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MID-SUMMER POULTRY WORK

By E. I. FARRINGTON

M ANY hens are kept through the Summer at a loss, not laying an egg for weeks. It is advisable and profitable to cull the flock in June or early in July, instead of waiting until Fall. Such birds as seem to be out of condition, with pale combs and a disposition to take life easy, might as well be gotten rid of now as later; the cost of the grain they would eat will be saved. does not mean sick birds, of course, but simply those which have laid prolifically for a long season and which must have a protracted rest. It hardly pays to try to fatten them, either, at this time of year.

Sometimes a radical change in feeding will start a flock laying. If commercial feeds are being used, growing mash may be substituted for laying mash. If the birds have been confined, the same result may follow if they are given a wider range with an abundance of grass. However, there will always be a certain number of birds which will refuse to lay no matter how much they are coaxed. If the flock is a small one, most of them can be picked by close observation, and should be disposed It is well, also, to get rid of the male birds, except such as are to be kept for breeding purposes, and they should not run with the hens. Eggs keep better when they are not fertilized. Sometimes a male bird which is to be kept for breeding purposes the next season may be placed with a farmer and given free range for the Summer, an excellent plan for all concerned, including the rooster.

Some poultry-houses which are excellent for Winter use, because they keep the fowls warm, are extremely hot in Summer, even when they have open fronts. The remedy is to make an opening in the rear wall just under the eaves, so that there will be a circulation of air at all times. A hinged board may be dropped over the opening in the event of a driving rain coming up, but there will be few nights when the opening will not be a distinct advantage in keeping the hens comfortable. Shade is also neces-sary in the hot months. Some poultrykeepers plant sun flowers to provide shade, while others grow vines over the fences. In lieu of anything better, strips of burlap or bagging may be stretched over poles.

An abundance of green food is essential at all seasons, but especially so in Summer. One of the simplest ways to provide it is to have a grass-catcher fitted to the lawn mower and to throw the clippings into the poultry yard. If there is a surplus of clip-pings, they may be saved for Winter use by spreading them on a grain bag in full sunlight for several days until they crackle when handled, after which they may be stored in barrels or boxes. Greens from the garden will be devoured with eagerness. A few rows of Swiss chard will furnish a liberal supply of greens, for the leaves grow again when picked. A small patch of dwarf Essex rape may be planted for the express purpose of growing green food for the occupants of the poultry-house. It matures in a few weeks and new plantings at short intervals will provide a succession. Very

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liberal feeding of rape is said to make the egg yolks somewhat light-colored, but the average amateur need not worry about this.

Where only a small flock is kept, a little bed of oats, Swiss chard or any green crop which grows rapidly may be made in the poultry yard and covered with chicken wire fastened to a board set on edge at each end. Then the hens will be able to eat the green stuff only as it grows to a point where they The best can reach it through the wire. plan I have found, is to open the gate to the yard about an hour before darkness comes and let the birds have the run of the grounds. They do not wander far but devote themselves devote themselves to consuming grass. Naturally a watchful eye must be kept on them so that they will not wander into the garden, but they are made welcome in the corn patch.

It is a great advantage to have double yards, so that one may be dug up and planted with a quick-growing crop like oats while the birds are confined in the Then there is no danger of the yards becoming foul, something to be carefully guarded against. If there is but a single yard, it should be plowed or spaded once a month. A hand-plow is excellent for this purpose. Unless the soil is very light and open, it is best to first rake or scrape up the surface accummulation and remove it; used in the garden, it makes an excellent stimulant for the growing vegetables.

Feeding in Summer calls for no special departure from the regular routine, except that the corn ration should be reduced in very hot weather. It is not necessary or advisable to cut out corn all through the Summer. It is the best grain there is. When feeding cracked corn, though, care should be taken to have it sweet and good. The same advice applies to beef scraps. The latter are needed, even when the hens have free range.

In Summer, when the days are long, the hens are off the roosts at an early hour and ought to have their morning meal at once. If the owner is averse to such early rising, he should scatter grain in the house after the birds have gone to roost the night before or else make the last feeding of the day so bountiful that there will be some grain left over for morning.

If the hens have free range, they should be fed before they are allowed out of the houses; otherwise they are likely to satisfy themselves largely with grass and what-ever else they may find outside and not eat enough grain, in which case the egg yield will fall off. Some poultry-keepers like to feed a mash in the afternoon. may be given about 5 o'clock and a feeding of whole or cracked grain made an hour or two later. It is surprising with what avidity the birds will devour hard grain shortly after they have had their fill of mash.

If the fowls have a wide range, no litter is needed in the house in Summer and the grain may be scattered in the grass. If the flock is closely confined, however, a litter is needed, so that the birds will be obliged to work for what they eat. A little grain may be sowed in the yard to induce the hens to scratch there. Some of it will sprout before it is scratched up, and will then be eaten with zest.

There is no better place for the growing chicks than an orchard or a cornfield. In the latter they will find many bugs and worms and will be protected from hawks. In hot weather it is best to house them in coops without floors. They should not be crowded and should not be allowed to run in the grass until the dew has dried off.





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While in the care of hens, they will not wander far afield if the hens are kept confined to the coops; later they will need to he fenced. It is always well to start with a fence that the chickens cannot scale, for if they do not form the habit of going over fences when young, they will not be likely to acquire it later.

After they have been weaned, the chicks should be taught to roost on wide perches. The lighter breeds usually require little teaching, but it may be necessary to put one or two older chickens or even hens with chicks of the heavier breeds. The perches should be wide in order to avoid the danger of giving the chicks crooked breast bonesthree inches is none too wide. Some growers of market chickens never allow them to roost so that there will be no cases of malformation of this sort. Young birds are prone to crowd, though, when they sleep on the floor and become unduly heated as

The chickens require green food in abundance. Sometimes it is necessary to give green rations even to young birds with a grass run, for after the season is well advanced, the grass becomes very tough. Of course, shade must be given, with plenty of fresh water. Fresh ground should be chosen for the chicks each season, unless they have a grass run, for foul ground has been responsible for many chicken growers' troubles.

THE SANDAL TREE

CCORDING to the New York Even-A ing Post "the Sandal tree (Santalum Album), from which most of the sandal wood oil of commerce is obtained, occurs in a limited area in southern India. Other species in the Hawaiian Islands, Fiji, New Caledonia, and Australia furnished a considerable supply of the oil at one time, but were apparently soon exhausted. The white sandal tree is cultivated in India, and because of its value and the large demand for the oil, efforts have been made for a long time to extend the area over which it These have rarely been successis grown. ful, chiefly, it now appears, because of the curious life habits of the tree. It is a root parasite dependent on the roots of other plants for its food. Planted alone it dies by starvation. An account of an investigation of its parasitism, conducted by M. Rama Rao, has recently appeared in the *Indian* Forest Records. He found no less than 150 alien species acting as hosts for the sandal It appears to prefer evergreen trees, and when attached to their roots becomes an evergreen itself. But it can flourish on deciduous roots, and in this case sheds the leaves annually as does its host. It is quite probable that this investigation will furnish information of importance in the cultivation of the tree-perhaps lead to a notable increase in the annual supply of san-dal-wood oil."

EXPORTING EDIBLE BIRDS' NESTS

THE export of edible bird's nests is one of the profitable industries in the Palawan Province of the Philippine Islands. Most of the product now obtained is sold to Chinese in the Philippines, but some of the nests are exported to China through Hongkong, and apparently there is no reason why the exports should not be extended to the Chinese in the United States, who are accustomed to import this product from China at much higher prices than those obtaining in the Philippines. The nests are sold in Palawan for their weight in silver, or for about \$1 in gold each.



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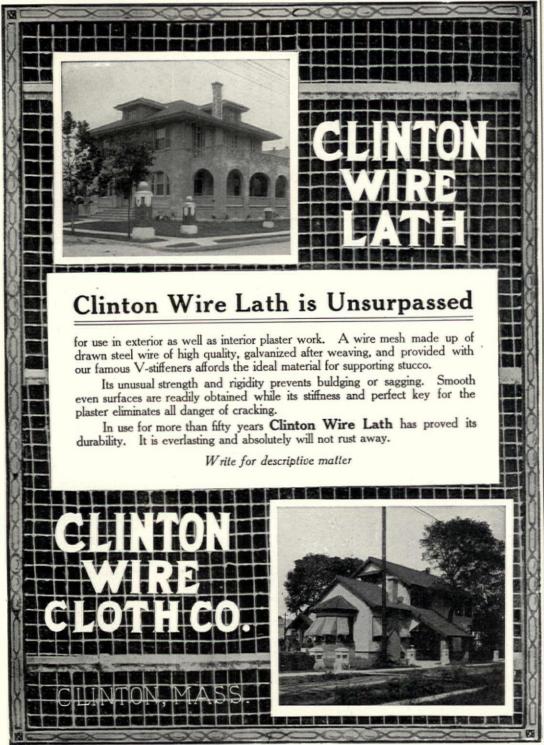
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PAINTING CEMENT BUILDINGS IN **GERMANY**

HE publication in Daily Consular and Trade Reports of an article on building methods in Hamburg contains interesting notes in regard to the class of paint used on cement structures in Germany that will be of interest to American read-

"It is claimed that large amounts of money are expended in the United States in painting cement and concrete, with unsatisfactory results, the paint either peeling or discoloring rapidly.

"According to information obtained from builders and architects, the principal precautions taken in northern Germany to prevent the peeling of oil paints is to defer their application until the cement is quite dry. When it is intended to apply color on outside walls which are still damp, water paints are used which are weather proof and which can be washed if necessary. These colors, necessarily, are not impervious to moisture.

"In his textbook for 1910 Dr. Glinzer, director of the State Building School in Hamburg, says that to make oil paint adhere to cement the surface of the material should be coated with diluted sulphuric acid (1 part concentrated acid to 100 parts of water), which afterwards must be washed off and the surface allowed to dry. Or the surface may be covered with diluted silicate of soda (wasserglas), the solution to be 1 to 3 or 1 to 4, and applied three times in succession. Still another method is to apply two coats of building 'fluat' at least twenty-four hours apart. Practical builders state, however, that the applications of sulphuric acid are not made by them, and that such success as they have results merely from careful work and the use of good materials. Dr. Glinzer also says that oil paint should be applied to cement in the following manner: The surface is given one coating of linseed-oil varnish, to which is added a first coat of white lead when the varnish is dry. A second coat is then added, also containing white lead together with more or less coloring matter, as the building laws forbid the use of absolutely white paint on the exterior of structures. In this climate the use of oil paints is recommended, as they are waterproof and present smooth surfaces which attract a minimum of dirt. Painting according to this method costs here about 10 cents per square yard.

Applied to iron, linseed-oil varnish when used by itself flakes off readily. It should be thoroughly mixed with red oxide of lead, caput mortuum, or ocher graphite. mixture serves as a first coat after the perfectly clean and dry surface has been gone over with the ordinary hot linseed-oil var-nish. When the dead color has dried, another coat of the color desired is applied. The oil, being partly converted into resin, combines with the coloring material, making a thick coating that is the more impervious to water accordingly as the color is finely ground or not. Lead should be used when the paint is exposed to water.

The water colors so frequently used in Germany as a rule have silicate of soda as their base. These colors can be used on cement, plaster of Paris, brick, or glass. Liquid casein paints are easily worked and are said to be durable. The discoloration of cement buildings results very frequently from the class of cement employed rather than from the color applied afterwards.'

THE MOST EXPENSIVE WOOD IN THE WORLD

ABOLE (Anisophyllea cabole Henriq.) is the name of a beautiful tree belongto the mangrove family of plants, Rhizophoraceæ. It is a native of the west coast of Africa, and is very common on the island of St. Thomas, where it is found generally in low or medium elevated portions. In the southern part of the island the tree grows so near the shore that its roots occasionally strike salt water. A more ideal situation is on the southern slopes of the mountains, where in its mature state it forms a very large tree. Individual specimens may be seen here and there which are from 120 to 140 feet high and from 4 to 7 feet in diameter 4 feet above the ground. Most of the trees are very much smaller, for the reason that practically all the mature trees have been cut down to make room for the cultivation of sugar cane. The large trees which are now to be found on these islands have been spared for the purpose of shade or wind break.

The wood, which is very highly esteemed, has a yellowish or light chestnut-brown color with darker colored streaks. It is very firm and durable, and when sawed into boards has the appearance of teakwood (Tectona grandis L.) It is easily worked and is susceptible to very high polish. When carefully filled and varnished it takes on a most beautiful appearance. The specific gravity of this wood is about 0.780 or 48.5 pounds per cubic foot. It is the most costly wood in the world, and is used at present only for making high-grade furniture and objects of luxury. This wood also serves as material for making fancy doors, parquetry, and interior finish of very fine residences.

Cabole was first sold in the city of St. Thomas in 1885, and immediately became very popular for all sorts of fancy work. The first boards which were brought in the market were not sawed, but split with wedges. Several of the merchants in St. Thomas at once attempted to introduce this beautiful wood into the English and German markets, but the cost of preparing the logs for shipment was so great that the project failed. The wood retained its popularity in St. Thomas, and the price soon went up to about \$3,500 per cubic meter. Cabole may, therefore, be considered the most expensive wood in the world.

THE MAKING OF COPPER STENCILS

O make copper stencils for marking laundry, etc., stencil sheet copper is used (the thinnest that is made) and dipped in a tin dish containing melted bees' wax so that both sides will be evenly covered with a thin coat of the wax. The monogram, device or coat of the wax. The monogram, device or figure is then drawn on ordinary white paper, the reverse side of the paper is black-ened with graphite, and it is laid on the center of the stencil plate and by means of a blunt needle the design is lightly traced. The design will now be visible on the thin wax coating. With the same blunt needle or point trace the monogram, but not completely, the lines being interrupted at regular in-tervals, to form "holders," so that after etching the monogram cannot fall out. Then the stencils are laid in a dish, fresh nitric acid poured over it, and the air bubbles removed with a goose feather. In barely half a minute the monogram will be eaten through. This may be observed by holding the stencil up to the light. It is then rinsed off with water and the wax coating removed by heating and wiping it off with a



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Each telephone message requires the right of all the way over which it is carried. A circuit composed of a pair of wires must be clear from end to end, for a single conversation.

A bird's-eye view of any railroad track would show a procession of trains, one following the other, with intervals of safety between them.

The railroad carries passengers in train loads by wholesale, in a public conveyance, and the service given to each passenger is limited by the necessities of the others; while the telephone carries messages over wires devoted exclusively for the time being to the individual use of the subscriber or patron. Even a multi-millionaire could not afford the exclusive use of the railroad track between New York and Chicago.

But the telephone user has the whole track and the right of all the way, so long as he desires it.

It is an easy matter to transport 15,000 people over a single track between two points in twenty-four hours. To transport the voices 15,000 people over a single two-wire circuit, allowing three minutes for each talk, would take more than thirty days.

The telephone system cannot put on more cars or run extra trains in order to carry more people. It must build more telephone tracksstring more wires.

The wonder of telephone development lies in the fact that the Bell System is so constructed and equipped that an exclusive right of all the way, between near-by or distant points, is economically used by over 24,000,000 people every day.

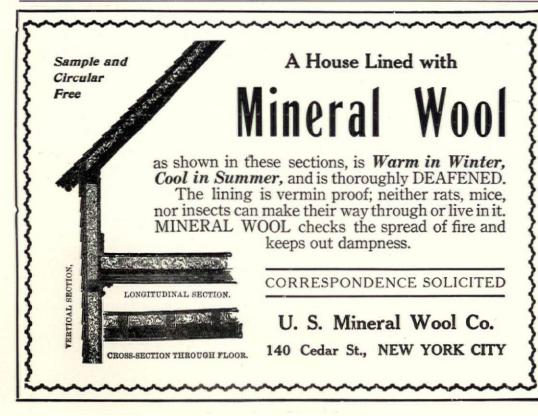
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OLD SHEFFIELD PLATE

RECENT decision of the courts in a A case tried at Belfast should be of interest to American purchasers of antiques, particularly "old Sheffield plate" or "Sheffield plate.

The prosecutor, acting with the support and co-operation of the Cutlers Co., and the Sheffield Master Silversmiths' Association, brought a series of six summonses against a dealer in Belfast, complaining that "he did apply to certain articles a false trade description, namely, 'Old Shef-field plate' or 'Sheffield plated,' contrary to the merchandise act of 1887.'

The case establishes the point that the term "old Sheffield plate" or "Sheffield plate" implies vessels made of copper and coated with silver by means of fusion. This process was the precursor of electro-plating, and died about seventy years ago. Very little ware is produced in Sheffield by this method to-day. Fine specimens of genuine Sheffield plate bring fancy prices, and at the trial it was stated that large quantities of both the real and counterfeit

are bought by Americans.

The articles in question were shown to be electroplate on copper by a process patented about the year 1853. None of the articles were Sheffield plate, Sheffield plated, nor old Sheffield plate, and did not come from Sheffield. The magistrates considered the offenses clearly proven.

In view of the great interest which collectors take in old Sheffield plate, it is interesting to note that so-called reproductions of this plate are manufactured in Birmingham. These are said to be produced in the same manner as the original Sheffield plate; and if after manufacture the pieces are rubbed down and brought to the same apparent age as the old plate, even experts, so one has informed me, would find it difficult to distinguish them from the genuine, although they could al-ways distinguish electroplate on copper from the ware manufactured by hammering or fusing silver upon copper.

Since the passage of the American tariff act of 1909 reproductions that have been exported can be recognized by having the word "England" on them.—U. S. Daily Consular and Trade Reports.

THE AMBER INDUSTRY

A CCORDING to the American Consul-General in Berlin most of the German amber is found in the waters of East and West Prussia, and the industry is a monopoly of the Prussian State. The raw material may be gathered only by authorized persons and in accordance with regulations prescribed by the Royal Amber Works at Konigsberg in Prussia. Raw amber in pieces of two inches and more is very scarce in Germany and the most of it is reserved for the home market. Only occasionally are a few pieces of the raw amber sold to foreign concerns.

Pressed amber, which is also produced at the Royal Amber Works, is made by a secret process. Small but good pieces of amber are melted to about 150 deg. Celsius and then molded under very high pressure into various forms and plates. The plates can be sawed and turned and manufactured into different objects. Forms in the shape of cigar tubes and mouthpieces for pipes, etc., are exported in large quantities to the United States. The artificial amber, often called ambroid, has the appearance of amber, and the untrained can scarcely differentiate between



AMERICAN HOMES AND GARDENS FOR AUGUST

THE readers of AMERICAN HOMES AND GARDENS will have in store for them one of the most interesting issues of the magazine with the advent of the August number, which will be devoted mainly to the subject of Remodeled Houses. The opening article, "The Remodeled Farmhouse," will be beautifully illustrated, exteriors and interiors, with an exterior view of an old made-over New Jersey farmhouse before remodeling.

BEATRICE C. WILCOX contributes an excellent illustrated article on "A Barn That Became a House," being a description of one of the most picturesque remodeled buildings to be found on Long Island. "Woven Furniture," by Harry Martin Yeomans, will show various types of willow furniture and woven furniture suitable not only for the Summer home but for the all-year-round home as well. Mr. Yeomans is a well-known writer on subjects connected with interior decoration, and the present article will be one that is well worth reading. One of the most beautiful country homes in America, a country house that has been transformed from an old mill, is described by Robert H. Van Court in an article illustrated by reproductions, photographs and floor plans. The double-page feature for the August number will be unusually handsome.

"A LITTLE Colonial Farmhouse That Became a Modern Home," is the title of an article by Sarah Witlock Jones, which is a narrative of the discovery of an old, tumbled down, Colonial farmhouse which the writer transformed into a beautiful little country home. This will be one of the most interesting features of the magazine.

F. ROCKWELL, one of the foremost horticulturist writers in America, contributes an article on "Geraniums," which is adequately illustrated by photographs, that will prove helpful not only to the garden beginner, but to an experienced window or outdoor gardener as well.

THE August number will contain extremely interesting departments on home decoration, gardening and also the department of "Helps to the Housewife," conducted by Elizabeth Atwood, whose articles have attracted widespread attention. Numerous other articles will appear in the August issue, which will have one of the most attractive cover designs in color that the magazine has shown this year.

CIVIC BETTERMENT OR PETTY INTERESTS?

In our enthusiasm for the civic betterment movement, we must not lose sight of the fact that those who devise asthetically excellent plans for improvement often fail to take into account, what The Builder calls "the shopkeepers' desire for self-advertisement," the product of our swiftly moving times. When the mass of our people have been educated to a sense and a practice of the higher duties of citizenship it will not become so necessary for the committees of civic improvement societies to make compromises in order to maintain harmony in obtaining concessions to their advanced points of view. As it is, the energy expended in inducing one's neighbor to come into line in any local

betterment plan often discourages those who do not feel that they have the strength to fight for a strip of lawn, a bit of park land, well kept streets, country roads freed from the hideous tyranny of the sign-board, public playgrounds, broad avenues, lighted highways and the like, when opposition seems strong and intelligence blind in the matter. Nevertheless the more dauntless workers we have in this direction, the sooner the public will become educated to a happier attitude, and petty interests will be turned into communal unity so far as the matter of public weal is concerned.

FOURTH OF JULY

HOSE with whom true patriotism, nationalism and devotion to one's country are held to be qualities that only the development of a strong, dignified and constructive sentiment can give proof of their worth, have done much to bring about a proper sense of the fitting manner of celebrating each succeeding anniversary of the signing of the Declaration of Independence. We, in common with other highly civilized nations, make manifest our national feelings on such occasions by as vast an amount of noise as we are able to command, and although one need not quarrel with thatexuberance, joyousness and enthusiasm are not silent factors—we do decry the perversion of the spirit of jubilation to the level of boistrousness and slaughter. Year after year Fourth of July has been made by careless, heedless American citizens to chronicle victims of the insane stupidity of placing danger in the hands of little children and incompetent or foolhardy grown-ups. We do not forget the thrill of lighting firecrackers when we were little folk, but we also remember just how careful we had to be and how anxiously we were watched lest our inexperience bring woe to our little fingers, sorrow into the hearts of our elders. But in the years that have passed since then firecrackers have hidden dynamite within their wrappers, and the little noisemakers of yesterday have been superseded by what, compared to them, may well be considered little less than bombs. Fortunately the cry for sane Fourths had gone out through the land with good effect. Public sentiment has been aroused against permitting slaughter to represent a national celebration and the Quiet Fourth has come to mean, not a day of whispering and bated breath, but a day sufficiently devoid of hideous perversive din to enable one to hear and be stirred by the solemn dignity of the cannon's roar as we salute, through trained, responsible hands, the memory of the birth of the American nation, and recall, with tender thought, the noble lives that have been given to the cause of the maintenance of our national integrity, in which thought we try to forget Folly fumbling with gunpowder.

Inadvertently in the editorial note appearing in AMERICAN HOMES AND GARDENS for June, 1912, wherein readers of the magazine were invited to submit photographs and descriptions of their home gardens, this invitation appeared to be restricted to subscribers. However, every reader of AMERICAN HOMES AND GARDENS, whether a subscriber or not, is cordially invited to submit photographs and descriptions of home gardens to the editor.



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cially tested grass seed, and pulverised manure—the ideal combination to grow quick, hardy, lasting turf. For seeding new lawns or patting new life into the old one nothing equals KALAKA. Packed in 5 lb, boxes, express prepaid, at \$1.00 per box, east, or \$1.25 west of Omaha. Write for prices on special mixtures for special locations and purposes. Order today and have the best seed that money can buy, Get our free lawn book THE KALAKA COMPANY, 25 Union Stock Yds. Chicago

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SELECTING A COUNTRY HOME

A WRITER in the Sun gives the following suggestions to the urban dweller who, listening to the call of life away from the oppression of bricks, mortar and pavements ungraced by Nature's own adornments, seeks a country home. "Before you start out," says he, "on a tour of the suburbs to select a home for the Summer, spend at least one evening in drawing up a summary of what you will need.

"How far is the house from the station? How many minutes is the station from the office? What is the commutation rate? Is there a good train service? These are the

first questions to be considered.

"The inspection of the house may be deferred until after the town has qualified. The next questions are how many rooms has the house and what is the rent? The arrangement of the rooms, the condition of the mechanical equipment, including plumbing, water pipes, gas pipes or electrical wiring and heating apparatus, the dryness of the cellar, the state of the wall coverings—all these factors and more of the same sort should receive careful attention. But there are other points hardly less important to the health and happiness of the family that you might overlook through inexperience or because in previous Summer quarters everything was perfect.

"Then consider these things: Which point of the compass does the house face? Does the sun get directly into the rooms where it is wanted, or does it pour too freely into those where it is not wanted in the Summer time? What is the direction of the prevailing winds, do they reach the front porch, the living quarters and the bed chambers, or do they waste themselves on the

"Where are the shade trees with relation to the sun and the breezes? Do they properly protect the sunny side? What is the general lay of the land? Is the house on a hilltop, on a slope, on a broad level stretch or in a valley? If on a hilltop you are sure of the breeze, but not so on a slope,

on a plateau or in a valley.

"Because of the slope of the ground, the direction and directness of the sun's rays or the thickness of the woods on the windy side you might find yourself in an oven all the beautiful adjectives in the real estate prospectuses to the contrary notwithstand-

"Are there breeding places for mosquitoes near by, any stagnant pools or places where water may settle after heavy rains?

"These will answer the mosquito question more decisively than screens on the neighbors' porches. If the house is in a valley has it a good drainage system all about? Are there provisions to make the water run away from the house and outbuildings rather than toward them?

"Then once more as to the house itself. Are its windows broad, high and airy; have they shutters or blinds which can be used or not as you please, and are they well equipped with screens in a good state of repair? If there is an attic is it well ventilated? Attics are often storage chambers for air heated by the roof that may make an otherwise cool house insufferably hot day and night. Do the porches unduly darken the best rooms of the house or are there overhanging roofs to shut out the light and the breeze?

"In short, consider not only the mechanical perfections and imperfections of the house itself, but also the topography of the neighborhood, and take nothing on hearsay, but see it all for yourself before signing the lease."



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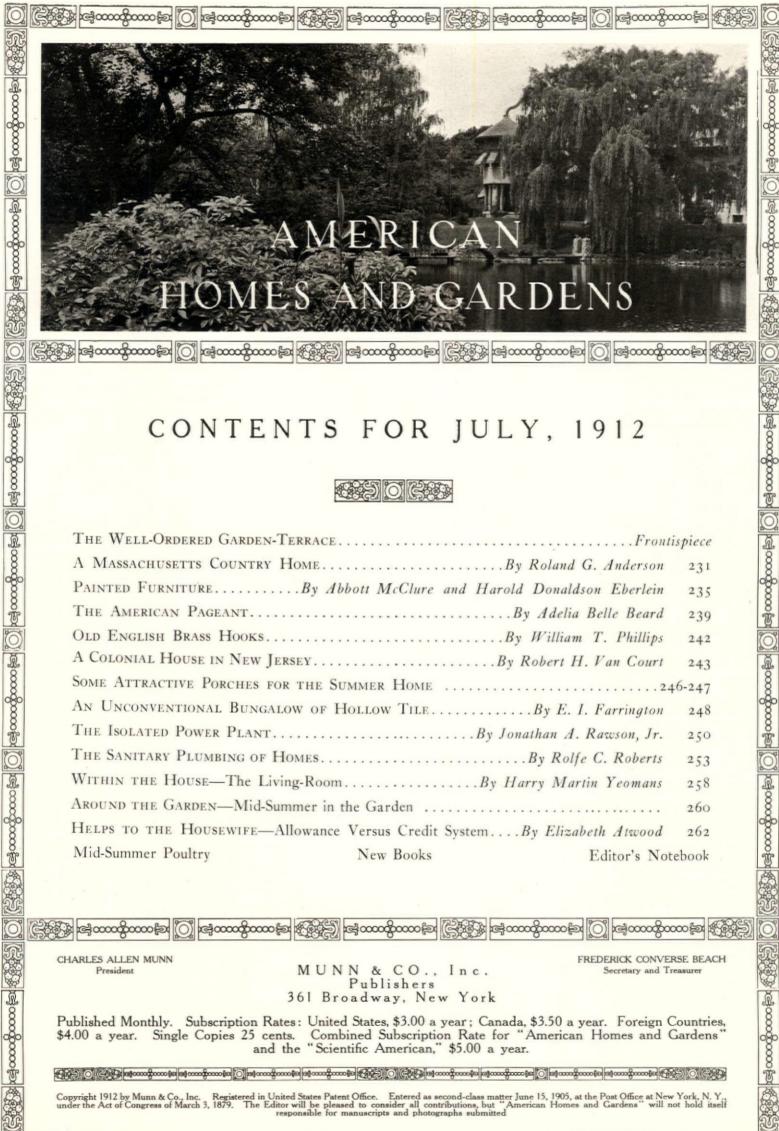
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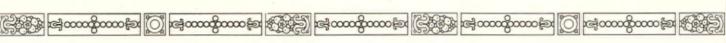
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The well-ordered garden-terrace is a mid-Summer delight to every home, and such a one as this is an example that is worth emulating



AMERICAN HOMES AND GARDENS





Volume IX

July, 1912



Number 7



A Massachusetts Country Home

By Roland G. Anderson Photographs by Thomas E. Marr



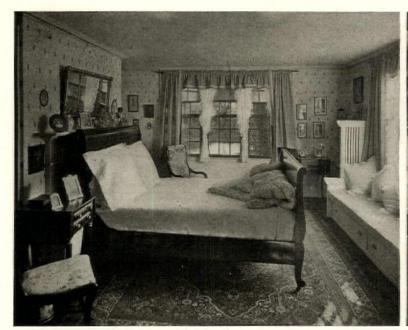
due very largely to the variety and interest of the country, the good taste shown in the greater part of the domestic architecture and the existence of a great number of old New England homes, many of which have

been landmarks for generations. A short distance from Dover, Massachusetts, and facing one of the old Colonial highways, is the quaint farmhouse which, in its restored and

HE beauty of the suburbs about Boston is beautiful form, is the home of Mr. George D. Hall. The alterations to the house, which were planned and carried out by Mr. Howland S. Chandler, an architect of Boston, have involved almost no departure from the style of the original building. Additions were, of course, necessary to change the structure built for a farmhouse into a modern country home, but good taste and a certain sympathy for the old work, has led to making these additions conform in letter and spirit to the original design in all the features.



The country home of Mr. George D. Hall near the town of Dover, Massachusetts, was once an old farmhouse, and was skillfully remodeled



Bedroom with its antique furniture



Dining-room retaining old chimney

No early Massachusetts home was really complete without the vast chimney, which was often the chief feature of the house. The climate of New England includes much weather which is exceedingly cold and the fireplace was therefore a detail of the first importance. There, too, the settlers had come from a country where the fireside stood for the symbol of home life and where the "roof-tree" spirit was much stronger than in countries where life is lived more largely out-of-doors. All this had a certain plain and the eaves are cropped closely to the body of the

effect upon the building of their homes, and a study of these old farmhouses would almost lead one to the belief that the home was really built about the chimney as a kind of shelter to the numerous fireplaces which it almost invariably contained.

Mr. Hall's country home possesses all the characteristics of its type—the earnest and severe style which was a fitting expression of the life of the times. The roof is broad and



The living-room is large and well lighted, thoroughly attractive and homelike



View of the living-room



View of the den or study

building. Walls are covered with clapboards painted white, and windows are hung with blinds painted green and are filled with small panes of glass, dictated, no doubt, by the difficulty and expense of securing larger panes rather than by the desire for the picturesqueness of effect which we so highly value to-day. One strongly suspects that the "eyebrow" window set in the roof and the broad veranda across the front of the house and around one end may be recent additions and concessions to modern demands, but so true

a regard has been held for consistency of design and the general fitness of things that they heighten, if possible, the old-fashioned quaintness of the building.

The chief entrance to the house is through a wide and hospitable doorway with "side-lights" in true New England style. The tiny hallway just within, with the narrow stairway, which, with many turns, leads to the floor above, is also characteristic of a farmhouse of the time and was made necessary, no doubt, by the fact that the huge "stack" chim-



The sun-room, which is a glazed piazza, contains a fine fireplace

ney with its many fireplaces must be placed in the center of the house so that the arrangement of rooms and stairways must be left somewhat to circumstances. The space at one side of the entrance hall is devoted to a large living-room—the "keeping-room" of a New England farmhouse which, no doubt, was a lineal descendant of the "great hall" of a home in England. The rest





A panel in relief has been set in the brickwork above the mantel shelf of the fireplace

of the main floor is given up to the dining-room and a little library or study called a "den." All of these old rooms are beautiful and extremely interesting with their old fireplaces, that in the dining-room having the old-fashioned brick oven in which the housewives of New England did their baking. The ceilings in these rooms are, of course, quite low and are slightly uneven,

which adds greatly to their interest. Woodwork about windows and doors and in paneling about mantels and chimneys is of the old-fashioned New England variety, quite guiltless of ornamentation and painted white, in keeping with its traditions. Opening from the livingroom is a large square piazza which has been enclosed with glass in small panes. This room is provided with a fireplace which, like the entire chimney-breast,

built right into the masonry.

The second floor of the main building is arranged in a delightfully rambling fashion with a pleasantly planned sitting-room, which has a fireplace and is so placed that it faces three directions and receives the sunshine during the entire day. There are three bedrooms, two bathrooms and closets.

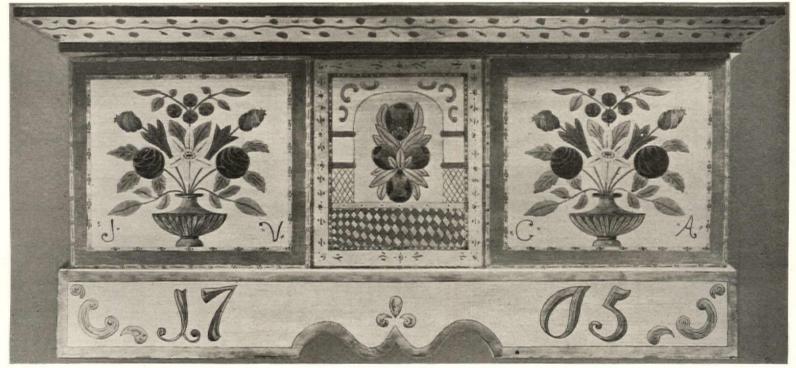
is made of brick with a bas-

relief in ivory-tinted plaster





The house, though entirely remodeled, retains the charm of the old Massachusetts farmhouses



A carefully made replica of an Eighteenth Century Bavarian bride's dower-chest, painted in colors

Painted Furniture

By Abbott McClure and Harold Donaldson Eberlein Photographs by T. C. Turner



O you ever think of furniture as having personality? Whether you do or not, it has personality and has it to a marked degree. After all, personality is only an outward manifestation of character, in the case of furniture at any rate, and if furniture has

not character we haven't a jot of reason for preferring one sort to another. Of course, if a chair is simply a chair, a table a table and a chest a chest, if we suffer from such a Peter Bell-like lack of all aesthetic sensibility, we may deny personality to furniture; otherwise we must concede it. Our tables and chairs, our sideboards and cabinets, all our household goods in fact, are refined or vulgar in feeling; they are patricians in mien or simple peasants as the case may be, but they all have distinctive personality and one of the chief factors in conferring that personality is the element of color and its manner of application. Color and life are inseparable. From our cradles up we are surrounded by it. We cannot escape from it if we would, and few of us would wish to if we could. From the lowest depths of savagery to the height of artistic refinement, from north to south and from east to west, from the remotest past to the present moment, color and color combination have always been of paramount concern, and the way we deal with them determines whether or not we possess that much coveted and oft disputed qual--good taste. We may choose to surround ourselves

with a Whistlerian atmosphere of drab and sepia or we may be like the eccentric gentleman who, in flat defiance of all accepted conventions of male attire, designed himself an eiderdown padded greatcoat of cerise samite quilted with bottle green; do what we will we cannot escape from the color problem.

So then, since color and its application are matters of so vastly important and universal consideration, we can readily understand how men came to embellish the furniture in their houses with designs and colors pleasing to their eye. Especially was this the case where the furniture, chest, cupboard or what you will, was severely simple in form and line and suggested the need of something to relieve its austerity of aspect. In the Middle Ages, however, at which period we begin to hear of painted furniture in Europe, such was the passion for gorgeous color that even ornately carved chests and cabinets or armoires were heavily overlaid with gilding and rich diaperwork picked out in scarlet and blue, chocolate and green, or gaudy with heraldic devices blazoned in all their proper tinctures. If you would have a lively picture of a baronial hall made ready for a banquet or my lady's bower with its varied garniture, look in the pages of Christine de Pisan or at some monkish illumination. From those englamored days, when primal traits of character and primary colors held the field together, to the second half of the Eighteenth Century, when Adam, Heppelwhite and Sheraton gave fresh impetus to the vogue for painted furniture, an impetus perceptibly felt on our side of the Atlan-

tic and still vigorously active, there has scarcely ever been a time when the aid of







End panels of the Bavarian dower-chest, four Bavarian kitchen boxes, and a small Biedermeyer jewel-box

pigment has not been employed to supplement the craft of the cabinetmaker or, perhaps, the simpler handiwork of the carpenter. From the Eleventh Century onward to the Renaissance a popular vigorous sense of color ensured the use of painted decoration for the more important articles of furniture, irrespective of their form.

With the Renaissance regard for form became supreme and the taste for varied and vivid color fell into abeyance among those that attended the behests of fashion-and be it remembered that the mutability of fashion is nearly as apparent in matters of furniture as in types of wearing apparel. However, notwithstanding the defection of the devotees of ruling styles, the fondness for painted ornamentation lived on in many quarters, ready to flourish forth again sturdily at the least en-

couragement. Especially among the Cabinet decorated in Bavarian style cases and snuff boxes. Though his Dutch and Bavarian peasantry was the tradition of furnilacquer formula is said to have died with him, his imitators ture painting kept alive and though heat alive alive alive alive and though heat alive alive alive alive alive ture painting kept alive and, though both style and execution are at times extremely crude, we find virile spontaneity and originality of conception to claim our respectful attention if not always our admiration.

In the latter part of the Seventeenth Century a wave of the so-called "Chinese taste" brought in the craze for lacquered decoration. Lacquered oriental boxes and chests were eagerly sought and ruthlessly broken up to supply



panels for the adornment of cabinets. Experiments in the manufacture of lacquer, aided by the suggestions of returned Eastern missionaries, were not altogether unsuccessful in their imitations and before long furniture entirely covered with lacquer and decorated in Chinese patterns was produced in abundance.

Among the most successful makers of a new sort of furniture, coated with color and covered with varnish, was one Martin, a French coach painter of the early Eighteenth Century, whose business theretofore had been to decorate coach doors with heraldic blazonings and flower borders. His varnish was a fine transparent lac-polish susceptible of taking on a beautiful surface. The work associated with his name is usually found on furniture such as tables or bookcases, as well as on small articles like needle

and pupils painted and enameled furniture of various kinds after his manner. Sometimes in the vernis-Martin work the excellent solid color-frequently a beautiful green-of the table or cabinet or chair is unbroken by any ornamentation save the gold mountings.

About the middle of the Eighteenth Century the brothers Adam, most notable English architects, began to design furniture to harmonize in spirit and style with the stately houses



Decorated chair of "English Empire" pattern



An old chair restored and decorated



Queen Anne lowboy, chairs and mirror, belonging to a Philadelphia collector. The ground work is a dark blue lacquer, the decorations in gold

they were building. No detail was too triffing to claim their attention and, as a result of this fortunate combination of the callings of architect and decorator, we have some of the choicest creations of that period, admittedly the hey-day of cabinet making. The brothers Adam allowed themselves great latitude in painting their furniture in colors. Where the piece was to be wholly colored it was usual to select some neutral hue such as slate, gray or dull green, pick out the less important features of the design in lines of color "very much as a carriage builder is wont to relieve his wheels," and then garnish the main portion of the design by such painted detail as the decorator saw fit. Classic medallions and plaques, wreaths, festoons and urns were the subjects generally employed for embellishment. Very often only portions of the furniture were painted, leaving the natural wood exposed to view for the most part. This was particularly the case where satinwood was used, which was beautiful in itself and at the same time afforded an unusually delicate medium for painted decoration. Many of the plaques, cameos and panels of this old painted and satinwood furniture were executed by such artists as Angelica Kauffman and Cipriani and are exquisite in color and finish.

Heppelwhite and Sheraton followed the lead of the Adams in designing and advocating painted furniture at the same time they were putting forth their best productions in mahogany and inlaid woods. For the japanned or lacquered furniture, and for the pieces colored in the vernis-Martin fashion, what we should now call inferior or white woods were almost exclusively used. In addition to lightness they possessed the further recommendation of being easily worked. At all times furniture forms have been

more or less influenced and modified by the kind of wood used but in the decadent part of Sheraton's career, and in the early Nineteenth Century, form was often completely sacrificed and dependence placed on paint to make up for the lack of shape and proportion. Both form and color unquestionably have their distinct functions and neither should be disregarded nor sacrificed.

Now, what has all this discourse anent long past and gone styles of painted furniture to do with us? What present application shall we make of it to our own needs and inclinations in the garniture of our homes? Never was there a period when more attention was paid to interior decoration and furnishing than now. During the mid-Victorian era, with its dreadful Eastlake, neo-Jacobean and Centennial episodes, popular taste seemed to be dead. Now, however, there has happily been a revival, a rejuvenation, and unwonted material prosperity has supplied the wherewithal to make it potent for good. Natures, artistically starved in that jejune period, were ready to welcome deliverance with open arms when the renaissance of sound taste began. Since that time the movement for better things has grown stead-Along with the reawakening, an increasing and commendable catholicity of outlook has more and more led people to accept and cherish whatever has real merit. For a while, indeed, only Colonial furniture—whatever we may mean by that term—was in favor, but now our horizon has sufficiently broadened to admit good things of whatever date. Thus, what with the assiduous collecting and importing on the part of antique dealers, and the reproductions and adaptations by workers in the several arts and crafts, we are confronted with an array of painted furniture

ranging in date of style from the Norman Conquest down to the latest cry from Germany.

Leaving out of consideration the imported antiques painted with rare skill and prohibitive in price, we may confine ourselves to two or three styles that seem to be specially suited to our conditions. To begin with, the painted furniture in Adam, Heppelwhite and Sheraton patterns is worth close attention. As a rule the form is good and the color and decoration pleasing. In the latter respects there is almost unlimited scope for variety of treatment. However, one word of caution is necessary. In purchasing such furniture it is better for several reasons to take modern reproductions, which are usually faithfully and well copied. The genuine antiques in this style are often so battered as to necessitate endless touching up at great expense and the initial cost is apt to be out of all proportion to intrinsic worth. Furniture of this sort is particularly suitable for bedrooms and drawing-rooms in Summer homes by reason of its lightness and cheerful coloring. Painted satinwood chairs, tables, sideboards and cabinets are always charming and suitable for any place where they will not be subjected to severe usage. Lacquered work after Queen Anne designs is deservedly coming more into vogue. The shapes are excellent while the coloring and decoration are extremely attractive, the gilt ornament of Chinese landscapes being applied on a groundwork of dark blue, red, black or green. Much of this furniture is imported from England, but a good deal is made and decorated in America and very well made, too.

It is a far cry, perhaps, from the courtly furniture just considered to the homemade contrivances of Bavarian and Hungarian peasants, but the quaint style of decoration employed opens up a field so pregnant with delightful possibilities for us that we should be great losers by ignoring it. The peasant furniture of Eastern Europe, whether the makers be Magyar, Teutonic or Slav, is naïve in decoration, full of vital originality in design, elemental vigor of color

and unweakened by over refinement. Colorings, pattern and construction of this painted furniture are traditional and instinct with national spirit. The wood commonly used is pine and the lines simple and direct. Often his own craftsman, the peasant chose easily fashioned pine as the most suitable material to work in and, prompted to indulge in gorgeous decoration both by the bareness of the wood and his own innate love of brilliant color, he fully availed himself of the free range afforded for play of fresh, unfettered imagination. In design and execution the Hungarian pieces are, perhaps, a trifle more angular and assertive than the Bavarian work. Decoration of this type is especially suitable for chests, boxes, presses and cupboards. It matters not if they are as plain as "Plain Jane" and made of mean wood, Bavarian painted ornament will help them mightily in nine cases out of ten. If we go into a strange room and discover a cupboard or chest of this kind, it may strike us at first as crude, but by and by we find our eye wandering back to it and we realize its growing charm. straightforward naïveté lays strong hold upon us and we should feel its removal a positive loss. To be sure, we cannot always get these pieces from their native source, but our craftsmen can faithfully reproduce them in color, design and feeling, and though they may not have the patina of age they create the same ingenuous atmosphere of homely comfort and cheer as the originals.

The Bavarian bride's dower chest shown in the illustration is a replica of one in the National Museum in Munich. It is two and a half feet long, a foot wide and a foot and a half high, including the base. On a cream colored ground the bright-hued flowers, figures and bands stand out vividly. The body of the chest is free of depressions or projections of any kind. Wide yellow decorative bands divide the front into three panels. In the two side panels stiff sprays of flowers and leaves spring primly from vases; in the central panel is a bunch of four plums. A comical little man with a (Continued on page 261)



An exceptionally fine satinwood settee from a private collection in Philadelphia



Among the "properties" of the pageant the old-time stagecoach with its narrow windows, swinging middle seat and drop steps was prominent

The American Pageant

By Adelia Belle Beard Photographs by the Author

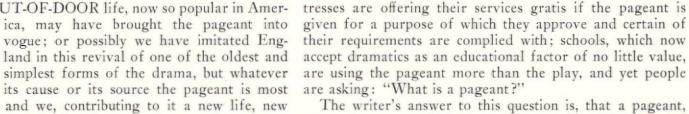


ica, may have brought the pageant into vogue; or possibly we have imitated England in this revival of one of the oldest and simplest forms of the drama, but whatever its cause or its source the pageant is most

certainly here, and we, contributing to it a new life, new themes and a wealth of enthusiastic fervor all our own, have gone pageant mad. Our country, the eastern part especially, has caught the infection in its most virulent form and is now in the throes of a new aspiration with a wild

desire to beat the Old World at it own game of pageant making.

Small New England towns and villages, some of whose inhabitants have never seen the inside of a theatre, are enthused almost out of their traditional New England reserve and are competing with one another in the bigness and splendor of their out-of-door dramas where the dramatis personæ is made up of the town people themselves; shining lights among our actors and ac-



per se, is a story told by a continuous series of living, moving pictures, a living panorama produced out-of-doors amid natural scenery and natural surroundings. When the old models are followed events are largely represented by al-

legory, or rather the subjects are, in the main, treated symbolically. Like mural paintings, pageants are more imposing and effective when they assume a decorative form. The grandeur and importance of the themes frequently chosen require simplicity and nobleness of treatment and a too realistic rendering would belittle them.

From the Twelfth well into the Sixteenth Century pageantry flourished in England, frequently in the form



"Rushing forward in the dance as though blown by the winds'



The symbolic dance was introduced at intervals throughout the pageant

of religious miracle-plays. These were performed first by the clergy, but became still more popular when later the people took them into their own hands and they were enacted by trading companies which were the representatives of particular trades. Each company had its own play and these plays were combined into one great pageant, giving the entire Bible history from Creation to the Judgment Day. The originals of some of these plays are said to have come from France, many were taken directly from the Bible and from legends of the saints.

The various trading-companies provided each its own stage in the form of a scaffold on four wheels. In these days we would call it a float. This scaffold had two rooms, an upper and a lower one. The upper room, entirely open and without a roof, was used as a stage, the lower one for a dressing-room. As in our modern parades, these floats followed one another over a given route, but instead of moving steadily along, each float made a stop in each street of the town long enough to enact its play, and was then wheeled to the next stopping place, where it reproduced its performance.

The first float gave the first play or chapter of the story exclusively and enacted it in every street. The second float followed the first and gave the second chapter, the third



A group of tiny wood nymphs

followed the second, and so on until the pageant was being played in every street and the audience at each stopping place saw the whole performance from beginning to end. How many floats were required for the telling of the story has not been recorded.

Though most of the principal events were pictured on the movable stages the actors were not entirely confined to them, for at times, it is said, characters on horseback would ride up to the "scaffold" and others would "rage in the strete."

The costumes were mostly conventional. Divine personages were identified by gilt hair and beards, the demons by hideous false heads, the souls by black or white coats, according to their condition, and the angels by gold skin and wings. In other early English pageants heroes of mythology and history and the abstract ideas of morality or patriotism were represented in allegory by costumed fig-

ures, and the city of London refused to allow even the great plays of Shakespeare to supplant these exhibitions, so dear were they to the hearts of the people.

So far the American pageant has not been a free-to-all performance, nor has it trailed its splendors through the streets of a town; it has chosen, rather, to confine itself to a suitable place in the open where its audience can be seated, if not always with entire comfort, at least seated, and where the privilege of a seat and of viewing the pageant has each its own price. Our most ambitious effort in the past was the rendering several years ago of Jeanne d'Arc in the stadium at Boston with Maude Adams in the title role; what we may yet achieve in this line is beyond prophecy.

While classical subjects find favor, the most popular and pleasing to the people in general are themes taken from our own history, and indeed for Americans this is a wise choice. It opens a new field for American dramatists also which doubtless will be ably and perhaps grandly filled, for, like some of the best of the old writers, they will not deem it beneath the dignity of their profession to contribute to the people's drama, raise it to the highest standard and make it typically American. Though our history is not ancient it still has its myths and its legends, and state history, as well as national, abounds with incidents that can be picturesquely presented by pageantry.

For the old pageants a general prologue was spoken by a herald, but the modern method of giving in the programme a synopsis of events and an explanation of the symbolical renderings is more satisfactory. From the standpoint of the audience of to-day the nearer the pageant approaches the pantomime the better, for the story is more clearly understood when nothing is left to be explained by the dialogue or monologue, to which one seldom attempts to listen even if the untrained voices can, in the open air, make speech intelligible.

When before one stretches the great, wide, beautiful outof-door stage, perfect as nature is perfect, a picture in itself, often filled with restless, gaily caparisoned horses, strange vehicles, oddly dressed men, women and children, what does it matter that one or two of the actors would try to put the situation into words, and who gives them a thought unless, perhaps, to wish they would have done and allow history to move along without waiting for them to say their little pieces. The shouts of the multitude, an important proclamation, or the cry of a single character is often effective; singing can also be introduced to advantage, but when long speeches or dialogues occur where there is little or no action the audience grows restless and remembers that the board seats are hard and the sun hot. Too much preliminary action for an unimportant result, such as a prolonged search for wood with which to make a fire, is also tiring to the audience strung up to the witnessing of large events. But let one picture follow another in quick succession, yet absolutely without hurry, and the people, actors and audience alike are carried along lightly by the sweep of events until the end of the pageant comes all too soon.

A successful pageant is well grouped. That is, when groups are formed they present a picture whose composition is good, and herein is found the need of an artist's eye, not necessarily that of a professional, but of one who

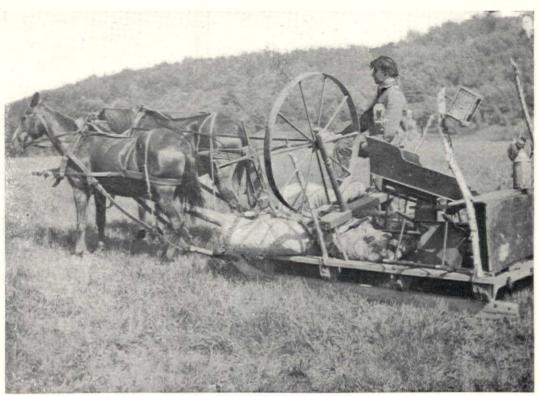
understands composition. To the audience the stage is always a picture, however its groups of actors may shift and change, and though a group happens to be far in the background and is apparently unimportant, it should form a tableau pleasing in itself and one which falls naturally into place in the general composition.

Dress plays an important part in the pageant. To be successful the historical pageant must be correctly costumed and the actors attired strictly in the style of the period represented where the representation is to be literal. When allegory is employed the costume should be symbolical and fashioned to suit the subject, indicating at a glance the idea embodied, just as the costume of the Goddess of Liberty proclaims the freedom of a nation.

One of the most attractive features of this out-of-door performance is the dancing. It lightens and relieves the historical pageant as comedy lightens tragedy in some of the greatest of our plays, and it is seldom omitted in a successful pageant even when the story does not strictly call for it.

Way up in the hill country of Vermont the six little villages of Thetford lately combined to produce a pageant commemorative of the one hundred and fiftieth birthday of the township, and this historical pageant was made very beautiful by the dances. The history of Thetford in its principal events was told down to the present day, but the story commenced at the period before history began, when the place was inhabited only by spirits of nature; a most poetical opening for the story of sterner facts that followed.

The natural scene which the audience confronted was "a typical fold of the green hills, a narrow stretch of intervale and the curving line of the Connecticut River." The pageant opened with the appearance of the Nature Spirits. Clothed in shimmering costumes of pale green, pale blue, and silver tinsel, the water sprites immerged from the foliage on the river banks as if arising from the water below; then from the background came the spirits of the intervale, rushing forward in the dance as though blown by the wind. These were dressed in light, floating draperies of warm, soft, pastel tints; yellows, pinks, rose and violet, representing the fruits and flowers of the valley. Finally, coming down the hill far at the back, swaying and bending in the dance as the trees sway and bend in the breeze, were seen the mountain nymphs, dressed in greens and browns and



For the costuming of the Thetford Pageant, attics, old cedar chests and hair trunks of the combined six villages were ransacked and verily the result was a remarkable collection

bearing aloft in both hands sheaves of living green branches. When these three groups met and mingled in a dramatic dance, gracefully fantastic, the effect was indescribably lovely and the composition and blending of colors a triumph to the director and leader. Often the scene, with its dancing figures, reminded one of a painting by Corot, and when at times little butterflies fluttered among the dancers and groups of flowers sprung up in the background there seemed nothing lacking that would add to its beauty.

The symbolic dance was introduced at intervals throughout the pageant. At one time the flaming spirit of war appeared, gleaming, naked sword in hand, and in a weird and cruel dance, announced the episode of the Civil War. Again the awakening of sleeping Thetford by Pageantry was represented in a dramatic dance, two characters only taking part, Thetford and Pageantry.

Apart from symbolical dances were the dance of the American Indians and later the old-time country dance, the Indian dance forming a connecting link between the fantastic undulating evolutions of the Nature Spirits and the prosaic pigeon-wings of the before-the-war period.

For the costuming of the Thetford pageant, attics, old cedar chests and hair trunks of the combined six villages (Continued on page 263)



The little tots representing butterflies



Charles II period, 1680



Charles I period, 1630



William and Mary period, 1690

Old English Brass Hooks

By William T. Phillips



HE brass hooks illustrated upon this page gowns and other things on for the past two decades as is are modern reproductions of old English to be found in the brass hooks patterned after examples examples of that date from the Seven-

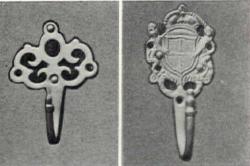
examples of earlier periods, which may now be

had in America, the examples here shown having been imported recently. We are coming to interest ourselves more and more in the minutia of home-decoration, in the little things that play a modest part in home

furnishings, but which, after all, are essential factors in many respects. Hooks, for instance, abound in every house, and how ugly many of them are—nearly all of them in fact. It is a pleasure therefore to come across so excellent a substitute for the hooks we have been hanging our hats, coats,



Georgian Period, 1730



Mary, King Charles, and of the Georgian era were the work of early English designers and metal workers. One is pleased to note the revival of beautiful "house hardware" in evidence in this instance as well as in other contemporary productions. It is to be hoped that modern craftsmen will go one step further and give us more examples than we find at the present time of artistic metal-

work designed for the house interior.

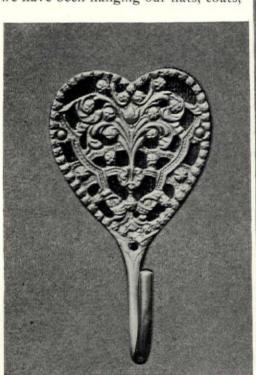
teenth Century. One of these hooks is Dutch, but

being brought to England

at an early time was, we

believe, copied by early English craftsmen, but

others of the William and



Dutch, circa 1700



Long hook, William and Mary period



Seventeenth century



The home of Dr. Dwight E. Marvin, at Summit, New Jersey, is an unusually successful example of the gambrel roof type of house

A Colonial House in New Jersey

By Robert H. Van Court Photographs by T. C. Turner



that is well designed leads one to country and suburban homes of every possible type. There are some architectural styles, however, which may be successfully used only for large and extensive buildings, for one

can hardly imagine a small suburban cottage of Gothic or Italian Renaissance design. Other styles of architecture, upon the other hand, seem particularly suited to small country homes and other buildings of a somewhat intimate and domestic character, and of these types none is more popular or more widely used than what we know as the "Dutch Colonial" style.

The chief characteristic of this type, of course, is the "gambrel" or double hipped roof, but it is interesting to note that while this kind of roof seems to have been invented in America its use was not confined to the region immediately about New York where Dutch influence prevailed. It occurs also in numerous old farmhouses throughout New England, and several well-known examples are still standing near Medford, Deerfield and other old localities in Massachusetts. The famous Hancock Mansion, which for generations was one of the landmarks of Boston, was also built with a gambrel roof, somewhat high in pitch and lighted by dormer windows. A gambrel roof which is really Dutch, however, is almost invariably possessed of certain lines by means of which it may be readily

HE never ending quest for the small house identified. Its dimension from the ridge-poles to the point where the downward slope begins is nearly always much shorter than the length of the slope itself, while in the case of the New England example the two dimensions are very nearly the same. The slope of the Dutch gambrel drops with a very graceful curve—it is never precisely straight, as the New England roof invariably is.

> At Summit, New Jersey, Mr. Benjamin V. White, a New York architect, has built for Dr. Dwight E. Marvin a house which embodies the characteristics of the New England rather than of the Dutch gambrel roof, and which is in many ways a successful example of this very pliable style, and the place is particularly interesting by reason of the beauty of the site as well as the tasteful designing and planning of the house itself. A low hill or knoll rises gently from the roadway. The soil is rocky and in many places there are boulders which appear above the surface of the ground. A dense growth of forest trees and underbrush surrounds the house and affords a background, providing a delightfully rural setting for its carefully studied architecture.

> Owing to the slope of the ground a straight walk directly from the street to the entrance doorway would have involved a flight of steps near the house. The approach has therefore been planned with a curving walk which enters the grounds at one side, avoiding the slope, and leaving the greater part of the space surrounding the house for a lawn

which has been so planted with shrubbery that the apparent size of the place is very much increased. The walls of the lower story of the house are of stucco, which also covers the foundation walls where they appear above the ground. The gable ends and the sweeping gambrel roof are of shingles with a slightly roughened surface which is either stained or left to acquire the weather worn appearance which exposure to rain and sunshine very shortly produces. The roof is here brought down very low, covering the entrance doorway

and the two shallow bay windows which are placed at either side. A veranda placed at each end of the building extends its lines and preserves the formal balance of the house and the roof is broken by one long, continuous dormer which enlarges and lights the upper floor with even less breaking of roof lines than there would be had three

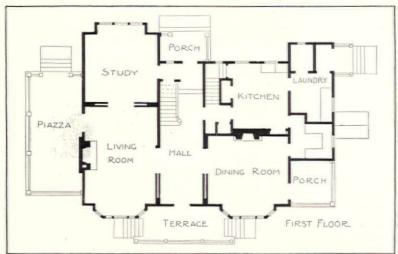


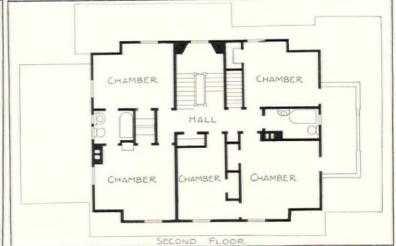
The hall and stairway with its wainscoting and graceful baluster and newel

the panels of lattice-work placed just beneath. These points of design are quite in accord with the principles of early Dutch colonial architecture, for what little interior decoration there is has been placed where it strengthens and emphasizes structural lines.

Before the main entrance is a small porch with steps at either end rather than at the front, which is the usual method. The door itself is filled with six tiny squares of glass which light the hallway within, where the interior has been planned upon the same modified Dutch colonial

lines which have been used for the exterior of the building. A broad hall divides the house and wide doorways open into rooms at either side. Just ahead, as one enters the hall, the stairway with its wainscoting and graceful baluster and newel leads to the floor above. Beneath the landing of the stairs is placed an arch in the old-fashioned manner, and





First and second floor plans of the Marvin house

or four smaller dormer windows been used. As seen from the roadside the interest of the house depends very largely upon the skill with which it has been placed amid its surroundings, the well-designed details of planning, such as the wooden blinds at the entrance door, the transoms and casements of the oriel windows and the simple but very decorative character of the railing of the veranda and

just beyond is a Dutch door divided horizontally in the middle, which one feels sure leads into a garden where tulips, hyacinths and other bulbous plants bloom with the first breath of Spring. The walls of the entrance hall are covered with a foliage paper, woodwork is of white enamel and several old rush-bottomed chairs with straight backs painted in black and gold do much to carry out the old-



The library is truly a roomful of books



The dining-room is bright and attractive

fashioned effect here welcome.

At the left of the hall are living-room and library. The living-room faces the street and the six windows which overlook the entrance are placed in a shallow oriel or bay window and are arranged with small panes in casements which open outward, as such windows should. The living-room also has a fireplace of very spacious and hospitable dimensions and a French window opens upon a broad veranda which is screened by tall growing shrubbery and flowering vines. Beyond the liv-



Aspect of the house in the Fall of the year

somewhat lower level than the living-room, so that one descends two or three steps in entering it. At the far end of the room are casement windows closely grouped—the walls are lined with bookcases which extend almost to the ceiling. A study or library should of course possess a literary atmosphere to a marked degree, and this is here accomplished by the shelves filled with books in bindings of many colors and other volumes upon an old-fashioned study table. Old chairs, some of them covered with leather, are grouped about and help to supply the note of comfort without which

any library is merely a room filled with books.

Opposite the living-room is the dining-room, where more casement windows look out across the lawn and where another window reaching to the floor opens upon a small porch planned for the serving of meals out-of-doors. This veranda is screened with wire netting and is very close to a stretch of woodland into which a glimpse is given. The white woodwork of the dining-room includes a narrow shelf or plate rack which is carried around the room

ing-room is the library or study, which is placed upon a at the top of the doors and windows, and upon this narrow shelf are various old plates and tiles placed against the plaster frieze. The walls are covered with an old-fashioned flowered paper which creates a background for mahogany furniture of a very simple Sheraton pattern adorned with narrow strips of inlay, and the tints of both the furniture and wall covers are emphasized by the dark-toned rugs which cover the floor. In all of these rooms the lighting fixtures are side lights of brass with the electric bulbs covered by cut glass shades of a most attractive pattern.

(Continued on page 264)



A delightful vista is presented from the broad porch-terrace situated between the bays of the living-room and the dining-room

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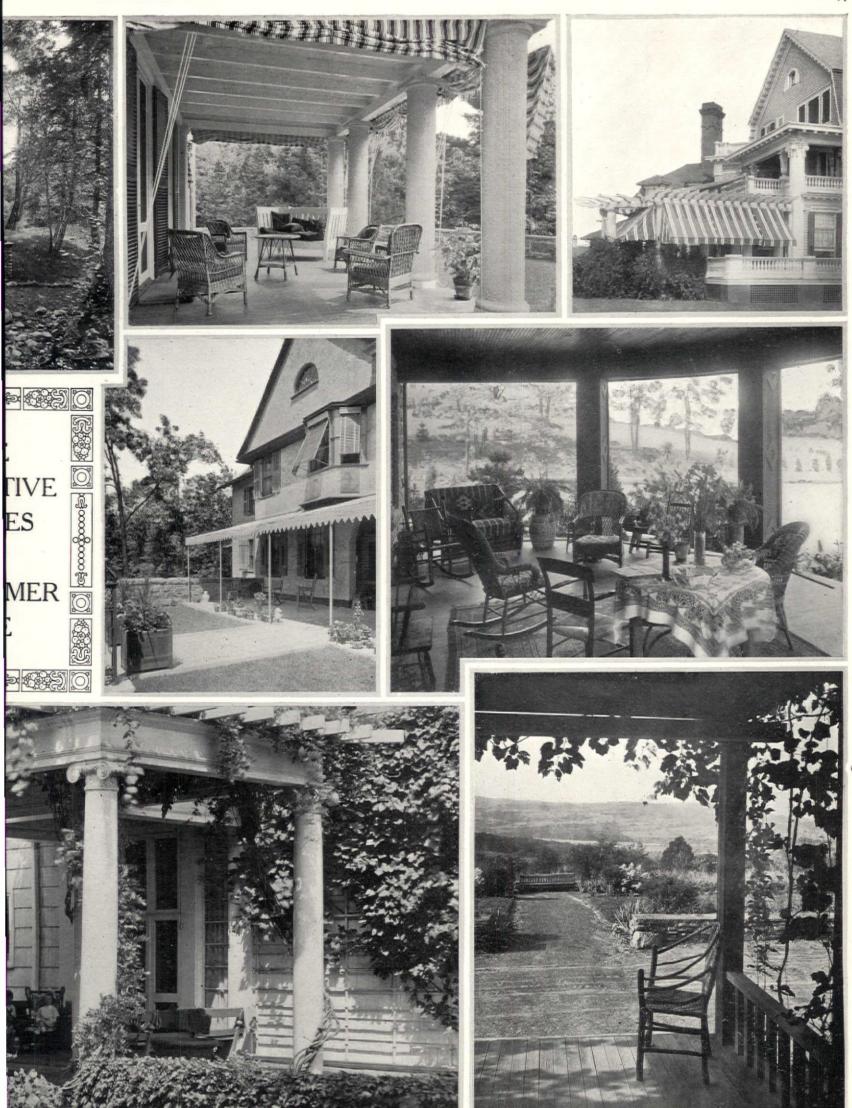














This unconventional bungalow is built of terra cotta hollow tile, covered with rough plaster, and was designed by its owners

An Unconventional Bungalow of Hollow Tile

By E. I. Farrington



ERHAPS all bungalows are expected to be rear is a massive fireplace and at the front over the enunconventional, but if that be the case the one owned and occupied by Mr. John L. Hamilton of Wollaston, Mass., is exceptionally so. It was designed in all its details by Mr. and Mrs. Hamilton, who take

especial pride in the fact that there is not a single dark corner in it, even the closets being lighted. The plans were made by Stewart and Marshall, architects.

low tile and the exterior is covered with rough plaster. On the roof is one of the fire-resisting roofing materials now in common use, so that the house is practically fireproof.

Although the bungalow, with its wide porch in front and sun parlor at the rear, presents an attractive apparence from without, the interior arrangements are of greater interest. Being a true bungalow, the house has but one story. The liv-ing-room, which occupies the center, extends to the roof, and is lighted in part by small dormers. At the

trance-hall, a gallery which makes an ideal place for reading and writing. A group of latticed windows opens from this gallery and aid in giving light to the living-room. Opening from the living-room are all the other apart-

ments. At the same time the rooms on each side constitute a suite. At the right are two bedrooms with a bathroom between. At the left are two bedrooms with double closets between. These closets are very large and a door opens The walls of the bungalow are built of terra cotta hol- from one into the other, making what amounts to a secret

passageway between the two rooms. Opening from the rear bedroom and from a hall leading to the livingroom is another bathroom, thus providing for an unusual degree of privacy. There is also a lavatory in the little hall just mentioned and lighted by a window high in the wall looking into the kitchen.

At the right of the entrance vestibule is a coatcloset, a window from which opens into another closet connected with the owner's room. This closet has an outside window, so that both closets are lighted and can



The "Loafery" has burlap-covered walls and built-in seats

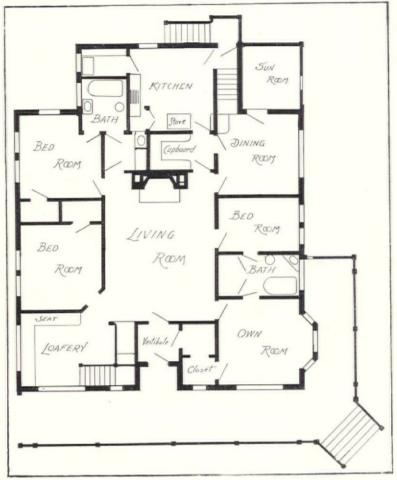
be quickly and easily ventilated. In the bathroom are wide shelves for linen and other articles and a man's closet with a laundry basket.

The high windows in the front bedroom give privacy without the need of draw-These and ing shutters. many other windows in the house are hinged at the bottom and when opened are held by a chain or rod, so that the rooms may be ventilated at the top and without danger of the air blowing directly on the occupants. At a social gathering of men in the big living-room one evening cigars were lighted and the room soon filled with smoke. After the visitors had departed, the hinged windows in the gallery and in other parts of the house were opened and in ten or fifteen minutes the house was entirely free of smoke.

A single chimney serves for kitchen range, fireplace

and hot water heater, although there is a butler's pantry between the living-room and the kitchen. The pipe from the range is covered with asbestos and passes through the top of this pantry.

The square dining-room is so arranged that when the table is extended to its full length to accommodate guests, the maid may enter from the pantry, pass around the table and make her exit through the living-room door, which is



Plan of the hollow tile bungalow

close to the pantry. This has been found a convenient arrangement on many occasions.

Opening from one corner of the living-room is what the owner of this house terms the "loafery," perhaps as fitting a word as "den." It has green burlap walls, with a picture frieze, built-in seats and small high windows, making it alto-gether a delightful retreat. From this room the stairs to the gallery lead.

The house is fifty feet and six inches long by forty-two feet and six inches wide, so that a very large basement might be expected. As a matter of fact, only a part of the space has been excavated, making so much less to keep in order. In the basement is a laundry, a room for the maid and the main room, where the heater is located, and in one corner of which there is a little workshop. Special

conditions governed the building of this bungalow, but it could be duplicated for from five to six thousand dollars, according to location. The great room of this house, occupying a midway situation, appears on plan form to be completely flanked on all sides. But instead of being pent, every outer part is a vassal to its interior lines, so commanding is its position, being just as accessible in its floor practice as its elevation is to light, to ventilation and to enjoyability.



The massive brick fireplace dominates the living-room



The gallery end of the living-room, looking into the "Loafery"



Here one sees pictured a water-tank, well placed, the lower portion of which is screened by judicious planting

The Isolated Power Plant

By Jonathan A. Rawson, Jr.



S TO the advantages to be derived from the presence of an individual power plant on the farm or country estate, there can be no argument. If the place is located where it can easily obtain a supply of electricity from the central power station, there are many

arguments for securing power in this way rather than by equipping and operating one's own isolated plant. But it is not given to all country residents to enjoy such an opportunity, and even though it were, assuming that the estate is large enough, there would still be the usual contentions in favor of the individual plant such as complete independence, and a saving in expense. In the matter of expense, the place would naturally have to be of sufficient extent in order to consume enough electrical power to make it worth the owner's while to buy and install a plant and provide for its operation.

As as matter of fact, there can be no general rule as to the desirability or undesirability of isolated power plants on country estates. There are so many things on which it depends. First of all, there is the size of the estate and the extent to which it is "farmed." Then there is the cost of fuel, the expense of installation and operation, and the general condition of the labor market. If hand labor is cheap, abundant and efficient, as it rarely is, the necessity for the power plant is diminished. If on the other hand, manual labor is hard to get, fickle in its allegiance, unintelligent and high priced, then the demand for the power plant becomes irresistible, unless operations are confined to a small scale and their potential profits thus greatly diminished.

The serious question involved does not bear upon the kind of power to be employed so much as upon the greater puzzle as to whether there shall be a power plant or not; and to determine this point each owner must do his own figuring, studying not only the cost of the plant under consideration and the expense of running it, but also his past expenses for labor, the average annual value of his farm products and the possibility for increasing their value by the employment of mechanical means. Labor-saving machinery is the same on the farm as everywhere else. It is profitable always if the operations warrant it. After it is once in place, it is sure to save money and to add to the peacefulness and pleasures derived from country living.

Few high-grade country residences are built nowadays without their own power plants to provide the illumination and water supply, unless they are served by public service companies. It was in the house that electricity first came into use on the country place, for illumination and for the lighter tasks of housekeeping; but there are so many things to be done about the country place that always used to be done by sheer force of muscle, and that are so much more easily done by electricity, that it was the most natural thing in the world to run the wires out to the barn and the dairy, even though the actual farming operations were not extensive. So in recent years the machinery manufacturers have arisen to the opportunities that confronted them and made it possible for the amateur or professional farmer to get very much more out of his property, and not at a heavily increased expense at that.

The windmill was perhaps the first isolated power plant for use on the farm, and the evolution of the windmill from its first crude forms into its present mechanical perfection is but typical of the general progress that has been achieved through the entire machinery world. The windmill had one serious disadvantage, which was, that it would work only when the wind blew. So plans had to be devised to store up the power while it was working, for use when it is idle.

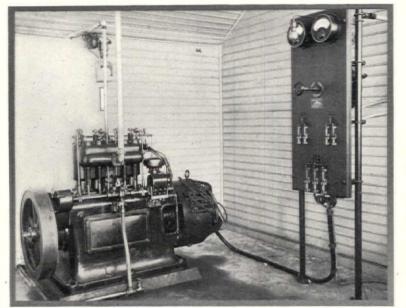
There are four such schemes. One is to connect the mill to an electric dynamo and store up the power in storage batteries. Another is to run an air compressor by the windmill and then use the compressed air for power. A third method is to make the windmill pump water into a pressure tank which would in turn force it to the outlets, but this device was planned for the purpose of securing a water supply rather than a supply of power. The fourth method of making the windmill's usefulness available at all times is to have it pump water into a tank on a tower

and then to allow the water to run from this tower down through a water motor and thence to the outlets, or in case more water is used for power than is wanted otherwise, allow it to run to another tank whence it is again pumped back to the first tank.

With the windmill, the electric motor and gas engine are now the chief contenders for the honor of supplying the farm with power. Each system has many ardent friends, and the advocates who represent them always reverse the usual court procedure, playing the part of the prosecuting attorney and attempting to have them sentenced to long terms at hard labor, declaring their qualifications for such appointments in terms and figures that apparently defy contradiction until the other party gets the floor and enters his plea.

Many men have no fondness for mechanics or anything that has to do with machinery, and to such the matter of picking a power plant to be lived with on one's own property must often appear most mystifying and unattractive. This phase of the situation is, however, quite certain to vanish in thin air, when account is first taken of the great possibilities in the case and of the undoubted benefits to be derived. Neither college nor correspondence courses in physics are essential to provide an entirely adequate understanding of the subject.

Perhaps right here it may be fitting to define briefly the units of power measurement in which the machinery catalogues abound, but which enter into many men's experiences for the first time when they approach the selection of a power plant for their own places. The unit of mechanical power is the horse-power, and the watt is the unit of elec-



A power plant equipment of this type is adapted for employment either on the suburban premises or for the country home

trical power. One horsepower is the force required to raise 33,000 pounds one foot in one minute, and a watt is 1-746 part of a horsepower. A kilowatt is 1,000 watts or 1.34 horse-power. The unit of electrical pressure is the volt, which is approximately one-half the pressure exerted by an ordinary dry battery. The flow of the electrical current is measured in amperes, one ampere being the amount of the current that flows when a pressure of one volt is applied to a circuit with a resistance of one ohm, the name given to the unit of resistance to the passage of the current.

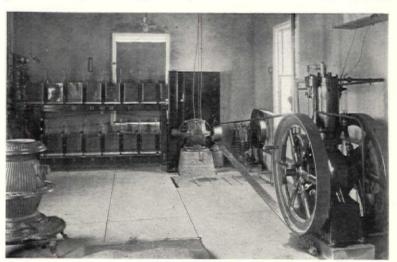
Voltage, or the pressure that produces the flow of the current, is measured by an instrument called a voltmeter, while the ammeter measures the current in amperes. An ampere-hour is the number of amperes multiplied by the number of hours the current flows, while the lamp-hour is the number of lamps in use multiplied by the number of hours during which they burn.

The improvements of late years in the construction of gas and of oil engines, as well as in electrical machinery generally and storage batteries in particular, have accomplished the perfection of small power plants to a point where efficiency is assured if only the simplest care is employed in the selection and due regard is had for the conditions under which work is to be done. The questions of first cost, and of expense of operation and maintenance have also been worked out greatly to the advantage of even the smallest farms.

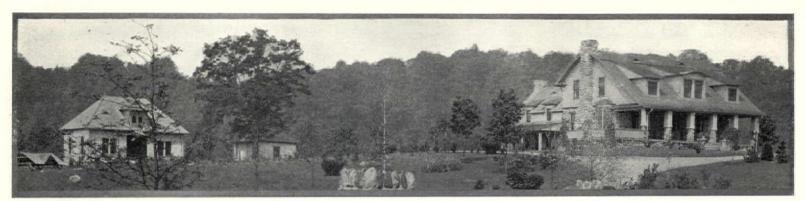
Gas engines and oil engines are made in almost any capacity. One leading firm builds them in sizes from one horse-power to 500 horse-power and is prepared to fill special demands for plants up to 2,000 horse-power. In case gasoline is too expensive as the fuel for any reason, other liquid fuels may be substituted, and engines are designed to use a heavier kerosene oil and alcohol. By common consent, the internal combustion engine is the most efficient of all, converting a larger percentage of heat into mechanical energy than any other form of prime mover. While the efficiency of a steam plant is rarely over twelve per cent, that of the gas engines is commonly rated at twenty per cent. Alcohol is said to work as effectively in gasoline engines as gasoline, and one estimate has it that



A garage and power plant can be combined, and such an equipment installed as that shown in the illustration to the right



Such an equipment as this may be installed at a comparatively low cost in a building like that shown on the left



The isolated power plant should be designed to form a pleasing unit in the arrangement of the grouping of outbuildings

four gallons of alcohol are the equivalent of three gallons of gasoline. Since alcohol does not carburet as readily as gasoline, it affords more difficulty in starting. A fair estimate is, that the average consumption of gasoline per horse-power per hour is about one sixth or one seventh gallon, with a minimum of one tenth gallon.

Most of the dealers' catalogues say that the internal combustion engines are regularly fitted for gasoline, naphtha, benzine or distillate, but that when so ordered they can be equipped to operate on alcohol, gas or kerosene. If the purchaser specifies no preference he will in most cases receive a gasoline engine.

As between steam and gasoline for the farm power plant, all the advantages are with the latter, and steam is rarely if ever considered now. The gasoline engine is always ready to start, and at the end of the run it wastes no partly used fuel. It does not store up large supplies of energy which might suddenly be released so as to cause an explosion. If its supply tank is buried underground outside the buildings, as it properly should be, there is no addition to the fire risk from that quarter. Larger engines are naturally required for irrigation than for general farm purposes, but even a three to ten horse-power gas engine can do most effective work in furnishing water for a small field. A five horse-power engine is capable of raising 500 gallons of water per minute from a depth of 20 feet. In filling the silo, 75 tons of corn fodder will be handled in one working day by an engine of 12 to 15 horse-power on a fuel allowance of 10 to 12 gallons. A 30-bushel load of ear corn can be transferred into its car or granary in three to six minutes by the means of a two horse-power engine.

The little portable farm gasoline engines are entitled to high rank among the benefits given to mankind. They have helped out many small farmers who could never have afforded large stationary plants, and for the suburban resident who does not make farming his chief business but who is still eager to develop his place as extensively as possible, these portable outfits have many attractions. With a belt drive, they are ready to work anywhere indoors or out and they are entirely capable of undertaking many of the jobs which if done by hand would require more men and more money for expenses.

The advocates of electricity as the proper form of power for country estates will always introduce their argument with the assertion that windmills, water wheels, steam engines and hot air engines complicate the operation of farming implements, because of the need for shafting, pulleys, belts and other transmission machinery, and that such power can only be used in restricted areas near the point where the power is generated. But they do not proceed far with their argument before they pay homage to the gasoline engine. Their use for it is to drive their dynamos. Water power, windmills, steam engines and turbines may be used to drive the generators, but the gasoline engine is obviously the most generally adaptable and easily obtainable.

The arguments for electricity on the farm are its safety, flexibility in operation, reliability and cleanliness. In the

matter of cost, the advantage is more than likely to be with the gasoline engine, but all things considered the electrical outfit appears to be much more mobile and versatile. But if the gasoline engine will do all that is necessary to be done, and where it can be done most conveniently, it is clearly unnecessary to transform its power into electrical energy and let it labor in that form. The question of portability is an open one. There are portable electrical outfits that can travel about on trucks, but they have to be started by the gasoline engine.

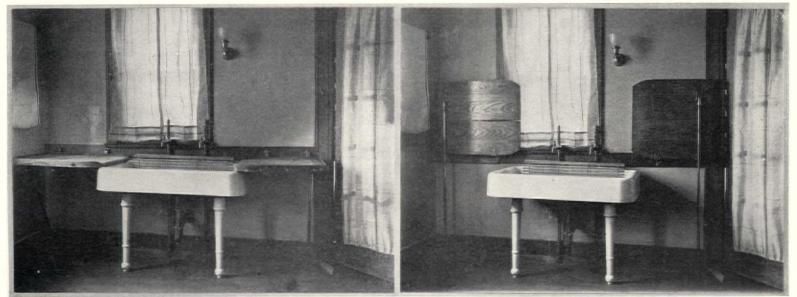
In the house electricity is the thing by all means. It will furnish light and do many little odd jobs that gasoline cannot attempt, and it is beyond dispute safer and cleaner.

There are few if any forms of ordinary farm work that the electric motor will not do efficiently. Besides attending to all the simpler duties, like running the cream separator, churn, corn sheller, farming mill, circular saw, feed grinder, grindstone and washing machine, it may apply for employment in the dairy and used readily with the vacuum milking machine as an assistant, and with its help the vacuum cleaning system may be applied direct to the cows themselves. All the loose hair and dirt is drawn into the dust collector and removed. The gasoline engine may, it is true, be assigned to these same tasks, but the electric equipment appears to be more compact and practical, and there is certainly an advantage in being able to keep the gasoline engine out of the barn because of the fire risk, if for no other reason.

In the dairy, electric motors take little power to run the separator and may be mounted on the floor, wall or ceiling near the separator and connected to it by a transmission belt. They can be adapted readily to use with rotary churns and butter workers, or with barrel and factory types of churns driving either through gears or by belt connections.

The total power capacity of the electrical engine plant chosen for the country place should in every instance be greater than the total amount that might be required at any one time. One authority advises that the size selected should depend to some extent on the point whether all the power for labor and lighting is to be taken from the storage batteries while the engine is not running, or whether the heaviest load is to be taken from the engine direct and the battery only used as a reserve for the hours when the engine is idle; or whether the current will be taken from both the generator and battery during the time of the heaviest load.

Inside the farmhouse, there are almost as many things for the electric current to do as out-of-doors or in the barn or dairy. First, it will supply the lights. Then, it will run the washing machine, the sewing machine, the ice cream freezer, the vacuum cleaner, the coffee grinder, the meat grinder, the bread mixer, and so on indefinitely. The electric iron and toaster, the complete cooking and baking outfits, water heaters and heating pads, and even the electric shaving mug and cigar lighter, carry its functions from the practical and useful into that of the merely convenient and luxurious.



These two illustrations here shown exhibit a convenient method of arranging the drainage-boards for the well-ordered kitchen sink

The Sanitary Plumbing of Homes

By Rolfe C. Roberts Photographs by T. C. Turner and Others



to maids and matrons that declares "the way to a man's heart is through his stomach." It is a heartless epigram and crude, nevertheless it contains much natural truth, since physical life so often seems to be the founda-

tion on which the moral structure is built and material wants underlying all others will clamor for early satisfaction. So it is with houses; no height of adornment and æsthetic refinement will make livable a home that first lacks the comforts of utility, and it is with the consciousness of this truth before us that we are moved to introduce the very important subject of the sanitary plumbing of the dwelling. No complement of man's housing is so vital to his physical wants as this, as in the bathroom and in the kitchen it provides the instruments and means for many of the primary daily ministrations to his body. Unfortunately a general ignorance of the sanitary feature of the subject has often led to the undue sacrificing of the plumbing equipment to other and less essential expenditures, perhaps, to merely ornamental ones in the building of a house, though now it

has come to be realized that this inconspicuous piping is vastly more important than the matter of fancy fixtures, in the selection of which latter common error makes the choice from appearances instead of from their sanitary and mechanical qualities.

An outline of the subject will serve to place before the mind's eye the material features to be considered of plumbing, of which so much is hidden away in floors and walls that one uninitiated in the subject has generally no coherent idea of what it really all is. The accompanying diagram indicates the various fixtures, tubs, basin, sink, etc., all placed

HERE is an old proverb sometimes quoted about the house where utility demands them. Note that these are put as close together as possible and all connecting with a rather elaborate hidden network of pipe. These pipes may be classified according to their function as (a) supply pipes for furnishing fresh water to the fixtures and (b) drainage or waste pipes for carrying off used water and refuse. A study of these various pipes will reveal the community water-pipe entering the basin through the proverbially tireless meter and then dividing into a cold and hot water supply fixtures. The latter supply is obtained by means of a boiler connected with the furnace or kitchen range or, it may be, by a special heater and this is piped to every fixture except the water-closet, which receives only cold water. Tracing now the branch drains which lead from every fixture they will be observed to enter a large main drain called the soil which, running vertically, extends above the roof for ventilation, and discharges through the house drain and trap in the basement into the public sewer or, if it be in the country, into a cesspool or, better, into a private sewage disposal plant. From these drain-pipes rise the vapors of decomposition known as sewer gas, to exclude

which a trap is placed at every fixture, just as the one in the basement is arranged to exclude gas from the main sewer. The trap is one of the most significant features of sanitation.

The foregoing outline is sufficient to indicate that the ordinance of plumbing consists broadly of fixtures for the use of water, and complimentary pipes to convey and remove water from them. Therefore it is important that both fixtures and pipes be installed with equal care. To neglect one side will negative the merits the other side may possess and will compromise the sanitary efficiency of the whole system



Bathtub fitted with a curtained shower

it is a safe rule to eschew all

adorned fixtures, tiles and

cornices, rather diverting the

expenditure at hand to an

increase of mechanical per-

about the bathroom designed

for the servants' use. A ser-

vice bathroom should be

considered a necessity, not a

luxury, even in small houses.

The opportunity for cleanli-

ness in this direction is too

often overlooked by home

ones are most elegant and

they are also most expensive.

Of bathtubs the porcelain

A word is here in place

and if, as it should be, sanitary efficiency is the sine qua non of plumbing, then only first-class material and experienced and reputable plumbers should be employed. Whether in a large house or in a small one, the employment of cheap material and labor cannot prove an economy but will, sooner or later, lead to ever recurrent bills for constant repairs and readjustment.

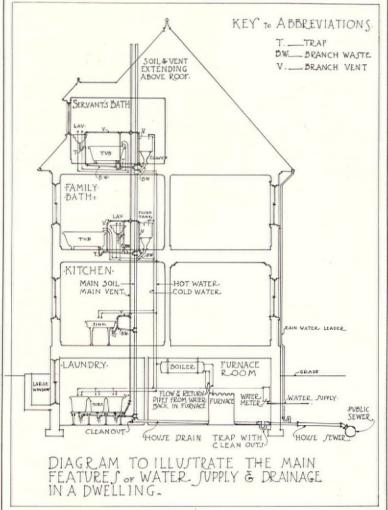
FIXTURES

In the design of plumbing fixtures there has been astonishing improvement in recent years. The essential points of perfect ones may be stated as an unabsorbent surface, smooth and easily cleaned, and an absence of joints and square corners where dirt will stick. All these features are embodied in the modern fixtures of glazed pottery and cast iron which are cast in one piece with rounded corners and edges, and with smooth impervious surfaces in white and ivory tints scarcely sur-

passed in appearance and sanitary perfection. Common observation has not revealed to many people that all white glazed vessels are not made of the same material. Some are made of pottery with a thick shell and are known to the trade as "Porcelain," while others are made of cast iron and are technically termed "Enameled." Rolled rims on iron vessels increase their likeness to pottery which they so closely resemble that people often buy them in the belief that they are getting the other material. Pottery fixtures are generally more expensive, are more distinguished in appearance and for some purposes are best, but economy, added to the virtue of the material, often makes enameled iron a more suitable choice. Fixtures are made of other materials, some of which will be mentioned later.

Beginning a review of fixtures with those of the bathroom we shall find, in the typical instance, that this room contains a tub, a lavatory and a water-closet, but greater luxury may add a shower bath or such implements as a sitz bath, a foot bath or a bidette. A well-appointed bath-

room is a great comfort and ministers to the body as truly as does a good library to the mind, even though the average man's bath cannot be large or sumptuous, let the plumbing fixtures of the bathroom be good and sanitarily correct. A bathroom may be a legitimate object for decoration of the highest order, as in the example of the famous one at Rambouillet, France, and as suggested in the fragmentary visions that Singer has reconstructed of Roman and Oriental splendor. A bathroom containing nothing not prescribed by utility will stand a much better chance of conforming not only to the standards of good taste, but even to the laws of art, than one attempting to follow lines of decoration not in keeping with its intention. Therefore, in general,



They are often designed to be built into the floors and walls with a tile finishing against them in a most compact and cleanly manner, but are also set free or raised on legs. Porcelain tubs absorb considerable heat and keep down the temperature of the water until they are first warmed-a trifle annoying on a frosty morning. Enameled iron tubs are cheaper and are more prominent in average houses, and they are excellent fixtures. They are also designed to set in the walls and floors, but usually stand free on legs. Their range in length is considerable,

planners.

according to space, but a convenient dimension is five feet. Companion of the tub is the lavatory. When of porcelain it is often supported on a porcelain pedestal, or it may be keyed to the wall and have the additional support of one or two legs. When of enameled iron it is more often made with a raised integral back and hung on the walls with perhaps the reinforcement of brackets. Bowls may be circular, rectangular or oval, but there seems to be a predilection for the latter shape. A marble slab to which a porcelain bowl was screwed was once a common form of lavatory, but it has corners and joints to loosen and become dirty and marble stains are often hard to remove, so it is now largely superseded by the one-piece glazed fixture.

The water-closet is the most important fixture from the standpoint of sanitation and should be selected with care. Siphon jet-closets are best; also most expensive. Siphon

> wash-down fixtures are commended and are most preferable to the variety known as "wash-out closets," which lack the virtues of the superior traps and siphonic flushing action which the former two possess.

> There are numerous good makes of siphon jet-closets which vary in detail. Some are arranged to make less noise than others and some make a point of economy of water used in flushing or of details of cleanliness. For a perfect understanding of these it is necessary to study the sectional drawings and descriptions of manufacturers. A certain fixture, for instance, has been invented with a bowl and seat lower than the ordinary closet and with the seat slightly inclined up from the hinge to be a little higher in front. Closet seats are of wood, gener-



Porcelain wash basin

kitchen space or the extent of its use, sinks

vary in size. In connection with sinks, plumbing houses provide ash drain-boards

nicely fitted with brass connections and hinged to fold against the wall, but in small

houses the drain-boards will generally be

made of tin and planished copper, of which the yielding surface reduces the hazards to

china. They have oval or flat bottoms;

the latter are better, and expensive sinks

have two compartments, one for flushing

and one for rinsing. They are sometimes

Serving-pantries contain sinks for washing the table service. These are generally

made by the carpenter.

ally in natural finish, but there is a patented process of white coating them. The low set flushing-tank is a comparatively recent innovation that is especially useful where headroom is low, as under stairs and roofs, and it is easier to clean and repair, but there is no objection to the old form of high tank where it is economy.

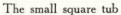
To many people, especially to men, a shower is more useful than a tub and with the advancement of hygiene the modern American is becoming such an amphibious creature that it is not uncommon to find one in even a very modest house. For quick daily baths it surpasses a tub because of the

ease and rapidity with which the immersion may be changed in temperature. For economy showers are sometimes placed over the bathtubs with a ring from which is suspended a curtain of cotton duck or silk-lined rubber. A more generous scheme is a framework of polished tube placed on a receptor about three or three and one half feet square. This form may have a needle bath spray of lateral streams and is also surrounded by a curtain. Porcelain enclosures are also made to be set into the construction like a niche. It is a common fault to have showers too small. If the shower is introduced at all it should have a large square stall with water-proof walls and be ample in proportion.

Before descending to the kitchen we will briefly mention the housemaid's sink and the waste sink. The former is intended only for getting water for cleaning and drinking and is placed near the bedrooms. The functions of a waste sink can generally be performed by a water-closet, but it is sometimes an advisable adjunct of a large house. Porcelain is the best material for this fixture and the best ones have a flushing rim and are provided with a flush-tank like a water-closet. They are generally put in little alcoves or closets where perhaps brooms and mops are also kept, but must have light and air and always kept scrupulously clean.

It is rumored that after paganism was overthrown the Roman household altar transmigrated to the modern porcelain kitchen sink. There might be a certain sadness about this were it not that it inspires, perchance, the opportunity of more sanctity in the care of this household utility than it was wont to receive. What with banging of pots and kettles and greasy aspersions the poor old sink of some years ago had a hard lot in life. But of all its competitors the porcelain pottery sink with a raised back is most worthy to appease the lares and penates of modern life. Enameled iron is apt to yield sooner to hard usage and when the enamel begins to scale the sanitary value of a fixture is destroyed. Cheaper sinks are made of galvanized, painted or plain iron, but are inferior. Soapstone absorbs grease and becomes black. Of necessity, depending upon either the





and splash-backs of the same material. Many housewives remember the day when the round, wooden tub played the principle wash-day role in even comfortable homes. It was a picturesque receptacle. Simple Simon might well figure over it in his fruitless quest, and to-day it is generally associated with scenes of rusticity or frugality. Modern plumbed tubs are made of porcelainlined pottery and iron or of cement, soapstone and slate. The last three pipes are very serviceable but much inferior to the glazed white ones, for they have joints or are absorbent and become odorous and are dark in color. The rolled-rim pottery sinks are best; they are set on a metal framework supported by bronzed iron or porcelain legs. No plain iron should be in the laundry, for it exposes the clothes to rust stains. Wooden rims are sometimes set on sinks, but it is better to avoid them and have adjustable wringer-boards. In small houses it is common to install two sinks, but three generally serve better and sometimes four are employed. It is not good practice to cover sinks and use

them for tables; they should be left open to the air. Wash-

set in marble slabs, but wood is safer and marble or tile may

be used in the splash-backs. Very fine sinks are made of German silver or white metal with even the drain-boards

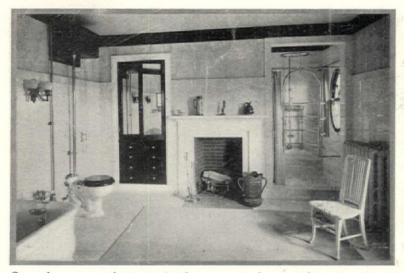
> ing operations in a kitchen may conflict with cooking processes, creating confusion and unpleasant odors and clouds of steam; hence it is better to have an ample light in some part of the basement where the tubs can be placed. In a large house there may be a special laundry on the main floor.

> Connected with the fittings of fixtures there is much detail of which the writer can here only suggest. These fittings and fixtures are ordinarily of brass, but in finest work may be phosphor bronze, steam metal or gun metal. Brass is usually plated with nickel or silver, but unless it is well done will soon wear off. Silver metal or white metal is a new alloy that can be handsomely polished and cannot lose its finish. Faucets, though varying much in detail, are in mechanical principle divided into ground-key and com-pression types, of which the

latter is longer lived, is



A well arranged shower



Some houses are fortunate in the amount of space they can give to the well-appointed bathroom

easier to repair and will not shock the plumbing by too rapidly stopping the stream-a condition known as water hammer. The combination faucets that deliver both cold and hot water from one spout are most convenient and the nozzle of the bathtub faucet may be ribbed to hold a rubber spray-tube. A fixture depends much for its sanitary quality on the character of its waste and overflow, of which the commonest arrangement consists of a rubber or brass stopper on a chain for a waste plug and a conduit running from the top of the fixture and behind it down to the regular waste pipe, for the overflow, objects to these arrangements as being unclean. The chain with its folded links presents an admirable harbor for dirt. Its total surface is rather large, in the average basin about fourteen square inches, it is difficult to clean and is nearly always in a filthy condition. Besides, it is in the way and if it breaks one must sometimes plunge the hands in murky water. Again, the concealed overflow pipe being seldom flushed and difficult to clean accumulates spatterings of soap and dirt which establish an unsanitary condition attended with unpleasant odors. To correct these conditions he recommends the use of the standpipe overflow and combined waste plug as the best device with which he is acquainted. Briefly, this consists of a polished tube whose bottom rim forms the stop-plug and by extending to the top of the fixture and being copped with a grating it forms an overflow, thus doing away with the aperture at the top of the fixture and the objectionable pipe. The standpipe is straight and being removable is easily cleaned by the housekeeper. In order that it shall not be an obstruction, fixtures designed for its use have a little niche to receive it and large enough to clean behind it. There are numerous ingenious devices for wastevalves operated by cocks on top of the fixture near the faucets, but generally their concealed parts are open to spatterings from the waste and are inaccessible for cleaning. Some have the stopper so far down in the waste pipe that suds and dirt arise from it when clean water is turned into the fixture.

The construction adjacent to fixtures plays, of course, an important part in sanitation. Ideal conditions are approached by smooth, polished, light-colored surfaces that are unabsorbent and easily washed by rounded corners and edges and by tight joints. The best floors are made of white vitrified, unglazed tiles and the wainscots of glazed white tiles. Other floor materials are marble terrazzo and cement, all of which require a concrete base.

Interlocked rubber tiling sometimes makes a good floor and a good, cheaper floor is made of narrow strips of closegrained hardwood carefully laid and soaked with hot linseed oil. Flagstones may be used in a large laundry. Besides tile already mentioned, wainscots may be of glazed brick and cheaper ones of polished cement or rock-finish plaster, the latter sometimes painted, and enamel paint may be applied to the walls and ceilings above wainscots, especially in a laundry where steam arises. Bathroom walls are sometimes covered with sanitary, washable wall-papers. It is not uncommon, especially in kitchens, to put hard materials immediately next to the fixtures and leave the rest of a room in cheaper construction. In bathrooms having wooden floors the water-closet is sometimes set on a slate or marble slab.

A cove at the junction of the walls and ceiling is good and tile corners, bases and wainscot caps are rounded. All wood trim should be free from moulding and have rounded edges. Boxing up fixtures is obsolete. They should be left open to air and light. It is not good practice to put storage closets under a sink.

The hot water supply is a special problem. The common method has been to heat the water by means of a water-back in the kitchen range and store it in a tank erroneously called a boiler. Where gas has supplemented the kitchen range the boiler is connected to the furnace and in large houses where there is a steady demand for hot water in Summer it sometimes has a special coal heater, or if the demand is not steady a gas heater is more economical. For tanks containing not more than eighty gallons a round water heater will suffice, but larger tanks will warrant an independent automatic gas heater. By opening any faucet a pilot light will set it in operation and hot water flows almost immediately. Little instantaneous gas heaters can sometimes be used to advantage in bathrooms. They are not connected with the hot water pipes and serve only local purposes. Storage tanks or boilers are made of copper or of wrought iron, which is stronger and will stand more pressure. It would be wise to learn from your plumber the conditions that sometimes lead to the explosion or collapse of boilers.

The piping is from a sanitary point of view, the most important phase of all house plumbing. A pure water supply is one of the chiefest concerns of sanitation, but as it has little to do with the observation that where water is silty or full of matter a good filter can be installed in the basement and periodically the pipes can be cleaned by pumping through them a solution of lye and warm water. Concerning drainage, however, much more must be said. We have already mentioned the sewer gas which arises in the drain pipes. It is the product of decomposing sediments which gradually coat the insides of pipes used for conveying waste matters. Scientists are coming to the opinion that sewer gas does not convey zymotic diseases such as typhoid, but as impure air has a weakening effect on the health of those who breath it and lessens the power of resistance to disease, it becomes the object of sanitary plumbing to exclude gases



A closet shower opening out of the bathroom

jections to form recurring obstructions.

practiced for both economy and sanitation. They should be grouped so as to

avoid the multiplication of soil pipes.

In a small house especially this is im-

portant, and by placing the bath over the

kitchen and the laundry under the

kitchen but one soil is needed. The less

plumbing essential in a house the better;

avoid fixtures not absolutely needed and

keep none in sleeping-rooms. Use no

quires intelligent care and its status is

often a fair index to the thrift and en-

lightenment of the family. If it is not

understood or is neglected there will re-

sult an undue deterioration of the prop-

erty, avoidable repair bills and the es-

The maintenance of plumbing re-

floor drains where a mop can serve.

Concentration of fixtures should be

from the house and keep the drains as free as possible from the deposits that generate them. The all important trap achieves the first object and proper flushing and intelligent laying of the pipes the second.

A trap is a device placed close to every fixture and the barrier by which it prevents the passage of air between the drain and the house is created by water held in a chamber so arranged that it will remain full even after the discharge of the fixtures through it. Traps are beset by certain dangers which tend to destroy this seal. An abnormal pressure in the soil or waste pipe may force it by back pressure. Sudden rapid discharges through the soil create a suction behind them that may draw out the contents of a trap-an effect known

as siphonage. Evaporation and capillary action also act on the seal. To equalize the air pressure on both sides of the trap and thus eliminate the conditions that lead to siphonage and back pressure, air is introduced to the trap at its discharging end by a back vent pipe leading to outdoors. New dangers arise for this complication, if not handled by skilled plumbers, sometimes exposes a by-pass, a misarrangement of pipes that permits a direct entrance of gas into the room. Back vents accelerate evaporation and sometimes become clogged by ejections from the trap so as to become entirely useless; they also increase the cost of the work about ten per cent. These conditions have brought about the invention of non-siphonable traps, which are designed to be used without back venting. Many eminent experts advocate this simple method, but city laws do not yet recognize an absolutely safe non-siphoning trap and back vents are generally prescribed. Traps are designed to be self-cleaning, but they should be exposed to view where possible and accessible for special cleaning.

Vigorous flushing is the watchword of good plumbing. It means ample precipitate discharges that will fill and scour the pipes and carry everything before them. Slow, dribbly discharges, only partially filling the pipes, leave the filth to be smeared and deposited in the waste channels. A common error is to have waste outlets too small and drain

pipes too large in proportion, as even if there is plenty of water it is not admitted fast enough to the pipe. The waste outlet should be equal in area to the section of the pipe. Fixtures with flushing tanks, like water-closets, generally have ample discharges; so have bathtubs if their wastes are large enough, but kitchen sinks suffer from defective flushing. They receive many small dribblings often of thick, dirty fluids containing grease, which is a special enemy of the pipes and traps, for it adheres and produces an odious putrefaction. To remedy this defect sinks are sometimes arranged with reservoirs or flush-pots that will contain about six gallons and when they have become full the plug is lifted and the contents are ejected with vigor. All fixtures should be as close as possible to the soil so as to avoid long horizontal runs of pipes, which retards speed, and good workmanship must guard against sags in horizontal pipes and assure careful joints with no pro-





A tiled bathroom

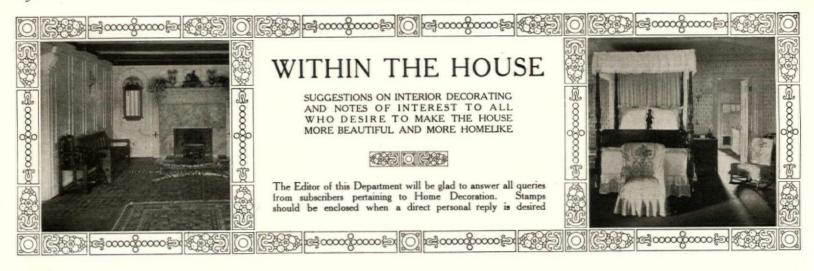
tablishment of unsanitary conditions. With regard to the cleaning of fixtures many housekeepers do not know that glazed surfaces are injured by many of the acid or gritty cleaning compounds, powders and scouring soaps, as for instance Sapolio, which makes very fine scratches that in time become dark with the filigree they gather. Muriatic acid attacks porcelain and enamel, so it is dangerous to employ dilutions of that chemical. A very fine powder, manufactured, is said to be a safe cleanser for porcelain and tile work and has also been well spoken of as a material for cleaning tile walls. Naphtha washing soap and hot water is also advised for fixtures and stains may yield to oxalic acid. Kerosene oil is sometimes helpful for cleaning glazed surfaces, and with warm water may help to cut the grease of the kitchen sink. The copper pantry sink may be treated with rottenstone and oil or with oxalic acid. The water-closet should be frequently scrubbed with a scrubbing brush and hot water and soap. The seats should be washed and, unless of the white celluloid type, should be periodically oiled or rubbed with furniture polish. Varnish and shellac should not be used, for they are cut by soap. The flush cisterns of the water-closet should be occasionally cleaned, for deposits of silt or grit may cause leaky valves. Branch waste pipes should be periodically treated to a solution of hot water and lye or caustic potash. Washing

soda, though not so strong, may be used. The solution may be poured in at night and washed out in the morning. Once in awhile use a disinfecting solution. A plumber should be occasionally employed to disinfect the soil pipe by means of formaldehyde, gas, or other disinfectant applied with a smoke-testing machine, and the pipes can then be examined for tightness. Also traps, nickel, brass and copper fittings tarnish rapidly in damp climates and require careful rubbing with a woolen cloth and may be polished with dry flour or whiting mixed into a paste with soap foam. Too much rubbing is apt to wear away plating, especially if polishing powders are used. Nickel may be cleaned with whiting powder and alcohol or with silicon and vinegar, finishing with a chamois skin. Copper may be treated with diluted oxalic acid and common salt, using after the acid whiting to prevent tarnishing and wiping the metal



A sanitary bedroom lavatory

(Continued on page 264)



THE LIVING-ROOM

By Harry Martin Yeomans



F recent years the living-room has been growing in favor, and it is a good omen of the sensible trend and interest which has been taken in home building and things artistic during the past ten or fifteen years, that this serviceable room has been fostered by

architects until it has grown to be the principal one in almost every house, and very few floor plans now appear without it. Pretentious houses have the regulation drawingroom and reception-room, but they include a large livingroom as well. It is in the smaller houses, however, that the social and economic side of the living-room is most manifest, and the space which was once devoted to a formal parlor, an upholstered den and a stuffy sitting-room, has now been incorporated in a large living room, which fulfills all the functions of the three former, and corresponds, in a general way, to the social hall of the olden times in England. This room also lends itself more readily to decorative treatment on account of its larger proportions and more ample wallspaces, and there is rejoicing at housecleaning time, when only one room has to be cleaned instead of several small ones. In small houses which have the conventional rooms on the ground floor, the members of the family seem to gravitate naturally towards one social center and neglect the other rooms, which are only waste space as far as their being used to any extent is concerned.

When a living-room is to be furnished, one is apt to be influenced by the idea that, in order to give it an informal appearance and keep it from becoming monotonous, a non-descript collection of furniture of various styles must be brought together and the walls lined with pictures regardless of their merit. This room can be treated in a more or

less formal way, and at the same time be perfectly fitted to its uses and embody all of the home atmosphere, which is indispensable in a living-room.

If the living-room is to be decorated in a period style, the models and motifs which went to make up the principal characteristics of that style must be adhered to and followed. But one can also take the furnishings of almost any of the great periods of decorative art, and by creating a suitable background for it, you will

be able to adapt this furniture to the needs of a room in a small house.

Some people possess the faculty of assembling artistic furniture, pictures and objects of different styles and periods, and seem to have an inborn feeling for just the right things which will combine in a harmonious whole. Persons endowed with this natural power of selection feel instinctively that certain objects will combine well when placed in juxtaposition.

This idea has been visualized in the charming living-room and sitting-room shown in the accompanying illustrations, one of them having been treated in an informal and the other in a formal manner. Both rooms are full of good ideas and suggestions for the living-room of the Summer house, from a decorative and architectural point of view, and have an atmosphere of calm repose.

The woodwork in the informal living-room is structurally good and culminates in the architectural treatment of the mantelpiece; the pilasters flanking the fireplace and framing the wooden panel above, having the effect of supporting the ceiling. This is good constructive decoration. The wooden panel over the mantelshelf, showing the grain of the wood, decorates this space effectively. The wood trim was not partly covered by draperies and pictures but was allowed its full value in the decorative scheme. The small panes of glass in the windows are more decorative than if the large sheets of glass had been used.

A two-toned gray paper, having a small repeat, covered the walls and made a quiet and unobtrusive background for the varied collection of furniture which was to be placed in this room. Some willow pieces, a mahogany Empire sofa, an old tapestry and a Chinese teakwood stand, are only a few of the things which were placed side by side, but one has only to refer to the illustrations to see the happy result that was obtained for features that reflect simplicity of style.

There was no overcrowding, the furniture being arranged around the sides of the room, leaving the center free, which gave the desired sense of spaciousness to this Summer living-room.

Everything in the room was both useful and beautiful. Ornaments that do not ornament were entirely lacking. The two pictures are large enough to be seen from the center of the room and are hung on a line with the eve.

The placing of the objects in the corner of the room by



A living-room for Summer occupation



This is an excellent example of a living-room that is free from the usual overcrowding of the floor space

the triple window is especially happy. The willow chair, the nest of mahogany tables, the brass jardiniere with its green plant, placed against the golden background formed by the Japanese screen, is a charming picture and would gladden the eye of a still-life painter.

In the beautiful reception room a more formal arrangement has been adhered to in the disposition of its furnishings, and a small collection of Japanese and Chinese porcelains, kakemonos, bronzes, screens and a console table, has been combined with some Louis XV. chairs and painted furniture in such a subtle manner that the room does not present the appearance of a museum.

The walls were covered with a natural colored Japanese grasscloth and made a fitting background for the Oriental objects which were to be placed directly against it. The interest at one end of the room centered around a two-fold Chinese screen framed and hung as a picture over a Renais-

sance chest. This room is a pleasing example of the satisfactory results that can be obtained with Chinese and Japanese decorative objects, especially at this time, when such a tremendous interest is being taken in things Chinese.

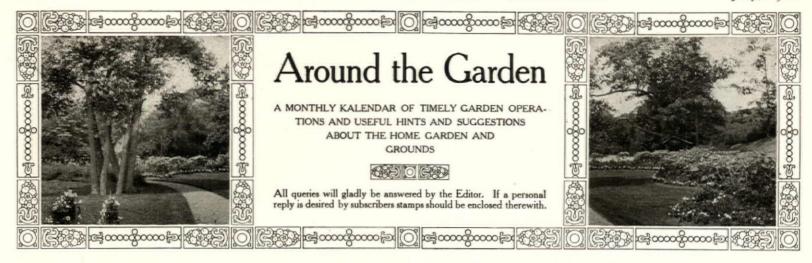
In a newly completed house there was to be a Colonial living-room. It was to be kept as simple and elegant as possible, as all Colonial schemes should be. Instead of using wall-papers, as had been the case in all of the other rooms in this house, it was decided to paint the walls an old-ivory and stipple them so as to impart a dull, flat finish and remove all traces of the brush marks. The woodwork was painted the same color. At the windows were white lawn curtains, having tiny ruffles, sill length, and looped back. A two-toned brown rug covered the hardwood floor.

This was a new house and all of the furniture was going to be new—replicas in mahogany of good models designed

(Continued on page 264)



A living-room of this sort presents an ideal aspect for Summer occupation, delightfully cool, and attractive in its simple elegance



MID-SUMMER IN THE GARDEN

Photographs by T. C. Turner and Others



UNE and her Roses, yesterday's glory, may have passed, but Mother Nature has not been forgetful of July's place in her affection, and there are lovely things in the garden that belong to this month of mid-Summer. Sweet Peas, Marigolds and hundreds

of other annuals will be bursting forth in prolific blossom and the garden-beginner should remember that they must be kept carefully picked, for if the garden flowers are allowed to bloom without cutting they will soon go to seed and by the middle of August such a garden will become a sorry sight. The late-blooming flowers, such as Dahlias, Cosmos, and Chrysanthemums, should be encouraged to take on a bushy form by the process of "pinching," as thus they will attain the ever to be desired compact growth.

ROSES—the hybrid perpetuals—will need cutting back five or six inches after their June blooming period



One should try to keep garden paths as neat in appearance as this one

is over. If they are carefully and patiently attended to, without lapse of vigilance one may hope to coax forth a second crop of blossoms before frost.

MONG those flowers which reach their height of beauty in July, the garden-beginner should expect to see Achillea, Campanula, Candytuft, Coreopsis, Digitalis, Evening Primrose, Japanese Iris, Silium Auratum, Phlox, Vinca and Yucca. The garden-maker should not allow the soil of his garden beds to become hard and flat and baked. Flowers, as well as vegetables, need to have the soil from which they spring constantly cultivated and stirred up. The provident gardener will look around for those plants which produce the loveliest flowers and lose no time in marking them so he may be enabled to secure their seed later when the pods ripen and thus assure himself of planting stock for the next season of his own growing. Of course, one probably will not raise all his own seeds, but there is great pleasure and satisfaction in being able to say "This lovely flower has sprung from the seed of another which I myself planted in my garden."

S for the vegetable garden, July will find one busy there. The garden-maker will be sowing seed of turnips, bush beans, beets (early varieties), during the early part of the month and later he will be sowing spinach seed. If there is a bit of idle ground which the harvesting of an early crop has left vacant, peppers, tomatoes, cabbage, and celery can be transplanted and set out there. The wise vegetable gardener never lets a square foot of earth lie unproductive. He harvests his early crops speedily and puts the idle ground to some good use. Readers of AMERI-CAN HOMES AND GARDENS, who may have missed the article on "Summer Work in the Vegetable Garden," by Mr. F. F. Rockwell, in the June, 1912, issue of the magazine (page 200), should turn to it without delay, as its suggestions will prove of great value to everyone interested in home garden topics. Finally a word about watering: When watering your garden remember that one good, thorough wetting down of the soil will be worth more than half a dozen sprinklings. Surface wetting may be better than nothing at all, but plants are watered not to remove the dust from their foliage, but to afford the thirsty, hard-working roots ample moisture for sustenance.

SLUGS IN THE GARDEN

A namateur gardener has written the editor of this department to ask for suggestions as to the best way to rid a garden of slugs, having been bothered by the havoc these plant pests wrought last season. Now, slugs are fond of moist places and thrive on moisture, except that which lime-water supplies. A good plan, then, is to put a lump of lime twice the size of one's two fists in a pail of water, leaving it there four hours. Next strain off the liquid, and as slugs are nocturnal in habit, water the plants they trouble several evenings in succession. Slugs may also be trapped

by placing various tender leaves near the stems of plants in the gardens infested, and as these will often attract them from their hiding places, a late night time gathering of this "bait" will, perhaps, produce a supply of slugs for riddance.

WEEDS IN GRAVEL PATHS

A READER asks what can be done to prevent weeds from growing in gravel paths. There are various preparations for ridding gravel paths of weeds, but a strong solution of salt and water used as a hot brine should prove efficacious.

PAINTED FURNITURE

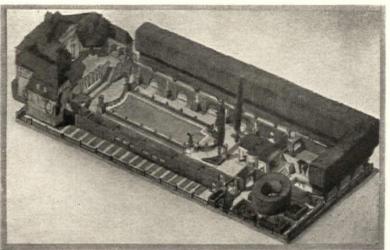
(Continued from page 238)

staff and an equally comical little woman presenting him with a nosegay occupy one end and a floral design the other. On the back a representation of the Sacred Heart is flanked on either side by bunches of flowers. The top of the lid is divided into panels and decorated with dainty sprays. On the base is the date 1705 and above it the letters J. V. C. A., presumably the initials of the contracting pair. The Bavarian boxes, of thin wood like our butter boxes, used for holding rice, salt and such things in Bavarian kitchens, are originals. One is dull green, another blue, a third lavender and the fourth yellow; the decorations of flowers are done in distemper. Before the small hanging cabinet assumed its present Bavarian guise it was nothing but an ugly little bathroom contrivance for holding medicine bottles. Its black ground, red decorative bands and basket of flowers certainly improve its appearance vastly. It would not be proper to class as furniture the gorgeously painted and gilt figures of the Madonna and Child, but they are so invariably found in the houses of the devout Bavarian peasants and add a note of such glowing color that they deserve mention.

While speaking of the Bavarian work a word of recognition is due Biedermeyer for his labors in the field of furniture painting. He wrought in the early part of the Nineteenth Century and his work, which is characterized by wreaths, festoons, urns, baskets and circlets of roses enclosing silhouettes, gave a strong impetus to his craft. About this same time the so-called "English Empire" style was popular in England and America and we have many painted pieces of it left, some good, some bad. The groundwork of the chair shown in the picture is a dull yellowish green, the stripe and acanthus ornaments are gilt and a touch of black is judiciously added in places. In other examples fruits and flowers in their natural colors are often elaborately executed.

Last of all we come to a kind of furniture that seems never to have been dignified by any specific name—just ordinary farmhouse wooden kitchen chairs and settees. If



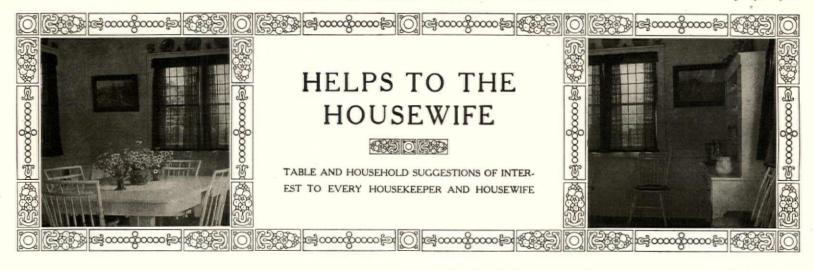


The German homemakers plan their gardens with infinite care, often making little models one year of the gardens they hope to have the next

one might be pardoned so undemocratic a term it could be called American "peasant" furniture. We find it on every hand and in all conditions, but most of it made with a grace of line deserving of careful preservation. Of course, it must be treated according to its rank in the furniture world, but there are many places where its use is highly desirable places that individual preferences will suggest. All these chairs and settees were painted and decorated, sometimes merely with black lines, sometimes with elaborate and gaily colored fruits, flowers and leaves. On some the rude designs are still fresh, from others generations of scrubbing housewives have obliterated all trace of ornament. The chairs remain, however, and are just as fit for decoration as the day they were made. The splat-back chair of the illustration was picked up in deplorable state in a New Hampshire blacksmith shop. A visit to the carpenter and the removal of old stain left it in shape for redecoration. After recaning and several coats of green, the design, somewhat Russian in character, was applied. Conventional honeysuckles and rosettes fill the splat and on the top piece an urn of vari-colored flowers is guarded on either side by a fat little dwarf with a broad white collar and a big white neckcloth. Three other chairs of fine lines came also from this New Hampshire village. They are fully a hundred and fifty years old and coat after coat of yellow paint had obscured the original decoration of fruit and oak leaves, all in black, until revealed by the scraping process. In redecorating one can advantageously use for groundwork greens, grays, certain shades of yellow, dark blues, brilliant reds and white. What has been said of painted furniture is enough to show how full of possibilities is that branch of industrial art. A broader realization of available resources will go far toward increasing the taste for colored decoration.



There is no feature of the country house more delightful than a broad terrace-porch from which one may look out over the home landscape



ALLOWANCE VERSUS CREDIT SYSTEM

By Elizabeth Atwood



T is true "that the mind cannot give what it has not taken in" in some form or another. The child cannot learn the value of money if she never handles it, nor can she ever learn the first principles of economical spending if she neither has the money to spend

nor the advice upon spending. Neither can a woman learn how to buy economically, nor how to save if she always has her bills paid for her and never has any money to handle, so that she may learn how to save. In short, a woman without an allowance, be she rich or poor, is a very helpless, careless and, many, many times, a most unhappy one.

A child's idea of money is what is seen in return for certain expenditure. Not until he is four or five miles from home with his pockets empty of cash does he fully realize the value of a nickel. Nor are children alone, in this actual sense of money value. One should establish an allowance plan and adhere to it. I have started several times to do this, and the children (wise things) were very glad when their wants were again supplied from the family fund. "Why, we get along so much easier and have more money to spend," they said, which was all too true.

Many parents have had this same trying experience. It is so hard to say "no" to your honest, pleading, browneyed boy, in whose hands your pocketbook is as safe as it is in your own. There are so many lessons to be taught to a boy or a girl who is to dress and pay for his or her pleasure out of an allowance. Do you not know how hard it is to keep within a prescribed limit? Well, I do if you do not, you, mother, who has not suffered in this kind of training of self and of children.

It is only through trying again, that we get training and experience. Every child ought to know through handling of his pennies, that ten cents make one dime and ten dimes make one dollar. After that the dollar will be cared for as worthy of consideration. A penny is so small an amount, and does not count "just this once." Our children are all very willing to help spend the money which comes into the family; in fact, they seem to regard it as a right of theirs, which we ought to consider a privilege. It is a rare occurrence when children are interested in the saving of the family income, even though it is to be for their ultimate gain.

We only are to blame. Where did we make the mistake? How could we have done better? Just by taking time and giving more thought to the training of the children and their spending of money, whether penny or dollar. If a child has an amount which is his very own, out of which some portion of his pleasure or comfort must be

paid, he is bound to value one cent out of his ten more than one cent out of your pocketbook. In a stipulated sum, the child's right should be absolute, as are the consequences. Out of such an allowance all gifts should be made, teaching the reward of self-sacrifice in the pleasure of giving.

Only a girl who has no fund of her own, knows the anguish of being without money, especially if all her companions have allowances. Her nature must be very easy and cheerful if she can stand this test. There is as much danger of a girl becoming a sponge as there is of a boy. If she has no money of her own her friends cannot bear to have her left out of possible treats or entertainments and they invite her to join them. This is the entering wedge of many unpleasant qualities. Her sense of obligation grows less and less and the one of right, becomes distorted.

Every girl should beg of her parents to give an allowance system a trial, even though they may not believe in it. Many parents would do this gladly, would have done it sooner, only they did not think of it. The girl with an allowance should be very honest with herself, always keeping within the limit. If mother gives the allowance she should not work upon the feelings of Daddy if she does come short, for this will weaken will-power and encourage dishonesty. Moral fiber is in training and this will help its growth. Self-reliance is surely helped at the same time. An allowance wisely directed in its uses develops the girl wonderfully, though it may only be twenty-five cents a week.

Whether a girl marries or not, this early training in wisely using an allowance is one of the best studies she can take up. As a rule there are few girls given even a smattering of a business training, and then later on men ridicule them for this lack. Where were the fathers when these girls were young? Probably they were paying bills and bemoaning the extravagance of women in general, their own in particular. I am not at all sure that these men desire to have their wives grow business-like. Fathers and husbands alike unite in keeping their women helpless in money matters. They do not want their women to develop the business side of their characters.

One writer puts it, that "Masculine kindness to women is so tangled up with selfishness that there need be no surprise that there is some confusion regarding them." They want to give everything, be responsible for everything the wife buys, for they are really very generous at heart, but they like to feel the dependence of their women, just as a mother loves to feel the clinging fingers of her baby learning to walk.

But how about the effect upon the wife? How about these women who are compelled to resort to tricks in order to have money, real money in their hands. It is all very well to run bills, but it is very pleasurable to pay for things. In fact, a woman with an allowance of twenty-five dollars a week has more self-respect than a woman who is privileged to run a bill of a hundred or more a week. Right there is the first mark of benefit.

Pampered women are not prepared to help when reverses come, however much they wish to do so. They have become intemperate in their desires, in their dress, just as much as man ever became intemperate in drink. This "vice of intemperance" strikes every family sooner or later, and generally in proportion to one's income it goes beyond a rightful limit. Then, for lack of knowledge, the woman is considered unbusinesslike, and so she is. How could she be otherwise? Having no idea of the value of money women are really wasteful, and all for lack of training and for which they are blamed.

I believe that every woman, whatever her station in life, should have a fixed sum weekly or monthly, in just proportion to her husband's income, the expenses of housekeeping and her clothing. Having agreed upon the amount she should have absolute control of it, to learn from the wise or unwise expenditures how to get the most for her money.

You will find most men reasonable, and if you approach them judiciously they will see the wisdom of a separate allowance. There are so many excellent arguments in favor of an allowance. The sense of being a partner in the firm is one, the independence acquired is another, the development of responsibility, the real value of commodities, all these are worth the training to be found in handling an allowance.

How much does a woman know of the increase in expenditures certain articles hold which are out of season, if, yielding to the tempting appearance she simply orders and her husband pays the bill? How is she to know whether she is exceeding the just proportion of money from the whole income which should be used for the table, if she is never put to it to judge and discriminate? In fact, how can she learn what it is to be extravagant, and what it is to be frugal, if she never handles the money belonging to the running of the house?

She should neither be blamed nor criticized for being unbusinesslike. Just give her an allowance to be rigidly adhered to, and after a few months she will have learned some things she had never dreamed of. She will learn proportions, if, after buying without counting cost, luxuries out of season, for the first two weeks, she finds that she must live on hash and turnips the last two weeks, or else go in debt.

She will learn the value of apportionment and she will find that such knowledge will give her power over her expenditures. One man has put it: "Considering the home as a business venture, what system has been devised in the conduct of this wholly one-sided venture? What is the apportionment for food, for clothing, for pleasure, for rent, for those fixed charges which every housekeeper must meet?" This is the business end of it—after having secured the coveted allowance.

There is a real excitement, a great pleasure in outwitting your butcher and your grocer; by living just as well as ever, setting on the table food just as nourishing as before, while saving from one third to one half on former expenses. And this is sure to be the result on the allowance system, if the woman is at all smart. I presuppose her to be smart or she would drift along the old way.

A woman with an allowance knows just where she stands. If she wants a fifty-dollar gown ever so much, and there is only twenty dollars of the clothing apportionment left, she will quietly wait until she has the money in hand. Under the credit system she had no way of knowing that she should not buy the coveted gown, and then she was called extravagant

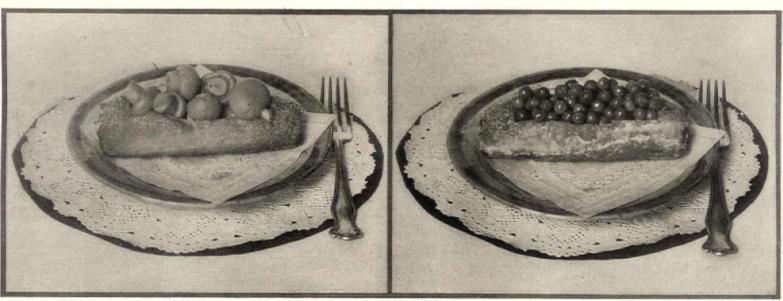
The little leaks which exist in almost every household and which work so much damage, will certainly be brought to light under the allowance system. Expenditures curtailed without diminishing the household comfort ever so little become a most interesting study. No housekeeper, looking back over her itemized expenditures for a month back, will fail to discover here and there a purchase that has proved itself to be not worth while.

But above all, there is so much pleasure in being independent of bills. To be able to trade where one chooses is a comfort. I have found better service in the stores under cash service, for I was quite likely to go elsewhere if not treated to the best there was to be had. There is a kind of slavery in the credit system. Take it all in all, there is every advantage to both man and wife, when the wife has a just portion allowed her to carry on the home business.

THE AMERICAN PAGEANT

(Continued from page 241)

were ransacked and verily the result was a remarkable collection. Even the British and Continental soldiers' uniforms were not lacking. Puritan costumes, gowns of Colonial dames, tilting hoops and modern dress were all required and it was well New England thrift had preserved these things, for the correct making of such costumes for several hundred people would have been an almost impossible feat, certainly for so small and out-of-the-way place as Thetford, whose cluster of villages hoarded so many relics.



A dainty way of serving mushrooms

Peas served in scooped out rolls

Among the properties the old-time stagecoach with its queer, narrow windows, its swinging middle seat and drop steps was prominent and there were other queerly fashioned old vehicles and sledges, some laden with the furniture and utensils of the earliest settlers.

Hard and earnest work as well as study is involved in the production of a real pageant, and it should not be lightly undertaken. A master mind must direct, one in which is combined with executive ability a knowledge and feeling of what is required of a pageant and what its strong points should be, also a discriminating judgment in selecting the subject. But the often splendid results justify all the labor and time expended, and the undeniably powerful effect, educational and moral, on the minds of the people is not to be left out of the reckoning. Great national lessons may be taught and uplifting schemes forwarded by the pageant that are quite beyond the reach of other means.

A COLONIAL HOUSE IN NEW JERSEY

CONTROL of manifestation from the first of manufacture from the first of the first

(Continued from page 245)

Dr. Marvin's house includes unusually complete service quarters, for there are two pantries—one placed between the dining-room and the kitchen and filled with a steel safe for silver in addition to the devices usually placed in pantries, and just outside the kitchen door there is another pantry where the refrigerator is placed. The kitchen is equipped with two ranges, one for coal and another for gas, and the laundry has the usual built-in tubs. The kitchen is separated so completely from the rest of the house that cooking odors cannot possibly penetrate through the pantry or small hallways with which it is surrounded.

The broad stairway with its paneled wainscot and mahogany rail leads to the second floor, where five family bedrooms have been arranged. Between two of these rooms is placed a bath and another bathroom upon the opposite side of the house is planned for the other three rooms. Windows upon two sides of these bedrooms provide crosscurrent ventilation, which is necessary for well-designed sleeping-rooms, and two of the rooms open upon a flat deck which could very easily be adapted for out-of-door sleeping purposes. The roof space of the house is so ample that it has given sufficient space for a large garret, useful for storage, and three bedrooms and a bathroom for the maids, and the rooms upon this attic floor are ventilated and lighted by a wide dormer window which also greatly increases their apparent size and height.

This country home, during the months when trees and flowers are in their Summer or Autumn glory, seems to be set in a space literally hewn out of the woods which surround it upon three sides. This nearness to nature is also suggested by the huge stones which are so numerous that they often appear above the surface of the ground. The grounds about the house have been arranged in the best of taste and by planting shrubbery closely around the building and at angles near the sidewalk the lawn about the house appears vastly larger than it would were it cut up by numerous walks, flower beds and clumps of foliage, all beautiful and well enough in themselves. The designing of a country home should be so done that the beauty which nature has bestowed upon the spot may be retained and emphasized, and the degree in which this is done will be the degree of success which belongs to the place as a whole. It is often said that the country about our American cities is beautiful until it is "ruined by improvement," in the form of hideous suburban houses which are designed and built in utter defiance of every law of judgment or rule of good taste. While the beauty of a settled suburb cannot be the same as that of a virgin forest it can be a beauty of simplicity, of careful arrangement and designing, and these are just the points the observance of which have made this little country home so complete a success.

THE SANITARY PLUMBING OF HOMES

(Continued from page 257)

dry. Clean brass with oil and rotten stone. Acids and naphtha reduce its rich color and give it a whiter tone. Solarine and German putz pommade are also employed. The strainers, waste-valves and overflows of the tubs, sinks, and lavatories should be regularly cleaned. A disinfecting solution may be occasionally employed about the fixtures such as permanganate of potassium or diluted carbolic acid, but always follow their use with an abundance of water to prevent injury to pipes and traps and cleanouts on bath branch and main lines should be regularly opened and cleaned.

The sink should be free from grease as much as possible, putting it rather in the garbage, and the sink strainers should be firmly fastened in place; if loose there will be a temptation for careless servants to lift it and sweep crumbs and scraps into the pipe. A corner strainer should be employed in the sink.

One of the elemental axioms of plumbing is that light and air are absolutely indispensable about fixtures. Law demands this but intelligence and decency will naturally desire it. A fixture in some dark corner with all its suggestion of hidden dirt and clamminess should be repugnant to everyone.

It is an old lesson, but one often disastrously forgotten, that in a freezing climate no pipes should be run in exterior walls or exposed places and when they leave the basement in a chase its bottom should be sealed with some material like plaster of paris to prevent the passage of cold currents of air. On very cold nights the water can be shut off in the basement and the pipes drained. The method of letting a small stream flow in a fixture, besides being wasteful, does not always prevent freezing.

THE LIVING ROOM

(Continued from page 259)

originally by the cabinet-makers of the late Georgian period. The furniture was not purchased until the room was ready to receive it and then only a few necessary pieces were acquired, as it was deemed best to obtain the furniture by degrees to avoid overcrowding. By the fireside was placed a winged chair, upholstered in cretonne to give a note of gaiety, and in addition a slant-top desk, a long table, some Chippendale chairs and settee, and two small tables.

No central chandelier was used, the illumination being from brass electric sidelights, having dangling prisms and glass shades, and two electric lamps made from yellow matt glaze pottery vases, having yellow China silk shades.

The usual small decorative objects and pictures were conspicuous by their absence. There was only one picture in the room—a large photographic brown-print of a portrait after an original by Van Dyke—which was hung low over the mantel, and a pair of blue Hawthorne temple jars were placed at either end. The brass fittings for the fireplace, the leather desk set, the mahogany bookstacks, and the lamps were both ornamental and useful, and took the place of accessories that were purely decorative.

The brown, yellow and old-ivory color scheme made a beautiful setting for the mahogany furniture, and the painted walls suggested a paneled room, although not nearly as costly.

REFRESHING DESSERTS AND COOLING DRINKS

By MARGARET SEXTON

N a hot Summer's night what could be more refreshing than a delicious sherbet. It cools one off for hours—it is not only palatable but is beneficial as well. There are such a tremendous variety of these tempting ices one could fill columns with recipes for them. The following are a particularly choice selection of excellent rules for the concocting of those which are most likely to please and be favorites after once testing their virtues:

RED RASPBERRY SHERBET

Now is the time to make red raspberry erbet. The delicate flavor of the berry sherbet. is very delicious used in an ice. foundation of most ices is lemon and often orange is used with good effect. When preparing the liquid for freezing make a quart of good strong lemonade. Put a quart of red raspberries on the fire in a granite pan with a cup of sugar. Allow them to come up to a scald. This starts the juice nicely. Strain the berries through a jelly bag. When all the juice has been taken from the berries, add it to the lemonade. Whip up very lightly the whites of two eggs add this to the lemonade as of two eggs, add this to the lemonade as The cup of sugar may not prove sufficient, add more if necessary and see that it is thoroughly dissolved before putting into the freezer. All housekeepers who are accustomed to freezing ice cream or ices know the process of freezing. An ice or sherbet freezes because of its component parts being water far more rapidly than ice cream.

LEMON ICE

Lemon ice is always a favorite and it surely is delicious particularly if good and strong and frozen hard and smooth. To a quart of water use four lemons and the juice of one orange. The sweetening is a matter of taste. Always in an ice it is well to remember, however, that freezing takes away from the sweetness of any frozen dessert. Grate the orange and lemon peel. Put it in a fine sieve. Pour the water which is to be used over the grated peel several times. This gives a very good flavor without leaving the peel in the sherbet. Use the beaten whites of one or two eggs, according to the quantity you make. A very nice addition to lemon sherbet is a wineglass of sherry to a quart of the mixture. This to be added just before freezing.

GRAPE FRAPPE

Grape Frappe is not a usual dessert. It is pretty to look at and those who like the flavor of grape will enjoy it very much. Grape Frappe is made of unfermented grape juice with the addition of a little of the ever present lemon. Make a pint of lemonade, sweeten to taste, to this add a pint of grape juice, the white of one egg well beaten, freeze, serve in sherbet glasses. A teaspoonful of whipped cream is a very nice finishing touch to each glass. Set the glass in a dish on which grape leaves have been laid. The combination of color is good and the grape leaves suggestion of the fruit used.

PINEAPPLE

Pineapple, that most lucious of fruits makes an ice unsurpassed by any other fruit. There is a sharpness in the juice that gives a little "stingo" to the sherbet most agreeable. Peel and carefully remove the eyes from the pineapple, then grate on a fine grater into an earthern or granite bowl; to a good-sized pineapple use a cup and a half of sugar. Allow this to stand on the pineapple for half an hour before



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using it. Make a pint of strong lemonade, use half a large juicy orange, then mix the lemonade and pineapple together with the white of an egg beaten up stiff. When thoroughly mixed together strain and just before freezing add a wine glass of sherry. No ice is more refreshing and delicious.

ORANGE SHERBET

Orange Sherbet is likely to be rather insipid if not properly made, but if it is sufficiently strong when mixed it will equal any sherbet. Grate the peel from four good-sized oranges and two lemons. Put this in a fine sieve—pour over it several times one quart of water. At the last put the juice in the water from both oranges and lemons and sweeten to taste. from the peel of both lemons and oranges gives a very agreeable flavor. To a quart of the mixture add the white of one beaten

COOLING DRINKS FOR THE THIRSTY

Tea punch sounds perhaps not very attractive, but when concocted in the follow-ing way is "a drink for the gods." The ingredients are: one quart of strong tea made from green tea, three quarters of a pound of sugar, the juice of five lemons and a half a pint of Jamaica rum. Squeeze the lemons and mix the juice with the sugar. Put the lemon skins in a bowl and pour the freshly drawn tea over them. Allow the tea to remain on the lemon skins until it is cold, then strain it from the skins and add the lemon juice, sugar and rum. Serve in tall ale glasses, fill the glass two thirds full with finely cracked ice; if you find that you have made the tea too strong, dilute it with a little water, then it would be well to add a small quantity of rum. This is the cup that cools, cheers and if too much is not consumed will not inebriate.

There is iced tea and iced tea. It is not a drink to be carelessly put together, as most people think. It can be far from agreeable, or is most refreshing and delicious if properly made. A pot of good strong tea should be brewed in the morning and poured off into a pitcher and the pitcher set on the ice where the tea will become thor-oughly cool. Squeeze the juice from three or four lemons and sweeten it preparatory to blending the tea and lemon juice at night. Before serving dilute the tea not quite so weak as is palatable as it will be weakened by the ice with which the glasses should be half filled, the ice cracked of course in small pieces. Have lemons sliced thin and with each glass serve two slices for appearance sake as well as for the flavor given by the rind. A very nice tasty addition is a small quantity of rum or a half dozen whole cloves allowed to soak in the tea all day. The cloves add a spicy flavor that is very pleasant. Tall thin glasses such as are used at soda water fountains are particularly desirable to use for iced tea.

Orange juice prepared as follows as a drink, is particularly good in the morning before breakfast, or for invalids; not only is it refreshing but it is nourishing as well. Squeeze the juice of a large orange into a glass in which there is cracked ice, beat up an egg both white and yolk and when light mix thoroughly with the orange juice. As a last touch before serving put a small quantity of vichy or soda in just to liven up the drink a bit, but not enough to dilute it.

A most agreeable combination for a drink is strong lemonade ice cold and ginger ale. To a quart of lemonade in which five lemons and one orange has been used, add a bottle of ginger ale. With bits of tinkling ice through it and a sprig of mint on the top one could not wish for a more tempting

SPURIOUS ANTIQUES IN THE EAST

ONSUL GENERAL George E. Anderson, Hongkong, has the following interesting article in a recent number of the U. S. Daily Consular and Trade Reports: "The attention of tourists traveling in

this portion of the world should be called to the fact that spurious goods of all sorts are upon the market of the Far East for sale to them. Not only are there spurious "antiques" of all sorts, such as chemically treated "old" brass, modern make "antique" porcelains, so-called "ancient" wall hangings, and works of art of all sorts, but there are some organically along has insisting are some especially clever base imitations of standard modern goods.

"The imitation of antiques in this portion

of the world has taken on all the forms to be found in Europe and elsewhere and has some features peculiar to the East, but the chief imitations of this class have had to do with Chinese porcelains and brass, ancient Chinese and Japanese armor and weapons, old Korean chests, old carved furniture, and similar goods, and in lesser degree of some of the various works of art in fine bronze, ivory, lacquer, and the like, in much of which in fact good imitations are not practicable.

"The imitation of old Chinese porcelains, as has long been known to connoisseurs, has long since become a branch of business so extensive and so successful that the sale of a genuine old piece nowadays is an event. While this is generally understood by collectors, the general public does not seem to appreciate the fact, for seven large new shops handling such goods were opened last year upon the principal shopping thorough-fare of Hongkong within the three months preceding the opening of what is generally considered the tourist season in this port. The trade in these imitation ancient porcelains has developed so far that there are regular auction sales in Hongkong of this imitation ware. To local people these goods are sold as imitations, but a considerable portion of them eventually find their way into the hands of people without knowledge of the actual facts and spurious "ancient" Chinese vases and other porcelains made in Europe and Japan have been scattered all over the world.

"Similar imitations of ancient brasses and bronzes, ivories, lacquers, and other art objects are made and sold in these or similar sales; in fact, there is almost no limit to the business. Genuine old pieces in brass, bronze, porcelain, jade, or in hangings or other embroideries or in similar goods beloved of collectors are practically not to be had on the market in Hongkong or other eastern ports except in very limited quantities, and to some extent, at least, there is better opportunity to acquire good Chinese and Japanese pieces in New York or London than in Hongkong or Shanghai. In spite of this fact, generally known to collectors and more or less known to the casual traveler, dealers here do a thriving and a very profitable business.

"Perhaps the worst feature of the situation is the fact that while there is a fair supply of good, standard quality modern art goods of all these classes the vast mass of such goods now sold are imitation goods of a quality false in some respect; and while the average tourist buyer may be on the lookout for imitation antiques he may be readily deceived by the "bronzes" of baser and cheaper metals, "silver" of pewter, particularly souvenir spoons and the like, clay "filled" silk, brass in all shapes and grades made in imitation of old pieces; in short, practically everything of any merit in Chinese or Japanese art, ancient or mod-

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"There is almost no limit to the classes of goods now sold in regard to which care must be taken. For example, silk goods are being adulterated to an extent and in a way never before followed, and quantities of Japanese and Chinese goods supposed to be made from the native-worked Japanese or Chinese silks are partly Amerilapanese or Chinese siiks are partiy American cotton. Silk hosiery is sold which is not only not all silk, but is undersized

"There will be found a real grade and and otherwise unwearable. "export" grade of porcelains like the an export grade of porcelains of Japan.

Satsuma porcelains of the market Imitation cloisonné ware is on the market great quantities. Japanese carved "cherry" wood furniture made for sale not only in Japan but in other parts of the Far Fast and sold generally in Honor care East and sold generally in Hongkong and even made for direct export to the United even made for direct export to the States and Europe, is now generally made in white soft wood stained and varnished. Much of the Japanese silver for sale in all these ports is pewter or silver of so low a grade as to lose all merit as such. Chinese blackwood furniture in some cases is white wood stained, but this is not so prevalent wood stamed, but this is not so prevalent now as it was, for the reason that the Chinese guild concerned has stopped the practice of imitating the expensive heavy

"Another feature of trade in such goods may be indicated by the fact that recently a large order was placed in Hongkong for "Siamese" brass, and most of the brass workers of this port at present are busily engaged in beating out beautiful brass trays with the usual Siamese engraved decoration and characteristics, to be sold in Siam as Siamese—beautiful work, but not what it Siamese—beautiful work, but not what it is sold as being. Considerable modern Chinese brass is made in Japan and some even

"Some of these goods are sold as imitation or second or third class goods, but there are many dealers who are not very in Europe. scrupulous about calling the attention of their customers to the fact that such goods their customers to the fact that such goods are imitation, and actual misrepresentation is common. Many of the more patent described by the sections have lost been understood by ceptions have long been understood by casual travelers in the Far East, but there are very modern and up-to-date imitations of old or other meritorious goods which deceive even more experienced travelers. It seems needless to add that travelers in the Far East should not only buy antiques, curiosities, and the like with the greatest care, but should also give particular attendard tion to the actual composition, standard quality, and real merits of modern goods purchased. Against prevailing conditions reputable business men in all eastern counreputable business men in all eastern countries have long been contending, but the present system is profitable and so long as people will buy them such goods will be people will buy them such goods will be sold, and the only adequate protection for the purchaser is his own wariness.

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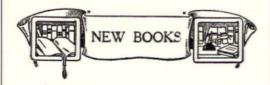
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The many people who take delight in Eastern rugs will welcome this folio, which is compliant and informing both to artistic and commercial demands. Seven rules of identification are given, covering design, coloring and technique, so that the purchaser who masters them may feel reasonably sure of the section from which the rug comes. There is a chronological history of the Orient, which furnishes a key to the overlapping of tribes and tribal characteristics as manifested in handicraft. A vocabulary of terms includes the rug districts and the nomenclature of manufac-ture. The characteristics of weaves are reduced to a table, which greatly facilitates identification. The use of rugs according to periods of history is another enlightening section. The most striking feature of such a folio as this should be, and is, the reproduction of various types of rugs. There are large plates of mellow tone and great beauty, interspersed with lesser illustrations and much clear descriptive matter. are no reproductions in color, but aside from this the work is all that could be expected, and exhibits the greatest care in arrangement, accuracy in information, and taste in selection.

INEXPENSIVE HOMES OF INDIVIDUALITY. New and enlarged edition. Introduction by Frank Miles Day. Chapter on Costs, by Aymar Embury, II. New York: Mc-Bride, Nast & Co., 1912. Cloth; 16mo.; illustrated; 80 pages. Price, 75 cents net.

This is a collection of half-tone illustrations and plan diagrams of twenty American homes, nearly all of which have appeared before in one of the periodicals issued by its publishers. Better paper and presswork might have been used to advantage and the book is hardly to be considered as an important addition to the literature of American domestic architecture.

PRINCIPLES AND PRACTICE OF POULTRY CULTURE. By John H. Robinson. Boston: Ginn and Company. Cloth, 8vo. Illustrated. 611 pages. Price, \$3.00.

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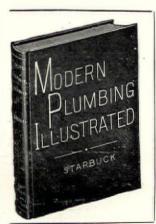
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THE IMPORTANT TIMBER TREES OF THE UNITED STATES. By Simon B. Elliott. Boston. Houghton-Mifflin Company. 1912. Cloth. 8vo. pages. Price, \$2.50 net. 8vo. Illustrated.

This volume is an authoritative and practical handbook of everyday forestry for the use of farmers and land-owners, as well as of foresters, students of forestry, and lumbermen. The author, who is a member of the Forestry Reservation Commission of Pennsylvania, and has been a life-long student of the subject, has made a thorough study of forestry problems in both this country and Europe, but the book is free from technicality and confusing detail, and one to be recommended. It is helpfully arranged, clearly written, and fully illustrated from photographs in such a way as to make the pictures reinforce as well as illustrate the text. It is a sound and excellent book, which will meet a definite and large demand

EVERBLOOMING ROSES. By Georgia Torrey Drennan, New York: Duffield & Co., 1912. Illustrated, 250 pages. \$1.50 net

This is one of the most readable of American books on the subject of Roses that the garden beginner could have, containing excellent cultural directions and a dependable list of varieties.

By Henri Bergson, New LAUGHTER. York: The Macmillan Co., 1912. 8vo.; 200 pages. Price, \$1.25 net.

In this essay on the meaning of the comic by M. Henri Bergson, one of the most brilliant members of the Institute of France, the author has wisely confined himself to exposing and illustrating his novel theory of the comic without entering into a detailed discussion of other explanations already in the field. He none the less indicates in discussing the comic in general, the comic element in forms and movements, expansive force of the comic, the comic element in situations and in words and the comic in character, why the principal theories, to which they have given rise appear to him inadequate. To quote only a few one may mention those based on contrast, exaggeration, and degradation.

EUROPEAN BEGINNINGS OF AMERICAN HIS-TORY. By Alice M. Atkinson. Boston: Ginn & Company. Cloth. 12mo. Illustrated. 398 pages. Price, \$1.00.

This is an excellent introduction to the study of United States history. The writer has followed in its essentials the program of the Committee of Eight, appointed by the American Historical Association in 1905 to consider a course of study in history for elementary schools. In the present volume England has been made the connecting link between America and those European countries that have played a part in the world from which our country was peopled. Significant periods and movements have been illustrated as far as possible through England. Primitive man, Rome and Greece, the Northmen, the Church, and the Crusades enter in this way, as well as mediæval life in town and country. Stories of the age of exploration and discovery also form a part of the tale. book ends with the death of Queen Elizabeth and the movement toward the colonization of America. The aim throughout has been to tell vividly, simply, and fully about a few great persons and events; to reduce the number of unimportant and unrelated historical events; to maintain strict historical accuracy; and to bring the past into relation with the present at as many points as possible.

How To Save Money. By N. C. Fowler, Jr. Chicago: A. C. McClurg & Co. 1912. Cloth. 16mo. 287 pages. Price \$1.00

This useful book is not intended for large investors, or for professional money-changers, or for speculators. It is addressed, primarily, to men and women of every age who are financially able to save moderately and systematically, and who wish to learn, therefore, of every form of investment, that they may place their money with a maximum of safety.

Training the Bird Dog. By C. B. Whitford. New York: The Outing Publishing Co., 305 pp. Price, \$1.25 net.

This is one of the most complete and exhaustive treatises ever written on the development of the hunting dog. It will be found useful to every sportsman, and should be in the library of every dog owner, as Mr. Whitford is a writer of authority.

Making a Newspaper. By John L. Given. New York: Henry Holt and Company. Cloth, 16mo. 325 pages. Price, \$1.50 net.

This is a book worth reading, an interesting and detailed account of the business, editorial, reportorial and manufacturing organization of the daily newspaper by a trained newspaper man. In this day and generation, when we are dependent upon newspapers for so much, it behooves us to interest ourselves somewhat in the subject of newspaper making, of what constitutes a great newspaper. The volume shows how editors learn of the happenings that need their attention; how physicians, ministers, merchants, builders and many others tell the newspaper, without realizing it, of their own and their neighbors affairs, and it contains anecdotes and the record of actual experience, which adds to the value of Mr. Given's narrative.

THE BOOK OF CAMPING AND WOODCRAFT. By Horace Kephart. New York: Outing Publishing Company. Cloth, 16mo. Illustrated. 331 pp. Price, \$1.50 net.

The author's aim in writing this valuable little book was to make its pages of practical service to those who seek rest or sport in the wilderness, or whose business calls them thither. As one may define woodcraft as "the art of getting along well in the wilderness by utilizing Nature's storehouse," Mr. Kephart's volume is a handbook of great service in this pursuit.

THE HALF-TIMBER HOUSE. By Allen W. Jackson. New York: McBride, Nast & Company. 1912. Cloth. 8vo. Illustrated. 115 pages. Price, \$2.00 net.

The various chapters of this book have not been written with any intention of presenting a technical treatise. In his preface the author states that it is addressed primarily to the general reader having an interest in house building or to those who have in mind building for themselves. Whether or not the publishers have felt it necessary to make the book bulky, it is a pity such heavy, unwieldy paper was employed in the printing, and the half-tone pages are pleasant book to handle is always a difficult book to read, notwithstanding which Mr. Jackson's text, despite the handicap placed upon it by the publishers, is worth the effort of reading it, even though not with patience. The chapter on "Methods of Construction" is especially interesting and helpful.



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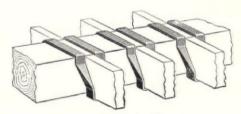
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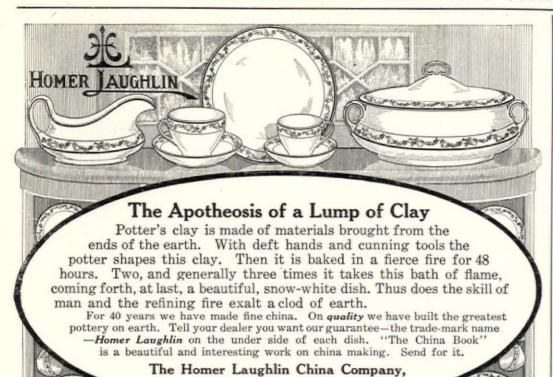
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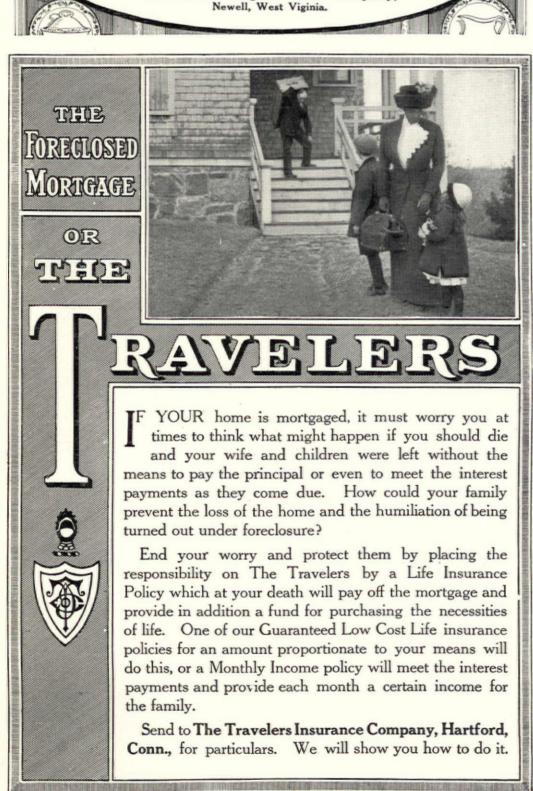
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DOLL-MAKING IN GERMANY

"HE old home of the doll is Thuringia," writes Consul-General Frank Dillingham, from Coburg to the Daily Consular and Trade Reports, "especially the town of Sonneberg, twelve miles from Coburg. Most of the poorer families in and around Sonneberg are engaged in this industry, which is the chief source of revenue of the population, giving employment for the whole year. The work demands a great deal of practice and skill, as well as time and trouble. The inhabitants start making dolls while very young, and by constant practice are finally able to work with astonishing accuracy and speed. In the doll industry only some special part of the dolls is made by each person. Some make the bodies, others the heads, and still others the arms, hands, etc. By this division the work is done much quicker and better.

"The heads are first molded, and, when sufficiently dry, the eyes are cut out by a skilled worker with a very thin, sharp knife. This is extremely delicate work because all of the sockets have to be of uniform size or the eyes do not fit. After being burned, the heads are painted, waxed, or glazed, depending on the material from which the heads are made. The arms, legs, and hands, are produced in a similar but simpler manner, as the painting consists only in giving the necessary flesh color, while the heads must have rosy cheeks, red lips, and dark or light eyebrows, depending on the color of the eyes. The setting of the eyes and the making and attaching of the wigs involve a number of other processes.

"The doll industry is now commencing to make the 'character doll' in restricted numbers. The model is made by an artist and the molds are then copied from this model. The painting of these dolls is done with especial care, and, consequently, their price is considerably higher than that of the commoner type of doll.

"The assembling of the different parts of the dolls is often very complicated. The best jointed dolls have stout elastic cord on the inside, to which the movable parts are attached. A special branch of the industry is devoted to the making of dresses and hats. The latest Parisian styles are copied in dressing the larger-sized dolls, and the creations turned out compare very favorably, in miniature, with the original."

BATHROOMS IN ARABIA

A N American consular representative in Aden, Arabia, has written the following note regarding bathrooms in British Arabia:

"This is a primitive country. Drinking and bathing water is drawn from the sea, condensed, and delivered to residents in wagons at one half cent a gallon.

"There is no plumbing and modern bathroom fittings are conspicuous by their absence. We use washtubs for bathing purposes, and for shower baths we use an ordinary tin bucket with a sprinkler soldered in the bottom and suspended from the ceiling. Thus a shower arrangement costs only fifty cents. How soon these conditions will change for the better can not be definitely stated. The British authorities have considered the advisability of piping water into Aden from Lahej, about thirty miles distant, but have come to no decision in the matter as yet. Should a change take place, this consulate will do its utmost to insure the introduction of American plumbing and bathroom facilities."

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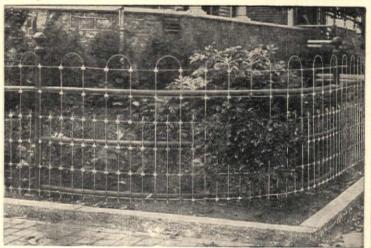
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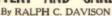
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form, and casting and finishing the various objects. With the information given in this book any handyman or novice can make many useful and ornamental objects of cement for the adornment of the home or garden. The author has taken for granted that the reader knows nothing whatever about the material, and her overlained one progression are in the various operations. granted that the reader knows nothing whatever about the material, and has explained each progressive step in the various operations throughout in detail. These directions have been supplemented with many half-tone and line illustrations which are so clear that no one can possibly misunderstand them. The amateur craftsman who has been working in clay will especially appreciate the adaptability of concrete for pottery work inasmuch as it is a cold process throughout, thus doing away with the necessity of kiln firing which is necessary with the former material. The information on color work alone is worth many times the cost of the book inasmuch as there is little known on the subject and there is a large growing demand for this class of work. Following is a list of the chapters which will give a general idea of the broad character of the work.

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Handy Man's Workshop and Laboratory

Compiled and Edited by A. RUSSELL BOND

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A Collection of Ideas and Suggestions for the Practical Man

Man

VERY practical mechanic, whether amateur or professional, has been confronted many times with unexpected situations calling for the exercise of considerable ingenuity. The resourceful man who has met an issue of this sort successfully seldom, if ever, is adverse to making public his methods of procedure. After all, he has little to gain by keeping the matter to himself and, appreciating the advice of other practical men in the same line of work, he is only too glad to contribute his own suggestions to the general fund of information. About a year ago it was decided to open a department in the Scientific American devoted to the interests of the handy man. There was an almost immediate response. Hundreds of valuable suggestions poured in from every part of this country and from abroad as well. Not only amateur mechanics, but professional men, as well, were eager to recount their experiences in emergencies and offer useful bits of information, ingenious ideas, wrinkles or "kinks" as they are called. Aside from these, many valuable contributions came from men in other walks of life—resourceful men, who showed their aptness at doing things about the house, in the garden, on the farm. The electrician and the man in the physics and chemical laboratory furnished another tributary to the flood of ideas. Automobiles, motor cycles, motor boats and the like frequently call for a display of ingenuity among a class of men who otherwise would never touch a tool. These also contributed a large share of suggestions that poured in upon us. It was apparent from the outset that the Handy Man's Workshop Department in the Scientific American would be utterly inadequate for so large a volume of material; but rather than reject any really useful ideas for lick of space, we have collected the worther suggestions, which we present in the present volume. They have all been classified and arranged in nine chapters, under the following headings:

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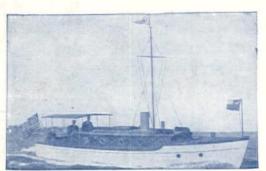
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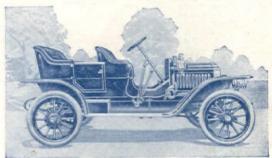


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