The White Berline Limousine

The Latest Production of the Most Progressive Motor Car Company of America

The White Berline marks the highest development of the modern motor car, both in beauty of body design, and merit of chassis construction. Every small detail which adds to comfort, convenience, and safety of operation has been carefully and successfully executed.

The logical combination of left-side drive with right-hand control, places the driver in the proper position to handle the car with the greatest amount of safety in traffic, a very important factor in closed cars. The left-side position of the steering wheel, together with the White Electrical Starting and Lighting System, makes it possible to reach the driving seat, start, and light the car without the necessity of stepping into the street. When the services of the chauffeur are not required, the glass partition back of the driving seat can be instantly dropped out of sight, throwing the entire interior into one compartment.

White Berline Limousines are built in Forty and Sixty horse-power models.

The White Company
CLEVELAND
Manufacturers of
Gasoline Motor Cars,
Trucks and Taxicabs.
Luxury, Beauty, Comfort and Quality without Extravagance

Hudson Closed Cars

Finest Limousine and Coupe Bodies on Chassis Designed by 48 Master Builders.

A Four—the "37," and the "54"—a Six.

If you seek beauty, comfort, quality, richness and appointment, and do not especially care for exclusiveness which is obtained only by paying a high price, these cars will appeal to you.

The bodies were designed by men who have done similar work for the builders of the most expensive cars. No expense has been spared in material or workmanship. By larger production than is possible with cars of much higher price, we are able to include all in appointment, in finish, completeness and other essentials that is to be had in any closed body automobile.

**Designed by 48 Leading Engineers**

HUDSON cars are designed and built by 48 expert engineers, at the head of which body is Howard E. Coffin, America's leading automobile designer.

These men were gathered from 97 leading factories of Europe and America and have had a hand in building more than 200,000 motor cars.

They have contributed all their experience and skill to the production of the HUDSON "37" and the "54" HUDSON. These cars are the best they know.

Just as much skill and experience is incorporated into the building of the bodies.

The imagination of the most fastidious buyer can suggest nothing in appointment, tone, character or completeness that these cars do not possess. Every thought has been anticipated. In choosing a HUDSON the only detail that you do not get which is found in other cars, is that uncertain quality which cost alone suggests but does not assure.

**Electric Self-Cranking — Electrically Lighted**

The Limousine and Coupe bodies used are identical for both chassis. The former seats seven—the latter, three passengers. Limousines are finished in imported Bedford cord, over-stuffed upholstery. The Coupe is upholstered in pebble-grain leather.

The Limousine on the "37" chassis is $3,250, and on the "54"—the six—chassis is $3,750. The Coupe on the "37" is $2,350, and on the "54" $2,950. Prices are f. o. b. Detroit. Open bodies—either Touring, Torpedo or Roadster type—are furnished at extra charge.

HUDSON MOTOR CAR COMPANY

7487 Jefferson Ave., Detroit

See the Triangle on the Radiator
SUBURBAN TRIPS WITH YOUR ELECTRIC

You Welcome Long Suburban Drives or Country Roads if Your Electric Has a Good Battery and is Equipped with the Westinghouse Motor

The pleasure of an electric extends to every day in the year. The spirit has only to move you and you find the electric carriage at hand for pleasant drives through the suburbs—for shopping, calling, the theatre.

With the Westinghouse Motor and all its up-to-date features; protection against dust and mud; ability to take hills, without undue drain upon batteries; strength and power combined with comparatively light weight; you can absolutely depend upon the electric in all kinds of weather and upon all kinds of roads.

Westinghouse Motor equipped electric trucks and delivery wagons save their cost in a few months and give the best possible service.

We will be glad to give you any special information about electric vehicles for any purpose upon request. The names of all electrics equipped with Westinghouse Motors may be had for a post card.

Westinghouse Electric & Manufacturing Company
Dept. M Y, East Pittsburgh, Penna.

The publishers of Suburban Life Magazine take pleasure in announcing that a recent postal-card canvas of subscribers showed that 47 per cent either owned an automobile or intended to purchase one in the near future.

To this fact is probably due the leading position held by this magazine among the monthly periodicals carrying any considerable amount of automobile business. Tabulated figures showing the relative amount of advertising carried by all the leading magazines during the year 1911 placed Suburban Life Magazine first in the volume of Automobile Accessory business; second in the volume of Automobile Tire business, and fifth in the volume of strictly Automobile Vehicle business. This is a record of which we are justly proud.
**The Month's Work**

**In the Flower Garden**

CLEAN up the borders and beds this month and cut down all the dead or dying tops from the annuals and perennials.

Mulch the rhododendrons and azaleas with maple or oak leaves, and secure a supply of pine, spruce, or other branches to put over the rhododendrons for protection from the winter’s sun.

Bulb beds and borders should be planned, made, and planted this month, to produce flowers early next spring.

Fallen leaves make good mulching for the protection of bulb and perennial beds and borders. Oak, maple, and chestnut leaves are particularly desirable for this purpose. They are also good for banking coldframes, hotbeds, and pits. Any residue of leaves can be placed in piles or in holes in the ground to rot, as this process produces leaf-mold, which is an excellent material for potting-soils.

Seeds or perennials sown in the summer should have made good plants by this time. They may be planted out now where they are to bloom next spring, or transplanted to other frames, if crowded.

After the first killing frosts, dig up the caladium bulbs, dry them, remove the tops, and store in a cool place. Dahlia and cannas need the same treatment, and will keep nicely in store in a cool place. Geraniums to be kept over until next spring should be heavily cut back and potted, or they may be dug up, the soil shaken from the roots, which is an excellent material for potting-soils.

In the Vegetable Garden

CLEAN up the garden at once! Clean each piece of ground as fast as the crops are removed. All stumps and stones must be removed, and it is advisable to burn them, so that they will not harbor injurious insects that would help to destroy next season’s crop.

If winter crops, such as rye, have not been planted yet, it is advisable to do so now. Planted in the spring, they must be planted two inches apart in the garden. In the spring, they must be planted an extra coat of whitewash before cold weather opens.

Cutworms hibernate through the winter in little oval burrows three or four inches under the surface of the ground. Loosening up the soil beneath the root of the plant, the freezing and thawing of the loosened soil will produce the same result. Corn ear worm, or maggot, is mastered by the same process.

Fall spading will kill the familiar white grub, as exposure is deadly to them, even though the freezing is not fatal.

Cabbage stumps, left in the ground, are excellent harbors for all the cabbage-worms and haphazard bugs. The squash-bugs and striped cucumber-beetles will live over the winter in the shelter of the vines; therefore clean up everything in the garden and burn it.

Squash-bugs can be exterminated in great quantities, in the autumn, by laying boards or shingles about the garden, under which the above pests will seek shelter during the night. Brush them into a pan having a little kerosene in the bottom.

Clean up the asparagus beds, as advised last month, if they have been neglected.

Asparagus can be planted at this time, as well as in the spring. It likes a warm soil and a sunny situation. Nothing is so effective as a mulching of good manure to both new and old beds.

In the Fruit Garden

It is not too late to set out some fruits in the orchard, except, perhaps, in the extreme north, providing the ground is well drained. Stone fruits, like peaches, plums, apricots, and cherries, should be set out in the spring.

Harvesting the fruit of the apples, pears, and quinces is the one job in the orchard this month. The fruits should be handled with great care, just as if they were eggs; otherwise the slightest bruise will offset the keeping qualities of the products.

If some of the fruit be packed in dry oats or cork dust, it will keep nicely for spring use. Do not, however, use pine sawdust, otherwise the fruit will taste of it.

You can propagate blackberries now by root-cuttings. Select roots about the size of a lead pencil, and cut them into pieces two inches long; then pack them in sand in shallow boxes and bury them in a well-drained place in the garden. In the spring, they must be planted in the garden at least two inches deep.

Also make cuttings of gooseberries and currants, about three or four inches long, and plant them two inches apart in the garden. Set the cuttings very firmly in the ground, and just deep enough so that the top eye will be even with the top of the soil.

In most localities apples, pears, currants, and gooseberries can be safely planted in the fall, providing, however, that they are fully matured. In most fruits do better when planted in the spring.

In the Greenhouse

BULBS should be planted at once for next spring’s flowers. Plant them early, as they will require all the time, now, to enable them to make substantial root-growth, which is so very necessary.

Cyclamen, showing their buds in the early part of this month will produce beautiful flowers for Christmas, provided they are subjected to a night temperature of sixty degrees. Watering, however, must be done with great care. Just a little too much, or a little too shy, or allowing the crown of the bulb to become soaked, means disaster and ruin.

The beautiful begonia Gloire de Lorraine should now be growing rapidly, and at this stage the plants must not be syringed. They should be protected from the direct sunlight by a light shade, but they will require an airy and light place in which to develop to perfection.

Shape the plants with stakes, to produce well-formed growths that are compact.

The poinsettia is the most desirable plant for Christmas decoration, and it must be protected against “drawing” by being grown close to the glass. Increase the temperature when the colored bracts begin to appear. This fine plant requires a warm place, like the tropics, and, to help it along, it should be encouraged with applications of manure-water on frequent occasions.

Secure a few rhododendrons, mollis and Ghent azaleas, lilacs, Deutzia gracilis, and forsythias or golden bells, for forcing purposes. They amply repay you the trouble, and should be potted as soon as they are received.

In the Poultry Yard

ALL repairs and winter arrangements should be completed before the end of the month, and it won’t do any harm to give the interior of the coops an extra coat of whitewash before cold weather opens.

Be sure that the pullets that are expected to lay this winter are placed in winter quarters early. Let them get used to their new surroundings before they start to lay. After-hatched chicks are due to start laying this month.

Make it easy for the new layers to find the nest in and be sure there is ample nest-room for all. If you have added to the total number of your chickens since spring, be sure there is plenty of perch-room for them in your houses.

Be sure to arrange for some green food during the winter months. An article on another page tells of one way to provide it.
Quality comes first in Sargent Hardware. The mechanism is designed for strength and perfect action. The workmanship is of the accurate kind that considers every detail.

Successful architects appreciate the splendid selection the Sargent line affords. It includes the exact designs that best fit in with each architectural and decorative scheme.

Shall we send you a copy of our Book of Designs? We also have a special book of Colonial Designs.

SARGENT & COMPANY, 152 Leonard Street, New York
THE rapid growth of our cities has so encroached on the suburbs that they in turn have crept gradually farther with this thought in view, and as a result today the term "Countryside" more nearly represents the commuter's territory.

The call of the country is becoming increasingly insistent. Thousands of families move yearly from our big cities into the suburban districts. As the nearby suburban towns become more populous, they in turn extend their boundaries, until we have a "Countryside" peopled, for the most part, by city-bred men and women, many of them enjoying for the first time the pleasure of outdoor life and the freedom of a detached house.

The business man with a ten-acre place is a more frequent proposition, and, in many instances, the ten acres not only provide a beautiful home, but yield a profit on the investment, veritably an anchor to the Woodward. An increasing number of city men are annually buying farms of varying acreage, some for pleasure and others with hope of ultimate profit, but all in the desire to get back to nature and own for themselves land which shall be reckoned in bulk, and not by the front foot. All this has brought about a new condition of things, even within the life of this magazine, for it is obvious that nothing which stands still can progress, and this is particularly true of any magazine which represents a developing idea.

Suburban Life for 1913

WE do not promise you a new magazine for 1913, but we do promise you a magazine which will broaden into the field of the "Countryside" and be fully abreast of the great movement which we have just described.

For the past eight months we have been planning the editorial contents for next year with this thought in view, and we are now ready to announce that we have obtained some exceptionally valuable material.

A Farm Story

COMMENCING with the January issue, we shall begin the publication of a serial called "The Story of an American Farm." This recounts the experience of a man of the great movement which we have just described. His experiment was a success. A very clever story is woven through the chapters, and, best of all, the characters are real men and women. This story will run through the twelve issues of 1913.

Practical Farming Articles

IN line with the broader policy of the magazine, we can now promise articles from the following well-known writers:
- Geo. H. Dacy, an authority on live-stock management and general farm subjects;
- W. H. Jenkins, an authority in the field of agricultural journalism, who has made interesting experiments in the growth of alfalfa; Sarah Savage Multer, well known as an investigator of insect pests; Chas. C. Casey, who will write on the scientific management of the country places and the business of farming; Jos. H. Sperry, expert horticulturist, whose specialty is the greenhouse; M. Roberts Conover, a facile writer on general suburban and country-life subjects, and who draws from his own practical experience; H. V. Tornmohlen, who has long made a study of poultry-raising and the developing of fine breeds; Dr. Leonard Keene Hirschberg, who will cover the field of fruit-raising and live-stock in a practical and pleasing way.

Farms of Business Men

IN addition to the articles above enumerated, we have in preparation a series of separate articles on "Farms of Business Men." This will tell the farm experiences of men well known in business and professional life, many of whom originally bought their farms with no thought in view other than that of pleasure, and have found, to their surprise, that both pleasure and profit were possible. This series also includes experiences of men who are employees, and have invested their savings in small farms within commuting distance of their places of business. Each has an interesting story to tell.

House-Building and Furnishing

IN this field, in which SUBURBAN LIFE has come to be looked upon as an authority, we shall continue the high standard set for ourselves by the house-building issues of 1912. We are now planning to have at least four issues definitely devoted to house-building and house-furnishing. These numbers will be fully abreast of the times in portraying the newest things which have developed during the year both in building and furnishing, including a series of articles on "Period Furnishings."
While sketches in color are sufficient for the trained decorator, the layman must also see actual examples of the furniture in order to get a definite and adequate idea of how the room will look when completed.

In the Oak Room on the Second Floor of the new store of W. & J. Sloane at Fifth Avenue and 47th Street, are displayed models of the best furniture made in England in the reigns of James I, Charles I, Charles II, James II, William and Mary, Anne.

Many of these models are the actual handiwork of Seventeenth and Eighteenth Century makers. Many are modern reproductions equal in style and finish, and superior in construction. All have marked individuality.

**W. & J. SLOANE**

**FURNITURE AND DECORATIONS**

Fifth Avenue and Forty-seventh Street

New York
The Contents for
October, 1912

Arthur Tomalin, Managing Editor

Page

Cover Design
Photograph by Thomas E. Matt & Son

The Month's Work 177

Contents Design
Photograph by J. Horace McFarland Co.

Frontispiece—A Beautiful Home Interior 182

Leaded and Stained Glass in the Home
Harold Donaldson Eberlein 183

Heating the Country House Properly
Joseph F. McGiniry 186

Practical Decoration for the Home Interior
Garrett Winslow 187

How to Choose Light Fixtures
Robert H. VanCourt 189

The Return of the Painted Mantel
Loring Eliot Duncan 198

What Our Friends Have Warned Us About
Building
Agnes Atwood 191

Fixing Up the Attic
Mary W. Mount 193

The Country Woman and the Electric Motor-Car
Mrs. A. Sherman Hitchcock 195

Tramping in the New York City District
Frances Cheney Dawson 197

An Autumn Day (Full-page picture)
Photograph by Eugene J. Hall 198

The Problem of "New Thought"
Margaret Woodward 199

The Two Veterans (Full-page picture)
Photograph by George R. King 200

Alfalfa for the Country Place
W. H. Jenkins 201

Look Out for the Tree Borer!
Sara Savage Miller 202

“The Garden Glows With Dahlias Large and New”
(Full-page picture) 204

The Human Pedigree of Flowers and Trees
Harriett Wilbur 205

How We Built a Small Greenhouse and What We
Grew in It
Joseph H. Sperry 206

Flowers to be Eaten
A. Tegner 207

Where Questions Are Answered
208

The Flowers That Grew on the Sand-Dunes
Kate Hudson 213

A Natural Support for Fruit-Tree Limbs
Tobias H. Rogers 214

A Home-Made Wine
Katharine Girling 215

A Novel Hanging Basket
W. B. K. 216

How Philoflora Made a Coldframe
Jennie Bard Dupla 220

The Suburban Library
Page
George E. Brown 224
M. Roberts Conover 225
Elisabeth Gregg 226
Kate Hudson 230
L. D. Stearns 233
M. H. J. 233
Harriet Woodward Clark 234
Elisabeth Gregg 236
H. V. Tormohlen 237

For Outdoor Sleepers

An October Idyl

How to Start Hard-Wooded Plants

GREEN FOOD—A Necessity for the Laying Hen
By Harold Donaldson Eberlein

[Editor's Note.—This article has to do largely with, and is from the viewpoint of the advocates of what may briefly be termed the Continental School of Stained Glass Art. A second article from the viewpoint of the American School, and describing and illustrating its achievements, will appear in an early issue.]

As the principal beauties, and countenance of Architecture, consist in outward ornament of lights, so the parts are ever opposite to the eyes of the beholder, taking more delight in the beauty thereof, being cunningly wrought, than in any other garnishing within the same.” So wrote old Walter Gedde at the beginning of his “Booke of Sundry Draughtes, Principally serving for Glassers: And not Inpermint for Plasterers and Gardiners: besides sundry other professions”—a most valuable store of leaded glass patterns, accompanied with a treatise on the preparation of “cullours” for painting on glass, published in London at the “signe of the Faulcon,” in 1615, and couched in the quaintest of terms.

Walter Gedde was fully alive to the paramount architectural importance of the window. He knew—as some of us moderns appear not to know, judging by our performances—that a “window is not merely a yawning hole in the wall.” He knew that it is a part of the room, and he knew, too, that on the glazing depends the character and effect of the window, whether viewed from inside or from without.

Fenestration so determines the exterior appearance of a building that we may not disregard the arrangement of the windows; but, alongside of fenestration, and of equal importance in fixing the aspect, is the glazing. No better proof of the truth of this latter statement is needed than a glance at a Georgian house from whose windows the many-paned and wide-barred sashes have been removed, and replaced by “the dreadful vacancy of sheets of plate glass.”

The art of leaded and stained glass is not independent of, but accessory to, the dominant art of architecture; it is, however, one of the noblest and most virile forms of decorative art. Being subservient to architectural requirements, it has, of course, its limitations; but these may be a source of strength, rather than of weakness. In considering the use of stained and leaded glass in the house-building of today, it is unnecessary to specify these limitations. Suffice it to say that, in houses of certain architectural types, it is not only becoming but even needful, in order to get the best artistic results, while in others it would be manifestly out of place.

To quote only two instances: In houses of Georgian or Dutch Colonial type, such glass would be grotesque and incongruous; in half-timbered Elizabethan dwellings, in Jacobean manors of brick or stone, in modern English houses, or in those that follow some of the Continental styles that have flourished since the Renaissance, it is eminently desirable. Except in the rarest possible instances, and then subject to the utmost restraint, leaded glass has no place in Georgian architecture save in the fan-lights over doors and in the glazed panels at each side, features that came into vogue when the Adam influence reigned supreme.

Without for a moment impeaching the claims of Georgian, or so-called Colonial, architecture to high esteem, as peculiarly suited to American conditions and feeling, a type adapted to our needs from a worthy English model at the most impressive period of our Colonial growth, it is but fair to say that there is no reason why the domestic architecture of the country should universally conform to a single style, however excellent it be. There is room enough for all styles that are good, when used with discretion, and in places where they are in keeping, and one notes with
pleasure a welcome increase in the number of dwellings patterned after admirable examples built in the days of the Tudors or Stuarts, or inspired by the creations of Italian or Frenchman, German or Fleming, and adjusted to existing needs. It is for these houses, savoring as they do of medieval traditions, that leaded and stained glass—the product of an art essentially medieval in its origin and best development—is fitting, and oftentimes positively indispensable, to give the final sense of finish.

Before going further, let us understand precisely what we mean by the terms “leaded” and “stained” glass. By “leaded glass” is understood that system of glazing wherein all the pieces of glass in a window, whether set in simple geometric figures or arranged in more elaborate pattern, are joined together and held in place by grooved strips of lead, or lead-lines, as they are called. By “stained glass” is to be understood, strictly speaking, a window or panel composed of bits of colored glasses put together with strips of lead; not a picture painted on glass with different-hued pigments. Details of the design are traced in with brown shading, which is then burnt or fused into the glass in a kiln. “Stained glass,” however, ordinarily used together from very early days. While interesting and richly varied windows can be made of leaded glass without any colored enrichment, stained and painted cartoons, roundels and quarries, are often added for their “special glory of illuminated color.”

A prejudice undeniably exists against the domestic use of stained glass, and because of this prejudice—needless, it is true, but nevertheless existent—hundreds of people, well able to afford the luxury, deprive themselves of this source of lasting pleasure and satisfaction. The prejudice is twofold in its origin. In the first place, there seems to be a deep-rooted feeling that stained glass is essentially ecclesiastical—which it is not—and that, if used at all, it is necessary to run to the utmost abominations in opalescent horrors to escape far enough from the shadow of ecclesiasticism.

In the second place, a great many people associate domestic stained glass with the “pink, purple and sauterne” monstrosities with which misguided builders in the early '80's disfigured the windows of the houses they built, a
species of vitreous ornamentation that has now descended to barber-shops and beer saloons in obscure country districts. This sort of decoration was so offensive that the residuum of hate that still lingers is scarcely to be wondered at. The great pity is that so many, content within their wall of prejudice, never try to look over it, and inform themselves of the real resources of legitimate embellishment at their disposal, and so the matter is passed by with miscellaneous indifference.

In certain positions, nothing can serve more to enrich an interior than the wealth of color obtainable from a stained glass window; it is a perfectly allowable bit of gorgeousness, no matter how severely plain the rest of the apartment may be. Our ordinary surroundings, for the most part, are singularly lacking in robust, virile color—this lack is a real loss to us in more ways than one—and windows afford an excellent chance to supply some of the chromatic deficiency without disturbing our timid, conventional sense of propriety. With a proper architectural setting, a good stained-glass window diffuses an opulent charm which few are insensible to. The living, vibrant color is ever fresh, and the figures are quick with tireless spirit. A window either wholly or partly filled with worthy glass will always arrest attention and supply the roving mind with food for thought.

The degree of ornamentation in stained and leaded glass is widely varied. A window may be entirely filled with stained or painted glass, or the color may be confined to cartoons, rounds, or even scattered quarries. Again, leaded designs without any color, and wholly dependent on the leadings for expression, are often extremely effective, especially when the lines of the object depicted are few, bold, and rich in suggestion, as, for instance, the sails of windmills or ships, the hulls of boats or the waves of the sea. Last of all, the leading may be confined to geometrical patterns of much or little elaboration, as occasion requires.

When the leading is geometrical, the simplest form of glazing is the easiest and thriftiest for the cutter, as well as the most straight-forward for the glazier, is to set together parallel-sided pieces of glass in a lead lattice. These little square or lozenge-shaped panes, which were used from the very first, were called "quarries," a name derived from the French carre or carres, meaning a four-sided figure, or else from the

As to the cost of windows of leaded glass, or even of leaded glass adorned with painted and stained cartoons and heraldic devices, they are not prohibitive in price even for people of moderate means. In a house costing $15,000, leaded glass in some of the rooms could not be counted a piece of unwarrantable extravagance. When we consider how much character the windows impart to the whole edifice, surely it is worth while to spend something upon them to make them as comely as possible. Of course, the degree of elaboration in the pattern will govern the cost: the more leading and cutting, the higher the price.

When cartoons of either varicolored or monotint glass are added, or when some of the quarries are decorated, the cost increases materially, although not to the extent that some people imagine, and not beyond the reach of a moderate income. For the cost of stained and painted glass it is impossible to give any general estimate, and it would be misleading to attempt to do so. Here the relation between dollars and square feet ends; the value of such work can be gauged only by the design and the quality of craftsmanship bestowed upon its execution. The same remark applies equally in the case of windows composed wholly of stained glass. Like good pictures, good windows are worth their price; but here again popular notions as to excessive cost are often erroneous. Like pictures, too, windows can be put in place at any time. They are worth saving up for and acquiring gradually.

The placing of leaded or stained windows must be determined by the exigencies of each particular case, but some suggestions can be made on general principles. To begin with, if there is an obnoxious view to be blocked out, the logical thing to do is to put in either a stained, or else a "roundel" or "bull's-eye" window. Dining-rooms, libraries, and halls are also particularly appropriate places for leaded glass windows, which may or may not be enriched with color, just as fancy dictates. If the dash of color or the quaint device is added, there is still plenty of plain glass to see through. Oftentimes, in libraries and halls there are windows that lend themselves especially to a stained-glass treatment.

When the leading is geometrical, the simplest form of glazing is the easiest and thriftiest for the cutter, as well as the most straight-forward for the glazier, is to set together parallel-sided pieces of glass in a lead lattice. These little square
THE home-builder and owner has many important questions to decide, but there is none more important than the problem of heating the house. The heating plant must be worked out along the proper lines to secure correct results, and results are important when the thermometer is at the zero point. Home comfort depends upon the correct solution of the heating problem. Everything about the house is really secondary to the heat. The heat must amble, readily obtained, and easily maintained. Clean lines must be considered, health must be looked after, and, finally, it must be economical.

There is no rule that can successfully be applied to all houses, as each house forms its own individual problem, and the heating plant must be especially designed for each particular house. The conditions must be considered that must be considered in designing the plant—the climate of the country in which the house is located, the situation of the house as regards its relation with other buildings, the points of the compass, the nature of the building material, its exposures, and the size and arrangement of the rooms. One would say that the heating problem is a difficult one, but such is not the case. A house of any given size may be thoroughly and economically heated, if the heating apparatus is properly designed by capable parties. Heating has been practically reduced to a science, and all conditions can be met with our modern heating methods.

Practically speaking there are but three kinds of heat, and from these three we find many additions and changes so that we have scores of heating systems.

THE most generally known method of heating is by hot air. This method has been in use for a number of years and has been used with a degree of success. There are many points to be scored against hot air, which probably are not the fault of the method. Hot air can be made a satisfactory heat and deserves a better place in the public minds than it has occupied in recent years. This method brings the heat-making apparatus and the radiator, or air-heater, and with the system of pipes conducts the heat to the separate rooms.

The manufacturing plant is called a furnace, and the construction of it is such that when a line is built in the central portion, or better known as the fire-box, it gives off the heat to the air which is in the chamber that surrounds the fire-box. The air thus heated becomes lighter in weight and immediately rises. The air is brought to this chamber from an opening at the outside of the building, and as it is heated it rises through the pipes to the several rooms; thus the air that was brought from the outside is made to act as the heating agent.

Now, here is where the science comes in: The outlets to each room must have sufficient area to admit enough air to the room to heat it thoroughly, and the pipe which conducts the heat must be sufficiently large to supply this opening with all the air that it requires, and, likewise, the furnace must have ample air-space to enable it to furnish the several pipes with all the heated air that they require.

Then again, the flue or chimney must be a good one, as this is a most vital point not only in hot-air, but in all the methods later described. It is better to spend a few extra dollars on the chimney at the start than to spend it later on a sick heating system.

With these items well taken care of, the question of cost now arises. We often hear that hot-air heat costs less to install than the other methods. This is probably true of many hot-air systems, but if the plant is properly installed the cost is brought close up to the other methods, and good heating results can be obtained only from a well-designed plant. Too much care cannot be taken, and it is no more than proper to advise against the installation of the low-priced hot-air system. If the apparatus is well constructed, the chance for dust and germs to come into the rooms is diminished. As for fuel economy, little can be said, as a hot-air system is much more susceptible to the atmospheric changes than other methods of heating.

STEAM heating is the method that is today in most general use, and it has been used with much success in the modern dwelling. There are many things that can be said in favor of this method. The manufacturing plant, or the manufactory, of the plant is called a boiler and the heating medium is obtained by converting water into steam, and generating a low pressure, generally about two pounds. This steam is conveyed through pipes to radiators which are placed in the several rooms. Each radiator has a valve for opening or closing the supply of steam, and is also provided with an air-valve which allows the air to escape from the radiator, so that the steam may enter. The air does not leave the radiator of its own accord, but is forced out by the steam. These small air-valves are so constructed that just as soon as the air has been expelled and the steam comes in contact with them, a small part of their mechanism is expanded by the heat and the air-valve is closed so that the steam cannot escape.

Steam, as it comes into contact with the iron of the radiators, gives up its heat to the iron, and the iron in turn radiates this heat to the air in the room. When the steam gives up its heat, it immediately condenses into water, and drops to the bottom of the radiator, finally flowing back to the boiler in the basement. This leads us to one other point of water which condenses when this water of condensation would not be forced out of the air-valves the same as is the air. The air-valve is just provided for such conditions. Steam has a tendency to rise, and it is not possible that any water which accumulates in the air-valve or the radiator, it causes the float to rise and again close the air-valve so that the water could not be injected into the room. These air-valves are important factors in the successful working of any steam system.

There are two kinds of steam-heating systems. One is called the one-pipe system and the other the two-pipe system. The one-pipe system is the one most commonly used. By one-pipe system is meant that the steam in going to the radiators is passed through the same pipe that the water of condensation flows back through to the boiler. This is quite practical, still it does not seem reasonable that the steam should flow in one direction while the water flows in the opposite direction in the same pipe. This becomes much simpler when you consider that a cubic inch of water becomes a cubic inch of steam its temperature is raised above 212°, and likewise a cubic foot of steam would become but a cubic inch of water condensed. The pipes in the system are so graded that the water falls to the bottoms of the pipe while the steam, being lighter, is crowding itself to the top of the pipe.

In the two-pipe system the water is passed to the boiler through an extra pipe. It is not so well adapted for use in residences as it is for larger buildings. The pipes in the steam system are very small as compared with those used in the hot-air system, and can be readily concealed in the partitions so that there could be no objection to their appearance in the rooms. The radiators in this style of heating are small and do not take up much floor-space. They can be decorated in harmony with the rest of the room, and become an adornment rather than an objection. There is not the slightest opportunity for dust to be conducted into the rooms with this method of heating, and for economy, the correct regulation of the steam pressure makes this a very desirable heating arrangement. Dampmer regulation is extremely important, and too much care cannot be taken to see that the automatic regulator which is furnished with all low-pressure steam boilers. These boilers are an improvement, and so well adapted for this style of heating that, in case of carelessness, should an excessive steam pressure be generated, proper vent is given and the steam is exhausted in the basement.

Next to the hot-air system the one-pipe steam method is the least expensive at installation. In the use of fuel it is quite economical, and, when one is looking for a moderate cost and still a satisfactory heat, low-pressure steam is an excellent selection. The chief drawback to the low-pressure steam system is the air in the radiators and the regulations. These drawbacks have been recognized by the modern fitters with the result that we have seen the advent of great improvements in the question of air-venting and of automatic regulation. There are at present several well-designed heat-regulators which can be adjusted to any heating-system and so arranged that the temperature of the living-room will operate the dampers of the heater so that a given temperature is maintained at all times.

HOT-WATER heating has been a very successful method, and has always been closely identified with the hot-air system. They are vastly different. The reason of their close identity probably comes from the fact that the same-style boiler can be used and the same piping is employed. Some change is necessary in the radiators and other fittings, but in certain respects the materials used are almost the same. In the hot-water system the whole plant is filled with water up to the highest radiator in the house, and the system must always be kept filled to secure proper results.

The water, after it has been heated, rises to the different radiators through the house and there gives off its heat the same as was the case with the steam. The water in the system is generally figuring to produce the boiling point at 180°. The radiators will naturally have to be larger than the steam plant, there being two or more pipes in each radiator instead of one. As you cannot have steam until water reaches the boiling point, it can be easily understood why larger radiators are necessary for this style of heating. The radiators are of slightly different construction so as to allow for the free circulation of the heated water. All air must be removed from the radiators, the same as in the steam system, but in this case it is removed by the air-valves, a positive valve which must be opened and closed by hand. This process, however, does not often...
Furthermore, it is not a difficult matter if some sort of a plan is worked out first, and one room taken at a time, instead of tearing up the whole house and inconveniencing the family during the rejuvenating period. Some general plan should first be outlined very carefully, giving consideration to the new colors to be used on such important features as the walls and woodwork, having at the same time some general idea of the changes desired in the furnishings. This general plan of redecoration for the important surfaces will prove a wonderful guide in working out the little details which will come up from time to time. We do not realize how much some of the surfaces are worn, how badly the wall-papers have faded, how much the floors have been scrubbed, until all of the furnishings have been taken out of the room. It is then that a general survey can be taken and more of the details worked out. What are we going to do with this worn surface? How can we overcome the badly marred appearance of that surface? These are all questions which will be coming up and which, after one really gets into the work, will be found very easy to overcome. Let us take up the treatment for the different surfaces to be refinished.

DON'T BE AFRAID OF THE WALLS

Just because the walls happen to be the most important surface to be redecorated in the room, and because they are in a badly worn and faded condition, let us not give up hope at the start. There are so many different ways of finishing walls, so many attractive shades to be had, that this is one of the most interesting features of the work. Its success, too, means so much in getting a satisfactory final result. Of course, there is a dark spot where every picture hung, as well as a stronger wall-color back of all pieces of furniture that have been standing in the same place for any length of time. Wall-paper cleaners won't do. The color has badly faded. Let us
Just a Little Occasional Refurnishing will Keep an Attractive Room Always Attractive

for such decoration. Many different kinds of effects are possible in decoration of this kind. A simple little stencil design around the room at the ceiling corners gives an attractive effect, and does not in any way interfere with the pictures. It is, of course, possible to apply an all-over pattern by stenciling, as well as attractive striping. Such effects, of course, require a little more time. If the ceiling is unusually high and a lower effect is desired, this can be very easily obtained by wall divisions, either with a wainscoting or with a drop-ceiling, both of which can be obtained by means of stenciling without any additions to the woodwork.

In some of the chambers, it may be desirable to use a less expensive wall-finish. In such cases, some of the best water paints can be selected. These paints cover well, and are quickly applied when a wide wall-brush is used. With the wall effect completed, we can turn our attention to the woodwork.

get after this wall with the determination to make it of such a character that it will not fade around the pictures, and that it can be cleaned with soap and water.

This is going to be "Do-it-yourself" decoration, and so wall-paper is out of the question. Everyone, however, can wield a brush, and so paint is the thing to use. Water paints are not to be considered in this case, because here we want a finish that is washable and durable. There are a number of satisfactory flat oil paints which will produce these effects. The paints are made in a number of attractive colors, and color cards can be obtained from the local dealer. Finishes of this kind have been very frequently applied directly over the wall-paper with good results. It is, of course, important that the wall-paper be fastened firmly to the wall when a material of this kind is used over it. It is better, however, to remove the wall-paper, and this is an operation which can very easily be accomplished. A very wide wall-brush should be used, and either hot paste or hot water applied to the wall-paper. This very shortly softens the paste, and the paper can be scraped off easily with a putty knife or a flat piece of metal. It is well to wash off the wall with clear water after the wall-paper has been removed, and before applying the first coat of wall-finish. Two coats for the darker colors and three coats for the lighter colors will give very good results, the first coat being mixed half-and-half with a sizing specially made for the purpose. A five-inch wall-brush will be found very satisfactory for applying these flat paints, and it is really surprising how quickly one can go over an entire wall.

While plain wall effects are most desired, these days, one would hardly wish to have the entire house finished with plain flat tints. It is possible nowadays to get most attractive stencils, and a flat oil finish is just the kind of wall for such decoration. Many different kinds of effects are possible in decoration of this kind. A simple little stencil design around the room at the ceiling corners gives an attractive effect, and does not in any way interfere with the pictures. It is, of course, possible to apply an all-over pattern by stenciling, as well as attractive striping. Such effects, of course, require a little more time. If the ceiling is unusually high and a lower effect is desired, this can be very easily obtained by wall divisions, either with a wainscoting or with a drop-ceiling, both of which can be obtained by means of stenciling without any additions to the woodwork.

In some of the chambers, it may be desirable to use a less expensive wall-finish. In such cases, some of the best water paints can be selected. These paints cover well, and are quickly applied when a wide wall-brush is used. With the wall effect completed, we can turn our attention to the woodwork.

Just because the woodwork may be finished in an ugly natural yellowish tone, is no reason for discouragement. In fact, when changes wrought are of a radical nature, one gets much more satisfaction out of the final results. Yellowish natural woodwork can be satisfactorily repaired after this wall with the determination to make it of such a character that it will not fade around the pictures, and that it can be cleaned with soap and water.

This is going to be "Do-it-yourself" decoration, and so wall-paper is out of the question. Everyone, however, can wield a brush, and so paint is the thing to use. Water paints are not to be considered in this case, because here we want a finish that is washable and durable. There are a number of satisfactory flat oil paints which will produce these effects. The paints are made in a number of attractive colors, and color cards can be obtained from the local dealer. Finishes of this kind have been very frequently applied directly over the wall-paper with good results. It is, of course, important that the wall-paper be fastened firmly to the wall when a material of this kind is used over it. It is better, however, to remove the wall-paper, and this is an operation which can very easily be accomplished. A very wide wall-brush should be used, and either hot paste or hot water applied to the wall-paper. This very shortly softens the paste, and the paper can be scraped off easily with a putty knife or a flat piece of metal. It is well to wash off the wall with clear water after the wall-paper has been removed, and before applying the first coat of wall-finish. Two coats for the darker colors and three coats for the lighter colors will give very good results, the first coat being mixed half-and-half with a sizing specially made for the purpose. A five-inch wall-brush will be found very satisfactory for applying these flat paints, and it is really surprising how quickly one can go over an entire wall.

While plain wall effects are most desired, these days, one would hardly wish to have the entire house finished with plain flat tints. It is possible nowadays to get most attractive stencils, and a flat oil finish is just the kind of wall for such decoration. Many different kinds of effects are possible in decoration of this kind. A simple little stencil design around the room at the ceiling corners gives an attractive effect, and does not in any way interfere with the pictures. It is, of course, possible to apply an all-over pattern by stenciling, as well as attractive striping. Such effects, of course, require a little more time. If the ceiling is unusually high and a lower effect is desired, this can be very easily obtained by wall divisions, either with a wainscoting or with a drop-ceiling, both of which can be obtained by means of stenciling without any additions to the woodwork.

In some of the chambers, it may be desirable to use a less expensive wall-finish. In such cases, some of the best water paints can be selected. These paints cover well, and are quickly applied when a wide wall-brush is used. With the wall effect completed, we can turn our attention to the woodwork.

Just because the woodwork may be finished in an ugly natural yellowish tone, is no reason for discouragement. In fact, when changes wrought are of a radical nature, one gets much more satisfaction out of the final results. Yellowish natural woodwork can be satisfactorily repaired.
How to Choose Light Fixtures

By ROBERT H. VAN COURT

This is the age of electricity, and in none of the fields in which it is so successfully employed is its use so universal and preeminent as in the field of illumination. In a way, methods of lighting may be regarded as an index of the state of general culture of those in whose homes they are found. The age of the candle was followed by the age of lamps with oil of various kinds as the source of light; then came the age of gas which has been followed by the present period where electricity has been tried and proved to be the true illuminants and adaptable in countless ways where other kinds of lighting could not be used. In passing from one to another of these successive stages, however, the older methods of lighting have not been discarded; the thought and care which had been lavished upon their application had produced results so practical and beautiful that they could not be wholly given up, and in homes today one often finds candles, lamp gas, and electricity all in use, frequently at the same time.

But no dwelling-place of any kind is being built today without due provision for the use of the electric light. As yet, electricity as a source of heat has not attained general use, and, in the average home, gas is used for cooking, and sometimes for the heating of the house. Its use in the kitchen makes necessary the piping of this room of the house, and gas is sometimes here used for lighting purposes also; often the entire service portion of a home will be arranged for the use of gas for lighting, even though the rest of the house be wired for electricity. Then too, some people who, for various reasons, may prefer to have two sources of light available, may have their houses piped for gas as well as wired for electricity. In many houses already built the use of electric lighting is sometimes desired in addition to gas. The necessary wiring is much less expensive and difficult than is generally supposed, and the wiring need not mean the complete tearing up of the house or the interference with domestic life which it is sometimes thought to involve.

But no part of the planning of a home is usually approached in so circuitous a manner as the question of lighting, upon the success of which all of the beauty and much of the comfort of the house is dependent. Of course, one may decide to have the building lighted by electricity and the actual wiring be made an item of the building contract, but the general practice is to postpone the selection of the lighting fixtures until the house is ready to receive them. When this time is reached it usually happens that the building appropriation is completely exhausted, or that the indulging in various "extras" has already absorbed any reserve which may originally have been laid aside, and, for various reasons, the question of proper lighting fittings, the choice of which means so much, is hampered when it is not made impossible.

Most architects have a sufficient grasp upon the problems of illumination to make their advice safe to follow, and if the selection of lighting fixtures be left to the architect or the decorator, the results are apt to be satisfactory. Much of the success of the lighting of a house depends upon the judgment with which the subject is treated, and, for this reason, the solving of the lighting problem should certainly be regarded as one of the functions of architect or decorator. This is not only on account of the scientific details involved but also because the decorative treatment which the rooms are to receive has a very important bearing upon the amount of light required and upon its distribution, and consequently upon the wiring which must be done.

Few people realize that the treatment of walls, ceilings, and floors has so great an effect upon the quantity of light used.

Rooms where light paint, wall-coverings, and rugs are used require vastly less light than similar rooms where the walls are covered with dark paper or fabrics, and where rugs are dark in tone and deep in texture. This is to say that where four ordinary brackets, each having, say, one electric burner, suffice for illuminating a room where white paint, light wall-paper and rugs are used; twice or three times the quantity of light must be provided where a dark-colored paper and "mission" woodwork are employed. Light-colored surfaces have a tendency to reflect illumination where dark surfaces absorb the light.

Now the most skillful designers have for centuries been at work upon the making of lighting fixtures. Even in the earliest of colonial days in America the settlers possessed candlesticks and lamps of wonderful beauty, and designers today, with the rich store of centuries of careful designing to draw upon, and with a source of light as adaptable as electricity for use, have made the most of their opportunities, and the dealers in fixtures for lighting offer their wares in an assortment so varied and complete that they may be had in designs suitable for any use and in keeping with decorations of any period. Where the selection is not made by decorator or architect, or by some one of trained taste and judgment, the result is apt to be the expenditure of much money upon fixtures which are unsatisfactory from a decorative viewpoint.

With such a wealth of really beautiful designs to choose from, there can be no excuse for using fixtures which will destroy the beauty of the interior. Here, as in every other department of decoration, the simplest treatment is apt to be the most successful.

There are a few broad and fundamental principles upon which to base a safe and wise selection. The usual copper or wrought-iron in fixtures is recommended chiefly in rooms finished in dark wood, and such metals are particularly desirable where the finish is in the "mission" or "craftsman" styles with wall-coverings presumably of wall-paper or fabrics in keeping. Fixtures of ormolu or crystal, upon the other hand, are appropriate only where the rooms are in such light and graceful styles as the various French periods.

There are, however, many kinds of fixtures so simple in character that they may be safely used in any but the most strictly formal interior, and they are chiefly of brass in some of the many finishes in which this [Continued on page 232]
The Return of the Painted Mantel

By Loring Eliot Duncan

The painted mantel, that is, the wooden mantel painted white, or, in some instances, containing panels of a dark wood, has come into its own once more. It was the popular, and, for most people, the only sort of mantel in use in the early days of the Republic. The beautiful, chaste designs were for many years crowded into the background by the many varieties of stained woods, natural finishes, and the like. Today, so leading mantel-makers declare, fully ninety percent of the mantels sold are of the painted description. It is time, of course, that there is a demand for certain styles of natural finished woods. A dining-room or library paneled or finished in oak or mahogany, for instance, requires a mantel of that wood. But wherever they can get away from it, architects, designers, and decorators are abandoning the natural-finish mantel.

There isn’t anything new about any of the designs from which the painted mantels that are being made today are fashioned. All of them are copies or adaptations of the old mantels which adorned (that’s the only proper word to use) the beautiful colonial dwellings of old Salem in Massachusetts, or old Alexandria in Virginia, or old Germantown in Pennsylvania, or any of the old settlements in which colonial living was at its best. In those beautiful homes, so largely of the Georgian type, are found the patterns for the really beautiful productions in painted mantles that are being offered to the house-building public of the present time.

Contrary to general belief, the latter-day productions are not so expensive as one would suppose. As a matter of fact, they cost no more, mantel-makers tell me, than chestnut mantels of the same size and general pattern. Certainly they look better—by a very large percentage.

The secret probably lies in the fact that they are of uniformly simple design. They have to be true to the period from which most of the designs are copied. Then the wood need not be especially selected for the grain. Again, the apparent elaborate carving isn’t carving at all, but wonderfully clever reproductions of the real carving. It is either in papier mache or of a putty composition.

Of course, the more expensive mantels that are to be painted come with real wood carving at very much higher prices than the composition designs; but few want them, and only those who have used them, and those who make them, know how durable and otherwise thoroughly satisfactory the composition designs have proved to be.

As noted before, there is often a variance from the white-painted plain mantel. These are intended for rooms in which furniture of the Adam period is to be installed. The panels are of dark-finished wood, inserted just above the fireplace proper, and their appearance in a room with pronounced surroundings is decidedly striking. But, for the most part, the painted mantels are the plain white of our own colonial period.

A particularly fine combination that I saw recently consisted of a white-painted mantel in a singularly severe pattern, and a grate that was an American adaptation of the English hob grate, with brass-finished fittings. The fireplace was built of Dutch tile of a light blue pattern. The whole might have been lifted out of a home of a hundred years ago, instead of being an up-to-date product of today’s factories.

Those who built the old fireplaces had not a great variety to choose from when the question of materials for the fireplace came up. There were the Dutch tile, the small bricks, and the marble slabs in various colorings, and all three are found in colonial fireplace work, and all three are today being used in exactly the same way.

Another evidence of the growing regard for things Colonial is the revival of popularity of the Franklin stove, reputed to be the invention of the philosopher and statesman of Revolutionary days. This is what might be called an open fireplace on legs, and with a stove chimney. It fits compactly into a fireplace that is not of great depth, or it stands out in a room. Its most noteworthy feature is that it throws heat out into a room better than does the average open fireplace, and still gives the same effect as the fireplace. The Franklin stove has never quite gone out of use since its invention, but in recent years it has again become very popular. Architects are specifying them for rooms in which there is no chance to build a fireplace and in which it is desired to have one. Those engaged in reconstructing old houses find them of aid in providing an open fireplace effect where it is possible only to provide a stove-chimney outlet.

In connection with one of the modern painted mantels, the modern Franklin stove given, at a comparatively moderate cost, quite as good service as most open fireplaces, and an infinitely better appearance than some of the stained monstrosities in mantels that seemed to be so popular only a few years ago.
SEVERAL definite warnings have reached me in regard to very generally accepted floor plans. The most vital of these is to avoid, if possible, that commonly met arrangement by which a nearly square foundation is cut into four sections, as in diagram III. The main objections to this plan are the opening between the dining-room and the living-room, and the impossibility of putting the door into the kitchen at any point except directly opposite the entrance. The vista-into-the-dining-room destroys the illusion of “atmosphere” which is always found in New York apartments.

The actual entrance to the house need not be the front door. Everyone wanted one or more. I have already noted the need of a porch for the servant.

In this instance, the plan called for an exit porch across the entire end of the dining-room. It was to be reached by French windows, and the food was to be passed out of the pantry window. Such makeshift arrangements point the necessity for thinking all these little details out with far greater care.

The sleeping-porch is so popular that it needs no comment. None of my friends had one, but everyone wanted one or more. I have already noted the need of a porch for the servant.

The sleeping-porch is so popular that it needs no comment. None of my friends had one, but everyone wanted one or more. I have already noted the need of a porch for the servant.

The sleeping-porch is so popular that it needs no comment. None of my friends had one, but everyone wanted one or more. I have already noted the need of a porch for the servant.

The greatest variety of opinion I found respecting the entrance-hall and the stairway. No two ideas were alike about them. One insisted on a small hall and boxc*d stairs; the next on a large hall and sweeping, imposing stairs; a third wanted the extra space consumed by the hall put into her living-room, so oppamed her front entrance, to place this floor plan. Greater width is to be pleased; but the color scheme suited to the furniture of the one may not harmonize with the other. Diagrams IV and V offer a better layout of the same space.

Porches are in so many instances wrongly placed by the well-meaning amateur. Privately entered porches, not accessible from the street, and consequently not receiving their modicum of dirt and mud, are in every case to be preferred. The actual entrance to the house need not be over the porch at all. I have seen some charming doorways, sheltered only by a little slanting scrap of roof, or framed in the dignified pillared style of the colonial architecture. Western porches are, as a rule, sunny in the afternoon, just the time one could be most free to enjoy them. East, southeast or south is the best exposure. We use our porches chiefly in summertime, and ought to think of them as summer rooms.

The use of one porch as a hot-weather dining-room was a universal suggestion, but only in one case was a solution offered of the question of getting the food out. In this instance, the plan called for an exit porch across the entire end of the dining-room. It was to be reached by French windows, and the food was to be passed out of the pantry window. Such makeshift arrangements point the necessity for thinking all these little details out with far greater care.

The greatest variety of opinion I found respecting the entrance-hall and the stairway. No two ideas were alike about them. One insisted on a small hall and boxc*d stairs; the next on a large hall and sweeping, imposing stairs; a third wanted the extra space consumed by the hall put into her living-room, so opened her front door directly into the room, and carried the stairs up from one corner. A fourth had a tiny vestibule jutting into the large room; the stairs were invisible, as they turned at right angles and ascended as a boxed stair from the room.

Amid such a variety of preferences, I can only give my own. I do not like my front door to open directly into the living-room. It makes the room cold in winter, always muddy, and when evening guests are gathered together, a newcomer has no opportunity to divest himself of wraps. I find also that the stairway out of the living-room is more picturesque than useful. When sweeping above stairs is being done, all the dust settles below, making additional work. Without a separate back stairs, the living-room stairway is worse than useless—it is an effectual trap. Servants cannot get back and forth if there are guests, private interviews with any member of the family keep all the others impris-
boxed stairway is safer in case of fire, if it can be shut off at the floors by a door.

"In a small house," says one of my friends, "who has built a very successful one, after eliminating the expensive features already tried out by her father and married sister, who have large establishments in the same town, 'economy of space is the thing: no halls, vestibules or hallway except where absolutely unavoidable.' She goes on to say that her separate back stairs, which are planned with every consideration for their needs, tend to every room without greatly disturbing the walls and floors. The house was too small to permit the sacrifice of any space to a servant, and in the families of insurance people you will invariably find the additional protection of a sprinkler system installed in the basement.

A separate water-bucket for the laundry will keep the rest of the house cool in summer. A little practice on the stairs will be filled with disagreeable ash-dust. A tin flue, if you have an ash-chute, can be enlarged upon indefinitely. Most bad dwelling-house fires start in the cellar, and in the families of insurance people you will invariably find the additional protection of a sprinkler system installed in the basement.

A separate water-bucket for the laundry will keep the rest of the house cool in summer. A little practice on the stairs will enter the ash-barrel under cover, or the cellar will be filled with disagreeable ash-dust. A tin flue, if you have an ash-chute, can be enlarged upon indefinitely. Most bad dwelling-house fires start in the cellar, and in the families of insurance people you will invariably find the additional protection of a sprinkler system installed in the basement.

A separate water-bucket for the laundry will keep the rest of the house cool in summer. A little practice on the stairs will be filled with disagreeable ash-dust. A tin flue, if you have an ash-chute, can be enlarged upon indefinitely. Most bad dwelling-house fires start in the cellar, and in the families of insurance people you will invariably find the additional protection of a sprinkler system installed in the basement. 

A separate water-bucket for the laundry will keep the rest of the house cool in summer. A little practice on the stairs will be filled with disagreeable ash-dust. A tin flue, if you have an ash-chute, can be enlarged upon indefinitely. Most bad dwelling-house fires start in the cellar, and in the families of insurance people you will invariably find the additional protection of a sprinkler system installed in the basement.
Fixing Up the Attic

HOW TO UTILIZE WHAT IS, GENERALLY, WASTED SPACE—NURSERIES, COZY CORNERS, AND BEDROOMS

By MARY W. MOUNT

AND in hand with the high cost of living has come the necessity for economizing space, and suburban householders, in particular, are looking to attic and cellar to supply them with extra rooms. The latter can almost always share a billiard-room with the coal-bins, and the former can be converted into one or more cozy bedrooms, a playroom for children, or a quiet sitting-room, in which the mistress of a household may sew or write, free from the disturbances that beset her elsewhere.

Strange enough, few people realize the possibilities of an attic save as a place in which to store trunks and trash. Unfinished beams and flooring, spaces of sloping roof and high windows, discourage the possessor of an attic from trying to do anything with it. The problem, too, becomes complicated to the householder of small means by reason of the costliness of timber and labor.

One family solved the problem, so far as a playroom was concerned, by stretching burlap from one upright to another in the center of half an attic, divided from the other half by a hallway. The center of the unfinished attic was enclosed on each side by walls of light brown burlap, and the same material was employed to cover the rough surfaces of side walls around the door and windows. From the roof was suspended a swing, and trunks were piled under the window and on one side of the room, and covered with burlap, to form broad benches upon which the children could arrange their toys and play the ever-delightsome game of "tea-party."

Attic rooms suggest all sorts of economies, and this one had its floor covered with several thicknesses of newspapers, over which was tacked matting. A few rugs were added, to give a cozy appearance to a warmly covered floor, and carry out a color scheme of brown and blue. Three feet above the floor, a brown-stained strip of wood extended around the wall, and nail in the shape of bookshelves, to place against the wall. Flat bosss tacks, along the front edges of the shelves, not only held the burlap in place but also supplied a decorative note to the attractive lot of furniture. From a brass rod at the top of the bookcase was suspended a delft-blue curtain of scrim, stenciled in brown, and procured for ten cents a yard.

The scheme of blue and brown was further carried out by a strip of scrim on each side of the group of windows, over which hung curtains of dotted white Swiss.

Neither rest nor convenience was forgotten in the arrangement of this playroom, for a comfortable divan, with blue-stenciled brown covering, made not only a place for children to nap on, but also a bed where one could sleep when the house was filled with guests.

In this cozy playroom were disposed such pieces of furniture as would contribute to the pleasure and comfort of children, and its very aloofness from the rest of the dwelling made it possible for them to indulge their own ideas in minor decorations without affecting the pleasing color plan of the whole.

Much more elaborate treatment was employed to construct two bedrooms in the other side of the attic. Doors were fitted into the partition-wall between half and attic, and then uprights were set at intervals from this wall to the opposite one, dividing the space in half. From one of the manufacturers of composition-board—a material that resembles and is treated like wood—were ordered large panels, eight feet in height, and of a convenient width to cover the uprights and form a partition-wall. Where the roof sloped, panels not more than six feet and a half were required, and strips of wood, extending from the uprights in the middle of the attic to the beams of the roof on each side, supplied a ceiling foundation on which to nail large panels of imitation-wood. This material can be ordered in any size that may be desired, and scantlings for uprights are easily sawed and nailed into place, so that the veriest tyro in room-construction can put up a well-built apartment with very little effort. There is nothing heavy to lift, since composition-board, although thick, is very light, and nothing thicker against the wall. Flat boss tacks, along the front edges of the shelves, not only held the burlap in place but also supplied a decorative note to the attractive lot of furniture. From a brass rod at the top of the bookcase was suspended a delft-blue curtain of scrim, stenciled in brown, and procured for ten cents a yard.

The scheme of blue and brown was further carried out by a strip of scrim on each side of the group of windows, over which hung curtains of dotted white Swiss.

Neither rest nor convenience was forgotten in the arrangement of this playroom, for a comfortable divan, with blue-stenciled brown covering, made not only a place for children to nap on, but also a bed where one could sleep when the house was filled with guests.

In this cozy playroom were disposed such pieces of furniture as would contribute to the pleasure and comfort of children, and its very aloofness from the rest of the dwelling made it possible for them to indulge their own ideas in minor decorations without affecting the pleasing color plan of the whole.

Much more elaborate treatment was employed to construct two bedrooms in the other side of the attic. Doors were fitted into the partition-wall between half and attic, and then uprights were set at intervals from this wall to the opposite one, dividing the space in half. From one of the manufacturers of composition-board—a material that resembles and is treated like wood—were ordered large panels, eight feet in height, and of a convenient width to cover the uprights and form a partition-wall. Where the roof sloped, panels not more than six feet and a half were required, and strips of wood, extending from the uprights in the middle of the attic to the beams of the roof on each side, supplied a ceiling foundation on which to nail large panels of imitation-wood. This material can be ordered in any size that may be desired, and scantlings for uprights are easily sawed and nailed into place, so that the veriest tyro in room-construction can put up a well-built apartment with very little effort. There is nothing heavy to lift, since composition-board, although thick, is very light, and nothing thicker...
panels of composition-board, fitted with hooks for clothing. In the yellow room a brass rod, and in the pink room a white one, supported curtains of corresponding color over the closet doors and curtains of white scrim at the windows. Here the color note was furnished by one width of flowered chintz, cut in half to drop each side the window, and with a slightly gathered valance draped above the window, so as to give it an appearance of greater height.

Where one can afford little extras in attic-room furnishings, therefore only curtains of the simplest kind should be used. Lace is quite out of place, and swisses and scrim suggest themselves as being not only eminently suitable but cheap.

The interval of space between the imitation-board walls and the roof makes the rooms cooler in summer and warmer in winter; and, where one can afford the outlay, it is wise to insure quiet by having two rows of uprights and composition-walls through the middle of the attic, with clothes-closets arranged between the partition walls. This is of particular advantage where one room is dedicated to the use of a maid, as is usually the case. Whether closets are between or at the sides of rooms, however, they should be fitted with at least one set of broad shelves upon which may be placed bed-linen and blankets. Such shelves may be constructed of the same imitation-board that is used in the walls, and can be ordered in the exact size wanted. It is always well to order any of the various composition-boards by measurements.

Perhaps one of the most useful features in an attic room is a window-seat, which may be a neat, cabinet-made box-seat, or two grocery boxes, with a top of composition-board attached by hinges to the outlay, and the whole covered with cretonne, chintz, denim, burlap, or any similar material. A cushioned seat is easily made by quilting cotton between two strips of the material used to cover the box-seat, and attaching the corners to the lid of the box. This saves trouble, as cushions piled upon a seat have to be removed whenever one wishes to open the box.

White enameled furniture is prettiest in an attic room fitted up with light colors, and many an unsightly piece of half-worn furniture can be sandpapered, enameled over coatings of white paint, and fitted with new brass handles. Indeed, where economy is an object, unpainted wooden chairs, with rush bottoms, look very attractive when enameled in white and made easy with a cushion that corresponds with the dominating color in the room. Chairs and rockers of this sort cost only seventy-five cents to a dollar and a half apiece, and are light and durable. The bed should be brass, white-enamedled iron, or white-painted wood, and it is a mistake to add any trimmings in color to the furniture, as such trimmings impart a cheap look to it. Simple white furniture in a bedroom always looks sweet, and many an old bureau or chiffonier of oak takes on a freshness and loveliness that it never before possessed, when covered with white.

Since inexpensiveness is usually a characteristic of rooms under the roof, the floor-treatment must cost as little as possible, and those who have learned to make floors warm at little cost recommend laying newspapers over the boards in single sheets, with edges well overlapping, until several layers of paper insulate a warm covering for the floor. Over this, drugget or matting may be tacked, and then the floor finished with a large cotton or jute rug in gold and white coloring. If the nine-dollar rug is not available, one may lay a small rug beside the bed and another before the washstand.

A very charming and fashionable paper to use in an attic bedroom, where ceilings are wont to be low, is one of the new papers that have sprays of flowers extending up from the base-board upon a plain surface, and are finished with a narrow border of the same flowers just below the ceiling. This gives an effect of height to a room.

Now that cretonnes and chintzes are brought out with the same decorative designs as ormament papers, it is perfectly possible for hangings, wall-paper, table-scarf, washstand splasher, coverlet, and upholstery to match in color and pattern.

Pictures that are hung in a room of this character add most to their surroundings if framed in black and gold or narrow black frames. The touch of black accentuates the cheerful yellow tones of the room. All-white, with a mixture of white and gold frames are also charming in a room of this character; but it would not look well to mingle picture-frames of various colors and kinds in a room decorated as this one is.

For the attic room furnished in pink and cream, it would be well to cover the floor with light matting, or else stain the borders a dark brown, so that the unlively planks which usually floor attic rooms will not appear conspicuously. Over the center of the floor could then be spread a big rag rug in pink and gray tones, or else one of thick cotton, with a pink center, and border in pink and white.

While white furniture of wood, wicker, or rush would be prettiest, dark-wood pieces look well in a pink room; and both of these sorts of furniture are inexpensive.

It is astonishing, when one looks into the subject, how much may be done at a real cost in transforming the waste places of a country home into rooms that will be useful and very satisfactory.
The Country Woman and the Electric-Motor Car

By Mrs. A. Sherman Hitchcock

-The proportion of women who operate their own cars becomes greater each year, and there is no type of mechanically propelled vehicle more suited to feminine use than the electric car. One of the most notable developments of the motor-car industry is the prominence of the electric vehicle, and its merits are so considerable, and its appeal so strong to the feminine sex, that its continued popularity is assured. It is not a rash prophecy to declare that, in a few years’ time, it will be the vehicle most commonly met with in suburban towns, country villages, and the cities.

In many respects, the advantages of the electric car over the car of larger proportions are enormous, when considered as a means of locomotion for the average woman. While there are scores of women expertly operating the gasolene car, there is, of course, always a possibility of complication that is quite beyond the average woman driver to meet successfully; and there are also many women who do not possess the interest, enthusiasm and intelligence to undertake the study of mechanics.

A woman must also sacrifice, to a very great extent, her appearance when she becomes the driver of a gasolene car, and must wear special clothing if she wishes to remain looking trim and sportswoman-like, while the electric vehicle affords one the opportunity to wear attractive and picturesque raiment, and not have it ruined by the dust of the road and the wear and tear of travel.

The accommodation of the electric car is necessarily smaller; but, from an economical standpoint, that is a strong factor in its favor. A greater number of passengers means extra weight; and extra weight requires a more powerful motor, and entails considerable more wear on the tires, mechanical parts, and chassis. Another strong point that makes the electric a popular favorite is that its usual capacity is two people. Accommodation for two people is most frequently required for the majority of town and country spins. Very many owners of large, high-powered gasolene cars have discovered the advantage to be derived by adding an electric to their garage, to be used for run-about purposes. The man or woman who goes out of town for week-ends, and can afford it, will find it worth their while to own an electric car. To be sure, there is the wider radius of movement, the greater speed, the capacity to traverse long distances with the gasolene car; but for woman’s use in the city, the suburb and country town, or, in fact, any place where there are facilities for charging the batteries, the electric conveyance offers possibilities that cannot be approached by any other type of machine.

The use of the electric car is indeed general. It has crept into the favor of royalty, being the especially liked vehicle of queens of many countries, and nobility has fallen completely beneath its charms. The club-woman and the suffragette have been drawn into the vortex. The society leader, the actress, the woman physician, the business woman, all enthrone over the respective benefits they derive from the use of their little electrics. The seeker after health and recreation obtains both with the aid of the electric, at little expense and no exertion. Innumerable phases of rural life are opened to the woman owner of the electric; she is inhaling the pure, fresh air of the country, and admiring beautiful scenery round about her.

When a woman becomes the owner of any car, she is desirous of driving as much and as frequently as possible. With the male portion of the family at business during the day, the woman often cannot enjoy motoring as she desires; the driving must be largely done in the evening, when vision is restricted, and the beauties of nature cannot be enjoyed in their fullness. The electric vehicle seems, therefore, particularly adapted to woman’s use and needs. It can be driven daily to a large annual mileage, and the cost of maintenance and upkeep is surprisingly small.

The cleanliness of the electric car is one of the chief recommendations that could not be overlooked by the women motorists. It is especially adapted for making calls, for shopping expeditions, is ideal for carrying its owner to and from the theater, receptions, teas, luncheons, etc. It is perfectly adapted to juveniles and adults of both sexes and all classes. For the aged...
and the invalid the electric has great possi-
bilities. It is very drey and monotonous for an invalid. It is all very well to be taken in an invalid-chair to the solarium of a hospital, or to be wheeled out on a lawn; but how much better is a drive in a little car that runs with perfect smoothness, that does not stop or start with a jerk, out through the parks, or over a beautiful road in the country.

There is nothing which fits more completely into the pleasures and economies of suburban life than the electric vehicle. Any suburbanite having an invalid in her family, one or more of the ever-ready, always safe and sufficiently speedy electrics, and these cars will be as prevalent upon the country highways as any other type of conveyance. Then, too, the suburbanite values the electric as it deserves, and it is not deserted in the winter. The electric is essentially an all-year-round conveyance. Frost has no terrors for it; it slips but slightly on snow, its starting ability is excellent, especially with good non-skid tires and with either good non-skid tires or the easily attached anti-skid tire chains, it is not liable to side-slip. For winter use, it can be operated from inside if desired, can be used lighted, is always ready to go in rain or shine, operated from inside if desired, can be well

The electric car has mechanism that must be oiled and greased, just the same as every other vehicle, but the parts are accessible. The lubrication is for the purpose of lessening the friction of the parts in motion, instead of minimizing the heat by oil and the use of cooling mediums. Under no circumstances do complications exist. The mechanism should always be left as adjusted—except in cases when conditions are manifest that indicate wear, and then there is really little that can be done. The wheels and rear construction are packed with grease and do not need attention. The dynamo should never be molested; it was constructed to be let

alone, and is always admirably tested before leaving the factory.

A few drops of oil will be required occasionally in the joints of the steering mechanism, the controls, etc. The commutator should always be left to the hands of an electrician. It will probably require a little fine oil at the end of seven or eight hundred miles.

The electric vehicle is, of course, almost noiseless, the odor of smoke and oil is wholly absent and the vibration is minimized. The novice finds no difficulty in learning to drive the electric car. She learns to steer the car, the movement of the controller handle, which gives varying speeds forward and backward, and the application of the brake. She cannot make an error with the controller handle, because of the interlocking devices; it is simply a matter of progression from one to the other, or reverse.

Observation of the amperes-meter is the only attention necessary. This indicates the condition of the battery and the energy. Knowledge of the motor and the wiring is necessary, as it will enable the operator to overcome difficulties which, though trifling, are not the cause of delay or loss of use of the car. A short circuit, a broken connection, or some other breakage or derangement, may require but a few minutes' time to remedy; but, unless one has had such knowledge, these trifling troubles are just as serious as a broken part.

Invaluable knowledge to the operator of a car is being familiar with each part, and the relation of each part to the whole, so that one is safeguarded against any conditions which may eventuate. Perfect understanding of her electric motor means continued service, reduction of expense in operation, and increased satisfaction to the woman purchaser.

Should there be loss of power or incapacity, it would probably be the result of a broken circuit or a short circuit, which should be immediately attended to. If the trouble cannot be located, the car should be taken to the nearest garage. Under no circumstances should the batteries be permitted to stand when near exhaustion. On the contrary, they should always be kept fully charged when not in service. It should be remembered that just as over-exertion affects a person, so, in proportion, an electric battery be affected by over-discharging or over-exertion. The result may be the same from over-charging the battery.

It is advisable to keep the vehicle in a garage where there are charging facilities, so that it may be inspected and known if the batteries are holding their full charge before leaving the factory. The woman operator should bear in mind that a battery can be damaged materially by failure to observe ordinary care and discretion.

If women could only realize the keen pleasure of driving their own cars, the pleasure to themselves and the pleasure they can give to others, they would take up driving at once. The electric motor car can be driven with perfect safety by a woman, with its absence of cranking, sparking, changing of gears, clutches or throttle, with only steering and controlling levers and brakes, nothing could be more simple and easy. It is so much pleasure and comfort, and all the work of shopping, marketing and calling is made delightful.

Continued on page 225
WE Americans are somewhat justly accused of not knowing how to play—not getting the full meed of our earnings, recreation and joy out of the brief hours we have away from our work. Part of the trouble is this very brevity of playtime, and our Sundays—God's rest-days; we do not make plans in advance for our half-holidays but not all of it. Another reason is that we do not go motoring when we choose, and who never- theless manage to be happy. They are the ones who have to count up their pennies before they can construct their pleasures, to whom the least of the out-of-doors is more interesting than that of their acquaintances, and they are generally the ones who have mastered the art of playing well in spirit and in practice. To those who have not forgotten how to walk, who have learned that no better medicine for tired heads and nerves was ever devised than a simple tramp in bracing air, over beautiful roads, there is a particular call in the crisp days of October and November. Can any costly machinery give us the pure joyousness of the open air and the environs of New York City, the advice regarding walking and attire is good anywhere. Almost every city and town in the country offer as good tramping districts.

In October and November the atmosphere is ideally cool, the breeze just stimulating enough for a swinging tramp. And what has Dame Fashion to offer in comparison with the gorgeousness of the Indian summer? Trouble enough we take to have a glimpse of the clothes parade in our cities on gala days, but the most splendid costume of them all could not approach the ever-changing loveliness of the autumn streets.

In Europe, whole families go off for tramps together; in England, every Saturday half-holiday sees loaded trains of walking parties starting out of London, making for Epping Forest, or Burnham Beeches, for the hills of Surrey or the river banks. Not to walk on a holiday is the exceptional thing. A club of people meeting for regular walks finds it possible to have a delightful interchange of conversation amid the pure joyousness of the open air and beautiful woods and hills. To this community of thought and interest is, after all, the finest thing society has to give us. The charm of the slow revealing of another's tastes is impossible under the most inspiring conditions, is a pleasure to which we allow too little opportunity in these hasty days of ours.

For girls, no wiser or more delightful way of spending Saturday afternoon or Sundays could possibly be devised than a few hours in the open. A group of four to ten girls forms a congenial foundation for a walking-club. The girl who lives in the smaller town seldom has difficulty in finding a beautiful road on the outskirts of her neighborhood. Getting the girls together will be her chief problem. For the city girl, especially the New York business girl, therefore, I have the greater number of suggestions to make. Properly equipped in dress, information, and lunch, such a club can find a dozen profitable and delightful ways to spend a Sunday of rest and worship, too.

Four or five miles is enough to plan at first, for those who have walked but little. Longer walks up to ten miles can be attempted after trying one's strength and getting into training. Wear heavy, low-heeled boots, preferably laced to support the ankles, if you can, rather than Oxford ties; never pumps or thin-soled shoes. This is very important. Heavy-soled boots are worn by all long-distance walkers, not only because they protect the feet from burning, but also because one swings along at a more even and less fatiguing gait when wearing foot- wear that moves by its own momentum. A short skirt of rough mixed or washable material, or a loose blouse, free at the neck, and a large simple shape hat, form the most satisfactory costume. In November, a jacket or sweater will be wanted most of the time. A tennis waist of china or pongee silk or soft flannel will be as fresh at the end of the day as at the beginning; the popular "middy" blouse is comfortable and appropriate, but tailored skirt-shirts with high collars will scarcely stand the informality which is inevitable if the expedition is to be any fun.

So much for what to wear; the main question, after all, is where to go. Any cyclists' map of the environs of New York will yield suggestions to the metropolitan girl. The matter of car fare is a consideration; but sometimes, when a place can be reached by both train and trolley it is worth while to save time by paying a few cents extra on the train. At the information bureau of the large railroad stations descriptive folders can be obtained for the asking, covering most of the suburban district around New York, and there are booklets published by various real-estate companies and newspapers that carry real-estate advertising, from which one may learn of attractive roads. If the plan is to walk through a historical district like Tarrytown or Flushing, a little time spent in the library beforehand will be well repaid in understanding and enjoyment.

Here are some walks I have tried many times and can recommend; once started on regular walking holidays, however, you will find out many more delightful districts for yourselves.

FIVE-MILE WALKS FOR A SATURDAY AFTERNOON

Van Cortlandt Park.—Go by subway or train from 159th street to the entrance by the golf-links; find the grass-grown path on the top of the aqueduct and follow it to Yonkers. Return by train or trolley and subway. Or simply follow the beautiful roads to another entrance, crossing the park to the Jerome Avenue side.

The Palisades.—Take the Fort Lee Ferry to Edgewater; walk north along the water-edge till the road rises on the top of the Palisades. Englewood is reached by Palisade Avenue, opposite Spuyten Duyvil, and the return from there to the ferry by trolley is an exhilarating ride. The walk may be shortened by turning inland from the river at Cuyenville or Leonia.

In the spring and summer, there is a little motor-boat ferry from the foot of Dyckman street across to the Palisades at the foot of Palisade Avenue. A walk on the top of the bluff may well be begun from this point in either direction, or the walking party which has started from Fort Lee may get home by this pleasant route.

Without leaving Manhattan Island,—Take the

(Continued on page 223)
AN AUTUMN DAY

“What visionary tints the year puts on,
When falling leaves falter through motionless air,
Or numbly cling and shiver to be gone.”

—JAMES RUSSELL LOWELL.
The Problem of “New Thought”

WHY THE LATEST OF FADS HAS OBTAINED SUCH A FOOTHOLD IN AMERICA—
THE QUESTION OF HEALTH IN OLDEN TIMES—PHYSICAL FRAILTY TODAY

By MARGARET WOODWARD

[Editor's Note.—These articles on problems of suburban living are based on actual experience and observations of the author. The views are those of the author, and not necessarily those of this magazine.]

The average American is fond of fads. He0often relates every possible occasion, to his own supreme gratification and to the discomfort of his friends. Fortunately for the well-being of the general public, fads are, as a rule, short-lived. The enthusiasm of the fad-seeker usually wanes when he finds that his diamonds are but quartz crystals, and that the planet he has discovered is simply an ordinary asteroid. Nothing daunted, however, the fad-seeker pursues other will-o’-the-wisps, even though they prove as intangible in substance as the fabric of a dream.

The most important fad which has struck the American people, and the one which has clung to the race like the Old Man of the Sea, is the health fad—a fad which has got to health and is determined to keep it. "Tis sad, but true, that for several generations we Americans have been sick. The last generation succeeded in doctors, in beer, tea, in patent medicines, hot-water bags, and various nostrums. Noxious drugs were the panacea for every ill. People demanded them. They kept the race.

The American of today has advanced a step further. He has kept the fad, but is developing it along up-to-date lines. Sickness has now become a recognized commercial product. The prolific advertisements in papers and magazines, in pamphlets and publicity letters, feed the fad and keep it well nourished. Thousands of dollars are spent annually informing the American public of its sick and dying condition, and offering "cure cures" at a great discount.

For a long time I have wondered what has happened to cause such decadence in the American people. The original stock was certainly robust. We proudly trace our ancestry to the Anglo-Saxon race, which, for a thousand years or more, by personal prowess and an uncompromising independence of action, was easily the dominant race of the world. Our immediate kin, those sturdy English yeomen who breathed the rough Atlantic and founded a nation on this "bare and rock-bound coast," were certainly fashioned from these rude American women of today. Study the splendid physique of the dark-eyed woman of the forest. Erect, of massive build, but of perfect proportions, she runs, leaps, or jumps, able to support her body. With the agility and suppleness of a panther, she hunts, fishes, or traps her mode of living. As may be expected from interest in so much as it is perfectly adapted to the felling of a mighty forest giant was as child’s play. The strength of the Anglo-Saxon was prodigious. His endurance was nothing short of incredible. At any trial of strength, he would have worsted our puny American at short notice. These primitive races had wonderful powers of recuperation. A savage, let us suppose, receives on his body a blow from some sharp cutting instrument. In a few days the skin will unite naturally, with no recourse to any outside help. Nature, working through the splendid organisme of the savage does the work. The same blow would probably have killed the American outright. If not, the process of recuperation would have been exceedingly slow. Surgeons and nurses would have been summoned to his aid, and the man, as likely as not, would have been maimed for life.

Contrast, if you please, from a physical standpoint, the cave woman with the average American woman of today. Study the splendid physique of the dark-eyed woman of the forest. Erect, of massive build, but of perfect proportions, she looks down from her stately height to all wild creatures. She hunts, fishes, or traps for her daily food. Her dress is of a peculiar interest to us. It is a simple creature, the gown is made from the skins of the animals she has slain. The waist is draped in a manner known to all women, where-whereby the right arm is left bare. No tight sleeves for our cave ancestor. The skirt is fashioned from these same skins sewed neatly together, sinews being used for thread. It is not long, reaching from the waist half-way to the knees. This gives a freedom of action extremely necessary in these days, when wild beasts stalked their prey daily. The cave woman did not know from one minute to another when she would have to climb a tree and swing from branch to branch, in order to escape from the savage bear or panther. Comfort and good appearance regulated these two-for-days. A skirt too short, too tight around the hips to allow the muscles and sinews full play, was boycotted. Above all things, the cave woman wanted to be adequately clothed in the proper performance of her duties.

The American today has been the growth of centuries of endeavor, but it has been bought at a heavy price. We have gained immeasurably on the side of education, culture, and refinement. People have sloughed off their barbarous instincts, and replaced them with social graces. We no longer dress in skins, or live in mounds, caves, or huts. We are free-thinking, well-groomed specimens of humanity. But for all this gain on the side of what we are pleased to call civilization, we have lost in physical stamina. We have culture, but at the expense of health. "The civilized man has built a coach, but lost the use of his feet. He is supported on crutches, but lacks so much support of muscle."

Compare the native Anglo-Saxon, in the prime of aboriginal strength, with the strongest native American of today. To the former, the felling of a mighty forest giant was as child’s play. The strength of the Anglo-Saxon was prodigious. His endurance was nothing short of incredible. At any trial of strength, he would have worsted our puny American at short notice. These primitive races had wonderful powers of recuperation. A savage, let us suppose, receives on his body a blow from some sharp cutting instrument. In a few days the skin will unite naturally, with no recourse to any outside help. Nature, working through the splendid organisme of the savage does the work. The same blow would probably have killed the American outright. If not, the process of recuperation would have been exceedingly slow. Surgeons and nurses would have been summoned to his aid, and the man, as likely as not, would have been maimed for life.

Beside the superb health of our remote kinwoman, we poor American women are as sickly as children. "The American woman is as delicate as a snail's pace through our short lives. "But we are civilized beings, and not cave women," says some woman triumphantly. Granted, but we have acquired civilization at the expense of health. Has it paid?

Out of the depths of his misery one unfortunate writes: "Surround the sick man with the pomp of kings; let his chair be a throne and his crutch a scepter; he will look with contemptuous eye on marble or gold, or purple robes of royalty, and would deem himself happy could he enjoy, even under a thatched roof, the health of the meanest of his subjects." As we note the general stampede of seekers after health, we are inclined to believe Bonaparte's sarcastic remark: "It is the pit of the stomach which rules the world."

It was just at this point in the history of our race that "New Thought," and the multiform varieties of metaphysical science sprang into existence. They, one and all, claimed to meet the ever-increasing demand for physical and moral health. The name "New Thought" is a misnomer. "New Thought" is simply "the oldest of thoughts cast into the mold of these new times."

Its claims, like those of similar cultures, are stupendous. It appears upon the horizon like the one promising eye on marble or gold, or purple robes of royalty, and would deem himself happy could he exist under a thatched roof, the health of the meanest of his subjects." As we note the general stampede of seekers after health, we are inclined to believe Bonaparte's sarcastic remark: "It is the pit of the stomach which rules the world."

New Thought is certainly a far cry from the health fad of the 1890s. The health fad was a general stampede of seekers after health, uninterested in horticulture, or the arts, or the sciences, or the humanities. They were attracted to the dazzling arc-light. I do not wish to criticize any faith or any system of ethics which has alleviated human suffering and brought men and women to a higher plane of thought and action. But it passes my comprehension how a religion indirectly founded on, and receiving its coloring from, Hindu philosophy, could have been born in New England, and have numbered among its adherents the descendants of the Mayflower. I hardly think the modest prophet of Concord would thank the New Thoughtist for designating him as "The Master," and I am confident he would repudiate any claims to worship. It is simply another instance of our American tendency to follow any fad, and to be restless longing for something new and occult that has furnished New Thought and other philosophies with disciples. To be just to all concerned, New Thought has attracted thousands who have a genuine desire to learn the truth, even nuggets of pure gold. Because of

[Continued on page 216]
THE TWO VETERANS
Alfalfa for the Country Place

THE WONDERFUL PLANT THAT MAKES A NEW SOIL AND FEEDS POULTRY, HORSES AND CATTLE—HOW TO PREPARE THE GROUND AND PLANT AND HARVEST THE CROP

By W. H. Jenkins

Today we had on our table that which we produced on our little farm, Jersey milk, butter, cream, and cottage cheese, eggs, fine strawberries, salads, white mealy potatoes, and other vegetables. All these, to a large extent, are the different kinds of foods into which the alfalfa which grows on our farm is transformed. Alfalfa fed to the cow is changed into milk, to poultry into eggs. The alfalfa roots in the soil furnish the fertility for the strawberry and other fruits, also for the potatoes and garden vegetables.

All the above comes to us with little cash outlay. The alfalfa-feeder cow requires but little grain for maximum milk-production. With green alfalfa for poulters in summer, and cut alfalfa hay in winter, the grain ration can be reduced one-half the usual amount, and, when other conditions are right, the hen keeps up to her full capacity for laying eggs. When fruit and vegetables, or any crop, is grown on an old alfalfa field, the soil being completely filled to its lowest depth with large roots, which have a large nitrogen content, these decomposing roots feed the growing plants far better than commercial fertilizers that contain no humus, and the roots cost little or no money.

The economical production of the best foods is the end we wish to work for when we have soil. We want the science that tells us how to rightly use natural resources, and so direct great natural forces that they work for us. We are making progress in this direction when we learn to grow the alfalfa plant.

What we pay the most money for is nitrogen; and yet the atmosphere contains an inexhaustible supply, and, in fact, the main constituents of foods for animal or human bodies, for it also contains the carbon. The other elements are the comparatively small quantities of mineral matter in the soil. The alfalfa plant is constituted to go to the atmosphere for its nitrogen, which most other plants do not, and its large, long tap-roots go to the lowest depth of soil for mineral matter, and to the vehicle (water) which carries matter, and for the vehicle (water) which carries

Having a good depth of good, loamy soil, having sufficient humus to make it a mellow loam. If the soil were underlaid by a strata of gravel or porous drift rock that made natural drainage, it would save artificial drainage. In some way, I want to own some good soil with good drainage. Having this, I would study to establish in it the alfalfa plant.

For our city friends who are "Country-minded," and who are thinking about vegetable and fruit gardens, and for farmers who are spending a large part of their income for purchased food-stuffs, to feed animals so the animals will feed and clothe them, I wish to tell some things I have learned in about twenty years' experience in growing alfalfa.

Alfalfa belongs to the clover family, and needs more lime for food than most other plants. It is believed that it takes nitrogen from the atmosphere by a process that needs a certain kind of bacteria which are found in nodules on alfalfa roots. It is also thought that fresh animal manure in the soil, by its fermentation and decay, makes more favorable conditions for the bacteria to work.

Having a good depth of good, loamy soil that was fairly fertile, I would add to it lime, soil from an old alfalfa field containing the alfalfa bacteria, and fresh stable manure—the latter if convenient, for, although desirable, it is not necessary. If I kept animals and composted the manure with raw ground phosphate rock, by using it in the stable as an absorber, I should know I had the conditions almost ideal, if all the above were added to the kind of soil I have mentioned.

To go further into detail, I will need to describe the preparation of the soil, application of lime, etc. If the soil was not well cultivated last year, and is not clean of weeds, I would plant it to some crop, as corn, that could easily be given clean and thorough cultivation, and make the soil rich enough to grow a large crop. At the last cultivation of corn I would sow rye or vetch through it, to make a cover-crop for winter, and add humus to the soil. Early the next spring I would plow or go over it finely, broadcast two tons of air-seeded, or ground, lime per acre, or I would make one ton of stone lime by covering it with soil, then spread it evenly over the ground. It is largely a matter of convenience which method is used; I have always had good results with the latter.

I would spread the soil containing the alfalfa bacteria, and harrow it well. The best time for sowing alfalfa north of the latitude of New Jersey, I know, is in the spring. In New Jersey and Pennsylvania, midsummer may do, but still I should prefer to sow earlier. Further south, fall seeding may succeed very well. Alfalfa roots should have sufficient time after sowing for the roots to grow down into the soil several inches before winter, so they will not be thrown out by the freezing and thawing of the soil.

When ready to sow the seed, harrow the soil very finely, and sow on it one-half bushel of barley to the acre, or harrow in about one-half inch deep; next sow thirty pounds per acre of guaranteed pure alfalfa seed, that has been tested for fodder. It is better to sow fifteen pounds each way, to get a more even seeding. Do not harrow in the alfalfa seed, but roll the ground, or go over it with a plank drag. The firming of the soil over the seed is very important.

Before the barley ripens, mow it; this, with the alfalfa mixed with it, will make good hay. Generally it is best to leave the second crop on the ground for a mulch during winter. The second year from sowing, three to four crops can be cut, and the yield should be four to six tons per acre. The alfalfa need not be re-seeded for several years, if such weeds as plantain and dandelion are kept out. At its best, the yield per year of hay should be five to eight tons per acre. The food-value of one ton of alfalfa to feed to animals, is, when compared with present prices of hay and grain, at least $20.

When the alfalfa is well established, it is better to give the ground another dressing of stable manure, late in the fall or early in the spring. The crop should always be cut at the right time, which can be determined by examining the roots. It is the nature of the

Alfalfa Bed in Poultry Yard Covered with Wire Netting Through Which the Chickens Eat

(201)
plant to start a new crop from the roots, when one develops to nearly the blooming stage. Not to cut the crop when another starts from the roots is to injure both crops, and perhaps the plant for future use.

Having given space to detailed directions for alfalfa culture, I wish to assure my readers who have soil like that described that they cannot possibly fail to grow it successfully if every essential for success is well complied with. If one is left out, or not done at the right time, it may fail. Alfalfa, growing in the East, not on the limestone soil, means thorough work, and is a high type of agriculture. The compensation for overcoming difficulties is the building up of your soil until it is an asset you can draw upon as you can upon a bank account.

A few acres of land on which alfalfa has been established, used for small farming, fruit-culture, or gardening, makes possible a living for those who will work for it, by keeping some animals, cultivating a good family fruit- and vegetable-garden, or perhaps growing some money-crops; because alfalfa will so feed the cows and poultry as to get maximum production, when balanced with some of the cheaper carbonaceous foods, and the roots in the soil will feed the plants in the garden, and these give you the best possible living, and save you the cash you would pay for poorer articles.

Look Out for the Tree Borer!

By SARA SAVAGE MÜLLER

Among the largest and most destructive of the tree-borers are the larve of the leopard- and goat-moths. These caterpillars are commonly called borers, because they bore into the wood and feed upon the very heart of the tree.

Like most of our deadly pests, the leopard- and goat-moths are natives of the Old World. Some time prior to the year 1879, they were introduced into the United States. Since then they have been steadily increasing in numbers until now they are well established in certain parts of the country; for instance, New Jersey, Connecticut, Staten Island, Long Island, New York, and Massachusetts.

These moths belong to the same genus Cassida, and their life history is similar. The larve of both species are indiscriminate feeders, attacking such shade trees as the elm, ash, beech, hickory, walnut, oak, chestnut, poplar, alder, maples, mountain-ash, tulip, aspen, willows; and among the orchard trees the pear, apple, and plum; also, such shrubs as the privet, lilac, and honeysuckle. The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.

The females lay their eggs in the cracks of the bark, near the ground, and occasionally on the roots of the tree. As many as 300 eggs have been counted in one spot, and the larvae appear in July. During the day they remain motionless upon the trunks of trees; although in plain view, they are difficult to see, since their protective coloring conceals them.
New York City, were so badly damaged by the borers that after every storm great quantities of limbs were broken off.

The caterpillars feed in summer, and rest during the winter months. About two years are required for them to reach their maximum growth. Then comes the pupal stage, which is passed near the opening of the tunnel. When metamorphosis is completed, the pupa works its way to the mouth of the tunnel, when the thin skin splits open and the moth escapes, leaving the empty pupa-skin protruding from the deserted tunnel.

Trees are often seriously injured before the borers are discovered. The signs that indicate their presence are the small holes in the trees, the oozing sap, and the empty pupa-skins sticking out of the trees.

These insects are so destructive that a single one can seriously damage a tree. Indeed, a single one will sometimes kill a tree.

The goat-moth, genus Cossus Linnaeus, has done great damage to the trees of Europe. Mr. W. J. Holland, in his book on moths, tells the following interesting story. “My friend, Dr. Ortman, entering my study while I was writing, relates that when he was a boy of eleven, living in his native village in Thuringia, his attention was called to a notice posted by the Burgermeister, offering a reward for information which would lead to the detection and punishment of the individuals who, by boring into the trunks of a certain fine avenue of birch trees, upon which the place prided itself, had caused great injury to them. Already the instincts of the naturalist had asserted themselves, and the prying eyes of the lad had found out the cause of the trouble. He went, accordingly, to the office of the Burgermeister, and informed him that he could tell him all about the injury to the trees.

The official sat wide-mouthed and eager to hear. ‘But you must assure me, before I tell you, that the reward you offer will surely be paid to me.’ ‘Yes, yes, my little man; do not be in doubt on that score. You shall certainly be paid.’ ‘Well then, Herr Burgermeister, the holes from which the sap is flowing were not made by boys who were after the birch-sap to make beer, but by the weidenborer’ [the common German name for the Cossus]. A small explosion of official dignity followed. The act of the presumptuous boy was reported to a stern parent, and the result was, in Yankee phrase, a ‘licking,’ which was certainly undeserved.”

Let us not be like the Burgermeister. Let us heed a timely warning and examine our trees, and wherever the tell-tale holes are found, search for the deadly borer and destroy it, lest it continue to increase and work great havoc among the trees of this country.

It requires patience to fight the borers, for they are so well protected in their burrows inside the trees that they are difficult to get at.

The simplest method, however, is to insert into the holes a long pliable wire, hooked at one end, and draw out the insect. Then by means of a small glass syringe, inject into each hole one teaspoonful of carbon bisulphid. This is a deadly poison, and should be used with the greatest care against fire (smoking is dangerous when using this chemical). After the solution has been injected, securely close the holes with wax or putty. In case of badly infested trees, the safest way is to cut them down and burn them; thus destroying all larvae and pupae.

When it is desired to save a rare and valuable tree at any cost, consult an expert. Much can be done by the so-called “tree-doctor” to save a tree that seems to be doomed. Many trees in our city parks are evidences of his skilled labor.

Trees that were in such a condition that one would suppose that they were hardly worth attention have been rescued and given back to man for many additional years of usefulness.

If all realized the great destructiveness of which these pests are capable, I am sure all would be on the look-out for them and wage unending war. The method of destroying them is comparatively simple, but requires patience.
"The Garden Gious with Dablias Large and New"

— ILBOTT
The Human Pedigree of Flowers and Trees

By HARRIETTE WILBUR

PART I

[Part I.—This is the first of two articles concerning the legends of the transformation of human-kind into flowers and trees. The second article will appear in the November issue.]

PRIMITIVE man naturally interpreted all phenomena in terms of his own capabilities and limitations. And because, in common with human-kind, a plant possesses life and is subject to disease, accident, and death, metempsychosis has been an important factor in flower legends.

Keats has given us another reason for these legends in his lines on the narcissus:

What first inspired a bard of old to sing Narcissus pining over the untainted spring? In some delicious ramble, he had found A little space, with boughs all even round; And, in the midst of all, a clearer pool, That e'er reflected in its pleasant cool The blue sky here and there, scarcely peeping Through tender wreaths fantastically creeping; And on the bank a lovely flower he spied, A meek and forlorn flower, with naught of pride. Drooping in its beauty o'er the watery clearness, To woo its own sad image into nearness. Nor teach my beating heart to fear.

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

No, the heart that has truly loved never forgets.

The gods, who mortal beauty chase, Still in a tree end their race:

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

Hycacinthus was a young mortal so fortunate, or rather unfortunate, as it turned out, to be loved by two gods, the Sun and the West Wind. One day Apollo was playing a game of quoits with Hycacinthus, when Zephyrus, the god of the west, passed by. Zephyrus jealously blew Apollo's quoit aside, but with the dire consequence that it struck his playmate and felled him. How eyes must weep!

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

Hycacinthus was a young mortal so fortunate, or rather unfortunate, as it turned out, to be loved by two gods, the Sun and the West Wind. One day Apollo was playing a game of quoits with Hycacinthus, when Zephyrus, the god of the west, passed by. Zephyrus jealously blew Apollo's quoit aside, but with the dire consequence that it struck his playmate and felled him. How eyes must weep!

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

Hycacinthus was a young mortal so fortunate, or rather unfortunate, as it turned out, to be loved by two gods, the Sun and the West Wind. One day Apollo was playing a game of quoits with Hycacinthus, when Zephyrus, the god of the west, passed by. Zephyrus jealously blew Apollo's quoit aside, but with the dire consequence that it struck his playmate and felled him. How eyes must weep!

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

Hycacinthus was a young mortal so fortunate, or rather unfortunate, as it turned out, to be loved by two gods, the Sun and the West Wind. One day Apollo was playing a game of quoits with Hycacinthus, when Zephyrus, the god of the west, passed by. Zephyrus jealously blew Apollo's quoit aside, but with the dire consequence that it struck his playmate and felled him. How eyes must weep!

Another mortal whom Apollo loved was the young hunter Cyparissus, who, having accidentally killed Apollo's pet stag, grieved into a metamorphosis over the mishap and became the mournful cypress, which Apollo declared should henceforth be used to shade the graves of those who had been greatly beloved through life.

Hycacinthus was a young mortal so fortunate, or rather unfortunate, as it turned out, to be loved by two gods, the Sun and the West Wind. One day Apollo was playing a game of quoits with Hycacinthus, when Zephyrus, the god of the west, passed by. Zephyrus jealously blew Apollo's quoit aside, but with the dire consequence that it struck his playmate and felled him. How eyes must weep!
AFTER we had graduated from cold-frames and hotbeds, and our conservatory, we thought we must have a greenhouse, and we went at it "as we," for unless "the captain's captain," as well as the captain himself, and their children, too, take some interest in the private greenhouse, it is far better, when the employment of a private gardener is beyond the means of the suburbanite, to leave the greenhouse unbuilt. Some prefatory remarks will make the whole matter of greenhouse-building more interesting and instructive to the suburbanite who contemplates building.

A greenhouse which has one end toward the north and the other toward the south is called a north-and-south house, and the name east-and-west is applied to the same, if it be built with the north side toward the east. When the two roofs of a greenhouse are equal in length, it is called an even-span house, and when an east-and-west house has the south roof longer than the north, in such houses the north wall being higher usually than the south wall, it is called a three-quarter-span house. A lean-to is a greenhouse with one roof, the higher side of which, usually, though not necessarily, the north, is formed by some building, or by some wall of stone or concrete, already built on the home grounds.

Again, any of the above-named houses whose roofs are curved are called curvilinear houses; those whose eaves only are curved, curved-eaved houses; and those whose roofs and eaves are without a curve, straight-roofed houses.

It is pretty generally conceded that for forcing roses, carnations, and other plants, which are set out in benches of soil for cut-flowers during midwinter, a three-quarter-span east-and-west house gives the largest results in blooms during that season of the year; and, furthermore, the north side of a three-quarter-span house is a good location for a propagating bench. During the remainder of the year, the even-span north-and-south house is better, not only for growing plants, giving to these a more symmetrical growth, but also for growing cut-flowers and vegetables. Probably the best of all greenhouses for general use is an even-span house, one end of which points a little east of south and the other a little west of north, since such a house will receive more of the forenoon sun in the short days of the winter months, when, according to statistics, there are more sunny forenoons than afternoons, and since it has not the objectionable features of a three-quarter-span house during the summer, which then receives the direct rays of the sun, and hence is intensely hot.

The curvilinear greenhouse is the most ornamental of all, on account of its graceful lines, and it has more head-room over its side-benches. The curved-eave house is lightest of all, as it has no gutter at its eaves, and makes a beautiful appearance. For growing purposes, neither of these is superior to the straight-roofed house except in the two points indicated above.

The first and most important step in building a greenhouse, after deciding upon the style of house, is the selection of a location. Whether an attached or detached greenhouse is decided upon, the site must be where no surface water gathers and stands at any season of the year, and where a cellar may be dug at least seven feet deep—better still eight—under the workhouse part of the greenhouse, or the already existing building to which the greenhouse is attached, in which the heating apparatus may be installed and the supply of coal be kept. It cannot be too emphatically stated that it is of paramount importance that the earth, or the concrete floor of the greenhouse, and the boiler-pit be always free from water. Unless this rule is observed, a greenhouse during the wet season is a continual wreriment. If, however, the surface where the greenhouse is to be built is always dry, but there is danger that during some seasons of the year the boiler-pit will be wet, as can be easily ascertained from an inspection of the cellars of dwelling-houses in the immediate neighborhood, this difficulty may be overcome by laying a tile drain from the bottom of the pit to some point lower than its basin where the water may flow out. A burnt child dreads the fire, and the writer once had a world of trouble from a wet boiler-pit, and his trouble is far from being an isolated case, as he has learned since from personal observation. The greenhouse should be located, if possible, where it receives the full light of the sun all day.

There are three methods of heating a greenhouse: by hot water, by steam, and by the two combined. Hot-water heating is preferable for a moderate-sized greenhouse, or range of greenhouses, especially on a private place. With a hot-water system, the air in the greenhouse begins to grow warm as soon as the water begins to warm, and loses its heat gradually as the water grows cold; and, furthermore, with the hot-water system, the fire may be left many hours without attention, and a night fireman is not required except in very extreme weather.

Where steam heat is used, there is no heat in the greenhouse until steam is up, and none after steam runs down, and a night fireman is usually required; but in extremely large greenhouses ranges steam is preferred by many, especially in rose-growing, and even in moderate-sized ranges devoted to rose-growing, a combination of hot water, as the main depend­ence, and steam, used at certain seasons of the year and for the application of sulphur to pre­vent mildew, gives the most satisfactory results.

Had the writer, when he began to build his first very modest and inexpensive greenhouse, known that which he has since learned by experience, and a somewhat wide observation, and which he has written into this rather long preface, he would have been saved some unnece­ssary expense, and not a few mistakes, failures, and disappointments. Were he, with his present knowledge, to build again a greenhouse even for private use, he would dodge the local carpenter, glazier, plumber, and boiler-man, and at once get into connection with some well-known greenhouse-building company, and con­tract with it for an iron-frame, concrete-walled greenhouse, with a hot-water heating equipment.

THAT is what we, in building our first green­house, did not do, and what we did do, mistakes and all, is as follows: We selected a site north and east of our dwelling-house, on the east end of our garden; a high board fence about fifteen feet north formed a wind-break. We planned and built there a north-and-south even­span greenhouse, which we thought could be economically heated and easily managed. The size decided upon was thirty-two feet long and twelve feet wide. Red cedar posts, eight inches in diameter at the top, were set four feet apart along each side of the proposed greenhouse, three and one-half feet deep into the ground, with two and one-half feet of post above the ground. This required eighteen posts, each six feet long. At each end of the proposed house were set two posts of the same diameter, the same depth in the ground, and about the same distance apart, but with enough post above ground so that these posts would support the gable-end rafters of the roof when set up later. Lengthwise through the center of the rectangle formed by these posts, a trench

(206)
THE usefulness of flowers as edible delicacies is practically not known in this country, though abroad they are used as ingredients in many dishes.

Candied violets are now a staple product of several districts in France. At Grasse, for instance, in which neighborhood immense quantities of them are raised, all the old and stale violets are purchased by the confectionery manufacturers, who steam them, dip them in boiling sugar, and sell them in commerce at a high price as "confiture de violette." Rose buds boiled in sugar and made into preserve form a sweetmeat popular among the Turks and Greeks. In Roumania, roses, limes, flowers, and violets are much used for flavoring preserves of various kinds; and are also utilized in Turkish, Persian, and Arabian, in the preparation of sherbets. The famous violet sherbet of the Caliph is of a greenish color, and to this day is called the "Grand Signor's sherbet."

That species of lily known to botanists as "Thunbergi" is, in China, one of the most choice delicacies of the native kitchen. It is dried, and used for seasoning roasts and other dishes. The lilies are grown for market in many provinces of China, and usually are dug up just before they open. Cooked as a fresh vegetable, they have a singularly agreeable taste and fragrance. The Chinese also candied dried rosebuds, violets and jasmine, and pomegranate blossoms, while out of the yellow water-lily they make a delicious jelly. The Turks also utilize this common water-lily in the preparation of a very favorite cooling drink.

But by far the most remarkable of edible flowers is that culled from the butter-tree of India. The blossoms of this singular tree are the chief means of subsistence with the Bhils and other Indian hill tribes. An average tree yields from two hundred to three hundred and fifty pounds of pulpy, bell-shaped flowers, that, when they drop off during March and April, the hot months of the Indian year, are eagerly gathered by the natives. They have, when fresh, a peculiar and luscious taste, but the fragrance of them is not pleasant, and is best and most briefly described as "mousy." Usually they are cured in the sun, shrivel to one-fourth of their size, and then resemble nothing so much as raisins. The natives prepare them for food by boiling, or steaming, or drying, and then resembling nothing so much as raisins. The natives prepare them for food by boiling, or steaming, or drying, the latter method of preservation being the most common and popular. The dried fruit results in a rather coarse, feathery, and not at all rich fruit which is sold for food; it is a common fishermens' dish. It is, dried and used as a substitute for butter, and is also used by the Europeans as a substitute for butter.
Suburban Life
October, 1912

Where Questions Are Answered

Pot-bound Plants

KINDLY send information how I can find out when large pot-plants are pot-bound, such as aucuba and other palms and ferns that require large pots. (A. B., N. Y.)

Turn the pot upside down, with the plant stalk between the fingers to hold the ball of earth. Tap edge of wooden projection and, if the roots are all exposed and some dead and twisted, your plant is pot-bound and badly so. Remove all the dead roots and repot carefully. This is an expert’s job, and should be done by one who understands his business.

Getting Rid of Dead Grass

I SHOULD be pleased to be advised how I can get rid of the dead grass on a lawn that is naturally good, but which has been neglected from about last August until the present time. It is, at present, about half good, and if I can be told how I am to bring it back to its normal condition, I shall be much obliged. (G. E. H., Maine.)

Sprinkle the barren spots with air-dried lime. Rake the surface of the lawn with brushes deeply. Wet it thoroughly. Sprinkle it well with good lawn grass seed containing a small percentage of Kentucky blue grass. Roll it firmly and smooth.

Ants on Peonies

In my mother’s home is a big row of peonies which bear bounteously each year, but, from the moment the plant appears until late in the fall, they are covered continually with ants—big black ones. Can you tell me what is the cause of this, and whether they are detrimental to the plant, and how best to get rid of them? (G. Mcll., Iowa.)

Spray the peonies with a good insecticide or with kermes and soap emulsion. A nicotine spray or a weak emulsion of kerosene and water will also get rid of your troubles. Of course the ants are very detrimental. Peonies are great feeders, and require great quantities of liquid fertilizer, and water deeply. They are heavy feeders, and require great quantities of liquid fertilizer, and water deeply. They will be diseased, and the other half healthy; and in other cases the entire lower part of the plant will be of a normal color, and only the upper part of the plant, including the flower-stems and flowers, will be diseased. Investigation has shown that this disease is not carried over in the soil, and is not contagious, but is a bilious attack caused by lack of moisture. Plants in greenhouses under control are rarely affected with this disease. The only known remedies are frequent cultivation of the surface of the soil about the aster plants, to conserve the moisture, or mulching with fresh cut grass, hay, straw, or straw manure, which will be of a normal color, and only the upper part of the plant, including the flower-stems and flowers, will be diseased. Investigation has shown that this disease is not carried over in the soil, and is not contagious, but is a bilious attack caused by lack of moisture. Plants in greenhouses under control are rarely affected with this disease. The only known remedies are frequent cultivation of the surface of the soil about the aster plants, to conserve the moisture, or mulching with fresh cut grass, hay, straw, or straw manure, which

Peonies not Blooming Freely

I HAVE a row of peonies—white, pink and red, which are in a slightly sloping bed on rather dry gravelly sandy soil which is fairly rich on top; but the peonies have been set out three years and do not blossom at all freely or in large size. Will you kindly tell me how to improve them—what kind of fertilizer to use, and what season to use it? (S. W. T., Mass.)

Peonies produce the most and largest flowers when planted where the soil retains a moderate degree of moisture, but is not swampy or ever flooded with water. Peonies are heavy feeders, and require a rich soil. The location where the inquirer has planted his peonies is not a favorable one. This may be overcome, in a measure, by applying around each plant, after cultivation, two or three times during the summer, a heavy application of well-decomposed cow manure, or, if that is not obtainable, horse or sheep manure, and working it lightly into the soil. In the autumn, after the ground is frozen, and the peony tops have been cut off and thrown down on the plant, cover the plant with a thick mulch of straw manure. In the summer, between the applications of manure, apply bone meal, and work it into the soil lightly. If small, freshly cut peony roots were used at the time of planting, they would also help. When you will explain in a measure why they have produced only a few small blooms, it will give good results only several years after planting. Quicker and more satisfactory results are obtained from one-year, two-year, and three-year-old roots, the two- and three-year-old being preferable.

Reporting Rex Begonias

SHOULD the rex begonia be repotted every year? We had hot-water heat put into our house last fall, and the begonia has shed its leaves and died. (E. E. H., Ohio.)

We will say that the rex begonias should be repotted every year, and that the pots should be about one inch larger than they grew before. If small, freshly cut peony roots were used at the time of planting, they would also help. If not, they do not need repotting until about the end of the second or third year. Winter is a good time to repot the plant. The pot should be a little larger than the root-ball, and the plant should be set in a slightly rich soil. After repotting, you may apply bone meal, and work it into the soil lightly. In the autumn, after the ground is frozen, and the peony tops have been cut off and thrown down on the plant, cover the plant with a thick mulch of straw manure. In the summer, between the applications of manure, apply bone meal, and work it into the soil lightly. If small, freshly cut peony roots were used at the time of planting, they would also help. When you will explain in a measure why they have produced only a few small blooms, it will give good results only several years after planting. Quicker and more satisfactory results are obtained from one-year, two-year, and three-year-old roots, the two- and three-year-old being preferable.

Cutting Back Iris and Roses

I AM a lady of seventy years with a little city garden back of our house, twenty-five feet wide and ninety feet long. Eight years ago it was a clay hole; now I myself, with constant work and little expense, by removing vines and evergreen vines and trees from the site, and after each cutting, have built up the worn sod. Last week, a lady visiting next door said it was a "perfect little park to look at," and I think it is, myself. Does it hurt Iris to cut it back after flowering? Or does it stop blooming, and also roses? I am pretty successful with my flowers; I have just been putting in my large potatoes around my

The Fence with Endurance

—have your dealer show you the three popular-priced grades

Clever housekeepers have chosen the original Brenlin Unfilled Shades for a million and a half windows. Many of these housekeepers, however, have a need for one purpose or another, for shades of a lower grade, and from them have come an insistent demand for a Brenlin standard of quality and uniformity—in three grades.

Go to your dealer today and let him show you how we have met this demand with two new grades of Brenlin—Brenlin Filled and Brenlin Machine Made—making a series of Brenlin shades, priced for the customary window—1 yard wide by 2 yards long—at

—Window Shades

15 cents, 25 cents, and 25 cents.

(except in the Far West)

Brenlin Unfilled Shades should always be shown for every window where length of service and attractive qualities are the considerations. For this shade is made of closely woven cloth without the "filling" that so often creases and falls out in unsightly streaks and "pills." Won’t fade it nor water always hangs straight and smooth, and

Brenlin Filled at 50c., and Brenlin Machine Made at 75c., and a window at 25c. for windows 1 yard wide by 2 yards long.

Mail Order

If no dealer in your town can supply Brenlin shades, write for the Brenlin Book Today

This book shows actual samples of Brenlin shades in all colors, and gives the many helpful suggestions for the artistic treatment of your windows. With it we will send the name of the Brenlin dealer in your town. Cassa. W. F. Bancroft & Co., 2234 Ebring Road, Cincinnati, Ohio.

No shop can set in—years can’t get out

For sale by leading dealers everywhere

Write for the Brenlin Book Today

The Fence with Endurance

No shop can set in—years can’t get out

The Fence with Endurance

You would be entirely justified in paying a fair price for an attraction which loses like this, if we could guarantee to last a quarter of a century.

We not only can but will.

Cut the fence down, and you have wasted a season’s work. We will remove the old fence, and put in the new for only one-third of the cost of the old. No one will know the difference. We will guarantee that in ten years it will be as fine as it was when first set up.

Our business is large. Our prices are lowest. Our work is the best. We will save you at least five dollars a yard.

We also make Iron Fencing, Terra Cotta steps, Tombstone Fountains, and are. Sold for catalogue.

ANCHOR POST IRON WORKS

21 Cortland Street (11th Floor) New York

Anchor Post Iron Posts are brazed with
tenners’ stock. All dipping post-holes

The Fence with Endurance

You would be entirely justified in paying a fair price for an attraction which loses like this, if we could guarantee to last a quarter of a century.

We not only can but will.

Cut the fence down, and you have wasted a season’s work. We will remove the old fence, and put in the new for only one-third of the cost of the old. No one will know the difference. We will guarantee that in ten years it will be as fine as it was when first set up.

Our business is large. Our prices are lowest. Our work is the best. We will save you at least five dollars a yard.

We also make Iron Fencing, Terra Cottas steps, Tombstone Fountains, and are. Sold for catalogue.

ANCHOR POST IRON WORKS

21 Cortland Street (11th Floor) New York

Anchor Post Iron Posts are brazed with
tenners’ stock. All dipping post-holes
Give Your Painter
Pure Linseed Oil
As well as
Pure White Lead

November 1912 Suburban Life

These Big Trees and Shrubs Were Planted by Nelson's Last Spring

The difference in cost between big trees and small ones is offset many times over by the increased value of the property on which the larger growth is set. Trees and shrubs do not grow in a night, and the years of waiting are lost years.

Let Us Plant for You This Fall

You do not need to wait. By planting Nelson's big trees you can transform the barren landscape into a scene of beauty. The effect is immediate, and more—it is permanent. Nelson's trees live. They are so sturdy, so vigorous and healthy, and are lifted and packed with such care that when properly set out they go right on growing as if they never had been disturbed.

“Languedoes Without Waiting”—Our Book—Free to You

If you live within 500 miles of Chicago and are interested in trees, shrubs and hardy flowers. Price 50 cts. to those further away. Rebated on first order. By planting Nelson's big trees you can transform the barest landscape into a scene of beauty. The effect is immediate, more—it is permanent. Nelson's trees live. They are so sturdy, so vigorous and healthy, and are lifted and packed with such care that when properly set out they go right on growing as if they never had been disturbed.

SWAIN NELSON & SONS COMPANY
767 Marquette Building Chicago, Illinois

Biltmore Nursery Grows Many Flowering Trees and Shrubs

The variety of blooms borne by the flowering trees and shrubs that may be purchased from Biltmore Nursery will prove a revelation to you. White, lavender, pink, red, crimson, yellow, and a myriad of other shades, await your option. The delicate charms of the Clethra and the rugged grace of the Locust are yours to choose from. With judicious selection, a succession of flowers may be had from spring until fall.

For those bewildered by the wealth of floral treasures, Biltmore Nursery has made assortments of the most showy and satisfactory trees and shrubs that flower, and offers sets of those that will meet every requirement of purse and preference.

The Book Tells Which Plants Are Best For You

To show the wealth of beauty available to the planter, Biltmore Nursery has issued a new edition of the book "Flowering Trees and Shrubs." Each page unfolds new beauties of form and color of flower—specimen illustrations appear here. Many of the rarer and more desirable species of hardy trees and shrubs are called to the attention of connoisseurs of outdoor beauty. Notes on culture show the adaptability of stock to the different soils and climates, and make it easy for the buyer to select the kinds best adapted to his own location. Attractive collections are offered.

A copy of this beautiful book will be sent free to those who contemplate planting soon.

BILTMORE NURSERY
Box 1400 Biltmore, N. C.

Dutch Boy White Linseed Oil

Both are pure. The linseed oil is supplied to the house-owner in our one- and five-gallon cans, sealed at the spout, and guaranteed by the "Dutch Boy Painter" trade-mark to be just as it was pressed from the flaxseed. The painter mixes the lead and oil in proportions to suit the conditions of each job as he finds it. Besides knowing what it is, he knows what it will do.

Paint of that kind put on early this Fall will dry hard before the rough weather comes, and protect your property from its ravages. Another thing that kind of paint will do is to beautify the interior of your home and make it more attractive for the shut-in life during the cold weather.

Ask for Our Painting Helps No. 73

which will give you some convincing facts and information. These helps include our stencil book with a hundred choice designs for high-class decoration, from which you may order at half the art-store prices.

NATIONAL LEAD COMPANY
New York Boston Buffalo Chicago Cincinnati Cleveland San Francisco St. Louis
(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)
This New Book
On Shade Trees
Is Free to You

It shows you how much it pays to plant for shade and beauty about your home and the actual cash value that such comfort brings, and how cheaply it may be had.

Harrison's Hardy trees and shrubs.

This book tells you what the advantages of planting in different soils and climates, how to have good beds, and how to set out trees and shrubs, so that you will thrive; contains 64 pages, 46 pictures: helpful and interesting. If you are thinking of planting trees, we will be glad to send you a copy of "The Why and How of Shade Trees and Evergreens," free.

How to Grow and Market Fruit

Our grade book, 120 pages, tells how to grow and market 40 acres more per bushel for forty fruit, how to have more and bigger crops, how to make established orchards produce from $200 to $600 profit per year per acre; contains 60,000 words and 200 special pictures showing-upon-modern methods. Poles, 60 cents, related, on $5 center for trees. Complete catalog of fruit and shade trees for $1.00. (A. F. B., N. Y.)

How to Grow and Market Fruit

Your book will tell you when to plant and when to harvest. If you are planning a new orchard, or if you wish to improve your present one, we will be happy to correspond upon this subject.

HARRISON'S NURSERIES

Fruit Ave., BERLIN, MD.

TIME NOW
TO BENCH YOUR
CARNATIONS FOR WINTER BLOOMING

If you have even a small greenhouse
WE OFFER
strong, field-grown plants of

ALMA WARD—Best fancy white

CHANCERS—Bunch-pink

C. W. WARD—Deep pink

BEACON—Scarlet

GUARANTEED STOCK
$2 per doz., assorted. $15 per 100. Order today.

THE HARLOWARDEN GREENHOUSES
GREENPORT, NEW YORK

1860
1912

Old Colony Nurseries

Hardy Shrubs, Trees, Vines, Evergreens and Perennials

Priced Catalogue Free on Application

T. R. WATSON
Plymouth, Mass.

NEW CLEMATIS, INA

A remarkably hardy and strong-growing vine, with large, chartreuse leaves and an abundance of white shaded blue flowers, two inches in diameter; blooms in August; just the thing for pergolas and screens or verandas; it may be planted now at any time. Strong, three-year flowered vines, $1 each, six for $5, twelve for $10.

SOUTHWORTH BROS., Nurserymen, Beverly, Mass.

This Club
Cannot Rust

Don't confuse it with clubs that have been specially treated—those clubs are usually too hard or too soft; haven't enough life or elasticity. The Monel golf club is made of a natural and lie, the beet thing about a Monel golf club is that the alloy of Monel Metal Golf Club Heads, $1.00. Clubs complete, $2.25.

The treatment of rose bushes after blooming is quite different from that of hardy herbaceous plants, like iris. A proper pruning of hybrid perpetual, or hybrid tea and tea rose bushes during the summer causes them to bloom more freely. The following treatment will give best results: When cutting a bloom, always use a sharp knife, and take off with the bloom, or cluster of blooms, a stem long enough so as to leave a stub with only one leaf on it between its end and the hard-wood branch, or main body of the bush, as the case may be. Furthermore, out back all to blind wood—that is the branches which have not produced blooms—is exactly the same way.

The surest way to destroy the large worms on calendulas is to pick them off and kill them. They are usually found at work in the cool of the morning or toward evening. Another remedy is to dust the under side of the leaves, when the dew is on them, with white hellerdore powder or tobacco dust. To destroy the black aphids, dissolve one ounce of ivory soap in five quarts of boiling water, and when this solution is cool enough, so that the hand can be held in it, put it on the calendulas with a sprayer, water sprinkler, or whisk broom. A few hours afterward wash off the soap solution in the same manner in which it was applied, using clear cold water, the colder the better. Other methods of destroying aphids are dusting the plants with any of the powders mentioned above, or spraying with a tobacco solution.

The Best Double Violet

I SHOULD like to know if the double violas require any different treatment in culture from the singles. Is it best to frost violas in the fall, to check the growth of the foliage? Will the doubles stand for this treatment? What is the best variety to grow? How about the Campbell variety? (L. M. B., Wyoming.)

Linda Howe Campbell is a very reliable variety to grow, and will give more pleasing results than many others. The old Marie Louise is a fine double violet, and of excellent color. Yes, you will find that double violas and singles require different treatment from singles. They will positively, not stand any exposure to frost and should be housed early in September. Singles develop quite early, in a winter-temperature of about forty degrees, but doubles require at least forty-five. They produce flowers until the middle of May. After March 15, reduce the night temperature about five degrees. Give plenty of ventilation and shade the glass, if warm. This will keep the house cooler, and cause the violas to retain their color.

Germinating Shasta Daisy Seed

A YEAR ago I sowed a packet of Shasta daisy seed. I think every seed germinated. At the proper time I thinned out the plants about four inches apart, and in the fall had a fine stand of more than a hundred vigorous plants. I was quite proud of them, and looked forward with pleasure to having handsome blooms this year. I should have this year. At the beginning of winter I covered the plants with dead leaves to a depth of three or four inches. My "handsome border" now looked quite fair and healthy. Soon the looking plants, and five weeklings. Would the plants have lived without any mulching, or was my "protection" too deep? There are many large worms in my garden. Do they do any harm, and should they be destroyed? (A. F. B., N. Y.)

Your seedlings should be thinned out into pots, and plunged into sand in a coldframe for the winter. Your garden would be a sickly affair without the large worms. They keep the soil aerated and open.

Asters—two hundred and fifteen of them. A big worm, also black aphids, have troubled my calendula. Is there a safe remedy? (F. L. B., N. Y.)

After aster has finished blooming, the flower-stalks, both those which are producing seed, and those which are not, should be cut off close to the ground; the former, because the production of seed takes away the vigor of the plant, and the latter, because they are useless and unattractive. The dead foliage also should be kept away, and where the tips of the leaves are brown they may be trimmed off. On the other hand, the green foliage should not be cut back at all; but a strong growth of foliage should be encouraged by fertilizing and cultivating throughout the summer, if treated, the plant will be kept in good condition, and produce an abundant crop of beautiful blooms. The leaves of the plant are its lungs, through which it breathes and lives.

Suburban Life

October, 1912

Our home study course in practical poultry culture consists of four fairly healthy booklets, and those which are not, should be cut off close to the ground, and only one leaf on it between its end and the hard-wood branch, or main body of the bush, as the case may be. Furthermore, cut back all to blind wood—that is the branches which have not produced blooms—is exactly the same way.

The surest way to destroy the large worms on calendulas is to pick them off and kill them. They are usually found at work in the cool of the morning or toward evening. Another remedy is to dust the under side of the leaves, when the dew is on them, with white hellerdore powder or tobacco dust. To destroy the black aphids, dissolve one ounce of ivory soap in five quarts of boiling water, and when this solution is cool enough, so that the hand can be held in it, put it on the calendulas with a sprayer, water sprinkler, or whisk broom. A few hours afterward wash off the soap solution in the same manner in which it was applied, using clear cold water, the colder the better. Other methods of destroying aphids are dusting the plants with any of the powders mentioned above, or spraying with a tobacco solution.

The Best Double Violet

I SHOULD like to know if the double violas require any different treatment in culture from the singles. Is it best to frost violas in the fall, to check the growth of the foliage? Will the doubles stand for this treatment? What is the best variety to grow? How about the Campbell variety? (L. M. B., Wyoming.)

Linda Howe Campbell is a very reliable variety to grow, and will give more pleasing results than many others. The old Marie Louise is a fine double violet, and of excellent color. Yes, you will find that double violas and singles require different treatment from singles. They will positively, not stand any exposure to frost and should be housed early in September. Singles develop quite early, in a winter-temperature of about forty degrees, but doubles require at least forty-five. They produce flowers until the middle of May. After March 15, reduce the night temperature about five degrees. Give plenty of ventilation and shade the glass, if warm. This will keep the house cooler, and cause the violas to retain their color.

Germinating Shasta Daisy Seed

A YEAR ago I sowed a packet of Shasta daisy seed. I think every seed germinated. At the proper time I thinned out the plants about four inches apart, and in the fall had a fine stand of more than a hundred vigorous plants. I was quite proud of them, and looked forward with pleasure to having handsome blooms this year. I should have this year. At the beginning of winter I covered the plants with dead leaves to a depth of three or four inches. My "handsome border" now looked quite fair and healthy. Soon the looking plants, and five weeklings. Would the plants have lived without any mulching, or was my "protection" too deep? There are many large worms in my garden. Do they do any harm, and should they be destroyed? (A. F. B., N. Y.)

Your seedlings should be thinned out into pots, and plunged into sand in a coldframe for the winter. Your garden would be a sickly affair without the large worms. They keep the soil aerated and open.

Asters—two hundred and fifteen of them. A big worm, also black aphids, have troubled my calendula. Is there a safe remedy? (F. L. B., N. Y.)
The Human Pedigree of Flowers and Trees

(Continued from page 205)

him to the ground. Vainly Apollo strove to check the stream of blood which flowed from the ghastly wound; but to keep some reminder of his friend, Apollo changed the fallen drops into clusters of flowers, ever since called by the youth's name. Zephyrus, perceiving too late the fatal effects of his jealousy, hovered inconstantly over the spot, and tenderly caressed the dear flowers which had sprung from his friend's life-blood:

Zephyr, penitent,
Who now, ere Phebus raiseth the firmament,
Fondles the flower.

BOTANISTS do not consider the species of garden hyacinths as the plant meant by the Greeks in this legend, but rather the Turk's cap lily, the iris, the larkspur, or the gladiolus. Whatever the plant, it should bear on its petals the exclamation of woe uttered again and again by Apollo: "Ah!" These letters, supposed to be discernible in the Gladiolus Byzantinus, were interpreted by Ovid either as the wail of Apollo for Hycinthus, or as the first letters in the name of Ajax, one legend very appropriately stating that the gladiolus, or sword-lily, sprang from the blood of this mighty warrior, and not from that of the princely Hyacinthus!

Hyacinthus dwells no more in his brilliant abode, and the stranger
Reads the memorial sighs he has left with a stolid amazement.

—Louis Houdonson, "Greek Mythology."

Come, hyacinths, chime your sapphire bells,
Toll o'er his fallen head, for Phebus' sake.

—Elizabeth M. Johnston, "A Spring Song."

Drooping grace unfurls,
Still, Hycinthus' curst.

—Laure Henry, "Cherous of the Flowers."

A POLLO suffered a more personal loss in that of his son Phaethon. This reckless youth demanded one day to take his father's place in the sun-chariot, and, before the journey across the heavens was completed, Jupiter wrathfully slew the young driver with one of his fierce thunderbolts. Phaethon's three sisters mourned him deeply, spending their days by the riverside, shedding tears, wringing their white hands, and bewailing their loss, until the gods, in pity, transformed them into poplar trees, and their tears into amber, which substance was supposed by the ancients to flow from the poplar like teardrops.

And the famed tree, that wept, with rister love,
The youth destroyed by the red bolts of Jove.  
—Greenleaf.

Rapin states that the violet was a nymph who, unable to escape Apollo, changed to a violet; a legend easily interpreted as the day-light changing into the purple twilight, to escape the sun that has pursued her all day.

ACCORDING to Rapin, too, the rose owes its origin to Apollo, though this time by incurring his wrath. "The rose was once Rhodante, a beautiful Greek maiden, of whose many suitors the principal were Halesus, Brias, and Orcas. Entering the temple with her parents and people, one day, and being pursued by her suitors, the excitement of the contest so enhanced her beauty that the people shouted: 'Let Rhodante be a goddess, and let the image of Diana give place to her!' Rhodante being thereupon raised upon the altar, Phoebus, Diana's brother, was so incensed at the insult that he turned his rays against the new-made goddess. Then it soon repented Rhodante of her divinity, for her feet became fixed to the altar as roots, and the hands she stretched out became branches, whilst the people defending her became protect-

Your Telephone Horizon

The horizon of vision, the circle which bounds our sight, has not changed.

It is best observed at sea. Though the ships of today are larger than the ships of fifty years ago, you cannot see them until they come up over the edge of the world, fifteen or twenty miles away.

A generation ago the horizon of speech was very limited. When your grandfather was a young man, his voice could be heard on a still day for perhaps a mile. Even though he used a speaking trumpet, he could not be heard nearly so far as he could be seen.

Today all this has been changed. The telephone has vastly extended the horizon of speech.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

Your Telephone Horizon

Talking two thousand miles is an everyday occurrence, while in order to see this distance, you would need to mount your telescope on a platform approximately 560 miles high.

As a man is followed by his shadow, so is he followed by the horizon of telephone communication. When he travels across the continent his telephone horizon travels with him, and wherever he may be he is always at the center of a great circle of telephone neighbors.

What is true of one man is true of the whole public. In order to provide a telephone horizon for each member of the nation, the Bell System has been established.
Moons' Shrubs solve the problem of bare house foundations and ugly veranda corners—now, in October, is the time to plant them.
Old Baucis look'd where Old Philemon stood
And saw his lengthened arms a sprouting wood;
New roots their fastened feet to bind.
Their bodies stiffen in a rising rind;
Then, ere the bark above their shoulders grew.
At once the enroaching rinds their closing lips invade.
Even yet an ancient Tyanzan shows
A spreading oak, that near a linden grows.
The neighborhood confirm the prodigy.
Grave men, not vain of tongue, or like to lie.
1 saw myself the garlands on their boughs.
And tablets hung for gifts of granted vows.

—Ovid (Dryden's translation).

Swift, in his humorous version of this legend, says:

Thus happy in their change of life.
Were several years this man and wife;
When, on a day which proved their last,
They went by chance, amid their talk,
To the churchyard to take a walk;
When Baucis hastily cried out,
"My dear, I see your forehead sprout!"—"Sprout!" quoth the man; "What's this you tell us;
I hope you don't believe me jealous!
And yet, methinks I feel it true.
And really yours is budding too—Nay,—now I cannot stir my foot;
It feels as if twere taking root."
Description would but tire my Muse,
In short, they both were turn'd to yews.

The Flowers That Grew on the Sand-Dunes
BY KATE HUDSON

For the true flower-lover, these are lovely blossoms and others still lovelier, but none absolutely unattractive and uninteresting; he will not only minister to his garden—be it large or small—most religiously, but will know just where and when to greet the season's wildwood weeds, from the early hepatica and marsh marigold to the late asters and goldenrods; and will joyfully name and enumerate what he's growing in his particular happy hunting-ground.

For such an one—for none other would in the least care to know!—we should like to give a list of what grows in our small camp-ground—a scant acre on the banks of Long Island Creek, near Oyster Bay, and backing on the sand-dunes of Long Island Sound, in silvery sand, with an occasional spot of compost-formed soil substratum.

We pitched camp in early June, when our nineteen scraggy firs and our seven cone-like junipers, on two of which we had left the graceful festoons of poison-ivy undisturbed, rustled their branches in the wind, reds of cactus-blossoms—great sulphur—satiny stars from one to two and a half inches in diameter—and thousands of pale pink, faintly fragrant wild roses; beyond which between camp and creek there stretched a broad border of beach grass, sea-lavender, prickle-weed, and cedgrass.

With the season's advance, the vegetation changed; and, as each weed appeared, it was jubilantly found and "made a note on"; till at the end of the summer, when the vigorous and brilliant goldenrod flourishes alone, our list comprised the following weeds: wild asparagus and mustard, yarrow, catmint, Queen Anne's lace, butter and eggs, mullein, wild primrose, milkweed, chickweed, grass of Parnassus, pimpernel (the tiniest and loveliest of blossoms!), sweet everlasting, lamb's-quarters, two kinds of white and one deep purple aster, hedge hind-weed, and three kinds of the goldenrod before mentioned. A goodly showing, forsooth, for the small slice of sea-sand soil surrounding our small bungalow!
A Natural Support for Fruit Tree Limbs

By THOS. H. ROGERS

For various reasons, fruit trees, more especially apple trees, are liable to split at the forks, or crotches, where the limbs join the trunk, and also higher up among the smaller branches. The cause may be too heavy a load of fruit left to ripen on the tree, instead of being properly thinned out, or it may be wind, snow, or snow-storms that cause the damage. The liability to split at the lower crotches increases as the tree becomes older. Some orchardists use temporary poles to support heavily loaded limbs, but in an orchard of some size the job of placing the props, sometimes as many as ten or twelve to a tree, and removing them after the crop is picked, is one of some magnitude, to say nothing about the expense for props and labor. Then, it requires skill and judgment to place the supports to the best advantage.

An improperly placed prop is liable to cause a heavily loaded limb to break, instead of preventing it. In some orchards, iron braces, or rods, connecting two or more limbs, are used to prevent splitting or breakage. But the rods themselves are expensive, and the labor of installing them properly is a matter of considerable cost; expense, no doubt, being the principal reason why they are not more generally used. Then, too, the limbs are weakened by the holes bored through them for the iron rods. Altogether too many fruit trees are neglected in this respect, especially apple trees, instead of being prop>erly thinned out, or at least not too heavy a load of fruit left to ripen on the tree, as the result may be the splitting and breaking of the branches.

Some years ago I read a paper before the Agricultural Society of New York on permanent natural braces for fruit trees. It is not necessary to use such supports, but what I have seen that will answer the purpose better, in my opinion, are certain very inexpensive natural props which can be used to support heavily loaded limbs, without injuring the tree in any way and without increasing the expense.

One of our many models now in stock.

I. M. BUEHLER & COMPANY

DEAN'S Combination
Coal and Gas Range

240 W. 33rd St., New York City

One of our many models now in stock.

Call or Write for Our Catalogue of Roses and Butler's Fancy Plate Warmers.

Hess sent you free

HESS送った方には

Hess's SHIPPER'S

Furnished equipment at your station at factory prices and wait for our pay while you test it during 40 days of winter weather. The entire outfit must satisfy you or you pay nothing. Several words looking like: ".without our offer you may be assured that Hess is the only company that can be depended upon to stand behind its word--service, simplicity, efficiency, 1 year's warranty." We are makers—not dealers—and will make you the run of the mill high grade equipment at the best possible price. Your name and address on a paid card is sufficient.

SAMPLE COPY FREE

A sample copy of Suburban Life Magazine free to any address sent us by a present subscriber.

Now is the time of year when you should be planting your Hardy Lamberts. They thrive so heartily in our northern climate. They will then get rooted before winter.

Landscaping and trees may wait until November. Our Autumn Supplement offers many surprises of surplus stock, but in a few weeks the season will be over. Get a new catalogue and supplement free. Address:

F. H. BURSTFORD, Charlotte, Vt.

Ref: Boll, 60-8 Pennsylvania St., Reading, Pa.

Sure's Phloxes Are the Flowers for the Beginner

From early July to late August the Phloxes will make your garden a spot of color that no other plants can duplicate. I have a great liking for these plants, and I think the Phloxes are the loveliest of all our hardy plants, and when planted in masses, or among the shrubs, are among the best of the hardy garden flowers. The My Book—"Sure's Hardy Plants" gives a list of the Phloxes at Wyoming, as well as Premies, Delphiniums, Poppies and Irises. I will send you a copy if you are interested in these hardy plants. Address: in Roes and Shrubs.

Consider The Lilies

How They Grow

The best way to get back to nature is to cultivate flowers. A love for flowers is rooted deep in the human heart. Theoroux says: "Oh, there is something peculiarly satisfying,—a thrill that imparts to the soul new life, new elan, to the old spirit. To dig in the earth and stir up the soil." All that is necessary here is the necessity of patience, and let us bloom forth as wildflowers in the fields of culture.

The New Style Book of Dutch Furniture

This valuable booklet is free. It illustrates over three hundred pieces of Holland Dutch Arts & Crafts Furni­ture. A must for every room in your house. It contains several notable articles which will aid you to choose your furniture and also acquaint you with the story about this elegant furniture and the clever Dutch Carpenters who fashioned it. It is a distinctive touch and individuality.

We will send you the address of our Associate Distributors anywhere in the United States. Write today for free and see LIMBERT'S New Style Book of Dutch Furniture.

CHARLES P. LIMBERT COMPANY
to withstand the stress of storms or the weight of a heavy crop of fruit that would break down trees not possessing them. They reduce the liability of loss from breakage to almost nothing at all. Portuguese fruit-growers practice this method, and, when we consider how simple it is, we cannot help wondering why such a clever, practical horticultural device was not discovered and used in this country, or any other "apple" country, years and years ago. To some extent it may be used on well-grown trees, but best results are to be expected from young trees.

These natural braces are formed by a variation of the ordinary grafting process. The best time to perform the operation is in the spring just before the foliage is pushing forth, but it may be done a little earlier or later, as suits convenience. Select a twig about three-eighths of an inch in diameter on each of two of the main branches, about two feet above the crotch where the lowest limbs join the trunk, the twigs to be as nearly opposite one another as possible.

With a sharp knife shave off a strip of bark and wood from one side of each twig. Have the edges of the cut as clean-cut and smooth as you can. Then carefully twist the twigs one about the other with the cut sides together, as shown in Fig. 1. Tie the twigs with waxed cotton string, to hold them in position, cut off the ends of the twigs at "A." Fig. 1, and wrap the twigs with strips of waxed cotton cloth and tie the cloth with waxed string. The twigs will unite and form a single branch extending from one limb to the other. Figure 2 shows a crotch with three branching limbs fastened together with three of the natural braces.

As the tree grows, the braces increase in size and strength, and provide good, strong, flexible supports when the tree most needs it. When once in place, they will last as long as the tree itself, while always ready when needed, and will save the cost of material for temporary props, and the labor of putting them in place and removing them every year. As the tree grows, similar braces may be introduced between the smaller limbs higher up, thereby strengthening the entire head, or branch system, to such an extent as to make it almost impossible for any of the principal branches to break down from any cause except a regular tornado.

Grafting wax is not expensive, and may be procured at seed stores and of nurserymen. A little of the ordinary grafting wax is all that is needed to prevent the twigs from drying out and removing them every year. The twigs will unite and form a single branch extending from one limb to the other. Figure 2 shows a crotch with three branching limbs fastened together with three of the natural braces.

As the tree grows, the braces increase in size and strength, and provide good, strong, flexible supports when the tree most needs it. When once in place, they will last as long as the tree itself, while always ready when needed, and will save the cost of material for temporary props, and the labor of putting them in place and removing them every year. As the tree grows, similar braces may be introduced between the smaller limbs higher up, thereby strengthening the entire head, or branch system, to such an extent as to make it almost impossible for any of the principal branches to break down from any cause except a regular tornado.

Grafting wax is not expensive, and may be procured at seed stores and of nurserymen. Satisfactory wax may be made by melting together 3/4 pound of tallow, 1 pound of beeswax and a pound of resin. Pour the melted liquid into cold water to cool, when it should be peeled like molasses candy until it is light-colored. If wrapped in oiled paper and put in water, it will keep indefinitely. To make it stick, drill a ball of number eighteen knitting cotton into the hot melted wax. To make waxed cloth, cut old cotton cloth in strips from one to two inches wide, roll loosely into a ball, and drop the ball into the melted wax.

A Home-Made Wine

By KATHARINE GELING

Take one gallon of grapes free from stems; one gallon of water, three pounds of sugar. Mash the grapes, and let stand in the washtubs three days, stirring and mashing down each day. Let the mixture cool over the sugar and leave over night. Put into a stone jar to ferment, and skim every day till fermentation ceases. Fill up with water, to make up for evaporation. It will take about a month. Bottle and seal.

Home-made wines have no large percentage of alcohol—only a little much over four or six per cent. They are especially pleasing to old people and invalids.

The mixture, while it is fermenting, looks and smells badly; but at last a clean, pure liquid will evolve, leaving the settling behind.

The Recreation of Winter Gardening

If you use Sunlight Double Glass Sash you eliminate the work and have the unalloyed enjoyment of the horticulture and violas you get from your hotbeds and coldframes. And in the spring you have early plants of all kinds to set out in the open.

DOUBLE GLASS SASH

The two layers of glass take the place of mats and boards. A tough layer of dry, still air between the two layers affords simple protection even in severe weather.

SUNLIGHT DOUBLE GLASS SASH CO. 942 East Broadway, Louisville, Kentucky

Write for these books

One in our free Catalog: the other is by Professor Massey. It tells how to prune and care for arborets, and is a companion to Professor Massey's book in addition to his Catalog.
This new pedestal lavatory—the "Valcour"—is a typical Mott product. Beauty and usefulness are admirably combined in its design.

For the ideal lavatory no material is comparable with Mott's Vitreous Ware or Imperial Solid Porcelain.

The white, china-like surface of Mott's Vitreous Ware and Imperial Solid Porcelain immediately suggests perfect cleanliness—the high lustre denotes a fine and hard texture, insuring cleanliness. The material is extra heavy and imparts great strength and durability.

"MODERN PLUMBING"—For complete information regarding bathroom or kitchen equipment, write for "Modern Plumbing," an 80 page booklet illustrating 24 model bathroom interiors ranging in cost from $73 to $3,000. Sent on request with 4c. for postage.

THE J. L. MOTT IRON WORKS
FIFTH AVENUE AND SEVENTEENTH ST., NEW YORK
WORKS AT TRENTON, N. J.


CANADA.—The Mott Co., Ltd., 114 Bloor Street, Montreal, Que.

Novel Hanging Basket

Insist on the name BISSELL'S "Cyco" BALL BEARING

The name BISSELL'S has for thirty-six years typified the best Carpet Sweeper ever made, hence when you purchase a sweeper don't be satisfied with a "just as good" kind, when the best will cost you but a trifle more. Insist that the sweeper you buy bears the name BISSELL'S "Cyco" BALL BEARING, as this name signifies that the bearing is extra heavy and imparts great strength and durability.

BISSELL CARPET SWEeper CO., Dept. 119, Grand Rapids, Mich.

A Novel Hanging Basket

FRIEND has a novel hanging basket. It is a large-sized funnel, painted moss-green, and filled with quick-growing vines. It hangs from the branch of a tree by a dark green raffia cord, which is fastened to another twisted around the edge of the funnel and kept in place by the weight of the latter. The open end allows an excess of water to escape; and the vines thrive so well that within a short time after planting the original funnel was completely hidden.

W. B. K.
Henderson’s Imported Bulbs

FOR AUTUMN PLANTING

From Holland, Great Britain, France, Italy, Asia, Japan, etc.

The greatest selection of varieties and the highest-quality Bulbs imported into America. Good old standards and magnificent novelties. Hyacinths, Tulips, Daffodils, Crocus, Lilies, Iris, Peonies, and a host of other Bulbous Beauties.

If you want Beautiful Bulbous Flowers in your house this winter, or in your garden next spring, you must plant the bulbs this fall!

The Easiest and Most Charming Way of Growing Bulbs in the House is with

HENDERSON’S

PREPARED FIBER

An excellent modern medium in which to grow and flower bulbs during winter in bowls, jardinières, fern dishes, etc., WITH-OUT DRAINAGE. Always sweet, clean to handle, no drip

Henderson’s Prepared Fiber is composed of disintegrated Holland peat fertilized and blended with pulverized charcoal, and crushed oyster-shells. It furnishes in an assimilable form all of the plant food elements needed by bulbs. It is light, clean, nice to handle, odorless, always remains sweet and if used as directed it retains just the right amount of moisture to encourage healthy, luxuriant growth and perfection of bloom.

But perhaps the crowning merit of Henderson’s Prepared Fiber is the charming effect produced by bulbs flowering in fancy bowls, fern dishes, small jardinières or other receptacles without drainage holes in the bottom, so they can be placed anywhere without danger of soiling anything from drip. One lady sends us photographs, one showing “Paper White” narcissus fiber-grown in a glass jar. She says: “I like to watch the root development,” the other photo shows a splendid hyacinth in a fancy teapot, showing that almost anything may be utilized for the purpose, though we can furnish special Bulb Bowls, if desired, as offered in our catalogue.

Almost any of the spring flowering bulbs may be grown in Henderson’s Prepared Fiber, but we specially recommend Roman and Dutch hyacinths. Early flowering tulips, all kinds of narcissi, lily-of-the-valley pips after ripened by frost or cold storage. Crocus, chionodoxas, scillas, snowdrops, etc.

Growing bulbs in Henderson’s Prepared Fiber is an easy and most interesting method and the effect when in flower is charming.

Price of Henderson’s Prepared Fiber: 50 cents per peck; $1.50 per bushel

Full directions for treatment are given in

Henderson’s Autumn Catalogue

of Bulbs, Plants, Seeds, and Seasonable Requisites. The handsomest and most instructive fall book published. Mailed free to all who mention Suburban Life.

PETER HENDERSON & CO. 35 and 37 Cortlandt St. New York
Have You Ever Tasted NEW CREAM?

You can have pure, un-aged cream, velvety smooth, thick as yoghurt, extracted from new milk. Delicately fragrant—delectably appetizing. Free from those odors and flavors cream acquires through age and exposure. One in a million, particular palates always prefer NEW cream. Delicately fragrant, particularly appealing. Obtained immediately after milking by using a SHARPLES Tubular Cream Separator.

Put the new milk through the Tubulak. Catch the NEW cream in one vessel and the milk and impurities in another. Separated. Both are natural in flavor, purity and freshness. The Sharpleys Dairies, Tubulak is the separator de luxe—The World's Most Beautiful. Contains milk or cream separators. Write for Catalog. SHARPLES SEPARATOR COMPANY. THE SHARPLES SEPARATOR COMPANY. WEST CHESTER, PA.

Suburban Life

H. C. Sharpley

How We Built a Small Greenhouse and What We Grew in It

(Continued from page 206)

three feet two inches wide, and three feet deep, was dug carefully in the garden. Leave in the ground below the bottom of the trench, and with three feet out of ground, measuring up from the bottom of the trench. This required sixteen posts, six at each side and one-half feet sixteen inches, six at each side and one-half feet. The total number of posts was thirty-six, all of red cedar on account of its lasting quality.

Next, matched-pine boards were nailed lengthwise on the outside of the side and end posts to the height of two feet above ground, and extending below the surface also about six inches, with an inside lining for this boarding of roofing-paper. The inside of the posts in the trench, which was really the sunken path of the greenhouse, were all smoothed off, but without paper lining. This made the smooth boards come on the inside of the posts toward the path, leaving the rough posts in what will be spoken of later as the solid beds of the greenhouse. It should be said, right here, that the posts first set to form the support for the sides of the greenhouse, and before the boards were put on, had their tops cut to a proper slant, to receive the eave-plates of the house; and, furthermore, it should be stated that one side of all the posts, and two sides of the corner posts, had been sliced off at the sawmill, before they were delivered, as far down from the top of the posts as could be on the ground, so as to give a smooth surface for boarding. This is a very important feature, and both lessened the labor of boarding, and enabled the workman to do a smooth job. Just at this point in our building we did a wise thing; namely, to omit one side of the greenhouse and gable-ends of the greenhouse—the both woodwork and the glass, and the ventilating sash. This material was supplied by a blue-print plan to guide the local carpenter.

In the roof, 16 x 16-inch and 16 x 24-inch panels of double-thick glass were used, and also in the gable-ends. There were ventilators at the top of the roof, each side of which was about three feet long by two feet wide, when lifted and closed and fastened, each separately by hand sash-lifting irons. There was a set of three or four wooden steps which led from the southern end outside to the door, three feet wide and six and one-half feet high, the bottom of which was on a level with the bottom of the greenhouse path into which this door opened. This passageway, and the steps leading down into the greenhouse, were furnished with an outer door, just like the door which covers the steps leading down from the outside path into a cellar, which could be closed in storms and cold weather.

As regards inside furnishings, greenhouses may be classified as raised-bench, solid-bed, and dug-out, surface-bed houses. Raised benches are simply large, shallow boxes, about five inches deep, of two feet wide by two feet long, which were lifted and closed and fastened, each separately by hand sash-lifting irons. There was a set of three or four wooden steps which led from the south end outside to the door, three feet wide and six and one-half feet high, the bottom of which was on a level with the bottom of the greenhouse path into which this door opened. This passageway, and the steps leading down into the greenhouse, were furnished with an outer door, just like the door which covers the steps leading down from the outside path into a cellar, which could be closed in storms and cold weather.

As regards inside furnishings, greenhouses may be classified as raised-bench, solid-bed, and surface-bed houses. Raised benches are simply large, shallow boxes, about five inches deep, of two feet wide by two feet long, which were lifted and closed and fastened, each separately by hand sash-lifting irons. There was a set of three or four wooden steps which led from the south end outside to the door, three feet wide and six and one-half feet high, the bottom of which was on a level with the bottom of the greenhouse path into which this door opened. This passageway, and the steps leading down into the greenhouse, were furnished with an outer door, just like the door which covers the steps leading down from the outside path into a cellar, which could be closed in storms and cold weather.

A PIPE was now laid which laugh town water was brought into the center of the greenhouse path, and a hose twenty-five feet long purchased, and a spraying nozzle. We now had a greenhouse thirty-two feet by twelve feet, with a path three feet wide through the center from end to end, and a solid bed side four and one-half feet wide. As the surface soil where the greenhouse was located was sandy and shallow, there was perfect drainage. It was now October, and the greenhouse had no heating apparatus. A friend of ours had a very small detached greenhouse which she successfully heated with an oil-stove. We purchased three first-class oil stoves, one for each bed. This was the first winter, using one or more heaters, as the outside temperature required, setting the heaters in the greenhouse path. The danger in this method of heating is that, on cold nights when all the heaters were burning, the air would become so exhausted that, toward morning, the heat would have left the greenhouse, and burn our very chilly. This was overcome by leaving some of the top ventilators open a crack, and putting in a bottom ventilator at the north end of the greenhouse. We constructed a floor made of a drain-tile and set vertically so as to give a smooth surface for boarding. This is a very important feature, and both lessened the labor of boarding, and enabled the workman to do a smooth job. Just at this point in our building we did a wise thing; namely, to omit one side of the greenhouse and gable-ends of the greenhouse—the both woodwork and the glass, and the ventilating sash. This material was supplied by a blue-print plan to guide the local carpenter.

In this greenhouse we grew successfully carnations, setting out the plants in the solid beds, Easter lilies, callas, Roman and Dutch hyacinths, and all the forcing varieties of nasturtiums and petunias. We also planted a pot-plant, and the bulbous, setting out the bulbs close together right on the surface of the greenhouse and in coldframes, covering them up first with sand or soil, and then later with hay or straw sufficient to keep out the frost, and bringing them in as we wanted to force them through the door. We now had a hot-water heater, and had it installed in the work-house, and had the greenhouse piped. This method was very satisfactory.
**BULBS**
Direct from Holland

- Hyacinths
- Tulips
- Narcissi
- Crocus

**The Giant Darwin Tulips**
The finest Tulips grown.

**Japanese Iris**
In large variety.

**Peonies**
In great variety from the largest collection.

**Perennial Plants**
A complete list. Can supply direct from nursery.

If you do not have a copy of our 1912 Autumn Catalog, write us. We will mail it.

**LEWIS & CONGER**
ESTABLISHED 1835

**Housefurnishing Warerooms**
Cooking utensils and moulds of every description. Cutlery, earthenware, china and glass. Kitchen and laundry furniture. House-cleaning materials, carpet-sweepers, vacuum cleaners, etc.

**China, Glass and Earthenware**
Water-filters and coolers, ice-cream freezers, SANITARY REFRIGERATORS and fireplace furnishings.

Five o'clock tea-kettles with lamps. Table dish-warmers. Hector-boils, chafing dishes, coffee-makers. The new and old English toddy kettles, reflector reading lamps, garden candlesticks, etc.

Goods delivered free at station within 100 miles. Prompt and careful attention given to all mail orders.

**Forty-fifth Street and Sixth Ave.**
**NEW YORK CITY**

**ORCHIDS**

- Peonies
- In great variety from the largest collection.

**Perennial Plants**
A complete list. Can supply direct from nursery.

If you do not have a copy of our 1912 Autumn Catalog, write us. We will mail it.

**FOTTLER-FISKE-RAWSON COMPANY**
Faneuil Hall Square, Boston, Mass.

**FLINT'S FINE FURNITURE**

**COLONIAL REPRODUCTIONS**

One of the main efforts of our craftsmen has been to produce furniture of the pure Colonial style, correct in dimensions and proportions, and keep constantly before them our motto of "Flint Quality" in construction.

We have a very large variety of Colonial Furniture Reproductions in complete suites, or single pieces for every room in the house, many of them reproduced from rare, antique models.

Inspection of our new Fall designs is cordially invited.

**FLINT'S FINE FURNITURE**

**Orchids**

- Peonies
- In great variety from the largest collection.

**Perennial Plants**
A complete list. Can supply direct from nursery.

If you do not have a copy of our 1912 Autumn Catalog, write us. We will mail it.

**FOTTLER-FISKE-RAWSON COMPANY**
Faneuil Hall Square, Boston, Mass.

**FLINT'S FINE FURNITURE**

**COLONIAL REPRODUCTIONS**

One of the main efforts of our craftsmen has been to produce furniture of the pure Colonial style, correct in dimensions and proportions, and keep constantly before them our motto of "Flint Quality" in construction.

We have a very large variety of Colonial Furniture Reproductions in complete suites, or single pieces for every room in the house, many of them reproduced from rare, antique models.

Inspection of our new Fall designs is cordially invited.

**FLINT'S FINE FURNITURE**

**Orchids**

- Peonies
- In great variety from the largest collection.

**Perennial Plants**
A complete list. Can supply direct from nursery.

If you do not have a copy of our 1912 Autumn Catalog, write us. We will mail it.

**FOTTLER-FISKE-RAWSON COMPANY**
Faneuil Hall Square, Boston, Mass.
Complete your building data before you go ahead with your plans and specifications. Investigate the claims of NATCO·HOLLOW·TILE

Then only can you be satisfied that you've chosen wisely. Your good judgment must be given fair play.

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

NATCO Hollow Tile places your building ahead of any other type of structure and at a cost only slightly in advance. The sum of advantages is, on the other hand, overwhelming. Architects in increasing numbers are specifying Natco Hollow Tile throughout for their own homes.

Furnishing the Home of Good Taste

By Lucy Abbott Throop

Miss Throop, who is an interior decorator practising in New York, has written what is undoubtedly the most valuable and concise survey of the period styles of decoration. Those that have furnished the house for most of the past fifty years are brought up to date by this interesting survey of the past, Miss Throop takes it in good detail the homes of today, with particular emphasis on the country home, and shows how either period styles or other modern adaptations may be consistently carried out. All the details of furniture, hangings, rugs, and so on, even to the pewter equipment, are thoroughly covered. Mailed anywhere for 50 cents postpaid.

How Philoflora Made a Coldframe

By JENNIE BARD DUGDALE

I ST, oh list to the true tale of Philoflora, all ye to whom the coldframe suggests nothing but an array of tomato plants, lettuce, and radishes, in early spring, and for the greater part of the year a scene of desolation, with broken and disordered sashes and beds overgrown with weeds. Philoflora fell heir to a large lawn and a slim purse. Philoflora—true flower-lover that she was—longed for blooms of every sort, for masses of shrubbery, for roses, yet many, many, for Hardy old-fashioned perennials, for violets and pansies to gladden her heart, while February snow lay thick on garden beds, and florists' prices soared far above the aforementioned slim purse.

During sultry September days, Philoflora made ready her coldframe. She utilized four discarded window-sashes, measuring thirty by thirty-six inches. In a sheltered corner of her garden, with a southeast exposure, a wooden frame was built, of a fit size to hold the four sashes snugly. It was sunken ten inches into the ground, rose six inches above it in front and twelve inches at the back, in order to give good drainage. The box was filled with sharp, clean sand, about as coarse as builders use in making mortars. This sand was about ten inches deep, wet completely through and always kept so, and in it we placed cuttings of all kinds of pot bedding-plants, which were, as soon as rooted, potted off, and this gave good outside. This propagation by cuttings is very interesting.

A VARIETY of flowering plants from seeds, asters, petunias, phlox, coreopsis, marigolds, stocks, mignonette, and many others, were sown in seed pans and flats, and transplanted, when large enough, first into pots, and later into the flower-beds.

Even the first year, we saw commercialism ahead, as we found a ready market for all surplus plants and blooms, and we welcomed rather than avoided it. Later, the writer retired from his profession, built two more north and south houses like the first, and parallel to it, with a few feet space between the middle and each of the other houses, and extended the workhouse east and west.

Later, the work-house was remodeled into an east and west greenhouse, and extended a hundred feet west. This greenhouse range was several years ago, sold to a thrifty Swedish florist, who still runs it as a commercial place in the "wooden nutmeg" state. The writer has never gone back to his old profession of teaching, but has, in one way and another, been connected with the nursery and florist business, and he has never regretted the change.
the mendicant. She returned laden down with sprays—long sprays from climbing roses, Crimson Rambler, Dorothy Perkins, Baltimore Belle, and other favorites, old and new. These she cut into eight-inch lengths, and planted an inch and a half apart, with two-thirds of their length underground. In such close phalanxes, sixty rose cuttings filled only a small part of the precious space in the coldframe. A simple diagram sketched in Philoflora's garden memorandum-book served to show the location of slips by name or color.

When this was accomplished, our brave Philoflora fared forth in quest of yet other roses—the monthly, everblooming ones, teas and hybrid teas, best beloved of all the royal race.

Here the very embarrassment of riches awaited Philoflora. Strong was the temptation to give over the whole coldframe space to the goodly company. How could one make choice between Kaiserin Augusta Victoria and La France, Duchesse de Brabant and My Maryland, Safrano and Marie Van Houtte, Killarney and the Cochets?

But Philoflora wore the armor of high courage. Heroically she contented herself with some two-score selections from the fascinating multitude, taking the precaution to plant two or three cuttings of each variety. As soon as the planting was finished, the soil was well watered, and the glass sashes tightly closed, and kept so except when further watering seemed necessary. Partial shade was provided on sunny days by cornstalks loosely crisscrossed upon the glass, and these were removed toward evening and on cloudy days.

AFTER the completion of the rose department, another section of the coldframe was devoted to cuttings from hardy shrubs. The beautiful Spiraea Van Houtri proved especially adaptable to this method of propagation, as also did the weigela, the philadelphus, the Forsythia suspensa, Berberis Thunbergii, and even the slips of the unaccommodating boxwood. The hardy cultivation took kindly to life under glass, and every joint which was given any opportunity, grew into a sturdy plant. Gaillardia and delphinium, transferred from an outdoor seed-bed, revealed in the winter climate of the coldframe, and became stocky and vigorous by springtime. But we anticipate, and must return to September and Philoflora. One section of the coldframe she filled with young plants of the sweet violet, and with the first days of February the buds began to open, and the fragrance and beauty of the exquisite flowers blessed many a dull, snowy day, their season ending in April, just as their hardy outdoor sisters made their appearance.

In the last section of the coldframe Philoflora sowed pansy seed in late September. As the autumn wore on, wee, winsome pansy plants dotted the surface of the ground. They grew steadily stronger with the lengthening days and strengthening sunshine of mid-February, and in March became a glory of purple and gold. Unusual size of petal and length of stem distinguished these flowers, and the heart of Philoflora was full of joy.

With the first balmy days of spring, Philoflora began to lift the glass sashes for a few hours, increasing the time as the plants in the coldframe grew accustomed to the outside air. When danger from frost was past, the passions were set out in beds and borders, and the roses and hardy shrubs and perennials were transferred to the places awaiting them. As they could be moved without delay and with ample balls of earth left on the roots, Philoflora found they had a great advantage over plants which came to her by mail. They made rapid growth, and so generously rewarded her toil that she returned each year to the preparation of her coldframe with increased zeal and interest in its possibilities.
Byzantine Wonder Lily

IN BLOOM

Is a Living Bouquet, an ideal decoration for the distinguishable or rare. Blooming absolutely without water or soil. Placed in a warm spot, the stately flowers of many colors, bearing in the center a corolla of golden stamens, unfold in succession. Delicately fragrant in the morning. An advertisement for you. Its magic flowering at this bulb is full of interest and pleasure. Storing in a cool place until bulbs have been cut and sent to you.

Large Bulbs

$3.00 for 12

$5.75

Monster Bulbs

30 for $2.00

75 for $5.75

Jumbo Bulbs (very scarce)

40

DELIVERY INCLUDED IN PRICE

Send for our Catalogue. It is well worth writing for. It is well produced, uniformly illustrated, and will enable you to procure a distinctive, beautiful garden. It offers a list of out-of-the-way bulbs, and other interesting features.

Address: H. H. BERGER & CO.

70 Warren Street, New York

Are You a Member of our great big Hunting, Fishing, Camping, Nativity-Loving National Sportsman Brotherhood? If not, now's the time to join. We have over 20,000 members. Our lodge comes to you once every month in the form of a page nearly illustrated magazine, chock full of exciting stories and information about guns, fishing, hunting, camping. The best place to go to keep up with the latest in the sporting world is your NMDB.

A WINDOW IN ARCADY, By Charles Francis Adams, Jr. 312 pp. 6 x 9 inches. Illustrated. Edward T. Kimball, Philadelphia. $1.00; postage, 10 cents.

Mr. Weed is a landscape architect who has covered the question of landscape work as applied to cemeteries in a thoroughly practical and concise manner. Many cemetery superintendents have aided in furnishing photographs and material for the volume, which should stand as a text-book on the subject for a long time to come.

A WINDOW IN ARCADY, By Charles Francis Adams, Jr. 312 pp. 6 x 9 inches. Illustrated. Edward T. Kimball, Philadelphia. $1.00; postage, 10 cents.

The author of "In a Poppy Garden" tells in this quiet countryside chronicle of the pleasures he has had during the secrets of nature, and also gives some valuable information to those who would do likewise. The book is illustrated with photographs, which in themselves are very interesting. The observations are very largely in southeastern Pennsylvania and southern New Jersey.

REPORT OF THE COMMISSION ON COUNTRY LIFE. By Mr. Weed. 200 pp. 4 x 6 inches. Sturgis & Walton, New York. $1.75; postage, 15 cents.

The result of the investigation of the commission on country life appointed by former President Roosevelt, although published as a senate document for the use of Congress, has not been available heretofore for popular distribution. The interesting record of the recommendations of the commission should be read by anyone who really has at heart the welfare of the rural dweller. Former President Roosevelt furnishes an introduction to this little volume, the profits from which, if any, are to be devoted to public country-life work.

FOUR MONTHS ABOB SPAIN. By HARRY A. FRANCIS. 370 pp. 4 x 6 inches. Sturgis & Walton, New York. $1.75; postage, 15 cents.

Mr. Francis' delightful story of his travels in Spain is full of human interest. He brings the reader close to the life of the ordinary people with the same charm that makes his "A Voyage around Journey Around the World," a well-remembered book. His four months' expense account totaled exactly $172, divided as follows:

- Transportation, $90; food and lodging, $55; bullfights, sight-seeing and souvenirs, $10; miscellaneous living expenses, $20.
- And keep the memory of his "A Voyage around Journey Around the World," in his heart.

The little book sets forth in direct form the principles of amateur gardening. It is a first-rate volume to be in the hands of a beginner, and, although positively trustworthy, is entirely free from technicalities.

MODERN ILLUSTRATION. By Henry C. Horwitz and the true atmosphere for the users of electric lights, architects, builders, etc. Its chief value is the practical nature of every word.

A SHOPPING GUIDE TO PARIS AND LONDON. By Francois Seurat. 324 pp. 4 x 6 inches. Illustrated. HEWELE, NORT & CO., NEW YORK. $2.00, POSTAGE, 10 CENTS.

One needs such a handy little volume if contemplating a trip abroad. London, known as "the shopping paradise of men," and Paris, known as "the shopping paradise of women," are represented to one's view in a guide-book that is very much out of the ordinary.

HOME WATERWORKS. By CARLTON J. LINDE. FROM KITCHENS TO GARRETT. By Virginia T. LEVIN, Van Nostrand Animal Company. 286 pp. $1.85. Illustrated. $1.50, POSTAGE, 25 CENTS.

One of the first three of the volumes of the Young Farmer's Practical Library, of which Ernest Ingersoll is the general editor. They are compact, essentially practical, up-to-date, and authoritative volumes on various phases of country life and farm matters in general. The series is the result of the investigation of the country-lifecommission, and they are well worth a place in any agricultural library.

THE LOVE THAT LIVES. By MARIE OSGOOD WIGHT. 286 pp. 4 x 6 inches. Published for The MacMillan Company, New York City. $1.10, NET; POSTAGE, 10 CENTS.

Character portrait is one of the points of style in which the author excels. The great, true love of a man for a woman who marries his brother is admirably depicted in this little volume. The man who loved sent his brother through college, helped support his brother's family, and at his death bequeathed what he had to his brother's wife. The man who married was a minister and, in the description of his family and the lives they lived, one catches the same charm that makes his "A Voyage around Journey Around the World," a well-remembered book. His four months' expense account totaled exactly $172, divided as follows:

- Transportation, $90; food and lodging, $55; bullfights, sight-seeing and souvenirs, $10; miscellaneous living expenses, $20.

And keep the memory of his "A Voyage around Journey Around the World," in his heart.
Tramping in the New York City District

(Continued from page 197)

subway to 177th street and Broadway; walk up the Lafayette Boulevard, across Dyckman Street and down the Speedway. For a very limited time, there is always Central Park, with guides and policemen to direct one from one point to another. Go in at East 72nd Street and cross diagonally north through the Ramble to the 79th Street. You will then discover difficulty in believing that you are in the heart of a great city.

Bronx Park has become almost too well known as a picnic ground; but it is not too far to reach, and the district near the old Lorillard mansion is very lovely.

From Yonkers up Warburton Avenue to Hastings is another good Hudson River walk.

FOR ALL-DAY WALKS REQUIRING LUNCH

A good plan is to take a train to a chosen point, and walk from there to another station—perhaps across country to a different railroad line, thus varying the return.

Alpine to Englewood.—Make an early start—always, of course—to Yonkers, and take the little motor-boat ferry to Alpine. It is about eight miles down into Englewood, along the top of the Palisades. This trip is best for a good-sized or mixed company, as the district is sparsely settled. By breaking the walk with lunch, it is not too long, and is one of the most beautiful near New York.

Staten Island.—This is a district all too little known—the most logical place for those who live far down town to set out for. The ferry trip of about twenty-five minutes from South Ferry to St. George is a treat in itself; a ticket for the South Shore Railroad (Tottenville line) is bought in New York. The northern end of the island from Tompkinsville toward Rose- bank and Fort Wadsworth is pretty, though thickly settled. It is worth while, however, to go as far as Great Kills or Eltingville on the train, and turn immediately toward the ocean boulevard. A stretch known as the "Woods of Arden" borders the water for nearly two miles, between Eltingville and Annadale. The boulevard is not cut through, but there is a well-defined path over the heather fields, or one may walk directly on the sands as far as Prince's Bay. Again, it is possible to turn back to Amboy Road at several points, following it to Huguenot or Prince's Bay. The railroad runs about a mile from the water.

Long Island.—One must go farther out to find good walks on Long Island. The district near New York is in a bare, ugly, and turnspout condition, under development, and one must go beyond Jamaica to the Huntington vicinity on the north shore, or far down on the southern coast, to find real country and lovely surroundings. This is apt to be too long a preliminary trip for those who live in up-town New York.

North of New York there is the famous road from Irvington to Tarrytown or Ossining, through Sleepy Hollow. Like all the Hudson river counties, the scenery is incomparable, but the train-fare makes the trip a little expensive.

A train ride of an hour and a half brings one to Cold Spring or Cornwall, and the wonderful Highlands of the Hudson—Storm King, Anthony's Nose, and other peaks easily mounted by those who rejoice in the hills. This is the best for family trips, or large parties properly chaperoned. Girls should not go in advance of young men; the district near the old Lorillard mansion is very lovely.

If you don't see the name Yale on a padlock, you can be sure it isn't a Yale Padlock. If you do see it, you can be sure that the lock is the most dependable padlock you can buy. Yale Padlocks are made in more than two hundred styles and sizes to meet every locking need. Each is the best for its price and purpose.

Yale Hardware

The period designs in Yale Hardware permit of furnishing a house to the last detail in perfect harmony with its general architectural treatment.

Yale Door Checks

Yale Door Checks shut the door silently, but with a firm push which never fails. They are made in four styles and all necessary sizes.

Yale Night-latches

The Yale Cylinder Night-latch No. 41 is a combination night-latch and dead-lock, offering in the most convenient form the highest security known.

Ask for two entertaining and informing little books:

"50 Uses for a Padlock" and "The Story of the Little Black Box"

All Hardware Dealers sell Yale Padlocks

The Yale & Towne Mfg. Co.
Makers of Yale PRODUCTS

Gardening Indoors and Under Glass, By F. F. ROCKWELL

Fresh vegetables and flowers out of season—and the fun of growing them—may be yours. This book tells the secrets of prolonging the joys and rewards of house gardening through the so-called "barren" months. The choice, care and propagation of the "southern" plants, such as tomatoes, cucumbers, lettuce, beans, melons, radishes, and the possibilities of a small greenhouse are all set forth with great thoroughness and interest. Illustrated. Size 5x7 in. $1.20 net; postage 10 cents.

Making a Bulb Garden

By GRACE TABOR

Plant half-foot-tall bulbs in a pot and you have bulbs next spring. This new volume in the House & Garden "Making" Books will give you full and dependable instructions for making a bulb garden. Illustrated. 30 cents net; postage 5 cents.

Making a Garden with Hotbed and Coldframe, By C. H. MILLER

Here is a proposition for full and winter gardening activities. Another new "Making" book that tells how to prolong the garden season and get a "head start" on vegetables. Illustrated. 50 cents net; postage 5 cents.

Making a Fireplace

By HENRY H. SAYLOR

"To smoke or not to smoke"—if you make the fireplace right, it won't smoke. In this "Making" book you learn the proper way to get a suitable draft and to make the fireplace a distinctive feature of the room. Illustrated. 50 cents net; postage 5 cents.

Send for Catalogue

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

A Book of House Plans

By W. H. Butterfield and H. W. Tuttle

The authors are two practicing New York architects who have prepared a series of designs for houses of character ranging from $0,00 to $6,000. These designs are illustrated by perspective views and floor plans with interior perspectives, and in some cases photographs of designs that have already been built. Full working drawings and specifications of each of the designs shown may be purchased from the authors. 36 xigs. 8t 4 in. net; postage 50 cents.

Architectural Styles for Country Houses

Edited by Henry H. Saylor

A presentation of the more common architectural styles required for country homes. Each style is discribed with reference to the materials used, the proportions of the parts, and the general characteristics. The styles include Colonial Houses, the Modern English Planter Houses, the Swiss Chalet Type, the Italianate Architecure, the Greek Revival, the Colonial Revival, the Spanish Revival, the Half-Timber Houses, the Dutch Colonial Houses, and the Northern Colonial. 401 pages. 8t 4 in. net; postage 50 cents.

Send for Catalogue

McBRIE, NAST & CO., Publishers, Union Square, New York
Is The Ladder Safe

The ladder up which the fireman climbs to put out the fire must be safe. Every inch of its lumber must be seasoned and sound.

So ought the insurance company on which you depend for payment of your loss be safe. It must be seasoned by long experience and sound by many trials of its strength.

No company meets these requirements better than the old HARTFORD. So when you need fire insurance

**Insist on the Hartford**

**Agents Everywhere**

---

**Time to Get Busy**

If you contemplate fence-building, the time to act is NOW.

**You Can Save**

A large amount by purchasing now instead of waiting until spring.

Tell us what kind of fence you need and we will send the Catalog of American Fences and Gates showing designs to meet your requirements and will tell you why this saving is possible.

**AMERICAN FENCE CONSTRUCTION CO.**

186 Church Street

New York City

Formerly Fence Dept., American Wire Fence Co.

---

[Image] A Home-made Poultry Hopper

upper one placed inside the lower, as shown in the accompanying diagram. Of course, the lower one makes the feed-pen, while the upper is filled with the fowl's rations. The upper box has a hinged top, and is raised on pegs one and one-half inches from the lower, or base-box.

---

**Brother to the costliest cars—**

in comfort, riding ease and silence

"Majestic" (Illustrated) $1500

"Olympic" $1500

---

**Thorburn’s Seeds and Bulbs**

**W**e are rather proud of our Bulb Catalog this year. In addition to a carefully considered assortment of imported bulbs for your early garden, we have a special offer which will interest you.

When you get the book look inside the front cover for the “special offer.” It is a most unusual one and its acceptance will not only save quite a little money on your bulb purchases, but ensure you a very charming garden in the early spring. A postal card will bring this beautiful 30 page catalogue and special offer to you. Write today.

J. M. THORBURN & CO.

10 years in business in New York

33 Barclay Street through to 38 Park Place, New York

---

**A CEMENT HOUSE**

**CAN BE SUCCESSFULLY PAINTED AND WATERPROOFED**

Send for booklet illustrated in colors telling how

THE OHIO VARNISH COMPANY

5055 Kimball Road

CLEVELAND, OHIO
The Country Woman and the Electric-Motor Car

(Continued from page 195)

Then, too, there is the added thrill of holding the power in one's own hand, and there is nothing more soothing to a tired and nervous woman than a seat in a smoothly running car.

The motto of the woman who can motor should be, motor early and motor late but surely motor, for each and every woman who does can find pleasure, good health, youthfulness, and an unequalled exhilaration with the aid of the electric-motor car.

Poultry-House Ventilation

WHILE the ventilation of the poultry-house is rarely a serious problem in the summer, the dryness and purity of the air in winter is of vital importance to the welfare of poultry.

To keep the air above the freezing-point, and yet have it pure, has long been a vexing problem in poultry-raising. Where the air is cold and damp, the birds will eventually sicken. Coombs will become frost-bitten, egg-production will decrease, or cease altogether. Drafts of cold air, even if the coop is dry, are likewise dangerous; but a dry, pure atmosphere, with the birds in motion during the day, and with a rootest that has the benefit of its own warmth at night, will go far toward keeping the birds healthy and vigorous.

Ventilators which promise much in theory often fail in practice. Pure air, admitted through ventilators near the floor, often becomes vitiated before it reaches the roosting birds; moreover, this method is drafty. Ventilation at or near the top of the building often carries out too much warm air and too little of the impure air.

DUTCH BULBS

We have just received from our nurseries at Sassenheim, Holland, a full supply of Daffodils and Early Tulips, Hyacinths, Narcissi, Crocuses, etc., of exceptionally fine quality. Order early while assortment is complete.

HARVEST SHOES

in strong clumps from our Deerfield Nursery. While assortment is complete.

Everything the best and at very attractive prices. Send for Catalogue.

HESS SANITARY LOCKER

A Well-ventilated Colony House

There is always a corner where foul air remains undisturbed, or a place on the floor which is not thoroughly dried. To maintain comparative purity of air near the floor, its surface must be dry. This can be accomplished only by flooding the floor with sunlight. The supply of fresh air must be of such volume as to give a complete change in a short space of time, without the drafts which result when the air moves faster than three feet per second.

A method of ventilation which is standing the test of wide usage is to make a broad opening on the south side of the building two or three feet above the floor and extending almost to the roof, curtaining it with some fabric which retards the velocity of the air. The three other walls of the building are made perfectly air-tight. In pleasant weather, this curtain is raised during the day, but is kept over the window at night or during stormy weather.

For a building twenty-five feet long by ten feet high and ten feet wide, such an opening, five by six feet, placed horizontally, gives excellent results. If preferred, one may use two openings, each two and one-half by six feet, with equal effect. In large buildings, some practical poultrymen advocate using the curved window alternating with one of glass.

A Barberry Hedge

BERBERS THUNBERGI is one of the finest hedges planted, perfectly hardy, while California Privet is not, north of Washington, D. C. The price on large Berberis has discouraged planting it, but we offer two-year seedlings, one stem, at $2 per hundred and two-year branch at $3 per hundred. These can be planted full in a hedge nine inches apart, or, if not readily lined in good garden soil for a year or two until needed. This is your opportunity to get a hedge.

AT SMALL COST

Father & Son, Rockland, Mass.

SUN DIALS


Any Latitude

Ask for Booklet No. 3.

E. B. MEYROWITZ, 237 Fifth Ave., New York

BEFORE YOU BUY A FOOT OF LUMBER
FOR ANY PURPOSE, big or little, indoors or out, in city or country,

Write for the proper volume of The Cypress Pocket Library. (Free)

Backed by our "All-round Helps Dept.," it is the "guide, counselor and friend" of ALL THE PEOPLE WHO CARE

What Values They Get for Their Lumber Money.

Why not buy WOOD with the same discrimination you apply to other things?

We do not advise CYPRESS for all uses, but any way where it can prove itself "the one best wood." For your use,

1. You don't tell your broker, "Buy 10,000 of Railway stocks!" Hardly! You tell him what.
2. You don't simply tell your Real Estate agent, "Buy me some land!" You tell him where.
3. You don't tell the contractor, "Build me a house!—and paint it!" You dictate the plans. And the colors.

WHY NOT BUY LUMBER WITH EQUAL CARE? INSIST ON CYPRESS OF YOUR LOCAL LUMBER DEALER.

Let your brokers "Buy $10,000 of O You don't tell the dry goods clerks "I want 8 yds. of cloth!" You say "silk," "wool," or "linen.

12. Cypress is for "All Bosom" (of every). _ (For Work in Plots, for Siding—and Why.
13. Cypress is for "All OddJob*" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
3. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
4. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
5. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).

1. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
2. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
3. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
4. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
5. Cypress is for "All Outdoors" (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).

1. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
2. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
3. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
4. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
5. Cypress is for "All OddJob*" (of every)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use)._ (For Work in Buildings, for Window Shutters, for Siding, for All Outdoors) (of any use).
Practical Decoration for the Home Interior

(Continued from page 188)

changed by a number of methods. The most common method is, probably, that of coating this woodwork over with white enamel. On work of this kind, it is best first to have the woodwork lightly sanded and then lightly sanded, so that all little rough spots and scratches are entirely eliminated. Then a covering of flat white of the same kind as used previously in one or two coats, sufficient to give a satisfactory white surface for the enamel. Usually one coat of enamel will be quite sufficient, and, if this enamel finishes with the flat or dull finish, it will be much more satisfactory at the start. Of course, the white-enamel finish will get dull after repeated washing. By the use of pumice-stone and oil one gets the dull effect at once. There are many chambers as well as dining-rooms finished in the yellowish natural effect that can be very greatly improved by white enameling the woodwork. This, of course, covers up all imperfections in the wood, and results in a most thoroughly brightened-up effect.

Oftentimes the woodwork can be most effectually treated by using a coat of stain and varnish combined. This produces a darker effect than the present finish. Oftentimes these lighter pine and oak effects would harmonize better with the general color scheme of the room if they were darker. There are attractive colors in stains of this character. The browns are especially good, while the greens and mahoganies are used with equally good results. One coat of such material will be found quite sufficient, after going over the woodwork and sanding it lightly, in order to be very sure there are no rough spots on it. A very simple method of getting the dull effect on woodwork of this kind is to use a velvet-finish varnish, which produces the dull effect without the necessity of rubbing with pumice-stone and oil.

A THIRD method which is often employed for the refinishimg of woodwork is to remove all of the old varnish and stain, and start in exactly the same as on new work. In cases of this kind, it is, of course, necessary to start the refinishing with a coat of stain, and follow that with shellac and one or two coats of some good interior varnish. It is well to sand between coats and rub the last coat with pumice-stone and oil, unless a mission finish is desired, in which case only the stain and a light body varnish are necessary, also, to be very satisfactorily. Oftentimes it is only necessary to go over woodwork with a coat of varnish, and rub that varnish down with pumice-stone and oil, or leave it in the gloss as desired. A little light sanding before applying such a coat will always give better results. It is really surprising how much such a coat of material will brighten up the woodwork. It is very often important that the baseboards be finished with varnish, since it is around the lower part of the baseboard that gets the most wear. Oftentimes the varnish has been entirely worn off from this part of the woodwork, and by applying a coat of varnish to the entire baseboard one brings back the woodwork into former condition. The window-sills should be treated in the same way.

White-enamed woodwork often gets badly scratched, and it is very easily renewed by applying another coat on the most badly worn parts. A little sandpaper will often clean off spots and scratches, and once the woodwork has been brought back to the original finish, it is the same as on new work. While the window-sills are said to be the most important feature, they are a very important part of the picture. It is these little bright patches that give character to the room, and just as the final "touching in" of the picture is the most enjoyable part of the work for the artist, so the final furnishing of the room is the most enjoyable part of the decorating for those who have the spirit of doing things themselves.

Into a fairly satisfactory condition. Even the worst floor will show up surprisingly well after a coat of inside floor paint has been applied. Such a material, of course, is opaque, and covers up the floor or the grain of the wood entirely. It is a very easy material to apply, and two coats of it will give excellent results. Oftentimes such a finish is used only as a border, and it is used in connection with Greek key stencils, which give the appearance of parquet flooring. Attractive floors give an all of us wonderful satisfaction, and it is well worth while to give to this matter very serious study. If everyone who has to deal with varnished floors would realize that an occasional coat of varnish over the worn parts would keep the floor in excellent condition at all times, the necessity of scraping worn floors and refinishing them entirely would never develop. When a varnished floor has been allowed to stand hard wear, month after month, the dirt seems to get ground down into the wood, and such a worn floor can be gotten out by ordinary washing or scrubbing, but requires deep scraping. This is always a big expense, and is not to be compared with the small cost of applying an additional coat of varnish over only the worn parts.

Another method of getting a satisfactory floor-finish over a floor which has been rather badly scrubbed and washed, is to first apply a coat of ground finish and follow this with a coat of stain and varnish combined. In this way, the badly worn and black spots of the original floor are first covered up entirely by means of the ground coat. Then the new finish is stained and treated in an entirely new color which will conform with the decorations planned.

In nearly every room there will be found one or two pieces of furniture which need renewing. These pieces can be easily brightened up with a number of different finishes, which can be purchased from your local dealer. Take, as an example, the wicker chair which was originally light in color, but has now become badly spotted and worn. This can be treated with one coat of stain, which will give it a new color, and give it a new brilliancy and new life. Oftentimes a coat of varnish on pieces of furniture, after first sanding them, can be followed with rubbing with pumice-stone and oil, and will produce wonderful results. The greatest pleasure in all of this operation of redecorating, of course, comes when we have the walls, woodwork, and floors all finished, and reach the point of bringing in the furniture, hanging the draperies, arranging the pictures, etc. This, of course, is a very important part of the work, since the arrangement of furnishings will very easily make or mar any room. Do not hastily place things about the room. Use some definite plan in all of this work. Use great care in hanging the pictures, grouping similar subjects together, and having some variety in size on the different walls. The pictures should be arranged so that there is a perfect balance on each wall. This can be easily experimented with until the position of each picture seems to satisfy one in every particular respect. Often a careful improvement can be wrought in one's rooms by eliminating superfluous bric-a-brac, pictures, etc. Avoid overcrowding in the furnishing.

This placing of furniture, hanging of draperies, hanging of pictures, etc., should correspond to the final touches in the painting of the picture. The same color should be used, the same way, so that the whole work is done before the picture is finished. Otherwise it will often take two coats to cover up these dark spots; whereas, when they are first sandpapered, one coat will be quite sufficient.

After the rugs have been removed from the floor, the worn parts always show up very badly. We must not let this discourage us, since there is no floor but that can be brought
A GREENHOUSE WILL GIVE YOU A TROPICAL GARDEN 365 DAYS IN THE YEAR

You can grow the choicer palms—the wondrously beautiful orchids and the countless lovely flowering plants that thrive so luxuriantly in just the ideal tropical conditions made possible in our greenhouses.

In fact, you can grow practically anything you want to grow almost any time you want to grow it.

Send for our catalog. It shows and describes 50 or more greenhouses for different wants and different purses.

Write to our main office at

901 Spring Street
Elizabeth, New Jersey

New York Branch, 1170 Broadway

HITCHINGS AND CO.

Heating the Country House Properly

(Continued from 186)

occupy a person's time, as the air once removed does not get back into the system, and the only air which accumulates is that which the water gives off.

Water, when heated, expands, and the hot-water system must be provided with a method of relieving expansion. This is generally done with a small tank placed in the attic where it will not freeze, above the highest radiator. An outlet is taken from this tank through the roof and emptied into the downspout, so, should the expansion be excessive, the water can flow out of the tank. Great care must be exercised and the outlet always kept free and never allowed to freeze. The expansion tank is provided with a sight-glass which always shows the height of the water in the system, and this is also shown in the basement by means of what is called an altitude gage. A thermometer should always be provided, to indicate at just what temperature the system is being operated.

The principal advantages of hot water are its ease of control and its economy in the use of fuel. The first cost is probably higher than that of any of the other methods, but this is readily offset by its fuel economy. A properly constructed hot-water system is a source of much comfort, and, while there are some objections which can be raised, there is little that can be claimed against the method. Return pipes must be provided for each radiator and a good circulation must be had to insure proper results.

Many hot-water systems have been condemned because of poor circulation. This fault is not with the method but rather with the construction. Devices have been produced which can be attached to hot-water heating-systems that will insure a perfect circulation. These devices are simple and inexpensive, and have produced some excellent results. Their function is to put the system under a pressure of ten pounds. This causes the water to flow more freely and permits it to absorb a greater amount of heat.

VAPOR heat is the newest, and its advocates say it will probably be the most successful, of the different methods which are in use at the present time. The object is to combine the good qualities of steam and hot water and omit some of the disadvantages of the older methods.

Vapor heat embraces the speed of the steam system and omits the difficulty of regulation. It is claimed to produce the delightful evenness of hot water without the use of the large radiators and the great body of water with which the water system is filled. Vapor heat is yet in its youth, and there are still many improvements to be added. There are a number of styles of vapor heating on the market, and to attempt to describe each would go far beyond the limits of this article. All of them attempt to arrive at the same solution, only through different routes.

The chief difficulty with steam heat is the air which accumulates in the radiators. In vapor heat this difficulty is dispelled. In the steam-heating system, the air is forced out of the radiators by the steam which has been generated to a pressure. To produce this pressure, it can readily be seen that there is an amount of energy which is wasted before the actual heating process begins, and this energy requires the consumption of coal.

In vapor heating this air is removed by other methods, so that no pressure of steam is necessary, because with the air removed the rising vapors of the heated water eagerly seek to fill the space in the radiators left vacant by the removal of the air. The heater and the piping are identical with those used in steam heating, while the radiators are the same as those used in hot water, only their size is somewhat smaller.

The valves used are quite different. They are
James McCreery & Co.

23rd Street

34th Street

FURNITURE AND FLOOR COVERINGS

are the essential furnishing features in our homes, whether a city house, an apartment, a country home, or club.

It is not difficult to procure furnishings for the average apartments, but it is very difficult to find an unusual Persian Rug in just the colorings and size needed, or a sideboard that is roomy and yet not too large for the dining-room of the modern city apartment.

We make it a pronounced feature in our merchandising to have the unusual in the various lines of furnishings as well as the staple and standard stocks.

Simplicity is particularly desired for country homes, and for such we have a complete stock of Craftsman Oak Furniture for any room, also rich mahogany built along the same lines as the Craftsman.

ORIENTAL and DOMESTIC RUGS in a very complete range of colors and sizes.

Carpets and Linoleums in all grades and designs.

Orders taken for furnishing single rooms, suites or entire houses. Upon request, estimates submitted.

23rd Street

NEW YORK

34th Street

O-Cedar Mop

Polish

gets all the dust from everywhere and holds it—not a particle escapes to mix with the air—until the mop is shaken out or washed. When washed it can be treated with O-Cedar Polish and is again ready for use.

For cleaning and polishing hardwood floors, oilcloth, linoleum and standing woodwork it gives a hard, high, durable luster and finish without hard rubbing. No more backache or house-maid’s knees.

Try It at Our Risk

Buy an O-Cedar Polish Mop at any dealer’s for $1.50, with this distinct understanding: If it is not absolutely satisfactory in every respect, after two days’ trial, your money will be refunded without question. If your dealer cannot supply you, send direct to us.

J. McCreery & Co.

Twenty-Third Street

New York City

Bobbink & Atkins

WORLD’S CHOICEST NURSERY

AND GREENHOUSE PRODUCTS

THE proper way to buy is to see the material growing. We shall gladly give our time and attention to intending purchasers visiting our Nursery, and invite everybody interested in improving their gardens to visit us. Our nursery consists of 300 acres of highly cultivated land and a large area covered with greenhouses and storerooms, in which we are growing Nursery and Greenhouse Products for every place and purpose, the best that experience, good cultivation, and placing us in a position to fill orders of any size.

Our Formal Rose Garden, planted with 5,000 Roses in 250 varieties is now in full bloom. Everybody interested in Roses should visit our Nursery and inspect same.

Deciduous Trees and Flowering Shrubs. We grow many thousands of Ornamental Shade Trees and Flowering Shrubs in all varieties and sizes. A visit to our Nursery will convince you of the quality of our work.

Boxwood and Bay Trees. We grow thousands of trees in many shapes and sizes.

Palm, Decorative Plants for Conservatories, interior and exterior decorations. Our greenhouses are full of them.

Hardy Old-fashioned Flowers. We have thousands of rare, new and old-fashioned kinds. Our herbaceous Grounds are especially interesting at this time. Special prices on quantities.

Hardy Trailing and Climbing Vines. We grow in pots quantities for all kinds of planting.

Our New Giant-Flowering March Mallow. Everybody should be interested in this Hardy New Old-fashioned Flower. It will grow everywhere and when in bloom is the flower of the garden. Blooms from July until the latter part of September.

Our Illustrated General Catalogue No. 29 describes our Products; is comprehensive, interesting, instructive and helpful to intending purchasers. Will be mailed free upon request.

Our Autumn Bulb Catalogue will be mailed free upon request.

Plant Tubes, Window Boxes and Garden Furniture. We manufacture all shapes and sizes.


Pot-Grown Strawberries. We raise thousands of pot-grown Strawberries, in all the leading and popular varieties, ready for immediate delivery.

roses, Tree and Herbaceous Peonies. Ready for immediate delivery.

Bulbs and Roots. We import large quantities of Bulbs and Roots from Japan, Holland and other parts of Europe. Our Autumn Bulb Catalogue will be mailed free upon request.

BOBBINK & ATKINS

Nurserymen, Florists and Planters

RUTHERFORD, N. J.
so graduated that the radiators can be heated by sections. Instead of having the whole of the radiator either hot or cold, as the case may be, it is possible to heat a quarter or half of the radiator during the mild weather and use the whole radiator when it is necessary. This is a decided advantage, as the temperature in each room can be arranged to suit the weather conditions. No air-box or damper is necessary with this system, and the working of the heating apparatus goes quietly on without the usual hissing noise that the air-valves on the steam systems make.

The manner of extracting the air from the radiator is where the different styles of vapor differ. One of the prominent ways is by running an air-line from the radiators into the chimney so that when the heater is in action the draft in the chimney pulls the air from the radiators. Of course the system must be sealed so as to prevent the waste of the vapor (which is nothing more than steam without pressure), and this is taken care of through a separate appliance which is generally controlled by government patents.

A NOTHER well-known style uses the water of condensation to extract the air. Other styles employ the use of pumps, either operated by electricity or by water-pressure from the city water-supply. No matter which method is employed, the object is the same and the results obtained are nearly identical. The ease of control is undoubtedly its greatest feature, and when a system is easily handled it means that it will be economical in the use of fuel. The cost at installation is slightly less than hot water, while the results obtained are claimed to be better than those obtained from its older rival.

A few words of further advice may not be amiss to the prospective house-builder. Locate the heater as near to the chimney as possible, and let this flue be a separate flue. Have nothing else attached to it, let it be as nearly straight as possible. A smooth-tiled flue is always best. The chimney should rise well above the building and should be in all directions free from any obstructions, such as trees. The construction of the system is of as great importance as the proper selection of the style of heating, and a competent person should do this work.

Hot water for domestic use can be obtained from the heating apparatus by the introduction of a coil or small water-back in the fire-box of the heater. When this is done, however, ample allowance must be made for the same. In all cases select a heater slightly larger than is necessary, and the question of heat will be solved by a cozy and comfortable home when the winter winds are blowing bleak and chill.

Finding a Use for the Unused Door

By KATE HUDSON

W e who board or lodge and do light housekeeping are often confronted by doors in our rooms, so far as we are concerned, to nowhere; doors locked tight and unused, unsightly and unfashionable. With slight trouble and small expense, such doors may be most advantageously converted into a bookcase by having a carpenter set up a vertical board on each side of the door-jamb and upon these boards—to the saving of the door-frame itself—nail the cross-pieces upon which the book-shelves are to rest. Then have your woodwork finished and stained to match the door behind it, and hang a curtain of cotton flannel, denim, or a more ornamental and serviceable material from a rod fastened just inside the door-frame, if the recess be just right, deep and shallow; as the door-settings are apt to be in our newer houses, have the rod fastened across the outside of the door-recess. A door thus treated will accommodate a surprising number of books.

THE BEST FLOOR

Factories, Offices, Corridors, Churches, Restaurants, and all public buildings, as well as Kitchens, Pantries and Bathrooms of private houses, are best floored with

Imperial Sanitary Flooring

Because it is durable, waterproof, fireproof, smooth and handsome. Applied in a plastic state, it hardens in a few hours and presents a smooth, warm, non-slipping surface, absolutely free from all cracks and crevices.

Full information and samples on request.

IMPERIAL FLOOR COMPANY
21 Furnace Street, Rochester, N. Y.

GALLOWS POTTERY

BEAUTIFUL Plants display Beautiful Pots

The equipment that year by year has kept in the lead.

It is no longer a question for argument as to that the obiect is the same and the results obtained are better than steam without pressure), and this is taken care of through a separate appliance which is generally controlled by government patents.

A NOTHER well-known style uses the water of condensation to extract the air. Other styles employ the use of pumps, either operated by electricity or by water-pressure from the city water-supply. No matter which method is employed, the object is the same and the results obtained are nearly identical. The ease of control is undoubtedly its greatest feature, and when a system is easily handled it means that it will be economical in the use of fuel. The cost at installation is slightly less than hot water, while the results obtained are claimed to be better than those obtained from its older rival.

A few words of further advice may not be amiss to the prospective house-builder. Locate the heater as near to the chimney as possible, and let this flue be a separate flue. Have nothing else attached to it, let it be as nearly straight as possible. A smooth-tiled flue is always best. The chimney should rise well above the building and should be in all directions free from any obstructions, such as trees. The construction of the system is of as great importance as the proper selection of the style of heating, and a competent person should do this work.

Hot water for domestic use can be obtained from the heating apparatus by the introduction of a coil or small water-back in the fire-box of the heater. When this is done, however, ample allowance must be made for the same. In all cases select a heater slightly larger than is necessary, and the question of heat will be solved by a cozy and comfortable home when the winter winds are blowing bleak and chill.

Finding a Use for the Unused Door

By KATE HUDSON

W e who board or lodge and do light housekeeping are often confronted by doors in our rooms, so far as we are concerned, to nowhere; doors locked tight and unused, unsightly and unfashionable. With slight trouble and small expense, such doors may be most advantageously converted into a bookcase by having a carpenter set up a vertical board on each side of the door-jamb and upon these boards—to the saving of the door-frame itself—nail the cross-pieces upon which the book-shelves are to rest. Then have your woodwork finished and stained to match the door behind it, and hang a curtain of cotton flannel, denim, or a more ornamental and serviceable material from a rod fastened just inside the door-frame, if the recess be just right, deep and shallow; as the door-settings are apt to be in our newer houses, have the rod fastened across the outside of the door-recess. A door thus treated will accommodate a surprising number of books.

THE BEST FLOOR

Factories, Offices, Corridors, Churches, Restaurants, and all public buildings, as well as Kitchens, Pantries and Bathrooms of private houses, are best floored with

Imperial Sanitary Flooring

Because it is durable, waterproof, fireproof, smooth and handsome. Applied in a plastic state, it hardens in a few hours and presents a smooth, warm, non-slipping surface, absolutely free from all cracks and crevices.

Full information and samples on request.

IMPERIAL FLOOR COMPANY
21 Furnace Street, Rochester, N. Y.

GALLOWS POTTERY

BEAUTIFUL Plants display Beautiful Pots

The equipment that year by year has kept in the lead.

It is no longer a question for argument as to that the obiect is the same and the results obtained are better than steam without pressure), and this is taken care of through a separate appliance which is generally controlled by government patents.

A NOTHER well-known style uses the water of condensation to extract the air. Other styles employ the use of pumps, either operated by electricity or by water-pressure from the city water-supply. No matter which method is employed, the object is the same and the results obtained are nearly identical. The ease of control is undoubtedly its greatest feature, and when a system is easily handled it means that it will be economical in the use of fuel. The cost at installation is slightly less than hot water, while the results obtained are claimed to be better than those obtained from its older rival.

A few words of further advice may not be amiss to the prospective house-builder. Locate the heater as near to the chimney as possible, and let this flue be a separate flue. Have nothing else attached to it, let it be as nearly straight as possible. A smooth-tiled flue is always best. The chimney should rise well above the building and should be in all directions free from any obstructions, such as trees. The construction of the system is of as great importance as the proper selection of the style of heating, and a competent person should do this work.

Hot water for domestic use can be obtained from the heating apparatus by the introduction of a coil or small water-back in the fire-box of the heater. When this is done, however, ample allowance must be made for the same. In all cases select a heater slightly larger than is necessary, and the question of heat will be solved by a cozy and comfortable home when the winter winds are blowing bleak and chill.

Finding a Use for the Unused Door

By KATE HUDSON

W e who board or lodge and do light housekeeping are often confronted by doors in our rooms, so far as we are concerned, to nowhere; doors locked tight and unused, unsightly and unfashionable. With slight trouble and small expense, such doors may be most advantageously converted into a bookcase by having a carpenter set up a vertical board on each side of the door-jamb and upon these boards—to the saving of the door-frame itself—nail the cross-pieces upon which the book-shelves are to rest. Then have your woodwork finished and stained to match the door behind it, and hang a curtain of cotton flannel, denim, or a more ornamental and serviceable material from a rod fastened just inside the door-frame, if the recess be just right, deep and shallow; as the door-settings are apt to be in our newer houses, have the rod fastened across the outside of the door-recess. A door thus treated will accommodate a surprising number of books.

THE BEST FLOOR

Factories, Offices, Corridors, Churches, Restaurants, and all public buildings, as well as Kitchens, Pantries and Bathrooms of private houses, are best floored with

Imperial Sanitary Flooring

Because it is durable, waterproof, fireproof, smooth and handsome. Applied in a plastic state, it hardens in a few hours and presents a smooth, warm, non-slipping surface, absolutely free from all cracks and crevices.

Full information and samples on request.

IMPERIAL FLOOR COMPANY
21 Furnace Street, Rochester, N. Y.
Dependable Power to Furnish Water and Light

The convenience and comfort of running water and electric lights in a country home more than offset the initial cost of the plant. An IHC engine furnishes compact, economical and thoroughly dependable power — gas, gasoline, naphtha, kerosene, distillate, alcohol and water and electric lights in a country home cooled, water-cooled, horizontal, stationa system. They operate on the cheapest oil fuels above their rated horse-power. They are simple, easily understood and managed.

The complete IHC line includes vertical, horizontal, stationary, portable, skidded, air-cooled, water-cooled oil and gas engines in 1- to 50-H.P. sizes; kerosene-gasoline tractors 1- to 45-H.P. sizes.

Write for catalogues and any information desired.
International Harvester Company of America (Incorporated)
150 Harvester Building Chicago, U. S. A.

How to Choose Light Fixtures (Continued from page 180)

very useful metal is produced. The fixtures having imitation candles, either for gas or electricity, are useful in many places and in rooms of almost any period, for, as real candles have been used for centuries, their imitations seem to fit in and be at home in almost any environment. The fixtures having glass pendants, and shades of cut-glass are not appropriate to such general use and are suitable only in rooms in the Georgian style which, in a somewhat modified form, in America is called the "colonial." Architects and decorators everywhere are encouraging the use of side-lights, or brackets, often to the giving up of chandeliers, excepting in very large and formal rooms. The chandelier, to tell the truth, has been sadly overworked and abused for many years, and has been used in so many places where it never should have appeared that its prestige has diminished, and its popularity waned so that it is now losing ground. As a means for brightly illuminating the ceiling of a room nothing could have been more successful than the old-fashioned chandelier, the number of lights of which might vary from two to eight, but it had an unpleasant habit of leaving most of the room in twilight or semi-darkness, and only rarely could it be made to cast the light down, which is necessary for comfort in rooms used for living purposes. How much more satisfactory in most rooms is the use of side-lights carefully placed. They are becoming increasingly popular for all the rooms of the house, and have always been in demand for bedrooms and for any but the most important master rooms. Properly arranged, they will illuminate a room sufficiently without creating the glare and unequal distribution of a chandelier, and, with the use of shades, their light may be softened and tempered to any extent desired.

But even in houses from which chandeliers have been abolished, the idea survives in the slightly altered form of a "dome" in the dining-room. After all its popularity and firm hold upon the affection of housekeepers is the result of much merit, for it casts its radiance not upon the ceiling but upon the dining-table, as it should. If it be made of glass which is not too dark, a soft and sufficient light will illuminate the room, while only upon the table will a bright light be cast, and the dome is generally low enough to avoid casting its light upon the faces of those sitting at the table, which is perhaps another reason for its popularity. A hanging dome, however, has its drawbacks as well as its advantages, for it renders impossible the placing of the table in any position other than directly under it and the dining-room cannot be used for any other purpose, as the low-hanging lighting fixture would be hopelessly in the way.

But the dome is giving way to what may be briefly described as the "shower," a form of the chandelier with the lights hanging downward, and which is being made in many attractive forms.

Just now there is a growing tendency to employ lighting arrangements where the source of the light is concealed and where only a soft glow is seen. This is accomplished often by placing lights behind cornices or heavy moldings so that the radiance is diffused without the eye detecting the electric bulbs which are used to produce the effect. The alabaster bowls which are sometimes used for holding the lighting arrangements are exceedingly beautiful and may be mounted upon tall standards or placed upon mantles or in other positions where, being somewhat above the level of the eye, the incandescent lights which they hold are not visible.

Another form is developed from the inverted bowl suspended from the ceiling in which are placed the electric bulbs. Until one has used this method of lighting, or has seen it in operation, the wonderfully soft diffusion of light that is
**Hardy Lilies**

The charm of the Lily is known to all. Perhaps you would like to add a few to your garden this fall. The following is a short list of the most popular. Why not order a few now while you think of it?

**Native Lilies**

Ready for Immediate Delivery

<table>
<thead>
<tr>
<th>Variety</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilium longiflorum</td>
<td>10 to 15 inches</td>
<td>2.50 1.75</td>
</tr>
<tr>
<td>Lilium formosanum</td>
<td>12 to 16 inches</td>
<td>3.00 2.00</td>
</tr>
</tbody>
</table>

**Superbium**

In a collection of best plants of all countries, our native Superbium would deserve a first place. In deep, rich soil it often grows 8 feet high, with twenty to thirty flowers. It is of the richest culture, and may be grown as a wild flower in any swampy or rough part of a place where the snow is not mown. Extra-selected bulbs | 1.00 0.75 |

**Madonna Lily**

Fragrant, snow-white Lily, blooms among the earliest in June. Should be planted at once. Extra-large bulbs | 1.50 1.00 |

**Japanese Lilies**

Ready in November

<table>
<thead>
<tr>
<th>Variety</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilium auratum</td>
<td>7 to 9 inches</td>
<td>0.75 0.50</td>
</tr>
<tr>
<td>Lilium longiflorum</td>
<td>10 to 12 inches</td>
<td>1.25 0.80</td>
</tr>
</tbody>
</table>

**Longiflorum**

Large trumpet-shaped pure white flowers like the Berenice Easter Lily, but is perfectly hardy. Flowers in July.

**Paeonia**

A fitting companion to the Auratum, flowering in August. May be had in three colors—White, Pink, and Crimson.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilium Album</td>
<td>11 to 15 inches</td>
<td>2.00 1.40</td>
</tr>
<tr>
<td>Lilium Mispomenae</td>
<td>9 to 11 inches</td>
<td>1.75 1.25</td>
</tr>
</tbody>
</table>

**Rubrum**

Pink. Pure white flowers like the White Trumpet, with purple centers. Flowers in July.

**Speciosum**

A beautiful companion to the Rubrum, flowering in August. May be had in three colors—White, Pink, and Crimson.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lilium Rubrum</td>
<td>12 to 14 inches</td>
<td>2.00 1.40</td>
</tr>
<tr>
<td>Lilium Rubrum</td>
<td>11 to 13 inches</td>
<td>1.75 1.25</td>
</tr>
</tbody>
</table>

**Catalog of Best Bulbs for Fall Planting free on request**

50 Barclay Street
NEW YORK

---

**One Dollar and a Half**

For the next twelve issues of the National Magazine will keep you in intimate touch with the greatest political campaign in the history of the nation.

Joe Chapple, "The Traveling Editor" of the National, will take you with him through the columns of the magazine to

The Great Ratification Meetings
Around the Circle with the Candidates
Stumping with the Spell-binders and finally on to Washington for
The Inauguration
The Inaugural Parade and Ball

and all the attendant festivities—and also entertain you each month with the chatty, colloquial paragraphs in "Affairs at Washington," a unique and exclusive feature of the National and one of the most popular departments published in any magazine.

The National contains every month, in addition to Mr. Chapple's contributions, a stirring serial, several short stories, special articles, a home-maker's department, etc.

The first copy will be sent the day we receive your subscription, so hurry along that Dollar and a Half for one fall year's entertainment in the pages of the National.

Chapple Publishing Company, Ltd.
BOSTON, MASSACHUSETTS

---

**PICTORIAL REVIEW**

**Pictorial Review** is a magazine of practical everyday usefulness. It contains special articles of particular interest on the sports, fashions, household hints and garden pages which show the new styles for each season sixty to ninety days before they are shown elsewhere. One department alone (The Economical Housewife) will save you over five hundred dollars a year. This department deals in an intensely practical way with the high cost of living. It tells you, each month, how other women are meeting this problem and conquering it. How they buy their foodstuffs, their household comforts and other supplies; how they prepare medicines, potatoes, dinner dishes from bought greens and carps of meat, etc. Each item is thoroughly tested out for experts before it is published. We get hundreds of ideas each month. You get into the very best of all the ideas and only the best which will save you money right away. Pictorial Review is a necessity to every household with a limited income.

**Pictorial Review Patterns**

No matter what patterns you may have been using in the past, try one—JUST ONE—Pictorial Review Pattern, selecting the style from this October number and you will realize, quickly, that Pictorial Review Patterns are the only patterns which will give to your dresses that elegance of line and that smartness which characterize all Parisian-made gowns. You will discover that you can cut a garment with one of our patterns of less material than ever before. Because of the patented Cutting and Construction guides which we furnish free with each pattern you can easily save a yard or more of expensive materials. That saving, alone, will pay the subscription price of Pictorial Review.

Try one Pictorial Review Pattern—JUST ONE—and learn why over five million women use them exclusively.

**BIG FALL FASHION NUMBER**

Pictorial Review for October contains the newest styles for fall—styles that are "right." This number always meets with a tremendous demand, and we respectfully suggest that you get your copy NOW or telephone your dealer to hold a copy for you. Any newsdealer or our pattern agency in your city will send you one copy or forward to us your subscription for one year. This price per year is only one dollar.

15 Cents a Copy NOW ON SALE AT YOUR NEWSDEALER'S—15 Cents a Copy

---

**Journal of Usefulness**

From the House of one of the Most Popular of Meat, Etc. Each Monthly Issue contains a unique and exclusive feature of the Pictorial Review, selecting the style from this October number and you will realize, quickly, that Pictorial Review Patterns are the only patterns which will give to your dresses that elegance of line and that smartness which characterize all Parisian-made gowns. You will discover that you can cut a garment with one of our patterns of less material than ever before. Because of the patented Cutting and Construction guides which we furnish free with each pattern you can easily save a yard or more of expensive materials. That saving, alone, will pay the subscription price of Pictorial Review.

Try one Pictorial Review Pattern—JUST ONE—and learn why over five million women use them exclusively.

---

**November Fashion Number**

Pictorial Review for November contains the newest styles for fall—styles that are "right." This number always meets with a tremendous demand, and we respectfully suggest that you get your copy NOW or telephone your dealer to hold a copy for you. Any newsdealer or our pattern agency in your city will send you one copy or forward to us your subscription for one year. This price per year is only one dollar.

15 Cents a Copy NOW ON SALE AT YOUR NEWSDEALER'S—15 Cents a Copy

---

**Affairs at Washington**

The history of the nation.

Joe Chapple, "The Traveling Editor" of the National, will take you with him through the columns of the magazine to

The Great Ratification Meetings
Around the Circle with the Candidates
Stumping with the Spell-binders and finally on to Washington for
The Inauguration
The Inaugural Parade and Ball

and all the attendant festivities—and also entertain you each month with the chatty, colloquial paragraphs in "Affairs at Washington," a unique and exclusive feature of the National and one of the most popular departments published in any magazine.

The National contains every month, in addition to Mr. Chapple's contributions, a stirring serial, several short stories, special articles, a home-maker's department, etc.

The first copy will be sent the day we receive your subscription, so hurry along that Dollar and a Half for one fall year's entertainment in the pages of the National.

Chapple Publishing Company, Ltd.
BOSTON, MASSACHUSETTS

---

**A MAGAZINE OF USEFULNESS**

Pictorial Review Fashions

We imported a large collection of Paris Models for the Fall Season from such well-known designers as Drecoll, Beer, Poirier, Matsell, Armand, Bernard, Agnes, and others, all of which are represented in modified form in the October number of Pictorial Review. In that issue you will find the new Panier and Diretcorio effects, the picturesque Robespierre styles in blouses, dresses, and coats, the new plaited skirts, in fact everything which will be fashionable this coming season. Be sure to see this Big Fall Number before selecting your styles for fall. It costs you no more to be dressed correctly and in the most up-to-date attractive fashions. Therefore get the best.

Ask your dressmaker—or any dressmaker—which styles and patterns are the best. We know now what she will tell you.

---

**One Dollar and a Half**

For the next twelve issues of the National Magazine will keep you in intimate touch with the greatest political campaign in the history of the nation.
accomplished can scarcely be imagined. The use of inverted shades is undoubtedly a common form of lighting arrangement, and both the shade and fixture-makers are producing some remarkably attractive things.

Of late years the use of portable lamps, also known as "drop-lights," has become more general. This is partly because they are, in themselves, so beautiful, and partly because they are valuable as reading-lamps, and, being easily moved about, they lend themselves to many different arrangements of furniture. In winging a house, a library or living-room is generally provided with one, or sometimes with several, "plugs" to which the wires of these portable lamps may be attached and thus make possible their use on reading-tables or wherever they may be required. These movable lamps are particularly beautiful when fitted with shades of leaded glass. The shades themselves are to be found in the most fascinating designs and in a vast array of colors, so that almost any combination may be had. Perhaps the most satisfactory shades for general use are those made of brown or amber glass, or the same material in the different shades of green, all of which are particularly beautiful when lighted. Shades, in fact, play an immensely important part in the lighting arrangements of a house—they may be used either upon gas or electric fixtures in shapes adapted for each. A much greater variety of shades is possible for use with electricity than with gas, and such shades may be of various materials so that they are highly decorative.

So important are the arrangements for lighting a house that the greatest care should be given to their selection and arrangement, and money judiciously spent upon them will be productive of large returns in the comfort and beauty which the modern home should exemplify.

Red and Gold
By L. D. STEARNS

Once upon a time, the god of Summer and the god of Autumn met.

Summer sat lightly on a snowy steed, with silver mane and tail and sunlight trappings, moving slowly, dreamily, along through pathways bright with sun and flower, languorously idle, happy in the warmth and glow. But Autumn pranced along on a dark brown mare, and all his trappings were of red and gold. No time to waste had he. His path was through bright lanes, all rich with gleam and gold. A little chill was lingering somewhere through the trees, and, as he passed, a gentle crispness seemed to touch the air.

They met and paused; clasped hands; and "Work! Work!" he cried, in ringing tones; "The land is fair," he said, "—a land of play and work, for you."

But Autumn proudly raised his head. "Nay! Nay!" cried he, "a land of work! The harvests must be gathered, for I reap where you have sown!"

And so they parted. And wherever Autumn drove his steed, where flower or leaf had been, a gleam of gold and red appeared in gorgeous, regal splendor.

For Outdoor Sleepers

To many, the chief objection to sleeping out of-doors is the necessity for early rising on account of the glaring morning light. If a thin, black silk scarf or a gauze stocking is bound lightly over the eyes, the morning nap may be prolonged.

Weed Chains

Give Confidence

A NARROW road, a precipitous descent, a sharp turn and a dangerous railroad crossing. Surely enough to instill fear into the mind of any automobile driver, but if your car is equipped with Weed Chains you are absolutely sure of sufficient traction, perfect brake control and the elimination of every possibility of skidding.

Are you still taking your life in your hands by refusing to take necessary precaution to prevent skidding? And you still unwisely depending on rubber alone for your own safety, the safety of the occupants of your car and other road users?

G.D. TILLEY
Naturalist

Beautiful Swans, Fancy Pheasants, Peafowl, Geese, Storks, Ornamental Ducks and Geese, Flamingos, Game and Cage Birds.

"Everything in the bird line from a Canary to an Ostrich"

I am the oldest established and largest exclusive dealer in land and water birds in America and have on hand the most extensive stock in the United States.

G. D. TILLEY, Box S, Darien, Connecticut

Weed Chains: The Greatest of all Safety Devices

Impossible to obtain adequate brake control without them. An absolute necessity on both roads and want a feature that will prevent you against accidents and to make steering comfortable and easy put them on the front tires free.

Made by Weed Chain Co., New York, N.Y. Cannot injure tires because they cannot be run without the use of a jack or connector.

Effective with Weed Chains today and insist for your own protection that others do the same.

For sale by dealers

Weed Chain Tye Grip Co. 28 Moore Street New York

Not Even an Anxious Moment

WEED CHAINS

Greatest of all Safety Devices

A Narrows road, a precipitous descent, a sharp turn and a dangerous railroad crossing. Surely enough to instill fear into the mind of any automobile driver, but if your car is equipped with Weed Chains you are absolutely sure of sufficient traction, perfect brake control and the elimination of every possibility of skidding.

Are you still taking your life in your hands by refusing to take necessary precaution to prevent skidding? Are you still unwisely depending on rubber alone for your own safety, the safety of the occupants of your car and other road users?

This Handsome Fireplace Complete 38

Complete and ready to install. Includes Andirons, Wrought Iron Penender and the famous Colonial Road Placket and Drop-Claw Support, which are the most ornamental and useful. Shelf with drop front. A lovely proportion. Elegant and graceful. All the materials used are of the finest quality. Keeps the fire looking like it was just lighted. A beauty, and a value. For sale by dealers. Winner of DuPont Award. Made by Weed Chain Co., New York, N.Y.

Write for Portfolio or FREE Booklet

Send 5c in stamps for our handsome and informative portfolios showing many different designs in different materials. FREE booklets. Weed Chain Co., 1762 W. 12th Street, Chicago, Ill. or 707 W. 12th Street, Cincinnati, O.

ARTHUR J. COLLINS

Not Even an Anxious Moment

Weed Chains: The Greatest of all Safety Devices

Impossible to obtain adequate brake control without them. An absolute necessity on both roads and want a feature that will prevent you against accidents and to make steering comfortable and easy put them on the front tires free.

Made by Weed Chain Co., New York, N.Y. Cannot injure tires because they cannot be run without the use of a jack or connector.

Effective with Weed Chains today and insist for your own protection that others do the same.

For sale by dealers

Weed Chain Tye Grip Co. 28 Moore Street New York

Not Even an Anxious Moment

WEED CHAINS

Greatest of all Safety Devices

A Narrows road, a precipitous descent, a sharp turn and a dangerous railroad crossing. Surely enough to instill fear into the mind of any automobile driver, but if your car is equipped with Weed Chains you are absolutely sure of sufficient traction, perfect brake control and the elimination of every possibility of skidding.

Are you still taking your life in your hands by refusing to take necessary precaution to prevent skidding? Are you still unwisely depending on rubber alone for your own safety, the safety of the occupants of your car and other road users?

This Handsome Fireplace Complete 38

Complete and ready to install. Includes Andirons, Wrought Iron Penender and the famous Colonial Road Placket and Drop-Claw Support, which are the most ornamental and useful. Shelf with drop front. A lovely proportion. Elegant and graceful. All the materials used are of the finest quality. Keeps the fire looking like it was just lighted. A beauty, and a value. For sale by dealers. Winner of DuPont Award. Made by Weed Chain Co., New York, N.Y.

Write for Portfolio or FREE Booklet

Send 5c in stamps for our handsome and informative portfolios showing many different designs in different materials. FREE booklets. Weed Chain Co., 1762 W. 12th Street, Chicago, Ill. or 707 W. 12th Street, Cincinnati, O.
Fall—the Ideal Tree Planting Time

If some kind friend told you of his success in planting trees and shrubs in the Spring, and then extolled the decided advantages over spring planting, wouldn't you be induced to give the question serious thought? At least send for Hicks for full information and a catalog showing kinds and prices of the trees you want? If, however, you haven't any such friend, we act as both friend and adviser and strongly urge you to do your tree and shrub planting this Fall—now.

Plant Hicks' big trees, if possible—big ones like the maple in the illustration, which was planted ten years ago. Of course, smaller trees, we have them in all sizes, from thirty feet down to six inches. No thinner, sturdier, more carefully root-primed stock can be found anywhere.

Come to our nursery, if you can, and make selections. If you can't, you can depend on our handling your mail order in a way entirely to your satisfaction.

Isaac Hicks & Son
Westbury, Long Island

Would This Roof Satisfy You?

Of course not. "Bayonne" Roof and Deck Cloth cannot fail like this. "Bayonne" is easy to lay and economical. It is suited to all outhouse roofs, porch roofs, small tree*, we have them in all sizes, from thirty feet down to six inches. No thinner, sturdier, more carefully root-primed stock can be found anywhere.

Come to our nursery, if you can, and make selections. If you can't, you can depend on our handling your mail order in a way entirely to your satisfaction.

John Boyle & Company, Inc.
112-114 Duane Street
New York

A Girl of the Limberlost

By Gene Stratton Porter. Author of "Freckles"

Just the book for you. Full of the freshness of the field and forest. A story that takes one out-of-doors in God's own country, and makes one feel the better for the reading.

Special offer. We have made arrangements with the publishers whereby we can make the following offer:

Suburban Life Magazine ("Balance of 1912")—A Girl of the Limberlost. Both for $1.00

The book and the magazine may be sent to different addresses, if desired.

Circulation Department

The Suburban Press, 334 Fourth Ave., New York

An October Idyl

By Harriet Woodward Clark

Within the whole circle of the twelve-month, there is nothing to compare with a New England October day. It is the delight and domain of both the poet and the artist. Longfellow, in his immortal sonnet, sings this refrain:

Thou comest, Autumn, heralded by the rain,
With banners by great gales incessant fanned,
Brighter than brightest silks of Samarcand,
And with stately oaks harnessed to thy wain!
Thou standest, like imperial Charlemagne,
Upon thy bridge of gold; thy royal hand
Outstretched with benedictions over the land,
Blessing the farms through all thy vast domain.
Thy shield in the field harvest moon suspended
So long beneath the heavens' o'erhanging waves.
Thy steps are by the farmers' prayers attended.
Like flames upon an altar shine the sheaves,
And, following these in thy ovation splendid.
Thine almoner, the wind, scatters the golden leaves.
Thy steps are by the farmers' prayers attended.
Thy shield is the red harvest moon suspended
Upon thy bridge of gold; thy royal hand
Blessing the farms through all thy vast domain.

The fall of the years! How often we hear the expression, and how symbolic it is—the falling leaf, the falling of the fruit, the falling of the chestnut bars, the falling of the acorn. The words strike our ear with a melancholy sound:

Oh hear ye not a voice that comes a-singing through the trees,
Across the mead and down the dell along the dying breeze?
And hear ye not the burden of its melancholy song?
Upon the lingering winds of autumn sadly borne along?
"Home, shepherds; home, sheep; winter cometh near; Wither, flowers; fall, leaves; days will soon be dear."

Autumn is the time of fruition; the harvest time with all its glad compensations for labor well spent in Nature's garden. The billycow fields of grain are safely garnered. We no longer hear the sound of scythe or sickle. On the prairies, the great reapers have ceased their tumult because the fields are bare. Their work is done. The luscious fruits, kissed by the summer sun and blushing rosy red under the golden haze of September, are carefully gathered into storehouses, together with the vegetables from the garden, to add to the householder's winter supply.

Bent low by autumn's wind and rain, through husks that, dry and dree, Unfolded from their ripened charge, shone out the yellow ear; Beneath, the turnip lay concealed in many a verdant fold. And glistened in the slanting light the pumpkin's sphere of gold. There sought the busy harvesters; and many a creaking wain Bore slowly to the long barn-floor its load of husk and grain.

Mother Earth, having scattered her largess with generous hand, now pauses in her beneficent Love and Labor have accomplished gigantic tasks. There's not a blade of autumn grain. There's not a yarrow or a wren.

There's not a raindrop or a tear.
There's not a blade of autumn grain.
Which the four seasons do not tend, And tides of life and increase lend. Alike on Nature's love rely.

There's not a sparrow or a wren.
There's not a blade of autumn grain.
And tides of life and increase lend. Rocked on her breast, these pines and I Alike on Nature's love rely. 

The climax of royal endeavor is reached in October. Nature views her completed work with impartial eye, and pronounces the verdict, "Well done." The time has now come for a cessation of the active forces of life. The strenuous efforts of millions of her willing subjects merit a reprieve. Resting-time has come. But, before the volume is completed and the word "finis" written, Nature provides another festiv—
a valedictory pageant with which to set her seal upon the year's work. We recognize this fest in the carnival of the trees. "The beauty that shimmers in the yellow afternoons of October,—who can clutch it?" What, in the whole calendar of the year, can compare with a bright October day? Observe the clear blue of the skies; the shimmers in the yellow afternoons of October,—in the carnival of the trees. "The beauty that since morning." The sunshine is especially warm and golden. It wears a benignant aspect. It lacks the scorching heat of July, or the pale freshness that is glorified by the hues of autumn. Every common weed and shrub by the wayside has become more brilliant neighbors. At the foot of the great forest trees, the feathery fronds of many ferns wave their delicate bronze streamers in the gray lichen in the dense shade of the deep woods clings to the smooth hole of the beech for support. By the brook, the alders and willows willows change into varying shades of amber. The trees in their coats of many colors are beautiful beyond all words. Art can never reproduce the pomp of crimson and purple and yellow of an October day. It defies the genius even of a Corot or a Rubens.

And now comes Autumn—artist bold and free, Exceeding rich in brightest tints that be. And, with a skill that tells of power divine, Paints a vast landscape wonderfully fine. Over the chestnut clod of gold he throws. Turns the ash purple, cheers with scarlet glow's. The lovely sumach, that crevule was seen clad in dull foliage of a somber green, Where dahies blooms given golden instead, Stains every oak leaf with the darkest red, Sets all the woodbine's waving sprays on fire. As we walk abroad, the landscape all about is glorified by the hues of autumn. Every common weed and shrub by the wayside has become more brilliant neighbors. At the foot of the great forest trees, the feathery fronds of many ferns wave their delicate bronze streamers in the gray lichen in the dense shade of the deep woods clings to the smooth hole of the beech for support. By the brook, the alders and willows change into varying shades of amber, Lowell writes of them:

And under it full often have I stretched, This willow is as old to me as life; Feeling the warm earth like a thing alive.

Of the forest of Arden, in "As you Like It," Shakespeare represents the banished duke as saying: "Are not these woods more free from peril Than the envious court?"

Recognizing the spiritual healthfulness to be gained from cultivating a closer acquaintance with Nature, Wordsworth says:

One impulse from a vernal wood
May teach you more of man,
Of moral evil and of good,
Than all the sages can.

I am not surprised that English visitors are greatly impressed at the gorgeous display presented by our New England woods in October. Their island home lacks the vivid coloring which

October days are short and the nights cool. But what they lack in length they make up in breadth. At the close of one of these bright days we see at eventide as having enjoyed, as Hawthorne expresses it, "a big armful of life since morning." The sunshine is especially warm and golden. It wears a benignant aspect. It lacks the scorching heat of July, or the pale freshness that is glorified by the hues of autumn. Every common weed and shrub by the wayside has become more brilliant neighbors. At the foot of the great forest trees, the feathery fronds of many ferns wave their delicate bronze streamers in the gray lichen in the dense shade of the deep woods clings to the smooth hole of the beech for support. By the brook, the alders and willows change into varying shades of amber. The trees in their coats of many colors are beautiful beyond all words. Art can never reproduce the pomp of crimson and purple and yellow of an October day. It defies the genius even of a Corot or a Rubens.
A Real Garden Guide for the Beginner

25 Cents a Copy

This helpful book, which tells what to plant, when and how much, and how and when to spray, is also offered as a premium in connection with a six-months trial subscription to Suburban Life for $1, regular price, $1.50. (New subscribers only.)

The book and the magazine will be mailed to different addresses if desired, which permits of either (or both) being used as a gift to a friend.

Send all orders to

SUBURBAN LIFE

334 Fourth Avenue, NEW YORK CITY

THE SUBURBAN GARDEN GUIDE

Planting Time-Tables
How and When to Spray
What to Grow—and How

By PARKER THAYER BARNES

Published by SUBURBAN LIFE

The most helpful magazine for home-builders

is the chief glory of our American woods in the autumn.

It is a pleasure to watch the delight of citybred children as they take trips into the suburbs, and enjoy—some of them for the first time—the carnival of the trees. To them Nature has opened a grand Arabian Nights' Entertainment—for their especial benefit. They need no Aladdin's lamp to explore this wonderful palace. The sun illuminates the spot, and adds immeasurably to the brilliancy of the scene. With their vivid imaginations, they readily people the place with fairies and gnomes, with knights and ladies.

Walled in with fire on either hand,
I walk the leafy wood-road through.

The maples blaze above my head,
And spaces whence the wind has shed
About my feet the living red
Are filled with broken blue.

Aquarium

As I stand in awe before our great forest trees, symbols of strength and steadfastness, typifying the "procession of human life in their grand march," I do not wonder that Bryant found here a theme for his "Forest Hymn."

The groves were God's first temples. Ere man learned
To bow the knee, and lay the architrave,
And spread the roof above them, in the darkling wood,
Amidst the cool and silence, he knelt down,
And offered to the Mightiest solemn thanks
And supplication.

The whispering winds—those penetrating voices of the wood—break the silence and murmur: "We all do fade as a leaf!" Granted. But is this a cause for sadness? The leaf fades in glory. The seed falls into the ground that it may spring up again into a newer, fresher life.

When will the clouds be averse to fleeting?
When will the heart be averse to beating?
And nature die?
The stream flows,
The wind blows,
The cloud flees,
The heart beats:
Nothing will die.

—Yeats.

How to Start Hard-Wooded Plants

OLANDERS, olives, and other plants of a similar character, are often difficult to grow from cuttings. If taken when the wood is in just the right condition, the slips will generally start in sand; but, if they have gone beyond this "just right" stage, they will refuse to do so.

I have often succeeded in rooting them in water when I could root them by no other method. Fill a wide-mouthed bottle or fruit-jar with rain-water, and drop the cuttings into it, after removing the leaves at the bottom. Allow the tops to project above the water, always. Place the vessel in a window where the sun can strike it, and add water as evaporation goes on. In two or three weeks' time you will generally notice tiny white roots starting from the base of the cuttings. When these have grown to the length of an inch and a half, or two inches, crumble soil into the water and let it settle around the roots until they are covered, then pour off most of the water and allow evaporation to go on before more water is given, until the soil is of about the same consistency as that in pots of growing plants.

After a week or two, the young roots will have filled the soil, and the plants can be removed by breaking the bottle, without the least injury, or set back and potted off singly. Ivy is rooted in this way with much more certainty of success than by any other method.
Green Food—A Necessity for the Laying Hen

HOW TO PROVIDE FOR A SUPPLY DURING THE WINTER MONTHS—SPROUTED OATS AND WHEAT

BY H. V. TORMOHLSEN

CHICKENS must have some kind of green food along with their grain and meat food during the cold months, if many eggs are wanted. Leafy greens, beet-scrapes, green cut-hem, blood-meal, or chopped raw beef will take the place of the bugs and worms they pick up during the warmer months. Something must also be provided to take the place of the tender blades of grass picked here and there. Grains are too concentrated in themselves to form the whole diet for the fowls. With a crop filled with nothing but grains, the starch in them becomes pasty and sticky after becoming moist, and will not move along easily through the fowl's peculiarly formed alimentary canal unless there is some bulky substance mixed with the food. In fact, it requires very much less food if bulky green foods of some kind are fed regularly, and, of course, they are much cheaper.

At first thought, it would seem almost impossible to have a supply of green food during the winter in our northern and central states, without considerable cost. Yet there are several different ways of supplying this part of the ration. Apple-pairings and cabbage leaves, which would otherwise be wasted in the kitchen, can be chopped up with a vegetable-cutter into pieces small enough for the fowls to swallow, and they form an excellent substitute for the grasses of summer. Heads of cabbage may be soaked grain and they will actually eat all the leaves off the clover plant as soon as it is scalded, so the fowls will turn as green as grass when it will soon be hung up and scalded, and fed in this manner; or a box is placed in one of the pans, as shown in the drawing, in a warm, light place. In fifteen or eighteen days, the first pan of sprouts will be ready for the fowls, and every two or three days thereafter. The sprouts are sprinkled once or twice a day, care being taken that they are kept reasonably moist.

The sprouting grains form a mass of matter, the fowls eat these, and the few remaining grains as greedily as the sprouts. The roots form such a compact mass that they are lifted bodily out of the pans when being fed. This is the reason separate receptacles must be used for each growth of sprouts, as otherwise they would mat so tightly that they could not be fed a little at a time, and were needed.

A pint tin of oats and wheat, soaked and placed in one of the pans, as shown in the drawing, in two or three weeks makes a mass of green, succulent, tender sprouts, sufficient for a pen of fowls and highly relished by them. They will materially increase the egg-yield, to say the least, and wonderfully tone up the flock and improve it in every way.
The Gateway of the City

"The Modern Terminal"

The first adequate presentation of the making ready of the great railroads to handle the human millions who will pass in and out of our cities tomorrow.

THE OCTOBER

SCRIBNER'S

MAGAZINE

A Special Number

Leading articles by:

Samuel O. Dunn, Editor of Railway Age Gazette

W. Symmes Richardson, of McKim, Mead & White, architects of the Pennsylvania Station, New York

A NOTABLE AND VITALLY INTERESTING NUMBER

A vivid picture of the marked growth and development in railway traffic and its relation to the congestion of population in cities.

25 Cents per Copy—At all Newstands.
**Flat-Tone**

A durable, unitary, oil paint for walls and ceilings, producing soft, rich flat effects; easily cleaned, easily applied, with soap and water, at colors.

**Marnot**

A durable, tough, plastic floor varnish that dries set free in hours and holds its lustre for the longest possible time.

**Brighten up Stain**

For chairs, tables, woodwork, floors and other surfaces, a natural hard wood effect. Stains and varnishes all one operation. Will not fade or change color.

**S.W.P.**

A durable and economical house paint. Made of pure lead, pure zinc, and pure linseed oil. Thoroughly mixed and thoroughly ground. One quality only—the best—at colors.

**HOW TO GET THIS EFFECT WITH SHERWIN-WILLIAMS PAINTS AND VARNISHES**

- Ceiling—S.W. Flat-tone Ivory.
- Walls—S.W. Flat-tone Buff.
- Woodwork—S.W. Handcraft Stain Walnut.
- Floor—S.W. Marnot Varnish.

For every worn surface in or about the home there is a Sherwin-Williams Paint, Stain, Varnish or Enamel that will beautify and renew it.

WHAT you are after is a good result—a pleasing effect and a lasting finish. It may be merely a chair to stain; it may be a room to beautify or it may be a whole house to decorate inside and out. Whatever it is, the right way to do it and the right materials to get the best results, are clearly illustrated and described in our new Portfolio of Plans for Home Decoration.

THIS portfolio is a painting and decorating guide for you and your painter—a guide to good results and to good material. The portfolio shows rooms artistically decorated, also pleasing exteriors—combinations of color out of the ordinary, yet in perfect taste. Best of all, it tells exactly how to get these beautiful and lasting results on your floors, woodwork, walls, furniture—in fact on every surface around the home that needs beautifying and protecting. Send for the new portfolio today. It is free.

**SHERWIN-WILLIAMS PAINTS & VARNISHES**

(S.W. Canal Road, Cleveland, Ohio)

Decorative Departments: 115 West 32d Street (Opposite Gimbel's), New York City
| 1221 People's Gas Building, Chicago

Offices and Warehouses in Principal Cities

Address all inquiries to The Sherwin-Williams Company, Decorative Department, 663 Canal Road, Cleveland, Ohio

J. HORACE MCPELANE CO., PHOTOCOGRAPHERS, HARRISBURG, PA.
A Coupé of Unequaled Luxury and Utility

The Newest Development by the Oldest, the Largest, the Foremost Electric Automobile Manufacturers in the World

Imagine the most beautiful lines created by classic art built into being by the most exquisite craftsmanship known in modern automobile building!

Then you have a faint conception of the surpassing luxury, the beauty, comfort, richness and dignity of the Baker Electric Coupé.

With its increased roominess, its full limousine back, its longer wheel-base and graceful, low-hung body lines, this magnificent new model thoroughly satisfies the public taste for a stylish yet conservative coupé.

On both interior and exterior have been lavished all the refinements of convenience and appointment demanded by so beautiful a car. One of its innovations is the revolving front seats, enabling the forward occupants to face any direction.

THE BAKER MOTOR-VEHICLE COMPANY, CLEVELAND, OHIO

Builders also of Baker Electric Trucks