be seriously injured the tree must die. The wood on the inside of this cambium layer or ring is not necessary to the life of the tree, acting merely as a support. A tree can live almost entirely without it, which makes it possible for a completely hollow tree to leave out year after year. It is this cambium that shows up green when a twig is peeled. An inherent function of the cambium layer is to heal each wound inflicted upon the tree by growing over it a bark-like callus, but it can only perform this beneficent office where the necessary conditions have not been interfered with, as where the sap can flow directly past a cut.
In a normally healthy tree the cambium layer envelops the rest of the wood in a manner similar to that in which a glove encases the hand and it is therefore impossible to cut into any part of the tree without
injuring it. The individual cells of this layer have the power to reproduce themselves. Where the cambium is cut into, provided the cut is made so that the sap can readily flow by it on its way upwards, the cells are incited into increased activity and by means of the rapid multiplication of the cells at this point the wound is soon protected with a callous covering. A stub remaining after a branch has been cut off tends to die back to the branch or trunk from which it grew and the opening thus left by the decaying stub gives access to all manner of insect and fungous diseases that are ever on the alert for just such opportunities. Along the cambium layer of a stub no sap can flow and consequently its cut end cannot be healed over. The life of the tree pulsates, as it were, with the sap, which must in a manner complete a circuit from the roots to the outermost buds and back again. Where a twig, or branch, is cut off the circuit is broken in that direction and the sap must now flow along the line that originally supplied this side channel, which is along the limb that bore the branch removed. This then explains why it is imperative that each limb be cut off as near to the limb from which it originally grew as may be possible.

To comprehend a little better the philosophy of pruning we shall have to consider a tree in what to many of us may be a new light. We shall regard it not as an individual, but as a colony of individual buds struggling in fierce competition with one another. As all draw their nourishment from the same source, manifestly an overabundance of buds will be a great drain upon the vitality of the roots that must supply the food yet have no power to limit the number of buds. As long as the roots supply the necessary pressure buds will develop irrespective of whether those buds grow into a branch or not. Pruning then, is simply man's correcting of Nature to serve his own ultimate ends. It is in its final analysis merely a reduction of the number of buds and a consequent amelioration of the fierceness of the struggle, so that the remaining buds may the better serve man's purpose, which in a fruit tree is the production of both quality and quantity of fruits, while in a shade tree


A COMBINATION OF GOOD AND BAD PRUNING
it is the possession of a sound leafy crown. Let it be understood that all buds are potential branches.

All late flowering shrubs are best pruned in March as they form their flower buds in the spring. Pruning the early flowering shrubs at this season will sacrifice flowers, for these shrubs have formed their flower buds the preceding summer, though where a bush has been neglected it will often prove advantageous to sacrifice quantity for quality of bloom. The early flowering shrubs, of which the lilac is the most common example, should be pruned immediately after blooming. Bear in mind that a bush appears at its best when its foliage is borne well down to the ground.
Each species of shade tree has its own peculiar symmetry. Nature has designed for each a more or less definite outline to which the individual trees aspire and all man's efforts to the contrary will result in the grotesque, if not in utter failure. A linden will never grow like a maple nor an elm assume the habit of a chestnut. Only dead limbs and such as interfere too much with each other should be removed. No limb should be cut off if the tree's symmetry be impaired thereby. Study each tree well before you attack it with a saw and then have a good reason for every cut you make.

With fruit trees this is no such matter. They are the result of man's arts and in their development Nature must ever be guided by man. The object here is to remove all excessive wood, leaving just enough to induce the tree to concentrate its energies on the production of fruit, which is best achieved by striving for an open top so that the sun may get at the fruit from all sides. After having made each cut as near to the branch from which the limb has been removed as may be, as smooth as possible and at such an angle that water cannot accumulate thereon, an even coating of white lead is the best protection that can be afforded the fresh wound.
_The accompanying picture illustrates well both how a tree should and should not be pruned. The wounds have been made close enough to the trunk and are healing over nicely, but the tree is headed too high and the branches do not spread sufficiently.

\title{
Walls and Their Coatings
}

\author{
By CLAUDIA Q. MURPHY
}

WE have long been prone to associate sanitary conditions for our walls with distinctly cold and unattractive effects. Happily, however, a better and truer realization of what sanitation stands for, has come about. It is no longer necessary to endanger health to obtain decorative treatment for our walls, for commercial science produces materials from which beautiful effects can be secured with full sanitary protection, for treated with such material, a wall may be beautiful, harmonious and artistic, and better than all, thoroughly sanitary.

Sanitary as applied to walls defined in plain English, means merely a surface that is clean and cleanable. It must also be a wall through which ventilation is possible and finally, it should be a color that is suitable. These four things constitute the sanitary wall.

Taking up this matter of cleanliness, it is not logical to suppose that a clean wall can be secured by the use of unclean materials. The material from which the wash or medium of color for the finish of walls is made, must itself be absolutely clean. If it is made from a rock basis, finely ground and of natural cement, then it is clean provided the coloring material is also clean. A wall is cleanable when it is possible to rub it down with a dry brush, cleaning it thoroughly and removing all spider nests, cobwebs and dust without removing the color. Then, too, the cleanable and therefore desirable wall, must be of a material that does not require additional labor to prepare it for recoating. It is always ready for a fresh coat at any time, and in any place.

In the past too little attention has been given the subject of ventilation; latterly, however, there is an improvement and great consideration has been given the matter of the wall surface as a means of filtering air from one apartment to another. A partition is not an air-tight impervious wall, it never should be.

The ordinary plaster has perhaps forty per cent of void, open spaces in it, through which the air circulates freely, passing through the apertures from one room to a nother. When doors and windows are closed, the oxygen of a room would soon be exhausted and the air dead and inert were the room air tight, so this circulation of air from one room to another is not only necessary, but it is essential to the comfort and health of the occupant of the room.

A wall coating should be used that does not close up these little cell-like openings in the plaster. That they are easily closed, is a fact which is unfortunately too true. In many modes of wall treatment, the use of correct tinting material, or in other words the
application of a sanitary wall finish, makes better ventilation possible in adjoining apartments by continuing the air cells.
The matter of color in regard to sanitation is always apropos. That colors affect the health and have remedial action upon the human system are generally accepted truths.
A recent magazine article states that the continued living in rooms covered with bright reds produces discordant effects upon the nerves and induces all forms of nervous diseases.
No class of people pay nore attention to the matter of color on the walls than hospital superintendents, and the best hospitals to-day insist upon the buffcolored wall, as being most agreeable to the eye, reflecting the largest percentage of light and producing the most soothing effect upon the occupants.
The soft greens, light tans, dainty blues, exercise similar and desirable effects, but in less pronounced degree. The tinted wall furnishes a good setting and background for pictures and decorative bric-abrac and accords well with figured curtains and floor coverings. The heavy, deadly colors are now largely relegated to the times that included the inartistic, old-fashioned, heavy lambrequins and portières. The result is better housekeeping, more attractive homes and happier occupants.
Another feature that it is desirable to include in any serious study of that which makes for sanitary walls, is the matter of the glazed, shiny surface seen when gloss paint is used or faience employed in the decorative scheme of walls in living-rooms.
Mr. Thomas Collcutt, President of the Royal Institute of British Architects, says in a recent address: "My own experience in a certain room lined with faience has been that of discomfort and irritation. Being, as you will allow, something of an expert when domestic architecture is concerned, I was able to trace the cause of my discomfort to the glaze of the faience."
The dull mat effects are softer and supply a much more desirable background for furnishings.
There are few houses built to-day in which the wisdom of tinting the walls of the interior for the first year at least, is not obvious. It frequently occurs that when this is done as a temporary makeshift that the occupants of the house are so satisfied with the soft flat tones that this treatment insures, that they retain them in preference to applying any other decoration. There are rich colors procurable in sanitary wall finish as well as delicate tones and by the judicious harmonizing of the various shades and colors, most pleasing effects result.

\title{
Window Boxes
}

\author{
By HELEN LUKENS GAUT
}

\author{
Photographs by the Author
}

FILLED with gay blossoms and trailing vines, window boxes enliven the melancholy of ugly buildings, as intelligence makes bright and beautiful a homely face. If one has no ground space for a garden, which is often the case in large cities where flats and skyscrapers elbow and jostle, crowd and frown, he need not sit down and weep, for he can fasten a few gardens to the side of his house, and though he can not sit in them, he can sit by them and let them hold his nerves and unrest.

The humblest tumbledown shack can be made attractive with a single window box. This was especially exemplified during the early days in Los Angeles, when Mexicans often combined the practical and artistic by planting pumpkin seeds on their window ledges, and it was not infrequent to see an old adobe charmingly draped with great leaved vines, from which, like copper bells in green belfries, hung huge golden pumpkins. Garden peas, grape vines and tomatoes were also popular for house decoration, and sometimes, by these same provident people, grain was planted on the sod roofs. Until haymakers began harvesting on the housetops, these mid-air fields were refreshing bits of nature to the tired slums.
Among odd, as well as practical window boxes, may be classed the kitchen window box which is adaptable for cramped tenements, especially for the apartments of a working bachelor girl, who may not be financially able to rent more than one room. It is neither artistic nor beautiful, appears more like a wart or a mole on a smooth face, but it is a


AN URN FILLED WITH GERANIUMS AND FERNS
useful and comfortable contrivance. It holds all steam, odors and grease of cooking within itself, thus permitting the living-room to remain clean and sweet, and able to look one pleasantly in the eye. In construction it is simple and inexpensive. First, have a shelf, supported by strong brackets built outside your window, the length corresponding with that of the sill, with which it should be level. The box should be made of galvanized iron and should be wide enough to hold a gas plate and small ovenabout eighteen inches wide-while the other proportions should correspond with those of the lower window sash, against which it should fit snugly. On either side near the bottom, place wire covered ventilators with iron caps, that can be kept open or closed.

In the top have a chimney or air shaft through which steam can escape. The window between stove and living - room may be kept closed except when it is necessary to attend to cooking food, and in this wayall disagreeable kitchen elements are condemned to perch on the outer ledge, seen and seeing, yet unsmelled. The box proper need not be nailed to the building, and is easily transferable from one location to a nother.

Of all the many window boxes in vogue, none excel in beauty and joy-giving qualities, that of the fountain window box, with its frolicking spray, grottoes, delicate water plants and gold fish. It is a thing alive, a thing that talks, that sings, that plays unending rest notes on tired heart-strings. The basin, of size to conform with that of the window against which it is to be placed, may be


AN ELABORATE WINDOW BOX


GARDEN ARRANGEMENT OVER PORTE-COCHERE


AN ATTRACTIVE ARRANGEMENT OF FERNS
either of iron, strongly riveted, or of wood, with inner lining of cement. There should be placed in the center of the basin, and at irregular intervals along the edges, grottoes of stones and cement. In these should be crevasses in which water plants can find root, and where gold fish can find hiding places. There should be a drain pipe for carrying off surplus water from the basin, also a fountain apparatus. A small statue-a wood-nymph or water-sprite-adds greatly to the charm of one of these miniature lakes. Maidenhair ferns, the smaller variety of umbrella plant, asparagus fern, wandering Jew and dwarf water lilies are all adaptable and charming for the water garden. To further beautify the home, in case there is ground space, and make use of the overflow from the fountain, it is an excellent idea to have a bed of ferns and papyrus directly beneath the window box, into which the drain pipe can drop.
Window boxes may be elaborate and expensive, or simple and inexpensive. The design is of no great consequence, for trailing vines soon droop and cover all architectural features, that is if these vines are encouraged with good care and petting. Some people have a clever faculty of making plants thrive, while others have a withering influence. Plants are like children and wives; they demand affection and care all the time. Spasmodic attentions are irritants. If a plant is petted for a week and neglected for a month it begins to scowl, whereas, if given uniform treatment it laughs all the time. Mrs. Theodosia Shepherd, of Ventura, California, whose successes with flowers are considered miraculous, says that whatever she wills her flowers to do, they do. This obedience is the reward they give for her love and devotion.
Window boxes ordinarily used are made of wood and painted green, though sometimes they are painted to correspond with the house on which they are put. A box of this kind for a four foot window costs about one dollar and a half, including iron brackets, and is suitable for any place, provided vines are planted


A WINDOW BOX AT WINDOW OF STAIRWAY IANDING
around the edges. Some striking designs are fashioned of bamboo. Filled with delicate lacy plants they are attractive, but they are scarcely suited to American houses. On a quaint Japanese bungalow or summer-house, they would be quite chic. Bamboo boxes are more expensive than those made of boards, because of the labor involved. They can sometimes be purchased at Japanese art stores, but by one who is clever with ideas and tools, they can be designed and planned at home.

Most elaborate are boxes made of metal with outer finishing of tiles, which are colored and arranged to represent beautiful landscapes. A box of this kind costs from one hundred to three hundred dollars, and is so elegant, it is with pity for its defilement that one fills it with soil. Such a box would be insulted if its face were veiled with vines, and would only tolerate standing plants with attenuated petticoats.

The rustic window box, constructed of rough, heavy bark is always attractive and is especially appropriate for log houses and summer bungalows. There are boxes of slats and lattice work, of elaborately wrought iron, of grille work, boxes with

Humus also makes a rich fertile footing for plants, but is difficult to get unless one lives near the woods.

There are fashions and fads in flowers as well as in gowns, and Nature with all her floral assistants, possesses great possibilities for mode and variation of color. No flowers are more desirable for filling window boxes than geraniums. They are jolly-hearted growers, ever smiling with bloom and profusion of rich foliage. They are faithful, substantial. You can have absolute confidence in their reliability. They even endure mistreatment

A PORCH FESTOONED WITH ROSES AND BANKED WITH GERANIUMS

with admirable patience. They will thrive in heat, and bravely withstand many a frost, and though they may look a little sick and weary sometimes, their dominant characteristic is grit. They eventually overcome all obstacles and resume their smiling individuality. They are popular with all classes, and can be found trailing their bright garments over fastidious lawns, or, with bonnets gay with blossoms, cuddling lovingly against poverty-stricken homes, which are made better because of their presence.
A row of upright geraniums should be planted in the back of a box for a banking, while drooping plants should border the edges. The Jean de Arc, a double white bloomer and an effective drooping geranium, is charming against a background of crimson blossoms. The Galilee is a double pink


SIMPLE PLAN OF USING RUSTIC HANGING BASKETS AND POTS climber and is friendly with the red General Grant. There should be harmony in these color combinations, as well as in music. If several window boxes are placed on a house the color scheme must be without discord. Miscellaneous colors are as distressing as bad odors. One of the most pleasing sights imaginable is that of a mission style home ornamented with well-filled boxes of scarlet geraniums which correspond with crimson flower bankings that surround and conceal the foundations of the building. Ferns


LOOKING OUT FROM A PORCH
are always beautiful, as are innumerable other varieties of plants, but nothing is hardier or more pleasing than the unpretentious geranium.

A style of window decoration little used, though immensely effective, is that of placing three small semicircular window boxes at intervals of two feet on either side of the casing, and a large box along the lower sill. When these are all glowing and fragrant with blossoms, the most insignificant window becomes a thing of beauty. People who have ugly houses need not despair. Architectural detail or design is not essential in the creation of charming exteriors. Wonders can be wrought by tacking a few floral frills to your forbidding walls.

A mustache will make handsome a man with a hair lip, and a bewitching gauzy veil will make you ignore a woman's freckles.

In localities where winter weather is too rigorous for promoting plant life out of doors, detachable window boxes are essential, so that when frosts come, they can be carried into the houses, where with their fragrant, happy loads of bloom, they will enliven the hearts and hours of their keepers, and laugh to scorn the elements that rage outside.

Hanging baskets, flower pots and jardinieres are of innumerable design and material, and their selection is a matter of fancy and pocketbook. Small wooden butter tubs painted green, do very well for porch railings. Ordinary clay flower pots can be easily decorated to represent Indian pottery, by putting on a few dashes of paint in grotesque design. These are extremely effective as well as inexpensive.

\title{
A Stable Convertible Into a Garage
}

\author{
A. RAYMOND ELLIS, Architect
}

QUITE an unusual treatment has been given to this combination stable built in Hartford, Connecticut for Mr. John B. Knox. The site made the problem difficult, as the building lines of the lot limited the operations. It was finally decided to attach it to the house, forming a small courtyard inside. This plan worked very satisfactorily, as will be seen from the plans. Another point arose; the house was brick and the cost of the stable had to be kept down. A frame building attached to a wooden one might look queer. However, a gradual transition between the two materials was effected by making the porte-cochère arch of brick, carrying the balcony above in wood; this made a very picturesque and graceful effect. The exterior of the stable is painted to match the brick of the house, trimmed with a dark green, also like the house. The whole scheme is very harmonious.
The increasing popularity of the automobile made it essential to prepare for its future consideration. Since a well appointed modern car requires more attention than a pleasure carriage, its future advent is well provided for. The foundation is of concrete, divided into an unexcavated part under the carriage room and a manure pit under the stable, all well drained, vented and easily accessible. As a precaution against fire when gasoline would be used, a heating pipe encased in asbestos and boxed was brought from the house. As a temperature of sixty degrees is sufficient the tax on the boiler is not severe. The main house sewer was tapped for the sewer connection, properly trapped and vented. Gas being eliminated, electricity was used for lighting.
The drive swings in from the street and under the porte-cochère, allowing a convenient turn into the stable. The carriage room has a concrete floor,


Ground Floor Plan
and a wainscot of concrete three feet, six inches high entirely around it. The floor is pitched to drain well, and the repair pit for the automobile is reached by a trap door covered with galvanized iron. The pit itself has three sides of concrete; one end is left out as an exit in case of fire in the machine. The ceiling and walls above the concrete wainscot are hard plaster on metal lath; this reduces the possibility of fire to a minimum in this room. This treatment also extends to the workshop. A large amount of repair work is continuous on an auto; therefore, facilities must be afforded. Oils and waste should be carefully kept in a ventilated closet in the workshop. Liveries, robes, etc., can be kept in the office.

Ventilation is necessary in a stable to preserve the highly finished bodies of vehicles and upholstery. Heat is necessary to prevent excessive dampness, causing rubber, leather and paint to deteriorate.

The gasoline pump, connected with a storage tank some distance away as required by the Board of Fire Underwriters, is recessed in the concrete side wall of the carriage room. Concrete floors, although generally used, absorb oil and soon look badly unless a drip pan of copper is sunk in the floor under the machine, or slate slabs used. Vitrified tile and brick are non-absorbent and can be recommended.

The stable portion is fully equipped with modern appliances and sanitary plumbing. The second floor contains two good chambers, and sufficient loft room for the storage of sleighs, grain and hay.
The stalls, located in the wing, have partitions built of heavy plank, with iron guards on top, making them light and airy. In the floor of each stall is placed a cast iron stall pan, pitched to drain toward the rear of the stall, and connected with a cast iron drain to the manure pit. This connects with the

sewer, trapped and vented. The flooring over these pans consists of three by four inch maple slats, insuring dry stalls and clean bedding.

If in the future, the owner should desire to have more than one automobile, it would be an easy matter to remove the partition between the stable portion and carriage room, making it one large room. This present arrangement is found to be very satisfactory.

The economy of making provision for the ultimate uses of the stable is manifest, as the piping for gasoline pump, locating the storage tank and excavating for repair pit, were all accomplished for much less than their addition later would have entailed.

\section*{A \(\$ 5,000\) Garage}

Designed by Andrews, Jaques \& Rantoul

THE garage shown in the plan below was built for W. D. Denegre, at Manchester, Mass. It was designed to accommodate four cars, and its arrangement is most satisfactory. Each car stands opposite its own door, and can be washed as it stands in its own position, there being drains under each car, the floor being
 a large well lighted room at the side of the car room. It is equipped
with necessary lathes, drill and other tools, power being supplied from a dynamo in the building. This dynamo, which is run by a small gasoline engine, charges the storage batteries, which supply current charges the storage batteries, which supply current
for lighting the buildings and grounds of the country place, as well as charging the batteries for the electric run-abouts. The battery room is at the rear electric run-abouts. The battery room is at the rear
and has no direct connection with the workshop or car room. A well arranged blacksmith shop is also a part of the building, but like the battery room has no direct connection with the workshop or car room.

For a low cost house the one shown has more than
the usual number of advantageous features. The walls of the building are of wood, having a stucco
exterior finish. The inside walls are sheathed up walls of the building are of wood, having a stucco
exterior finish. The inside walls are sheathed up to the eave line, the rafters are surfaced and sheathed on the upper side.


A combination stable and garage


The Editor wishes to extend a personal invitation to all readers of House and Garden to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice given.

IN response to many requests sent to the editor, we are again taking up the question of the selection of tiles, hardware, and lighting fixtures, suitable for houses of various types. A few general rules may be laid down to assist the amateur house-builder.

In a room where the woodwork is finished with a high gloss varnish, a dull tile should always be chosen and hardware and lighting fixtures should show a dull surface; if of brass, the brush brass should be selected, or wrought iron is often found effective. It may be added that when possible the woodwork of a living-room should not have a high gloss. There is a medium finish which is like rubbed wax, that over some stains is most acceptable, notably mahogany, but for many stains, particularly those of the socalled natural colors, a dead finish is to be preferred.
In selecting the color for the tile one should be largely influenced by the general color scheme which the finished room will show. If it is not possible to decide this before the tiles are selected, a safe medium is to choose ecru or some one of the soft dull shades of green, as with almost any color effect these will carry well.
Where a drop ceiling (that is, a ceiling where the ceiling tint extends to the picture rail) is used, a very good result is obtained by repeating the ceiling color in the tile. This may be deepened if the general treatment of the room requires a stronger color. Very beautiful and decorative effects may be largely assisted by the proper choice of tiles, and it may be added that rooms otherwise perfect in color may be made quite inharmonious by the use of the wrong tile.

If one is unable to visit a shop where a variety of tiles are displayed to make their selection, it is quite possible to write to the manufacturers, asking to be supplied with samples showing certain colors. This is decidedly the safest method and one which should be followed. All of the leading hardware manufacturers supply cuts and prices upon request, and will recommend you to a dealer who carries their
goods. Fortunately the over ornate from which we have suffered both in hardware and lighting fixtures is rapidly being displaced by simpler designs.

Where period furnishing is indulged in, if the architecture expresses the same characteristics as one desires to carry out in the room, it is very easy to find extremely attractive and correct hardware. For the Colonial house there are several booklets showing special designs. For interiors of this style the glass knobs are largely used and are very suitable. These are but a trifle more expensive than the metal ones and add a distinctive feature to the room in which they are employed, provided always that the design is appropriate.

Escutcheon, key plates and hinges should evidence their relation to each other, as well as to the room in which they are used.

The handle, knob and escutcheon, together with suitable knocker for front door of Colonial houses, may also be selected from cuts, if one is not convenient to a dealer carrying a well chosen assortment. The same method of procedure may be adopted in deciding upon the lighting fixtures for the house, where enough money is allowed to make these individual and characteristic. Cuts are very helpful and suggestive, although sometimes they serve only to show us what we do not want when we are endeavoring to make a decision upon this important point. In the home of moderate cost the allotment for fixtures is usually very small and, therefore, a larger amount of thought must be devoted to their selection. The ordinary stock fixture is very far from being a thing of beauty, and one wonders that the manufacturers do not adopt some less aggressively ugly type.

Many prefer to use silk cords to drop from the ceiling and hold the bulb and shade. The money which would otherwise be devoted to a crudely ugly fixture can be expended in the purchase of shades. These may be of spreading design and of porcelain, over which a full flounce of silk, trimmed about with a narrow bead or silk fringe, may be used,-
(Continued on page 13, Advertising Section.)


\section*{THE HOUSE}

IT is in June, as Lowell has said, that the "rare days" come-the perfect summer weatherbright and sparkling, warm and balmy, lifegiving and delightful, and it is then that the outdoor world becomes seductive and the indoor world ceases to attract. The piazza takes the place not only of the living-room, but the drawing-room, and its furnishing becomes the thing of paramount importance.

There is bewildering variety to-day in porch furniture and endless opportunity given to indulge one's taste and fancy. No furniture, of course, is more attractive than that made of rattan and in durability little is as profitable, but plainer kinds involving less initial cost are to be had and will be found acceptable-the chairs and settees with plain wooden frames and split bottoms are extremely cheap, comfortable and not unattractive, when painted and cushioned. The first three things to be remembered in selecting chairs for piazza use are comfort, durability and appearance. Many which are picturesque are tortuous resting places, and some apparently well made will not outlive a single season. In purchasing rocking chairs it is well to observe whether or not they are properly balanced and do not tip unduly forward or back. And the question of paint and varnish should be cautiously investigated, for nothing is more annoying than a chair which in damp weather lays hold on one's clothing.

For solid comfort as well as convenient arrangement the rattan arm-chairs with cushions and back rests and without rockers are the best. If the house is dull in color and the piazza deep and shady, green chairs and Turkey red cushions will prove very effective. The color of the house and the location of the piazza should, however, always be taken into consideration when the covering for the cushions is selected as these accessories really make or mar the general effect. If the house is light in color and the piazza sunny, cool shades, greens and blues, will unquestionably be found most agreeable, but even here strong dull colors are better than delicate light ones.

It goes almost without saying that awnings and shades must be provided for the piazza as well as for the windows of the house, for nothing is so disquieting
as a glare of light, but again care should be taken that they should not be hung in such a manner that they cut off the free circulation of air. The split cane and matting shades appropriately placed are attractive and can be made to serve not only as a shield but as background for a picturesque outlook. Why not make use of the outdoor pictures which Nature provides and occasionally give them setting or frame?
A table is a great adjunct in the furnishing of the piazza. Let it have both an upper and a lower shelf if possible and not be too high. A bowl of flowers set upon this, with some books and the current magazines, will give the piazza an appearance of cheer and an air of real hospitality. Such little touches make the distinction between the house and the home.

A square wall pocket made of denim of an inconspicuous color, fastened at its four corners and provided with a broad upper flap, placed against the side of the house, will prove an excellent place for the newspapers which customarily are left in the seats of the chairs to frolic ruthlessly about the piazza and finally escape to the lawn and walk. They can be had in matting but are not difficult to make.

If the piazza is very roomy and the furnishings somewhat sumptuous an agreeable touch may be added by placing upon the floor a few fibre rugs, but these are decidedly to be numbered among the nonessentials.
Hammocks and swinging seats are enjoyed by many and if space affords can well be given place.
It is in June, commonly, that the city dweller takes possession of his country home, and under these conditions there is work indoors to be done as well as out. Curtains must be put up, bedrooms made ready, pantries put in order, and coat closets prepared for occupancy. Window seats in the liv-ing-room made in the form of chests to hold extra cushions, shawls and the like, will be found well worth the cost and trouble of construction.

But there are those who do not abandon the city for the seaside or the mountains-who have neither country home nor piazza. In the eyes of many they are much to be pitied, but in truth they need not be commiserated. The city house is not of necessity
a bad place in summer. If one knows how, it can be made quite agreeable.

Have the windows fitted with awnings, screens and cool green shades, as well as muslin curtains freshly laundered and drawn back. Hang bead and bamboo portières where curtains are needed and where the wind can rustle them. Have the floors bare, waxed and polished, with a few light rugs attractively placed. Let the furniture be covered with pretty light colored slips, and keep bowls of flowers in the living-room and on the dining table. What rational being would exchange such a house equipped with a modern, tiled bath-room, for the crowded, conventional low-priced summer hotel or seaside boarding house ?

And a still more radical suggestion. If there is no porch or balcony, go up on the roof and see what that will offer in the way of midsummer comfort. Consult an architect and if it is possible convert it into an outdoor living-room. Put up an awning, lay down a rug, set some plants near-by, and with the usual porch furniture you will have a delightful retreat for hot summer evenings-a splendid place to view the sunsets and profit by the chance breeze. To be sure some provision must be made for rain, but the plan has been found feasible by many who have tried it.

\section*{THE GARDEN}

GLADIOLI and other summer-flowering bulbs may be planted till the first of July. Bulbs planted now will come in bloom after those of the first plantings have faded.

This is a good time to set geranium cuttings despite the fact that most florists suggest August. Slipping now will insure early winter blooming while in August the conditions must be exactly right for rapid growth. After rooting set them in pots of rich earth and whenever a bud appears snip it off. When midsummer arrives give them plenty of good air, sunshine and water; they will grow strong and healthy. In early autumn they are ready for the window, and in early winter will bloom.

Azaleas placed out doors, the pots buried in the earth, will do well in semi-shaded places. If a light bed of ashes is placed directly under the pots, the plants will not be disturbed by worms working up into them. In times of drouth keep them well watered and you will have good buds for winter flowering.

If you desire a quick growing screen to hide any unsightly object, try the plume poppy (Bocconia cordata). Its utility is amplified by the fact that it will do as well in the shade as when fully exposed
to the sun. The foliage is beautiful, the leaves being light green on top with a silvery white on the underside. Flowers of the poppy are pleasing, being creamy white and come as plume-like spikes. Its usual growth is from six to eight feet and it does well in any soil.

The most important and the actual work for the month will be found in cultivating, thinning, and watering. Flowers should be cut lavishly to prevent the formation of seed-pods which stop growth. Soil kept loose and mellow by cultivation, especially with the rake, retains moisture much longer than that which is allowed to crust over after rains or wetting artificially. There is ample foundation for the observation that the best watering pot is the hoe or rake. The plants must also be fed. Manure well, using pulverized or chemical manures. Mix charcoal with the fertilizer and rake it in. This will sweeten the soil and keep away snails and injurious insects. The charcoal will give an added rich dark color to the plants, and bring out the richness of color in the blooms.

The gardener begins this month to realize on the pleasures had in anticipation. If the preliminary work has been well done, flowers can now be cut. They should be cut and with generous stems. Do not conceive the idea that you have more flowers than you can utilize or that they will look well on the plants; if there is more than is desired for the house remember your friends, the hospitals, and the charitable institutions. The cutting of the flowers is better for the shrubs and plants if viewed only from the practical side.

If the June blooming of hardy hybrid roses are cut with long stems, the usual July pruning will be much lessened. Then again a vigorous cutting of the branches, or pruning after the first blooming is over, will cause to start from the roots of the hybrid perpetual rose many strong young shoots which will bloom in the fall, having nice long stems.

For the proper development of the buds and perfect blooms attention should be given to watering rose plants. Usually during this month the rains are ample but should anything like a drouth approach, the plants should be well watered. Give some food and plenty of air to the roots. The former may be given in either pulverized or liquid manure while the latter can be supplied by stirring the ground and raking-in the manure. The fertilizer will be immediately taken up by the plants and shown in the bloom results.

Canterbury bells, Gaillardia grandiflora, hollyhocks, and Pyrethrum should now be transplanted. In doing this have some regard to the selection of (Continued on page 16, Advertising Section.)


\section*{HARDY HYDRANGEAS}

INOTICE that there are two kinds of hardy hydrangeas catalogued, one Hydrangea paniculata and one Hydrangea paniculata var. grandiflora. Which is the one most frequently seen in gardens and which is the best?
O. M. P.

The one generally grown is the variety grandiflora, composed almost entirely of sterile flowers as is the common snowball. This makes a more showy flower on account of its size, but this increased size is its chief fault when artistic, natural effect is desired, as in heavy rains or winds the flower stems are unable to carry the weight of the heads, which lop over to the ground in an untidy manner. Staking them properly may help them to a certain extent, but each flower stalk must have an individual stake and even then they look unnatural. The type \(H\). paniculata has a flower head composed of numerous, small, white star-shaped flowers, with a few sterile ones. Their weight being in proper proportion to the strength of their stems the bush is more natural and pleasing in its form than its variety grandiflora. Both of these bloom in the fall. Lately a new species has been introduced in \(H\). arborescens sterilis, a splendid early summer bloomer of good habit, in which the flowers somewhat resemble the snowball.

\section*{THE BLACK BLISTER BEETLE}

Last year my Chinese asters were entirely ruined by a black looking beetle. What can be done to prevent it the coming season? Mrs. J. C. P.

The black blister beetle, as well as its striped relation, often destroys many plants and vines. They are especially fond of the Clematis paniculata, and kindred varieties. Often the first brood is not numerous, and, if exterminated, but little damage is done, but if unmolested they breed rapidly and danger ensues.
Immediately, at their first appearance, take a saucepan having a handle, fill half full of water and pour some kerosene in, which will float to the top. Approach the infected plant silently and look for the beetles. Hold the pan under the insect and gently strike the plant above it. The habit of the
beetle, when alarmed, is to drop to the ground, and it is an easy matter to have it drop into the oil. Early in the morning they are more sluggish, and more easily caught, and may at times be hand-picked. If too numerous for the above plan or one supplementary to it, sprinkle your plants thoroughly with a fine water spray and then give a good dusting with Dalmatian insect powder. Sometimes a thorough spraying, under a strong pressure of water, will drive them to a neighbor's garden where, if unmolested, they may remain.

\section*{a good vine for house decoration}

What is a good vine to grow for summer decoration in the house-a long stranded vine preferred?
B. M. P.

Nothing can be better than the Chinese yam, Dioscorea batatas, the fragrance of whose blossoms has given it the common name of cinnamon vine.

The tuber is edible and an effort was made to grow it as a commercial vegetable, but its tubers grew so long and deep and were so brittle that the labor of digging was too great. Its foliage is heart-shaped, glossy, and will remain fresh and plump when cut, for several days, even without water, thus making it useful to train over doorways, mantels or in situations where it is almost impossible to place its stems in water. I usually cut it the evening before it is wanted-placing its stems in a bucket of water and laying the vine on the grass in a situation where the morning's sun will not strike it, and give the whole vine a spraying with water. While all this is not necessary for a one day decoration it certainly helps it.
Young tubers make the most useful vines for decoration, being slender and devoid of the seedballs that later in the season appear on old plants and detract somewhat from the fresh, clean, glistening appearance the younger vines possess. Like all vines, if grown closely, they intertwine. It should be grown as the florists grow smilax, on strings held far enough apart to keep each vine separate. One way is to select an out-of-the-way, sunny place and erect a frame composed of telephone poles standing at least fifteen feet out of the ground. Run two by six scantling along the top. Plant your tubers immediately under the scantling, two feet apart in
(Continued on page 17, Advertising Section.)


Edited by JOHN GILMER SPEED
The purpose of this department is to give advice to those who have country or suburban places as to the purchase, keep and treatment of horses, cows, dogs, poultry, etc. Careful attention will be given each inquiry, the letter and answer being published in due time for the benefit of other readers. Where an early reply is desired if a self-addressed, stamped envelope is enclosed the answer will be sent. No charge is made for advice given.

\section*{The Breeding of Fowls}

SHALL we keep chickens? Of course, to be sure, with the qualification that the place be large enough to have runs for the chickens where they can be hindered from scratching up the garden without really being confined. Chickens need to have plenty of outdoor exercise to keep them in good health. Then again they need clean food and clean water and the houses in which they roost at night and where the hens keep up their praiseworthy habit of laying should be kept as clean as possible and whitewashed several times a year. If you are not going to look after your chickens yourself, or if you have not a sober and trustworthy servant to do the needful, it will be found to be a disappointing business. Women are very skilful in handling chickens and as they are at once more sober and more conscientious than men, I think I should prefer to have one in charge of my chickens than a man. Indeed women are the great chicken breeders in the United States; and it is a vast industry. It is in this way the farm wives get their nest eggs in more sense than one.

When starting be sure to select hardy


Cock and Hens - Rhode Island Reds Bred by P. H. Sprague, Maywood, Illinois
and prolific types; be sure also to get those that breed pure to the type; then do not cross them. The most foolish thing in breeding is to cross types. In an effort to create a novelty by cross breeding more frequently than not in the progeny the virtues of both types are lost and the defects increased. In illustration of this little article I have selected the Rhode Island Reds and the Columbian Wyandottes, the pictures of both types having been supplied by Mr. P. H. Sprague, of Maywood, Illinois. The Rhode Island Reds possess many virtues and have very few defects. They are surely a very superior all around general purpose fowl. Being large, weighing five to eight and one third pounds, and having lots of breast meat they make an excellent table fowl. They are especially noted |for their activity, which is the foundation of many of their good points. It keeps them healthy, keeps them laying and allows you to force them without their getting over fat.

They are extremely handsome; are deep, rich, cherry red, with good shape and symmetry, clean yellow legs, and a proud carriage.

As a breed for the farmer they stand without a superior. The chicks are rugged and can stand roughing it, for they inherit a hardy and vigorous constitution. They mature quickly, have a rich yellow skin and nodark pinfeathers. They are always plump, and having a long keel for breast meat, they are unexcelled for broilers and roasters.

They begin laying early and keep it up the year around. They are good setters, careful mothers, and as vigorous as any cross-bred stock. The birds have that deep buff under-color so


Columbian Wyandottes
Bred by P. H. Sprague, Maywood, Illinois


Rhode Island Red Cockerel


Columbian Wyandotte Cock

Bred by P. H. Sprague, Maywood, Illinois
much sought for, neat, low combs, bay eyes, and the proper shape. Owing to their solid build they equal in weight other breeds of greater size.

The Columbian Wyandotte is one of the newest of the American breeds, and has gained favor with both the fancier and utility man. The coming of the Columbian Wyandotte has been without a boom, without noise, almost without a champion, but they have made a lasting impression.
Merit and beauty are the secrets of their popularity. They are handsome with a beautiful aristocratic color.

\section*{In Behalf of the Greyhound}

\author{
By Mrs. H. C. KELLEY, VICE-PRESIDENT GREYHOUND CLUB OF AMERICA
}

\(\mathrm{A}^{\mathrm{N}}\)N article in a recent magazine, "Open Court," by Woods Hutchinson, M. D., entitled "The Dog Racing Lovers and Burrowing Outfit," was so able in many respects that it must be an actual grief to the lover of the greyhound to hear him characterized in the article "as a racing machine, instead of a dog, and in spite of his beauty and speed, one of the most disappointing creatures on four legs to try and make a friend and companion of." So arraigned is the thoroughbred greyhound by Dr. Hutchinson, who adds his opinion that the threequarter bred dog is both intelligent and devoted.

As a breeder of greyhounds


Mrs. Kelley and one of her Prize Winners
for ten years I have found the three-quarter bred dog of little value and even he rarely, if ever, deserves the scathing criticism of Dr. Hutchinson, though he does qualify as disappointing not only as a companion but even as a "racing machine." It has been without exception that the thoroughbred dogs in England and America have won the large coursing stakes, the Waterloo Cups and are the prize winners at the Bench Shows. The breeder of greyhounds in England is as jealous of his strain and of the purity and character of them as ever a breeder of horses is. Stonehenge, writing in 1853 of greyhounds,
speaks of the crossing of the English bull dog with the greyhound, but admits while it produces courage it produces a dog of qualities not lasting, saying after two years such greyhounds are an indifferent success. I doubt if the successful breeders of greyhounds in our Western States, could be tempted to experiment.

The greyhound is a "racing machine" but he is also your friend, your companion, and your protec-


A Group of Dogs Bred by Mrs. H. C. Kelley tor, if need be.

As the oldest dog known in history, the greyhound is depicted on the obelisks of Egypt, and has been the companion of royalty for centuries. He, of course, combines the beauty and grace loved by the artist and for that reason we are indebted to them for the many fine portraits often seen. How often do we read in history of "the favorite hound,"- "the beloved greyhound," etc.? It is perhaps true that the greyhound admirer is not normal in his admiration, but it can usually be traced to the impression made by some beloved dog which is diametrically opposed to the one received by Dr. Hutchinson. He charges them with cruelty, saying they frequently fly at the throat of the man who deprives them of their prey. Adding insult to injury, he describes them as willing to follow any one who feeds them.

Exceptions with one's four-footed friends exist, as also they do with our fellow men. Undoubtedly dogs of the character he describes exist among all breeds, but are they not victims of environment as often as are the criminals we see in our halls of justice ? It is rarely the case a thoroughbred dog, of any breed, unless maltreated and starved will develop tendencies except those peculiar to their type, hence heterogeneous breeding has to be carefully done.

Familiar portraits of many beloved greyhounds come to my mind and I recall many instances of courage, always combined with their natural dignity. I recall instances of their extreme gentleness, their play with kittens, their devotion to each other, besides their love for their master. Courteous always in their welcome, unlike the noisy terriers, their


A Group of Mrs. Kelley's Tioronda Bred Greyhounds fidelity rivals that of their kinsman, the bull dog.

I well remember reading not long ago, a protest from a Colorado ranchman against calling a greyhound a dog, arguing that that was the lowest name applied to an undesiratle member of society and being a most inappropriate title to give to the aristocrat of the canine world-the thoroughbred greyhound!

\title{
The Conformation of the Horse
}

\author{
By GEORGE M. ROMMEL, B. S. A., Animal Husbandman, Bureau of Animal Industry, U. S. Department of Agriculture
}

CONFORMATION is important not only because it has a great effect on the selling price, but because a horse with good conformation will do more work and last longer than one with poor conformation. The points especially to be sought are as follows: Wide, open nostrils; medium-sized, clean-cut muzzle; clean-cut, open jaws; clean-cut head; straight face; wide forehead; large, clear, intelligent eyes; medium-sized, smartly carried ears, set close together; clean-cut throatlatch; clean-cut, well-muscled, long neck, smoothly joined to the shoulders; and sharp, smooth withers. The shoulders should be sloping, and should extend well into the back; the arm should be well muscled and well thrown back. The forearm should be wide and muscular, the knees wide and strong and strongly supported. The cannon should be flat and well developed, so that there is no falling away below the knee. The fetlocks should be wide and straight, the pastern of medium length, strong, and inclined at an angle of about forty-five degrees. The feet should be of good size, with large hoof heads, dense bone, well-developed frogs, and wide heels of good height. The back should be straight, broad, and well muscled, and the ribs well sprung. The loins should be straight, broad, well muscled, and closely coupled to the hind quarters; the croup wide and straight; the quarters fully developed; and the tail set high and smartly carried. The flanks should be full. The hocks should be clean cut, wide, strong, and straight, and the supporting cannons broad and flat. Further description of the hind limb practically corresponds to that of the fore limb.

The necessity of these points from the standpoint of durability is obvious on a moment's reflection. A wide, open nostril generally indicates good lung capacity and therefore good constitution. A wide forehead usually indicates brain capacity; a straight


Photo by Harris \& Ewing, Washington, D. C.
GEORGE M. ROMMEL, B. S. A.
face, docility; a full, clear eye, intelligence; an erectly carried ear, alertness. Roman noses frequently indicate strongheadedness and dished faces viciousness. A horse with a narrow nostril, Roman nose, small "pig" eye, narrow forehead, and badly placed lop ears is usually one to be suspected of being capable of all kinds of equine villainy. A thick throatlatch, and short thick neck indicate a horse which will probably be thick in the wind. Meaty withers and shoulders are seldom found with good action. A straight shoulder and pastern shows a limb predisposed to ringbones, sidebones, and other diseases, and a horse with such conformation will not wear well. Good feet are necessary, as shown by the old adage, "No foot, no horse." The development of the "middle piece"-the body-is necessary for many obvious reasons. \(A\) horse with a narrow, shallow body, low back, and weak coupling is not only a weak horse with little constitution, but a poor keeper; a fully developed back, wellsprung ribs, deep body, and closely coupled loins usually indicate a strong one. The development of the floating ribs is important, especially in a brood mare, to allow full room for the development of the digestive and reproductive organs. A full hind flank is important for the reason that a "waspwaisted" horse is usually a poor feeder and lacks stamina.

The development of the hind quarters is necessary because the greatest amount of the animal's propelling power is developed there. Not only is muscular development necessary, but the hind legs must be well shaped to endure the great strain that is exerted when pulling a load. The hocks and the legs from these joints to the pasterns should be parallel and set rather close together. Viewing the leg from the side, the back line from the point of the hock to the ground should be perpendicular. The angles of
the bones of the lower leg should form an angle at the hock with the cannon of about sixty degrees. If this angle is greater we have what is known as a straight leg, and consequently a hock predisposed to curbs. If the angle is much less a "sickle hock" results. Deflection of the hocks inward causes what are known as "cow hocks." Bad conformation in the hock joint and light development of the joint predispose to spavin, one of the most serious forms of unsoundness.

This, in a general way, covers the points to be looked for in conformation and the reasons for them. Next, we should look for quality. This is shown in the cleanness of the head, neck, and bones of the leg, by the clean-cut appearance of the tendons, the softness and fineness of the hair, and the texture of the skin. Quality is an index of the breeding of a horse and of his stamina and durability.

\section*{THE EDITOR'S TALKS}

\section*{(Continued from page 21I.)}
the silk to be chosen to accentuate some color in the room, preferably dull yellows or pastel shades of rose or green.

There is nothing more objectionable in the living-rooms of the house than a glare of electric light. The ordinary stock central fixture is usually lighted from a switchboard; all lights turn to the ceiling and an unpleasant glare results, whereas shaded drop lights in various parts of the room, with a single electric lamp for reading, serve well to light the room. There are, however, certain manufacturers who are making a specialty of getting something unusual at moderate cost in this line.

The lighting of the dining-room is usually covered in moderate priced houses by a single fixture. This is either a spreading shade, holding a cluster of bulbs and hanging by chains from the ceiling, or a combination fixture with a globe, the electric light in the center and single arms on four sides for the gas jets. Such fixtures as this latter are especially to be avoided. Side lights are at present much favored in the dining-room, particularly where candles are habitually used upon the table. The bracket side lights to be found in stock may be set at proper intervals about the room, and serve to light it attractively, particularly

\section*{73 Million Dollars in 37 Weeks!}

Ordinary Life Insurance Issued.
The New Low Cost Policy The Prudential
is the Greatest Triumph in Life Insurance!

\section*{This is the Policy the People Want.}

After eight months of unparalleled success, read what our Enthusiastic Field managers say. These are selected from hundreds of letters.
```

"The man with Prudential Rate Book gets the -C. B. Knight, Philadelphia, Pa.
** The Prudential agent is to-day invincible, and
is envied by representatives of all Compa-
nies,",
\#ies."
Kock. Our 15 Payment Life for less, than
Rock. Our 15 Payment Life for less, than
'It is our firm conviction after twenty years
experience, that the public demand is for a
guaranteed,contract such as issued by The -W. F. Bache \& Co., Boston, Mass.
" New Policy is what the people want." -Pipes \& Foehl, Pittsburg, Pa.
"New Policy appeals to smart merchant. He
buys it as he would merchandise, knowing
luys it as he would merchandise, knowing _Louis Wirth, Cincinnati,O.
" The Policy sells-and it satisfies." -Tames Perry, New York City.
"Prudential's great size, tremendous business,
absolute safety and New Policy make compe-
tition a thing of the past."
My business for first quarter of 1908 was 50%
polhan same perlod 1907.
" Best policy on the market."
R.7. Mix, New York City.
H. H. Roth, Philadelphia, Pa.
-H. B. Nelles, Los Angeles, Cal.
-7. M. Skinner, Atlanta,Ga.
-Frank Chester Mann, Boston,Mass.
"Public clearly understands the liberal guaran-
teed contract. Most insurance for the least
teed contract. Most insurance for the least -H. R. Gould, Omaha, Neb.

```
                            Age 55 - 48.98


Incorporated as a Stock Company by the State of New Jersey.
JOHN F. DRYDEN, Home Office:
President.
NEWARK, N. J.



\section*{THE HOLLISTON MILLS}

Used by the highest class decorators in the country and found superior to any other wall covering
NORWOOD, MASS.
U. S. A.

Absolutely sanitary-will not hold dust-colors are fast, lasting and match perfectly.

\author{
New York Office No. 67 Fifth Avenue SEND FOR SAMPLE BOOKS-FREE
}

\section*{SEE OUR VERY SPECIAL SUBSCRIPTION OFFER ON PAGE 22 THIS ISSUE}
where attention is given to the shades. If sconce effects can be used, and are suitable to the style of the room, they are found very decorative. The bulb may be sought in the shape of a candle and when well frosted the light is attractively diffused. Small candle screens may be attached to the bulbs, and in their color and form add materially to the beauty of the room.

\section*{CORRESPONDENCE}

\section*{ENAMEL FOR WALLS}

My house has been added to since it was originally built and part of the walls in my kitchen are plastered; on two sides of the room, however, the walls are of tongued and grooved boards. I would like to know what I can use to cover these surfaces and give them an appearance which is at least similar. I want also to use a material which will cleanse readily and will not be dark in color.

Answer: I have asked several firms manufacturing enamels, to send you sample cards or panels. Some of these are made only in the white. One comes in a variety of pale tints which are very attractive. The surface supplied by the application of this, is like porcelain, is absolutely permanent and does not crack or spot. This may be used on your ceiling, plaster walls and the wood partitions.

\section*{SELECTION OF MANTELS}

I have had much difficulty in securing mantels ready to set up in designs which are pleasing to me. Many of the brick mantels show the arched opening which in rooms where the architectural detail of the woodwork is on square lines, is to my mind very ugly. I will appreciate it if you will suggest to me where I can obtain mantels which are artistic in design.

Answer: We feel with you that it is a mistake frequently made by the builders of mantels to introduce the arch. A stock mantel should be simple in design and absolutely unobtrusive, and in this way it may be fitted agreeably into a variety of rooms. We take pleasure in asking a number of manufacturers
to send you their catalogues. If this department can be of further service in helping you in selection, we would be glad to hear from you.

\section*{FRONT DOORS FOR CRAFTSMAN HOUSE}

I have been told that it is possible to purchase doors ready made suitable for a house in which the craftsman idea is followed in its architecture. I am living in Dakota. I am so far removed from the center of things that I am unable to get any information from my architect, who is also the contractor, as to where these can be purchased. I do not like the designs he has submitted to me. I would appreciate it if you will send me the addresses of firms from whom I can purchase these doors.

Answer: We take much pleasure in sending you the requested information and would add that under the circumstances, you are very wise in deciding to purchase your front door ready to hang. These doors are well made and those of craftsman design are particularly effective. We shall be glad to hear further as to the success you may have.

\section*{WALL-PAPER SAMPLES}

Wyoming Boulevard and an Interested Reader have asked if they can be furnished with samples of wall-paper through this department.

Answer: We are particularly anxious to impress on our readers, that the service of this department includes the supplying of samples whenever requested. Much care is taken to select only such papers as seem appropriate to the rooms the writer describes. The above inquiries were not accompanied by self-addressed envelopes, therefore we are unable to send them samples before hearing further.

\section*{CURTAINING CASEMENT WINDOWS}

I am about to move into a bungalow where all the windows are casement, having small diamond panes. These windows swing in. How can I curtain them effectively?

Answer: Set a small brass rod on the upper frame of each sash of the

M. \(\mathbb{Q}\) M. PORTABLE HOUSES

Special Open Air Cottages for Tuberculosis Patients
Summer Cottages, Automobile Houses, Children's THE ORIGINAL
Summer Cottages, Automobile Houses, Children's Play Houses, Hunters' Cabins,

Photograph Gallories, Etc.
Made by automatic machinery where the wood grows. Better built and better looking than you can have constructed at home and
at much less cost. Wind and water tight. Artistic in design. Constructed on the Unit System. (Panels interchangeable.)

Houses shipped complete in every detail. Can be erected and ready for occupancy from 6 to 24 hours after arrival at destination, according to size of hous

NO NAILS,
NO STRIKES.
Everything fits. Any one can erect them.
give you a delivered price at once. Please enclose 2c stamp in your give you a delvered price at once. Patase en
inquiry for Handsome, Illustrated Cataloge.
MERSHON \& MORLEY COMPANY


400 Broadway, Saginaw, Mich.


\section*{Battling the Elements}


F
IRS T the sun and then the rain with their destructive forces soon start decayunless you've got the right paint-protection. Not protection for today, tomorrow, or even one year-But paint protection for two years, three years, five years, or three years, five years, or
even ten years. even ten years.
Lowe Brothers with 35 years of experience in paint making have solved the important problems of paint-protection. They produce a paint that by actual test stands for years if the Paint is properly applied on a surPaint is properly applied on a sur
face in fit condition to receive it. Lowe Brothers "High Standard" Liquid Paint is an economical paint -not in the price per gallon-but in the cost of covering any stipulated number of square feet, and in the length of time it will protect that surface.


That's the test of the COST of any paint. There is a Lowe Brothers Paint for every purpose. Besides "High Standard"' Liquid Paint there is: Interior Enamel for wood work and walls.
Vernicol Enamel White for fine finish and bath rooms.
Quick Hard Drying Floor Paint.
Little Blue Flag Var nish for fine house finish.


The " LITTLE BLUE FLAG", is Lowe Brothers emblem of quality.
It is on every can of paint as a guarantee of a full measure of paint-satisfaction.
Ask for Color Cards and Booklet "Attractive Homes and How to Make Them."

They are free for the asking.
THE LOWE BROTHERS COMPANY-Paintmakers-Varnishmakers
450-456 E., Third St., Dayton, Ohio
New York
Chicago
Kansas City

\section*{VARNISH}

\section*{ENAMEL}

FRENCH'S
ESTABLISHED 1844 PHILADELPHIA
U. S. A.
"RELIABILITY"
"DURABILITY"
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. TMade in Wrought Bronze and Steel.
THE STANLEY WORKS
Myrtle Street, New Britain, Conn. New York Office: 79 Chambers Street
window. Run on this your curtain material by a casing at the top. The finished curtain should extend only to the middle of the frame of the lower edge of the glass. Another way is to set a rod at the top and bottom, running the curtain by a casing on each and drawing it tautly.

LIGHTING PLANTS FOR THE COUNTRY HOME
Would you be kind enough to supply me with information in regard to the best electric or gas plant I can use at my country home? I would greatly appreciate the favor of any addresses you may forward to me.

Answer: We have sent you names of manufacturers of reliable lighting plants for the country home both of acetylene gas generators and private electrical plants. You may depend upon the reliability of any of these firms.

\section*{SUGGESTIONS FOR THE MONTH}
(Continued from page 213.)
THE GARDEN
location to get the best bloom color effect as well giving consideration to the general habits of the plants.

Petunias are ever beautiful and bloom all season. If the flowers are kept picked their bloom is almost limitless and then they are admirable for window boxes, hanging baskets or for beds.

The lawn should be kept in excellent growing condition thereby insuring a green velvety surface. If it was properly fertilized in the early spring this result can be readily attained by frequent use of the mower, the elimination of weeds, and ample watering. When it is necessary to use the hose do not imagine that a mere sprinkling will suffice; apply enough water to thoroughly wet the roots of the grass.

Keep a watch on the rose bushes for the appearance of rose bugs, caterpillars, and other insects which molest the plants. About the only reliable remedy for the rose bug and the caterpillar is picking them off by hand. Other insects appearing they can usually
be exterminated by applications of hellebore or washing the plants in a solution of tobacco water. Insects must be kept off the plants in order to get roses approaching perfection.

The dahlia is one of the royal flowers of autumn, and it is well to make several plantings of them. Supposing that a first planting was made about the middle of May, a second and third should be made at intervals of a month each.

By this process, a succession of blooms can be had from about the middle of July until frost. In September many beautiful and perfect flowers can be had. The plant is easily rooted from cuttings; from a single tuber started early in the spring a number of good plants can be secured for later blooming.

If the tops of hardy phlox clusters are now pinched out, instead of the large flower clusters early, smaller and more graceful ones can be had later, and after the blooms of the undisturbed plants have disappeared. This is the best method of securing a succession of these flowers.

\section*{GARDEN CORRESPONDENCE}
(Continued from page 214.)
the row. Run a strong wrapping twine from each tuber to the scantling. The string may be fastened at the base to a forked stick driven into the ground. I use an old gas pipe, laying it on the ground along the line of tubers. When the vine is wanted cut it off, string and all, at the base and again at the top, just above the tip. By cutting the string after the vine is down, a few feet below the top and removing it, no evidence of the remaining string is seen.

\section*{THE EUONYMUS}

I enclose a small branch of a beautifully colored shrub from one of our parks. What is it? K. T.

It is the Euonymus alatus, a native of China and Japan growing about eight feet, and spreading in form. The corky ridges or wings along the bark suggested the specific name, alatus. Unfortunately it is subjected to a mysterious
 141 Milk Street, Boston, Mass.
A. S. Bell, Arch't, New York City
"Quilt" the warmest sheathing paper



Mercer Boiler for Steam and Hot Water Heating

\title{
Our Heating Boilers and Radiators
}
are made for the home where the Architect and Owner demand uniform heat in all weather.
The efficiency of our apparatus makes this always possible.

\section*{MILLS SAFETY BOILERS}

\section*{THE H. B. SMITH CO.}

Factory, Westfield, Mass.
728 Arch St., Philadelphia
disease known as the "Japanese dieback." Without any apparent cause, one or more entire branches, often half the shrub, and sometimes the entire plant, die back.

PERENNIALS AND ANNUALS
I have a strip of ground, running north and south, 150 feet long by six feet wide, with a fence on its west border. I would like to establish an old English flower garden on it of perennials and annuals, and would be very much obliged if you could give me some advice in regard to what I could put in to make it beautiful.
P. C. L.

Your exposure is entirely an eastern one, and if unshaded by trees or buildings you have quite a list of plants to choose from. Plant in bold masses, using one kind of a plant for each mass. Plant, as a rule, the taller ones at the back but allow them to come out here and there well towards the front so as to form bays, in which plant the lower growing forms. Any good catalogue will give you the heights. All of the following should be hardy with you, unless the drainage is poor. Among the perennials use Achillea, "The Pearl," Aconitum Napellus, N. autumnale, Amsonia salicifolia, Japanese anemone, Anthemis tinctoria, columbines, Aster Nova-Anglia, A. Novi-Belgii, campanulas, Boltonias, Centaurea macrocephala, delphiniums, Dictamnus fraxinella, Echinacea purpurea, Funkias, Gaillardias, Helianthus sparsifolia, H. multiflorus plenus, Hemerocallis flava, hibiscus, crimson eye, Iberis sempervirens, Iris Germanica, I. cristata, I. pallida Dalmatica, I. pumila, I. Siberica alba and I. Orientalis, Lychnis chalcedonica f. pl., L. Flos-cuculi, L. Haageana, L. viscaria, Monarda didyma, peonies, phlox, platycodons, Veronica longifolia var. subsellis. Get a good catalogue and look up the above and choose from them. For annuals try petunia, rosey morn, Howard's star petunia, and for white, snowball, also any of the annual asters, Chrysanthemum carinatum, or C. coronarium, calliopsis, golden ray, Gypsophilla elegans, Helianthus, Orion, facobea elegans, marigold, king of the garden, Nicotinias, Rudbeckia triloba, in fact most annuals will do fairly well with a full morning's sun.

\section*{BEGINNING OF HOUSE-NUMBERING}

IN the London and Paris of a century ago ciphered houses did not exist. The coat-of-arms, the housename, or the sign-board were the only indications to guide our ancestors' wandering feet by day or dark. "Watchman, what of the night, and where the deuce am I ?" must often have been the cry of these bewildered minds. Berlin began to number houses in 1795 . Starting from the Brandenburg Gate, the Prussian ediles counted straight on to infinity, neither beginning afresh with fresh streets, nor numbering the houses by odds and evens. Vienna adopted the latter reform in 1803, and Paris followed in 1805 . The ciphered house came 100 years ago; the ciphered citizen is surely coming. Already a postal society is being formed in Vienna to suppress all names and addresses, and to deliver letters by a system of private marks and identity tickets. Our familiar addresses will look 100 years hence like the beginning of an algebraical problem, a ad our personality will be reduced-like the Government majority - to a mere expression of naughts and crosses.-The Churchman.

\section*{INSECTICIDES FOR SUCKING INSECTS}

\(B^{\mathrm{B}}\)ULLETIN 118 , of the Purdue, Ind., University Station, gives the following formulas for the best insecticides and directions for preparing them:

First-Kerosene Emulsion: This is a well-known remedy for soft bodied insects. To prepare it, dissolve one pound hard laundry soap in one gallon of water. If the water is hard, add a little sal soda to soften it. Put two gallons of kerosene in a warm place, so that it will heat without danger to about room temperature or a little warmer. When the soáp is dissolved, add the kerosene and agitate violently for five or ten minutes. This agitation is best accomplished with a small force pump with which the mixture may be churned into itself, thus ensuring a thorough emulsion. A good emulsion should be thick and creamy and of uniform consistency. No free kerosene should separate out on standing. The mixture may be diluted and used at once, or the stock solution may be kept for some time. When cold it curdles like sour milk and should be diluted with three or four times its volume of hot water, before


The broughton gelf-closing basin cocks have beEn in use for several years. many of the largest hotels and public buildings in THE UNITED STATES ARE EQUIPPED WITH THESE GOODS. ::: ::: MADE IN BRASS, NICKEL OR BILVER PLATED, AND IN SOLID BILVER-METAL. :: :; EVERY ONE WARRANTED Manufactured only by
E. Stebbins Manufacturing Co. SPRINGFIELD: MASSACHUSETTS

Works at brightwood

\section*{HIGH GRADE PRESSED METAL SASH PULLEYS}


Made with Plain Axles, Roller Bearings and Ball Bearings
Combination Groove for Chain or Cord CATALOG SENT UPON REQUEST

\section*{The American Pulley Co.}

29th and Bristol Streets PHILADELPHIA \(\therefore \quad\) PA.


THE BEST SASH CORD MADE


Ives Patent Window Stop Adjuster


Entrance to Show Room of the J. L. Mott Iron Works Columns jurnished by us
60,000 columns at an average of \(\$ 5.00\) each, or 6000 at \(\$ 50.00\) each, gives you an idea of the annual capacity of our plant.
We own the largest factory building in the world devoted exclusively to the manufacture of high grade column and porch work.
Send for catalogue P 19 of columns, or P 29 of Sun-dials Send for cat
and pedestals. HARTMANN-SANDERS COMPANY Sole Manufacturers of Koll's Patent Lock Joint Columns Elston \& Webster Aves., Chicago, Ill. Eastern Office, 1123 Broadway, N. Y. City.

The best columns for porches, pergolas or interior use.
diluting with cold water to spraying strength. The strength to use depends upon the plant to be sprayed. Use one gallon of the stock solution to from ten to twenty gallons of water.
A superior kerosene emulsion may be made by using whale-oil soap in place of the common laundry soap, since the whale-oil soap has some special insecticidal properties of its own.
Second-Whale-oil Soap: This is an excellent spray for plant-lice and is very easily prepared needing only to be dissolved. It may be applied in summer or winter. When used in winter at the strength for a dormant spray, it should be applied while hot, as it tends to jellify when cold. Used very strong while the trees are dormant, it is a good spray for the San José scale. For this purpose it should be put on late in winter, as there is less danger at that time of its injuring fruit buds, than early in the season.
For a summer spray, dissolve one pound of whale-oil soap in five gallons of water.

For use in winter when the trees are dormant, dissolve two pounds of whaleoil soap in one gallon of water.

Third - Tobacco: A decoction of tobacco made by steeping the stems is useful against plant lice. Dilute the decoction till the color of strong tea and apply as a spray. Tobacco dust worked into the ground around the tree is useful for woolly aphis.
Fourth-Pyrethrum or insect powder: This material is madefrom the powdered flowers of a plant. It is expensive and loses strength very rapidly on exposure to the air. It should be purchased only in tight packages. It may be used as a spray at the rate of one ounce to two gallons of water, or may be dusted on the infested plant. It kills by contact.

Fifth-Lime Sulphur Wash: One universal application of this spray would be of inestimable value to the horticulture of Indiana. It is the best and cheapest remedy for San José scale. It is caustic in its action, and must be used when the trees are dormant, after the leaves are off in the fall, or before the buds open in the spring. The formula is:

Fifteen pounds flowers of sulphur.
Twenty pounds stone lime.
Fifty gallons of water.
By using at first a small quantity of water, mix fifteen pounds flowers of sulphur into a thin paste. Slake twenty

In uriting to adrertisers please mention Hovse and Garden.
pounds of good clean stone lime in from five to ten gallons of hot water. If the lime is quick so that it boils violently in slaking, add the sulphur while the boiling is going on, so as to take advantage of this heat to help cook the mixture. If the lime is slow and does not slake readily, give it plenty of time and add water very slowly, so that it will not "drown" and refuse to slake entirely. In dealing with this slow-slaking lime add the sulphur after it is thoroughly slaked.

After adding the sulphur dilute to about twenty-five gallons and boil for forty-five minutes. Then dilute to fifty gallons and apply while hot. The lime sulphur wash should not be allowed to stand over night before using, especially in the concentrated solution. It will not lose all value, but it is not so good as when fresh. The wash should be strained as it goes into the spray tank. -Home and Farm.

\section*{HARDY PERENNIALS}

WELL arranged and trimly kept borders of hardy herbaceous perennials soon grow into a source of much pleasure and considerable profit to anyone who has made the raising and selling of plants his occupation. Such a collection, being a part of the stock in trade, should be well chosen and should chiefly consist of such varieties as are truly hardy, sure to do well and well known and liked by all classes of people. There are any number of kinds that will in every particular come up to these requirements.

This is the beginning of the season when the hardy border looks its brightest. Keeping the bed free of weeds, staking, tying, labeling and watering is work to be attended to at this time. Little in the way of shifting or replanting, or of propagating by division or cuttings can now be attempted. But seeds of various kinds may be sown at this time of the year. It is this one of the many ways in which to provide good stock for next year's sales, a way open to such retail florists whose lack of sufficient garden space forbids the maintenance of a hardy herbaceous border. The seeds of nearly all varieties, that may thus be raised to any advantage, germinate readily and quickly grow into sturdy little plants. All of them trans-


\(n\) writing to advertisers please mehtion horse and Garden.



\section*{Write for Free Book on Summer Furniture}

Ford \& Johnson's Fiber-Rush Furniture is made of an exceedingly tough, tenacious fiber treated by our own exclusive process. The fiber is rendered moisture-proof-heat-proof -cold-proof - capable of resisting the influence of any climate. Furniture made of Ford \& Johnson Fiber-Rush is as strong and lasting as wooden furniture, and is far more artistic. It will not injure the most delicate fabric and will not sliver, break nor crumble. It is not only the furniture for the summer home the lawn-the porch-yachts and boats-but the furniture for the home all the year.

Our book tells you how, at moderate cost, to make your home most inviting and attractive. It illustrates by photographs, artistic arrangements of Living, Dining and Bed Rooms, Reception Halls, Dens and Porches, all furnished in

\section*{Fiber-Rush Furniture}

This light, durable material lends itself to so many graceful designs that it is preferred to heavy wooden pieces. The soft green shade which is a part of the fiber itself and which it retains as long as the furniture is used, harmonizes with any color scheme, and always gives the impression of refinement and elegance. It is so easily moved that it takes most of the labor out of sweeping, dusting and house-cleaning.
We make Chairs, Rockers, Conversation Chairs, Roman Seats, Dining Tables, Library Tables, Desks, Settees, Lawn Swings, Couches and Stools.

Every piece, is sold under our Guarantee of satisfaction or money refunded. Most leading dealers sell Fiber-Rush Furniture or they can get it for you from us. If you can not buy it in the stores write us and we will send you the name of a dealer who will supply you. Address our nearest office. Ask for Book 12 .

\section*{The Ford \& Johnson Co.}

Chicaso Now York Bonton
Cincinnati, O. Atlanta, Ga.
Largest Makers of Chairs and Fine Furniture

\section*{VERY SPECIAL}

Until June 15, not later, we will accept one dollar in full payment for 6 months' subscription to

House \({ }^{\text {Gfarden }}\)
plant easily when still small. A frame or a nicely prepared bit of ground will do finely for a seed bed; or the seeds may be started in trays or boxes. An early pricking off is advisable and soon after that a planting into cold frames or the open border, with sufficient space between plants, to obviate future crowding. If that is done in good season, so as to afford sufficient time for reestablishment before winter sets in, the stock will be all the better for it in the spring.

Another way, and one now largely practiced by large and small growers, is to grow the seedlings, as also much of the young stock in this department obtained by division and from cuttings and intended to meet the demand in early spring, in pots altogether, giving them a shift from time to time and placing them in cold frames during the summer. Some kinds stay in these frames until disposed of in the spring; others are taken to warmer quarters and grown slowly along all of them, being of salable size in the early part of spring. There is no difficulty whatever in disposing of stock of this kind, firmly rooted and nicely started as it is when it comes out of the pots. It is a line of business not likely to be overdone in the near future.-Florists' Exchange.

\section*{ABSURDITIES IN STAGE SETTINGS}

PDROF. HERKOMER, R.A., recently delivered an address at the Institute of British Architects on "Scenic Art." Criticising the modern theatre, he said some new form of auditorium, with an entirely different arrangement of the seats, was badly needed, and this, he thought, could be done without too much space being taken up. The aim should be to provide seats from which the full work of actor and scenic artist could be seen by the spectators. Some people thought scenic art was antagonistic to the drama, but he held a different opinion. The real secret of that art lay in illusion. The make-up of the background should be ascarefully attended to as was the make-up of the actor; yet the audience, which howled down the slightest inconsistencies in the actor's portrait, took no notice of the inconsistencies in the scene. At present it was thought proper to have pieces of sky hanging in strips, like clothes on a
line, and to have pieces of the firmament coming together at an angle in the corner of the stage. It was strange that tradition stuck to the stage more than to any other form of art.
Still, he would not destroy tradition in that direction. The present system for footlights was bad in every way, and very inartistic. There was a strange commotion when candles had to give way to lamps, for the actors, who were not always such swells as they are to-day, regarded the stumps of the candles as their perquisites. The proscenium in all theatres was much too high, and, for many scenes, far too wide. He proposed a contracting proscenium, which would adapt itself to the particular scene which was being portrayed. He claimed for scenic art a position not inferior to any form of pictorial art, and in this connection condemned the inconsistency of flashing a " moonbeam" upon an actor at all points of the stage. He had known a case in which two actors of equal prominence were on the stage at the same time, and each had a " moon-beam."-London Standard.

DID PIUS IX. SELL THE PICTURES?

CONSIDERABLE stir has been made in the Italian newspapers by telegrams from Germany saying that in the catalogue of a sale of pictures at the Castle of Tharandt, near Dresden, are "a great number of valuable pictures taken from the Vatican collections which Pius IX. sold to Count von Suminski when the Italian troops were on the point of entering Rome." It seems that the picture-gallery of the Castle of Tharandt contains about four hundred works, among which are pictures by Bartolommeo, Raphael, Correggio, Guido Reni, Salvator Rosa, Titian, Sebastiano del Piombo, and Leonardo da Vinci. It would be interesting to know if Pius IX. really sold these pictures, which did not belong to him, but were then the property of the Holy See, and would today be Italian national property.London Post.

\section*{SUPERSTITION IN BUILDING}

OUT on the Saratoga road, about six miles west from San José, workmen are sawing and hammering in the work of constructing another turret on the Winchester mansion, which is beautifully situated on a pretty farm of 100


STARTEARLY
when building and decide upon your fireplaces. For durability and beauty select
BRICKMANTELS
Every one a work of art. Catalogue sent upon application to PHILADELPHIA \& BOSTON FACE BRICK COMPANY 165 mLK street. boston, mass.

\section*{Russwin Hardware}

\author{
For Fine Residence Work
}

Unsurpassed in Design, Finish and Durability.

\author{
Haddam Design \\ Colonial
}

Booklets of designs will be furnished on request

\title{
Russell \& Erwin Manufacturing Company
}

NEW BRITAIN, CONN.
No. 26 West Twenty-Sixth Street, New York
No. 1201 Chestnut Street, Philadelphia
University on
-
it
```

    Interior view of the First Church of Christ,
    ```
    Interior view of the First Church of Christ,
    Scientist, Boston, Mass., in which we laid
    Scientist, Boston, Mass., in which we laid
30,000 feet of Interlocking Rubber Tiling, in
30,000 feet of Interlocking Rubber Tiling, in
a solid color, to harmonize with the stone
a solid color, to harmonize with the stone
-finish.
-finish.
        Interlocking
        Interlocking
    Rubber Tiling
    Rubber Tiling
    Noiseless, non-slippery; restful to the feet,
    Noiseless, non-slippery; restful to the feet,
    anitary, extraordinarily durable. The finest
    anitary, extraordinarily durable. The finest
    floor for use in public buildings, banks, offices,
    floor for use in public buildings, banks, offices,
    theatres, hospitals, libraries, kitchens, laun
    theatres, hospitals, libraries, kitchens, laun
    dries, billiard rooms, bath rooms, stairways
    dries, billiard rooms, bath rooms, stairways
    etc., etc.
    etc., etc.
    Samples, estimates, and special designs fur-
    Samples, estimates, and special designs fur-
    nished upon application.
    nished upon application.
        Beware of infringers. Patented.
        Beware of infringers. Patented.
        Manufactured solely by
```

        Manufactured solely by
    ```

\section*{New York Belting and Packing Company, Ltd.,} 91 and 93 Chambers Street, New York City

Chicaco: 150 Lake Street.
St. Louis: 218-220 Chestnut Street. Philadelphia: ir8-i20 North 8th Street San Francisco: -Cakland: Cakland:
E. IIth Street and 3d Avenue Cal. Boston: 232 Summer Street.
Indianapolis, Ind.: 229 South Meridian St.

\section*{Baltimore: ii4 West Baltimore Street.} Buffalo: 600 Prudential Building.
Hittsburgh: 913-915 Liberty Avenue.
Spokane, Wash.: if3 S. Lincoln Street.
Sole European Depot, Anglo-American Rub ber Co., Ltd., 58 Holborn Viaduct, London, E. C.
acres, mainly set in fruit. The structure is the home of Mrs. Winchester, widow of the inventor of the Winchester rifle. "Ten years ago," says a writer in the San Francisco Examiner, "the handsome residence was apparently ready for occupation, but improvements and additions are constantly being made, for the reason, it is said, that the owner of the house believes that when it is entirely completed she will die. This superstition has resulted in the construction of a mass of domes, turrets, cupolas and towers, covering territory enough for a castle. Although no part of the structure is over two stories high, the house is large enough to shelter an army. The house stands in the midst of a large and extremely beautiful lawn. Fountains throw their spray over figures that seem almost human. Beautiful flowers grow everywhere; roses, lilies, trees, vines, pampas grass and rare plants of every description help to make a magnificent setting for the buildings, which resemble an old German castle with its surrounding strongholds. There are many buildings beside the house, and they, too, show the effects of the owner's odd belief. Summer-houses and conservatories are made with the most picturesque of pinnacles, and there are many unexpected niches where groups of statuary are hidden. Even the barns and granaries are built in L's and T's, which suggest that they were made in parts and are ready at any time to have the work continued. The first view of the house fills one with surprise. You mechanically rub your eyes to assure yourself that the number of turrets is not an illusion, they are so fantastic and dreamlike. But nearer approach reveals others and others, and still others. How it is possible to build on an already apparently finished house and preserve its artistic appearance through so many changes is a query that nobody can answer, but the fact remains that it has been done. From every point of view new towers appear, and one has to make a circuit of the building to see all of them, for every addition, of the many that have been made, has one or more separate roofs, and every roof is elongated into a tower or rounded into a dome Not every one erected is sure to remain, though. The main cupola was pulled down and rebuilt sixteen times before it pleased the taste of the owner and was allowed to stay. As fast
as new rooms are finished-and they are all made with the very latest and most modern of accessories - they are furnished with the utmost elegance and closed, to be used hardly at all. Mrs. Winchester and her niece live alone in the great residence, and its doors are closed to all but a favored few. The tap, tap, tap of the carpenters' hamners never disturbs them in their cosy and luxurious quarters, which are as far removed from the sound as if it were somebody else's house that is being built. Mrs. Winchester in appearance is attractive and scarcely beyond the prime of life. In business she is shrewd, and socially very exclusive."

\section*{VARIATIONS IN JUNIPERS}

\(\mathrm{O}^{\mathrm{V}}\)UR common red cedar, 7uniperus Virginiana, grows practically over all of our country. But its character changes according to the climate it meets with, and this is why there are some dozen or more Junipers under different names, all of which are but variations of Virginiana. It is right that they should bear different names, for those who know the red cedar of Pennsylvania, and then see its representative in New Mexico, would hardly credit that climate had caused them to appear so widely dissimilar. These remarks are suggested by having seen lately the seeds of funiperus Virginiana from Utah.

These berries are almost of the size of small marbles, and there is no wonder it passes under the name of 7uniperus Utabense. In Wisconsin there is a juniper which nurserymen sell as sabina, but it is not sabina but a dwarf form of the common juniper, \(\mathfrak{F u n i p e r u s}\) communis, and goes under the name of Funiperus prostrata. Sabina has foliage more like that of the red cedar, and one would fancy it a variety of the latter were it not that it is counted as a distinct species and from Europe.-Florists' Exchange.

\section*{THE HISPANIC SOCIETY'S LIBRARY} THE Hispanic Society's Library and Museum were opened to the public a few weeks ago. This society, organized and endowed by Mr. Archer M. Huntington, a lifelong student of Spanish art, literature, and history, has a limited membership of one hundred,


Three of the largest factories of their kind in the world and the entire time and services of thousands of skilled men working night and day are required to supply the ever-growing demand for "Standard" Porcelain Enameled Ware - the standard sanitary equipment for the modern American home.
"standard" Porcelain Enameled Plumbing Fixtures have been known and sold for over 30 years. Year by year they have gained in popular favor. Year by year the demand for them has increased. By sheer force of superiority-by the splendid sanitation it provides, by its superior beauty, by the years of perfect service it insures - "Standard" Ware has won universal recognition as the most desirable sanitary equipment in the world. Genuine "Standard" Porcelain Enameled Ware is the one sanitary ware which makes and keeps your home healthful, modern and beautiful. Equip with "Standand" Fixtures and your sanitary problem is solved for good. CAUTION-Every genuine "Standard" fixture bears the "Standard" Green and Gold Guarantee Label. Thok for this label on every fuxture you purchase, as none are genuine
without it. The "standard label gives a protection you cannot afford to be without. Write to-day for our beautifully illustrated 100-page book-Modern Bathrooms. This is the most complete book ever published on the sanitary subject. Send for itenclosing 6 c . postage and give the name of your architect or plumber, if selected.
Address Standard Sanitary mfg.cs. Dept. 40, Pittsburgh, Pa., U. S. A. Offices and Showrooms in New York: "Standard" Building, 35-37 West 31st Street.



\section*{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
47-151 Baxter Street
New York City

\title{
Home-Making \\ The New Profession \\ -an illustrated 70 -page booklet \(F R E E\). Home-study course and boọks: food, cookery, diet, health, sanitation, house planning, management, children, nursing, dressmaking, etc. For home-makers, mothers, teachers and for well-paid positions American School of Home Economics, 635 West 69th St., Chicago. III \\  CENTURY SHINGLES WILL OUTLAST THE BUILDING
}

and each member must be a specialist in some department of research allied to the general purposes of the society. The library contains nearly 50,000 volumes in various languages and relating chiefly to Spanish history and literature; while the museum is stocked with curiosities illustrating the arts and crafts of the Spaniards. Here are to be seen gold coins of the Moorish kings and specimens of Hispano-Mauresque lustreware in finer and more abundant display than can be found elsewhere, except in a few European museums. The "Revue Hispanique," a quarterly valuable to students of Spanish subjects, is published in Paris by the Hispanic Society. The work of this organization not only promotes the cause of culture, but tends to knit closer the ties connecting us with the republics toward the South.-The Dial.
"Art and Service in Wrought Iron" is the title of an attractive illustrated catalogue issued by the Anchor Post Iron Works, New York. It contains illustrations and descriptions of gates, railings, fences, enclosures for game, poultry, dog kennels and paddocks which the company have erected.

Next to the house itself the gateway is usually the most prominent feature of a country place. It gives the first impression to a visitor or guest, and should be in good taste and well made for this reason if for no other.

Any one contemplating the erecting of gateways or fences will do well to secure a copy of this catalogue.

\section*{THE GREAT ROADS OF PERU}

PERHAPS the earliest road on record is that mentioned by Herodotus as having been constructed by Cheops, the Egyptian King, in order that stones might be dragged along it for his pyramid. In the opinion of the Greek traveller the work of making the road was as great as that of building the pyramid, for it took ten years to construct, and it was composed of polished stones with figures carved on them. But this does not compare in magnitude with the highways constructed by the Peruvians, while mediæval Europe was still in a state of semi-barbarous disorganization. The two principal roads in Peru ran from Quito in the north, to

Cuzco, the capital, the one along the sandy and level strip of coast, the other along the plateau of the Andes, a region of unparalleled engineering difficulty. The length of the second has been estimated at from 1,500 to 2,000 miles. It crossed sierras buried in snow; bridged ravines with walls of solid masonry; mounted and descended precipices by staircases hewn in the solid rock; and ran in interminable galleries along the sides of intractable mountains. When rivers had to be crossed, bridges were made with ropes of stout, pliant osier, twisted to the thickness of a man's body, and stretched over the stream sometimes for a distance of two hundred feet. These cables swung side by side, and fastened with planks so as to form a footway, were drawn through holes in enormous buttresses of stone specially constructed on each bank, and were secured firmly at each end to heavy beams of timber. A railing of similar osier material gave the passenger confidence as he crossed the oscillating bridge, that sank dangerously in the middle and mounted rapidly at the sides. The great highway was twenty feet wide, and was built with flags of freestone covered with bituminous cement. It was measured out by posts set up at every league; caravansaries and magazines were stationed at convenient distances for the Peruvian soldiers on their military expeditions; and a regular postal service had been organized by which highly trained runners, relieved every five miles, could convey messages a distance of two hundred miles in twenty-four hours. The roads were kept in beautiful order, the inhabitants of a district being responsible for that portion of the highway which traversed their land. At the same time it should be remembered that there was no wheel traffic to cut up the level surface of the hard pavement. There is considerable irony in the fact that it was not till the Spaniards forcibly introduced their socalled civilization into Peru that the famous roads began to fall into disrepair. -London Standard.

Red Jacket gooseberry is the result of efforts to improve our native sorts. Given a partially shaded position and a moist soil, it thrives and bears prodigious crops of fruit, which ripen with us in the last days of July.-Florists' Exchange.

\section*{Garden \(\mathbb{C}\) erra \(\mathbb{C o t t a}\)}

\author{
Italian Pots, Flower Boxes, Vases,
} Sun-Dials, Statuary, etc.


SPECIAL DESIGNS EXECUTED


\section*{WILLIAM GALLOWAY}

32d and Walnut Streets, Philadelphia
catalogue sent upon request


VITREOUS CHINAWARE FOR THE HOME BATH-ROOM


\section*{PLATE 986-K}

T1 HE bath-room for your home should receive the most careful attention of any room in the house. Absolute sanitation is the aim of civilized people, and the sanitation of your home bath-room is your first consideration. Without sanitary fixtures this object cannot be reached, no matter how good the workmen may be who instal the bathtub, washstand or closet bowl and flush tank.

For reasons of cleanliness and durability solid white vitreous chinaware is firmly established as the nearest possible perfection in bath-room sanitary equipment. For many reasons vitreous china closets and closet flushing tanks, as above illustrated, demand your serious consideration. Being made of a solid white vitreous chinaware, they are impervious to the action of water or acids, having no seams there is no danger of warping, and the surface being a clear hard glaze baked into the body of the ware as an integral part, paint and varnish troubles are eliminated. No metal lining is needed, therefore the dangers of corrosion are not to be feared, and the cost of vitreous china fixtures does not exceed that of a closet with the usual metal-lined wooden tank.

Of the hardness of rock, simplicity of operation, ease of cleansing and beauty of lesign, vitreous china closets and closet flushing tanks are acknowledged the ideal fixtures for the home bath-room.

We are the largest manufacturers in the world of these fixtures, and will gladly send further information if you will write us.

\section*{The Trenton Potteries Company}

Main Offices and Works,
TRENTON, N. J., U. S. A.
The Canadian-Trenton Potteries Co., Ltd., ST. JOHN'S, QUEREN


Colonial Massage Cream rounds out thin
cheeks, scrawny necks, armsand shoulders It cleanses the pores of all impurities, feeds and nourishes the skin, thus assuring perfect development. With its use anyone can enjoy a clear, smooth skin and a If your druggist doesn't have it, write us. Large \(2 \frac{1}{2} \mathrm{oz}\). Jar by mail, postpaid, for 25 cents.
IRON CITY CHEMICAL COMPANY 313 Carson Street Pittsburgh, Pa

\section*{Crême Tacoma}


A Clear, Beautiful Complexion for Every User of Creme Coacoma and no bad after effects.
Creme Tacoma is a natural skin food and beautifier. It goes right into the pores-requires no massaging it nourishes the skin and stimulates natural and healthy circulation-prevents or heals chapping, chafing and sunburn and allays all irritation. It smooths out wrinkles and crow's feet-and makes dry parched skin soft and vel vety.
Every woman who cares about her complexion-and all women should care-ought to have Creme Cacoma constantly on her dressing table.
Creme Tacoma contains no grease and will not promote the growth of hair on the face.
For sale by all druggists. Price 50 c . a jar. If your druggist can't supply you, send us his name and 10 c . and we will mail you postpaid a generous trial \(\qquad\) your co this to-day for your complexion's sake.

IRON CITY CHEMICAL COMPANY
313 Carson Street
Pittsburgh, Pa .


JAPAN possesses a remarkabie timepiece. It is contained in a frame three feet wide and five feet long, representing a noonday landscape of great beauty. In the foreground, plum and cherry trees and rich plants appear in full bloom; in the rear is seen a hill, gradual in ascent, from which apparently flows a cascade, admirably imitated in crystal.
From this point, says London Iron, a thread-like stream meanders, encircling rocks and islands in its windings, and finally losing itself in a far off stretch of woodland. In a miniature sky a golden sun turns on a silver wire, striking the hours on silver gongs as it passes. Each hour is marked on the frame by a creeping tortoise, which serves the place of a hand. A bird of exquisite plumage warbles at the close of each hour, and as the song ceases, a mouse sallies forth from a neighboring grotto, and scampering over the hill to the garden, is soon lost to view.-Boston Herald.

\section*{MONUMENT TO CATHERINE DE PAIX}

AMONUMENT has been unveiled at Péronne, France, to the memory of the jeanne d'Arc of Picardy, Marie Fouré, otherwise known as Catherine de Paix.

Péronne-la-Pucelle, as the little town is now called, was besieged in 1536 by the imperial troops under the Count of Nassau, who fired no less than 1,800 projectiles into it daily. Its defenders were commanded by Marshal de Fleuranges, Comte de Dampmartin, and a Neapolitan general, Francesco Chiaramonte, and the women appear to have acted with special bravery. On August 25,1536 , a general assault was made on the town by the besieging troops and one of them, an ensign, was about to plant his banner in triumph on the wall when Marie Foure performed the great act of bravery which has immortalized her name.
She went up to the ensign in a friendly way and said that if he would hand over the flag to her she could fix it for him better than he could himself. The ensign handed it to her at once, offering her the pole end, whereupon she gave him a push with it, and overthrew him into the ditch after cracking his head. -N. Y. Tribune.```


[^0]:    In writing to advertisers please mention House and Garden.

[^1]:    Chicago: 150 Lake Street.
    ST. Lours: 218-220 Chestnut Street.
    Philadelphia: 18-120 North 8th Street.
    San Francisco:
    Oakland:
    E. IIth Street and ad Avenue $\}$ Cal.

    Boston: 232 Summer Street.
    Indianapolis, Ind. : 229 South Meridian St.

    Baltimore: ily West Baltimore Street. Buffalo: 600 Prudential Building. Yittsburgh: 913-915 Liberty Avenue.
    Spokane, Wash.: i63 S. Lincoln Street
    Sole European Depot, Anglo-American Rubber Co., Ltd., 58 Holborn Viaduct, Lbndon, E. C.

[^2]:    Ornamental Iron Works, Entrance Gates, Wire Fences, Railings. We make and erect wrought iron railings, entrance gates, lamps. wire fences. tennis tences, kennel enclosures. rose arbors,
    pergolas, etc. Details for special work furnished if desired and special care given to architects' plans. Write for catalog H and estimates.

    ANCHOR POST IRON WORKS 149 Nassau Street

[^3]:    Myrtle Street, New Britain, Conn.
    New York Office: 79 Chambers Street Original from

[^4]:    Ilustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Iminois, Prof. F. M

[^5]:    The final note of Comfort, Health and Beauty is added to your home with an equipment of snowy "Standand" Porcelain Enameled Ware in the bathroom, bedroom, kitchen and laundry.
    Write for our beautifully illustrated book, "Modern Bathrooms," showing interiors of bathrooms and giving cost of fixtures in detail. Mailed for six cents postage.
    Standard Sanitary M/fa. Co. Dept. 40, Pittsburg, Pa.

[^6]:    Chicago: iso Lake Street.
    St. Louis: 218-220 Chestnut Street.
    Philadelphia: if8-i20 North 8th Street.
    San Francisco: Oakland:
    E. IIth Street and 3d Avenue. $\}$ Cal.

    Boston: 232 Summer Street.
    Indianapolis, Ind. : 229 Snith Meridian St.

[^7]:    (Continued on page 8.)

[^8]:    *"Sheffield Plate," by Bertie Wyllie. London, George Newnes, Limited. New York, Charles Scribner's Sons. Price,
    $\$ 2.50$ net. $\$ 2.50$ net.
    "C"In English Homes." Vol. 2. Published from office of ported by Charles Scribner's Sons, New York. Price \$ry net.

