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"There is a door at the front entrance of a house in your neighborhood, that I would like to have you look at. You will find it on a new house, said to be designed in the English style. It looks as though it were built of boards, and swung upon long, and rather fancy strap hinges of wrought iron. **

"Ring the door bell, and watch closely. As the door opens, you will notice that the ends of the hinges, which seemed to hold the door, are cut off, and the door actually swings on concealed hinges or butts, fastened to the edge."

Thus Mr. Walsh in the April issue talks about doors, and after discussing a particular type, quite the fad at the present time, he asks this question: "Do you think this modern imitation justifies its existence as a thing of beauty, when it is such a fake?" Not only does he expose doors in bad taste, but he does something constructive—he tells what doors in good taste may be like.

April with its promise of warm days and freedom from heating worries—certainly not a month in which one can become enthusiastic about conservation of heat and coal bills. But those who build in April, and those who have been harried all winter long by cold and draughty houses, are bound to think now of such matters if during the coming winters they wish to be comfortable.

Mr. Simons, whose articles have been appearing in The Small Home from time to time, has again delved deeply into statistics and scientific data, and brought forth an article on conservation of heat which is really easy to read. He starts out like this:

"All the heat generated in a home or in other buildings is eventually lost. All that any material or system of construction can do is to retard its escape."

"Insulation is one of the important ways of doing this. But the emphasis placed upon insulation during recent years has tended to make most home owners forget that there are other equally necessary ways of saving heating costs by construction.

And then he goes on to tell what these ways are, and how to carry them out.
COLONIAL YESTERDAY, TODAY AND TOMORROW

A style that has been the standard of good taste for generations and promises to remain so for as many more.
When we go out to buy furniture for our homes how many of us really know very much about what we are actually buying, and the history that lies back of the different styles. The story of furniture is particularly fascinating because it is so bound up with the every day living of human beings. The whole world of furniture forms has grown out of human needs, and when we think of it in that way it all takes on new color and meaning.

In order to buy furniture intelligently today one needs as never before to know something about its history and growth. Our shops show such a bewildering array of pieces from which to choose that unless we take particular care, our homes may easily become a hodgepodge of everything. So in the next few issues I am going to tell something of the story of the growth of furniture forms, always with the idea of our present needs in the back of my mind.

Old as the world is, man has not made so very much furniture, and it has grown and changed quite slowly. Man has apparently known how to work in wood and iron for centuries and centuries, but he worked slowly and laboriously. The Egyptians made furniture that is still furnishing us inspiration, today, beautifully made and inlaid with glass and enamel. That was more than
Here we have the complete evolution of the simple box chest to a handsome William and Mary highboy.

Fig. 1 (page 7)—An early American chest of Jacobean design.

Fig. 2—A drawer appears at the bottom of the chest.

Fig. 3—Two drawers with the chest on top.

Fig. 4—The chest now is made up of two drawers and no box.

Fig. 5—A full-fledged Jacobean "chest of drawers."

Fig. 6—Set on a frame the chest becomes a highboy.

Figs. 7 and 8—The sideboard also is a descendant of the humble chest. Here we have two versions of the change, one showing a drawer beneath, the other an elongated chest on a framework.

a thousand years before Christ. The Romans made beautiful furniture, which also we are copying and using today. Then with the fall of Rome Europe went backwards and for about a thousand years it was in darkness figuratively speaking.

Unless we have thought of it before it will probably be surprising to know that the furniture we get our ideas from today, the real beginning of household furniture as we know it, dates from only about 1400. That may seem a long time ago to some of us, but when we consider how old the world is and how long man has been making and using furniture it is only yesterday. About that time in Europe there came a revival of interest in art and beauty, commonly known as the Renaissance, or the rebirth of art. Italy led in this movement but every country in Europe shared in it. If each country had been nicely boxed up so that no one could get in or out then we might safely say of what it produced, this is Italian, this Dutch, this English. But people travelled then, not so much as we do now, but they moved about. When a princess married and went to her new home she often took with her her own workmen, and that is why we see appearing in one country after another the forms characteristic of another.

Even so there are forms that bear distinctly the mark of the country that produced them. The countries that produced characteristic furniture that we are still using today for ideas and inspiration are Italy, Spain, Holland, France, England, and our own early American, which we shall talk about later.

In furniture design when all is said and done there are just two main forms of outline, straight line and curved. Straight line, boxlike, architectural forms are characteristic of all early furniture. Men built buildings before they thought of furniture, and the first pieces of furniture of real distinction seem to have fairly grown from the architecture. The first chairs with backs and arms were modeled on the wainscot of a room, hard and uncomfortable they must have been too, as they did not in any way conform to the outline of the human body.

At first men had no thought of economy of material, their tables, benches, and chairs are so heavy it would be almost impossible for one person to move a piece. First of all the form and proportions of every piece were most carefully worked out. Probably the final choice of the correct proportions was a matter of centuries of experimenting. That is the way things grow. Then because the men of those days had plenty of time and because the artist spirit was strong they loved to add beauty to each piece in the form of exquisite carving, beautifully planned to fit the particular piece they were working. Always there was present that fine sense of proportion and of belonging together.

Straight line, box-like contours are characteristic of the early furniture of all countries. Italy decorated hers with one kind of carving, France with another, and England's early carving was the richest of them all, a carryover from the days of her Gothic glory, which Italy never shared to a like degree. Another characteristic of this early furniture that has come down to us is that it is all regal and palatial in character. If the poor man had any furniture, as he must have, we know nothing of it. The kings, queens, dukes, princes, and others of high degree had great influence either in encouraging or discouraging artistic effort. This is so true that furniture of
An early American trestle table. One of the earliest known in our country. It could be taken entirely apart and the top set up against the wall. The family "board."

certain types is known always by the name of the monarch reigning while it was being made. So true is this that you can follow right through English or French history with the styles of furniture. Henry VIII, Elizabethan, James 1st, Charles I, Louis XIV, Louis XV, and Louis XVI. This furniture is by its very nature so very rich and elegant that it can not well be reproduced today at moderate cost or by strictly machine processes. So those of us who do not have a great deal of money to spend for our furniture would do well to avoid the commercial reproductions of Tudor, Italian Renaissance, or Spanish. The examples of this furniture that have come down to us were made for palaces and castles, and the attempt to make so-called copies for our simple little American homes is pretty much of a sham. Very beautiful copies are being made today, pieces that in every way are the equal of the fine craftsmanship of the early days, but they are necessarily quite costly. The very essence of fine simplicity is honesty. An honest kitchen chair is preferable anytime to a cheapened and debased copy of a rich, handsome, carved throne chair.

As I have said before the furniture that we really know and that furnished us with our inspiration today dates from about 1400 to 1800. But really domestic homey furniture wasn't made until after 1600, and that is not so very long ago at all. After 1600—and if we remember our history we will recall that our own country was settled in the early 1600's, Jamestown, Virginia in 1607, and Plymouth, Massachusetts in 1620—we see a simplification of forms and the additions of many new pieces. The lines are still straight and boxlike, however, with no curves at all. The furniture made in England during the 1600's is most often known as Jacobean. The earlier pieces are still heavy, but the carving is becoming lighter. These are yet too rich and distinct to furnish copies for simple homes. They must be well made to look and be right.

The last few years we have been hearing a great deal about "Early American" furniture, and while most of us feel quite well acquainted with it, we probably could not very easily or definitely tell just what we mean by the term. The truth is that Early American is the child of Jacobean. As I often say, it is simplified or "cottagized" Jacobean. Its form is decidedly Jacobean, but honestly and straightforwardly simplic-
THE MONARCH OF ALL PLANTS—
THE EVERGREEN

By HARVEY H. CORNELL
Member American Society of Landscape Architects

A PLANT that is so apparently eager to retain its green raiment throughout the long winter, to keep up its appearance of cheerfulness, even warmth, regardless of raging blizzards, zero weather, and drifting snow, deserves the throne of the plant kingdom. Its mantle ranges in color from the dark green of the hemlock to the intense blue-green of the Colorado spruce and white fir. It furnishes a never ending source of interest in its wide assortment of forms and sizes, from the little globe-shaped baby of the family, Tom Thumb arborvitae, to the tall, dignified, spire-like, pyramidal arborvitae, not unlike the beloved tree of Italy, the Italian cypress.

Evergreens were first used principally as protection against cold winds. Consequently the more mature and striking examples of evergreen planting are the old windbreaks of native white spruce, arborvitae, and pine scattered over that part of the country where winters are severe. Occasionally some thought was given to ornamental planting of these same varieties, and the few old specimens in lawn and meadow are gorgeous to behold. Too often though the trees were planted too near the house, where, because the spread of branches shut off light and air, the owner's axe interfered with the normal development.

Except for these examples, the general run of ornamental evergreen planting is decidedly new and undeveloped, but the old order of things is changing, due to a growing appreciation of the value of the ornamental evergreen as a plant that will remain fresh and alive the year round. Exhaustive experimentation has produced for the evergreen-loving public a long list of evergreen types adaptable to almost any condition.
The evergreen, aside from its color value, for which it is most prized, is practically the only plant that lends itself to certain specific needs, aesthetic or utilitarian, of the small home owner who is fortunate enough to have sufficient room in his own private yard to allow the planting of at least a few such trees.

A commonplace house may take on new interest with handsome pyramidal arbor-vitae planted at the entrance.

In order of importance, the outdoor Christmas tree varieties should perhaps come first. The popularity of this type during the holidays has carried over to other seasons and led to the planting of many an evergreen on home grounds, where it becomes a living thing and is established once and for all.

Individual specimens in the lawn or at the corner of the house become prized possessions in the good old winter time. They are pointed out with pride. Often they stand almost neglected throughout the year but they seldom show this neglect. A single perfect specimen of arborvitae, of red cedar, or of Colorado blue spruce is not uncommonly worth several hundred dollars. Certainly the added value to the property must not be overlooked. Perhaps the most striking and picturesque examples of mature specimens can be found in our old cemeteries—tall, stately, pyramidal arborvitae or narrow compact red cedars.

The evergreens always afford some protection to house and grounds even when planted sparingly. The pine and the cheaper varieties of spruce come in at this point for their share of glory. And if an objectionable feature must be screened off from the living room windows, it is the evergreen and the evergreen alone that will do the job thoroughly. Just a few trees closely planted will screen, more effectively each year, the objectionable service drive, the laundry yard, the alley, and the neighbor's back door.

Colorado blue spruce outline the curved driveway in front of the house below. Later as the trees spread, it may be necessary to move one or two as they may shut off the house entirely.
The need for a simple open lawn as foreground to the house will often crowd the larger evergreens into the border planting where they become perfectly at home with other plant materials in framing the lawn area. In this position they may be used to advantage as a background for flowers, the green of the evergreens affording a pleasant contrast to the more striking colors of herbaceous plants. A mass of white phlox backed by an evergreen planting is a most gratifying picture to look upon.

And last but not least is foundation planting, the type of plant arrangement that means so much to the average small home, where there is little room for anything else, and where there must be some planting to relieve the bareness of house walls and afford a happy natural transition between the vertical walls of the house and the horizontal grass-covered areas forming the lawn. And yet this type of planting is most abused and often much less successful in its results than any other type of planting on the small home grounds, perhaps because it is much more in evidence.

These mistakes can be easily avoided if a little more thought is given to the practical requirements of the evergreens selected. For example, it is not uncommon to find a Colorado blue spruce planted as a baby specimen within a few feet of the foundation wall. If the extremely dry condition of the soil in such a location does not seriously retard the growth of the tree, its eventual spread of branches will interfere with windows and the tree itself will grow into an unnatural mass, unshapely and scraggily.

Again, other trees may be planted too closely together, the unnatural spacing interfering with normal growth. This does not mean that a compact group of large evergreens is not pleasing, but it does mean that each tree should be given at least a six foot radius in which to expand, thus spacing the larger growing trees approximately twelve feet apart measured from the centers or trunks. Therefore it is usual-ly safe to assume that the tall wide-spreading type of evergreen is out of place as foundation planting except at the corners of the house where it must be planted ten or twelve feet from the house wall. This lack of appreciation on the part of the plantsman for the need of growing space produces pitiful results.

Eighty per cent of the hills of wrong spacing can be eliminated through the selection of more useable smaller types of evergreens that vary in height from six inches to six or seven feet. They are even more adaptable to foundation planting than any of our shrubs, particularly the larger shrubs that are usually clipped back into ugly unnatural forms. In other words, foundation planting ordinarily has only a limited space in which to expand. The solution lies in the use of small evergreens and shrubs.

Among the evergreens the junipers come first and the cold weather varieties include the Pfitzer juniper, the prostrate juniper (Juniperus horizontalis douglasi—Waukegan Juniper).

The circles with numbers represent the evergreens in question, the key to which is given at the left.
THE HOUSE THAT CARPS BUILT
What Happened to a Man Who Tried to Get Along Without an Architect

By Charles E. Carpenter

I OFTEN wonder why it is that most of the wise guys who made all the wise cracks lived so long ago. Sometimes I am inclined to think that wise cracks are so much like oils. The poorer varieties readily evaporate, leaving nothing to indicate that they ever existed, while the better sort are lasting.

One of these wise crackers once said something like this: "He that has himself for a lawyer has a fool for a client."

But I have one that can give that cards and spades. "He who has himself for an architect, should be confined to the foolish house."

And I did not learn my wise crack in a book, either. I got wise by my own experience.

In other words, I am building a house.

That is to say, I started with that intention, but before the cellar was dug I found that I was merely paying the bills.

Of course I have an alibi. All fools have.

It was this way. I wanted to build for a refined, elderly couple, a nice comfortable cottage, so designed that there would be two rooms and a bath on the first floor for their personal use, in addition to a living room, dining room, kitchen, refrigerating room, and laundry for the common use of all who might occupy the house. But the idea was that the elderly couple should not be compelled to go up and down stairs.

It was to be a small, cozy affair, but as I did not have any definite idea of what I wanted, I hunted around until I discovered a one-story bungalow that had precisely the first floor design I desired.

"Hurrah!" said I. "All the builder has to do is to copy the first floor, and then utilize the second floor space as best he can."

So I sent for a builder who had previously done some little work for me, and I asked him if we needed an architect. He said that an architect on that job was about as useless as the North Pole, which I understand has cost many lives to reach, and is worth nothing after it is reached.

So we started. I say "we" because that is the proper word. The builder was to accept all orders from either my caretaker or private secretary as coming from myself. This being decided I said to the builder, "Shoot!"

But it seems there were preliminaries. Preliminaries always make me tired. Did you ever go to a big bout and notice the time wasted by the preliminaries to the introduction of the fighters?

The prime question to be decided was whether or not I wanted the house built on the "contract plan" or on the "cost plus plan." Either was acceptable to the builder. But, he suggested, as neither he nor I nor the rest of the "we" knew exactly what we wanted it would be somewhat difficult to build on the "contract plan," so we let it go at "cost plus." Only I think there must have been more than one "plus" slipped in.

I am not informed as to who invented the "cost plus plan," remeber it was the first question.

I thought that question was foolish. How could we go down into the cellar if we had none? Cellars were not of much consequence at one time, but since the Eighteenth Amendment they have become an essential. If they worked those old-fashioned cipher and perforated cardboard mottoes today, as they did in my youth, the popular motto on the wall would not be, "What is home without a mother?" but rather, "What is home without a cellar?" It seems that our model bungalow did not have a cellar. So right off the bat we decided to go one story further up and one farther down than our model.

Well, they finished the cellar and I wish you could see it. The guy doesn't live who is rich enough to stock it. The only real use to which I think it may be put is to make a skating rink. And it does not extend under the sun parlor and porch at that.

I had always looked upon a cellar as a sort of a hole in the ground—space—a sort of a nothingness which the head of the house never knew existed before Prohibition. Friend, let me say to you, as friend unto friend, these holes in the ground cost real money!

The new house is directly opposite my summer bungalow. While in the past it has been my habit to arise in the morning when I felt like it, everything was different after the new house was started. Promptly at 7:30 every morning every man on the job at the new house got a hammer and started to pound. One just had to get up and get away from it in self-defense. I complained to the builder about it and he said that he could have it remedied by the "cost plus plan." In fact, I now believe that all of the world's great prob-

(Continued on page 26)

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SPRING RAINS AND GUTTERS

During the Torrential Rains of Spring Leaks
Above Our Heads Are Serious Matters

By H. Vandervoort Walsh
Professor in the School of Architecture, Columbia University

TO certain temperaments, the patter of the rain on the roof is a dirge, to others it is the song of the coming of new life. After a winter of snow and sleet, there is prophesy of spring and all that is new and fresh, in the trickling sound of the warm rains. Snug behind the windows you have been, and listened to the crackle of the hail against the glass, but now with the sun coming north again, the sound of softer drops is heard, and the ice in the gutters begins to thaw and the leaders ring gently to the beat of dripping water.

The sun bores holes in the snow drifts that still cling to the roof, and piles of it suddenly take a notion to slide down with a great rumble.

Then is the season at hand, when we begin to take stock of the house and look to our roofs for leaks and examine our gutters for breaks. What damage have the winds done, the hanging icicles, the sliding snow, and the expanding ice? What corrosion has set in upon the metal of the flashing and gutters? For with torrential rains of spring, leaks above our heads are serious matters.

Contended are those who have built well and used the right construction for such seasons, for there is nothing quite so distressing as to find gutters torn away, leaders shot full of rust holes, and valleys leaking water onto plaster ceilings. Those who are planning to build new homes should study this part of the construction with great care. The best materials and workmanship and method of construction are none too good. Save money elsewhere on the house, but not on the flashing, gutters, and leaders.

Rain-water is a curious thing; it can be lead along like a bull with a ring in its nose, but it cannot be deliberately stopped. The secret of a tight house is more in providing the right channels to take off the water than to erect dams against it. When your house is covered with a roof that is complicated and its many gables intersect in valleys, the greatest care must be taken to build leak-proof troughs of copper in them. This is called valley flashing.

From the top of the roof down to the having a valley like this, you will have noticed that it makes a strong, deep line or crease between the two joining roof surfaces. It separates them crudely. Architects, as a rule, do not like this effect, but prefer to blend, particularly slate roofs, one into the other, by constructing a closed valley. This is built with copper shingles which are slipper in under each course of slate. These metal shingles are bent around to the shape of the valley and are completely hidden by the roof shingles which are laid so that they join together in the valley seam. In some fine roofs, architects have the valleys blocked around with wood to a U shape. Then the slates or shingles can be carried right around from one roof slope into the other without any apparent intersection. Yet under those shingles which are in the bottom of the U are laid metal sheets for protection. This type of intersection or woven roof is very soft in its plastic character. (See Fig. 2.)

Wherever a roof joins with a chimney or wall, there is sure to be a leak, even though the joint be tightly corked with putty or other filling compound. It is practically impossible to make such a joint water-tight, for the chimney or wall moves in settlement faster than the roof, or the roof pulls away from the wall. Yet by guiding the water along this place with flashing it is possible to stop leaks.

This is done by laying copper sheets half on the roof and half against the wall, and then lapping over the part.
against the wall other sheets, known as counter flashing, the upper edges of which have been stuffed with elastic cement into the mortar joints. Both the chimney and the roof can move without rending this joint apart. Yet the water running down the face of the masonry drips off the lower edge of the counter flashing onto the roof, and the water which may be on the roof is prevented from leaking through the crack by the flashing bent up against the wall. Thus we have the system of construction, known as flashing and counter flashing, which is almost universally used for any joints between roofs and walls, dormer sides, and chimneys. (See Fig. 2.)

There is another place, back of the chimney coming up through the sides of a roof, where trouble will develop. The water flowing down that part of the roof, behind the chimney, will be dammed against the back and leak through, in spite of all precautions. It has been found that there is only one satisfactory way to overcome this, and that is to build what is known as a cricket or saddle back of the chimney and cover it with sheet copper. This is really a little gable roof which throws the water to each side of the chimney, and prevents it from collecting. Here again the principle of guiding the water rather than damming it is followed. (See Fig. 4.)

Most of the leaks which develop in roofs are due to faulty construction or the corrosion of the metal used in flashing. The roofing material itself is not very often to blame. Yet the flashing is one of those small items easily forgotten, because it seems insignificant. The sheet metal contractor gets only a few hundred dollars out of a small house, but if he is not careful in doing his work, because the owner or general contractor has tried to get his bid down to the lowest possible amount, he can create conditions which will be the breeders of all kinds of trouble. Since his work, too, is in such places that it is not seen, his temptations to do careless things are great.

This same contractor usually has the job of installing the gutters and leaders which take away the rain water after it has run off the roof. It is quite possible to build houses without these and project the roof far enough out from the wall of the house to keep the dripping water from running down on the wall and splashing against the windows. This is not as common today as it once was, since we do not like damp cellars, which are often the result of the roof water running back through the walls, nor are the trenches very attractive, which are dug in the ground by the drops of water. Therefore it is almost the universal custom to catch the water in gutters and carry it down with lead type of drain is frankly exposed to view and is always possible to get at, repair, and adjust. It may be in the shape of a half round, a square or O. G. moulding. It may also be beautifully treated and made a special decorative feature along with the leaders and leader heads. In houses of the English Tudor style, leader heads of elegant patterns are often cast in lead. Sometimes architects specify pressed copper, washed with lead. These practical water drains, frankly exposed, are made things of beauty, and this is as it should be. (See Fig. 5.)

There are many houses in the Colonial style which have classical cornices, built with lovely mouldings. The beauty of such cornices may be marred by hanging a metal gutter in front of them. In this case, the so called box gutter is constructed at the top and behind the cornice. It is a trough of wood lined with sheet metal. If it is deep and narrow, as it usually is, troubles will develop in it as the ice begins to freeze up in it and expand. The front wall is then apt to be pushed out so much that the metal is split. To overcome this fault, a shallow and wide gutter should be constructed. This will permit the ice to lie in it and expand over the front edge without rending the gutter lining. (See Fig. 6.)

Another, quite old New England method, is to build the wood cornice, but make the top moulding a wooden gutter. From below, the appearance is quite satisfactory, and the durability of such a gutter is fair. Some claim it is even better than the average sheet metal gutter in this respect.

The expansion of the ice in gutters of sheet metal is possible without damage ensuing, because the metal gives with the ice and does not resist it as a rigid type will do. Leaders, not having some

(Continued on page 38)
CONTROLLING HUMIDITY IN THE HOUSE

So now we know what relative humidity is; we know that the ideal temperature-humidity condition for our homes is 70° and 45 per cent; we have lost our illusions about the economy of humidity—but have lost none of our realization of humidity's importance to our health; and we have learned how to find out what the relative humidity of a room is. The next practical question that confronts us is, How can we control the humidity in our homes?

Only by evaporating water into vapor and circulating this with the air in our homes can we maintain a relative humidity of correct percentage. So the vital question is, How much water must be evaporated each 24 hours to provide the required atmospheric vapor? This is answered for you in the accompanying daily evaporation table.

Let's see just how you can use it. Suppose you live in the North Central States. The average winter temperature and outdoors relative humidity, as found by the United States Weather Bureau, are given. Your problem is to raise the outdoors air, as it infiltrates into your house, from its condition of 34° and 73 per cent to the ideal comfort-condition—70° and 45 per cent.

Of course, the size of your home has much to do with it. Suppose it is a six-room dwelling of average proportions. The table shows that, in average winter weather, you should evaporate 6.5 gallons of water a day and circulate the resultant moisture through your home.

In the preparation of this table, it has taken for granted that half of the necessary evaporation comes from incidental sources. Really, the house we have just considered requires the evaporation of 13 gallons of water a day. But, as we saw, some of the vapor comes from the cooking-range, running faucets, the bathroom, and such sources. Without being able to figure out the exact details of your household routine, we have assumed—as air-conditioning experts are accustomed to assume—that the humidifying equipment will have to supply half the total moisture required.

It was assumed also that there are one and a half complete air-changes per hour in each room of your house. According to research conducted at the Engineering Experiment Station of the University of Illinois, there are central heating plants which circulate the warm air at this rate. If you haven't this type of heater—if you have one that leaves the air virtually static except as fresh air is admitted through doors and windows—the amount of evaporation required for humidification will be considerably less.

A third necessary assumption was that infiltration of outside air into your home is no greater than in the average case. The formula covering this factor and all others in the equation was provided by the University of Illinois. Average outdoor conditions have been used as the basis of the calculations. When zero weather prevails, considerably more evaporation will be needed than is shown on the table. But in spite of these assumptions, this table may be used as a sound guide in regulating conditions in your particular home.

Having learned exactly what the moisture-condition of the air in our homes should be, and how much water must be evaporated in order to produce it, there is only one more problem that confronts us in the effort to add the comfort and the health-insurance of humidity to our homes: How can we evaporate gallons of water and circulate the resultant vapor in the rooms we live in?

For our answer, we must turn to our heating plants. Modern science suggests that, instead of a heating plant, we should have an air-conditioning plant on our premises. At present, we seem a long way from anything like that which is practical and inexpensive. Nevertheless, we can expect that the equipment which supplies us with heat should do so without excessively drying it out.

Five types of humidifiers are available. Three are intended for use in connection with steam, hot water, vapor, and vacuum heating systems, and two in connection with warm air circulating plants.

One is a handsome metal urn, to be set on a table in a living-room, dining-room, or den, and connected with an electricity outlet. When current is turned on, water is evaporated and the vapor readily escapes to the surrounding atmosphere. During the seasons when artificial humidification is not required, the urn serves as a flower-bowl or an ornament. It is inexpensive, and the cost of the current it consumes is almost negligible. Figures as to the amount of water this humidifier will evaporate have not been published.

(Continued on page 30)
COTTAGE ARCHITECTURE AT ITS BEST

DESIGN 6G-2 has a plan which, for many people, is modern in the most exact and fundamental manner. The downstairs bedroom, set to itself on one side of the house, is not only a beautiful room in itself, but supplies a convenience which for many is absolutely necessary.

The central stair hall gives access from the front door to all the quarters, kitchen, living room, downstairs toilet, inside stairs to basement, bedroom, and stairway to second floor. That is exceedingly good planning.

The dining alcove, instead of being a pinched affair of benches on which one has to squeeze himself to find a place, is large enough to include a table of respectable size, and chairs. Set in a bay window, it will make a most agreeable place in which to dine.

The porch, shown in the perspective drawing at the top of the page, may be used or omitted as desired. It would have access to the living room through French doors in place of the windows shown on the plan.

The exterior, a charming cottage type with finely modeled walls, roof, and openings, will appeal to all who like fine architecture. The construction is frame, with stucco finish. Rough siding is used in the gable ends.

For price of plans and statement of service, please turn to page 46.
HAVING recently built a house of his own, the Seeker rather fancied himself in the role of advisor to those about to embark on a similar venture. He was beginning to suspect, however, that in calling him into conference his sister-in-law had wanted not so much an instructor as a yes man. His suggestions as to room arrangement had met with only mild interest; his advice as to style with mere disdain. He sat back now with open disapproval, and watched his companion leaf through the catalog of plans which they had been looking over.

"I don't care what you say," she announced cheerfully, "I like any style as long as it's Colonial, and Colonial I'm going to have." She turned again to one of the houses over which they had been arguing and studied it intently.

"Do you see that living room?" she asked at last, putting a triumphant forefinger on the room in question.

Adjusting his glasses, the Seeker peered at the area so labeled. "It does seem rather large," he ventured finally.

"Anything else?" prompted his sister-in-law relentlessly.

"Yes, but the corners," she pointed to them in turn, "four of them, and not a single one spoiled by a door. Don't you realize what that means? How lovely it is to sit in a chair in a corner? It's so cozy there and so—so protected."
Thinking it over, the Seeker believed he saw her point. There was nothing better than a corner for the comfortable chair with a table and lamp beside it. Too bad when a door close to the end of a wall made a corner too shallow for use. He hadn't exactly thought about that before though. The Seeker began to look upon his sister-in-law with new respect.

She was murmuring to herself now, cryptic phrases that he had difficulty in following. "Vestibule. That's to keep out drafts, I suppose. And a hall. Don't you like a hall" she asked abstractedly.

The Seeker nodded. Yes, he did like halls. They reminded him of the prologue of a play, or perhaps the preface of a book—tantalizing glimpses of what was to come.

Again his companion was examining the plan. The dining room was generously large. Perhaps she would have a corner cupboard added, maybe two.

The kitchen she wondered about. Could there possibly be all the cupboards she wanted? The Seeker assured her that it was very likely, at any rate the blueprints would show that.

Since they lived in different cities, it was not until their house was finished that the Seeker again visited his relatives. Letters had kept him informed as to the progress, but he was anxious to see the house now that it was completed.

"Isn't it a beauty?" asked his sister-in-law proudly, as they stood considering it a few moments before entering.

The shingled walls were stained a silvery gray that seemed to shimmer in the sunlight. The blinds were painted a rich olive green, and various shades of the same color blended harmoniously in the shingled roof.

"A peach," agreed the Seeker, capitulating handsomely.

As a home owner himself, he was vastly interested in the tour of inspection which followed. Nothing was omitted, from the roomy basement to the storage space in the attic. The bright, cheerful bedrooms met with his entire approval.

It was with the attitude of approaching a climax that his sister-in-law finally led him to the kitchen. The cupboard over the refrigerator, three shelves, was displayed proudly, also the icing door convenient to the back steps. The flour bin, drawers, and cupboards on either side of the sink were opened for his inspection.

Later, replete with good food, the Seeker was tempted to look over the garden. The memory of the broad screened porch tempted him, however. It was cool there, and the couch looked soft. He lay down upon it guiltily. Just for a moment, he assured himself. Within a few minutes he slept peacefully.
A House Without Expensive Habits
The kitchen, liberally lined with cases, cabinets, and drawers, makes one think of a panelled room. It is truly most pleasant and conveniently planned. For price of plans, please turn to page 46.

Beneath the smooth stucco finish, of design 5-K-21, the walls are of concrete masonry. Precast masonry forms have been used above the windows, about the entrance, and for the chimney cap.
A Five Room California Bungalow

Casement Windows, Arched Entrance, Tile Roof, and Careful Use of Very Little Ornament.

Either of these plans may be used with design 5-B-41. The main difference is that one has a larger kitchen and a dining alcove. The owner of the house shown here added a garage in such a manner as not to impair the good design of the house. The construction is stucco over frame.
A GOOD STYLE FOR THE MODERATE INCOME

Nothing Has Been Added Merely for the Sake of Appearance
Beauty and Economy Go Hand In Hand

The time is coming when we shall recover from the present fad for flashy architecture and turn to houses more like this, in which forms are simple and little is spent on extravagances.

For price of plans and statement of service, please turn to page 46.
Many touches about this little house take it out of the commonplace, both as to exterior and plan. Ostensibly of three rooms, a family of four or five could live in it quite comfortably. One or two bedrooms may be finished in the attic, and the sun porch may be turned into a sleeping porch by use of the folding bed provided in the alternate plan.

Another permissible change is shown in the alternate plan, in which the living room is made four feet longer. The construction is frame with stucco finish, and shingle roof. For price of plans, please turn to page 46.
TRUSCON Steel Casements set the Vogue in WINDOWS

There is something very different and distinctive about Truscon Steel Casements. Not only do they give a touch of modernness to a home — enhance the beauty of any architectural style — and furnish artistic backgrounds for drapes and curtains — but they actually set a new vogue in windows. Weather-tight, permanent, always easy to operate and providing double the usual amount of fresh air. Truscon Steel Casements have another advantage. They are surprisingly low in cost, and can be delivered immediately from dealer or warehouse stock. Ask for literature.

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO
Steel Window Division
Warehouses and Offices in all Principal Cities. Supply Dealers Everywhere.

TRUSCON Standard CASEMENTS
MODEL NO. 5
THE SECRET
OF PERFORMANCE
The House That Carps Built

(Continued from page 15)

lems might be solved on the "cost plus plan," including Prohibition and World Peace.

Naturally we began with the cellar. That was one thing about which we were orthodox anyhow. The next question that was asked by the builder was, "I suppose you want the cellar floor cemented?"

I could not see any sense in cementing the cellar floor. The couple for whom the house was being built are elderly, respectable, and law-abiding. So I suggested that the cellar floor not be disturbed, until I found that what the builder really intended to say was, "I suppose you desire a cement floor in the cellar." He explained that the difference between a cement cellar floor and a dirt cellar floor was that, if one happens to drop a bottle filled with valuable liquid on a cement floor, and the bottle breaks and spills its contents, one can quickly grab the coal shovel and scoop up a considerable portion of the liquid, but with a dirt floor, the liquid is absorbed so quickly that no salvage is possible.

I called his attention to the fact that we intended to heat by oil and cook by gas and that there was to be no coal shovel. To which he replied, "In that event you might sop it up with your handkerchief." This suggestion convinced me of the economy of the cement floor and forthwith it was duly authorized.

The heating equipment presented another problem. "I suppose you want to heat with hot water?" asked the builder.

Now my town residence is so located that we receive our heat from a central steam plant. We are supposed to have steam heat, but the steam is usually water by the time it reaches our radiators. That's a great scheme, that central heating. They charge you according to the amount of water discharged from the system into the sewer. Consequently, the more water that goes into the sewer the larger your heating bill, and the lower the temperature of the steam when it enters the system the more it is to the advantage of the central steam heating company, and the less heat you receive for your money.

I was sort of fed up with hot water heating and frankly said so, but I was told that I did not know what I was talking about, and as I knew I did not know what I was talking about, I was on fairly safe ground, so I said, "Let it be hot water, but see that the water is really hot."

Then came the question, "How shall we heat the water?"

Wood, coal, gas, oil, and electricity were available. I knew about as little about one as the other, only I had read the slogan, "If it is not electric it is not modern," and as slogans are for the purpose of educating the public to do the right thing, I felt I ought to show that I knew something about something, so I said promptly, "I think electricity is the best." But here I found that I had made another bad break, for the builder politely but firmly told me that oil was the only practical thing.

The next problem was to hit on some method whereby a noisy oil burner could not be heard. I got them there. They were about to design a sound-proof enclosure when I said, "Why go to all that expense? Let every one put cotton in their ears."

Then I was asked if I wanted hard flooring.

The Small Home Must Have Small Clothes Closets

K-V Clothes Closet Fixtures

Small clothes closets, yes; but plenty of space for garments. The K-V Fixture makes an orderly garment case out of the smallest closets by using every foot of space. A simple device, attached to the underside of closet shelves. Clothes hang in perfect order from an extension rod which slides from the closet at a touch. Sizes from 12 to 60 inches. Handsomely nickedle. Durable. Thousands in use everywhere.

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50° above
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Thrush System provides comfortable heat regardless of weather changes

The days in early spring give a heating plant the real test! Ice and snow and wind at night, blazing sun and rising temperature by day...quick fluctuations of 20° to 30° in twenty-four hours are easily cared for by hot water heating with Thrush Regulation.

Mild, perfectly controlled Thrush Hot Water Heating suits the temperature of the heat conducting medium to the requirements of the weather and maintains true summery comfort all the year round.

At the same time, Thrush System enables you to cut the cost of your fuel 20% to 40%. Accelerated circulation and increased heat transmission which Thrush System provides assure more heat from the fuel that is burned because the heat is transmitted to the rooms where it is needed, not wasted up the chimney.

Thrush Automatic Damper Control prevents runaway fires and keeps combustion of fuel even and regular. Get our booklet now and learn more about this ideal form of home heating.

MAIL THIS NOW
H. A. Thrush & Co.,
Dept. D., Peru, Ind.
Send booklet "Which Heating Plant for My Home?"
Name: ________________________
Address: ________________________

H. A. THRUSH & CO.
PERU, INDIANA

THRUSH SYSTEM
OF HOT WATER HEATING
I said that naturally the elderly couple did not want the floor so hard that it would blister their feet, but on the other hand, they wanted the privilege of wearing house slippers if they wished. And, on the other hand, they did not want the floor so soft that their slippers would sink in and be pulled off their feet, so I suggested that the floors be medium. Then came the bathrooms!

Take it from me there are more problems connected with a bathroom than there are with all the other rooms combined. I was shown catalog illustrations of more types of bathroom fixtures than there are in all the hotels in New York City. I noticed only one marked difference between them, and that was that the ones which I seemed to prefer cost most.

Then the builder asked, "Are you going to have tile bathrooms?"

Now, in my time, I have had the final word in selecting buildings and equipment, connected with my Company's business, running into millions, and never once did I feel, on occasions when I was consulted on such matters, as if I were the Company's champion dumbbell. But on this simple cottage, I seemed to know nothing minus.

Wherefore, being determined to establish a reputation for superiority or expire in the attempt, I replied, "I suppose we ought to do the usual thing. They are no longer making dining rooms of tile, except in Child's Restaurants, and as there is perhaps no other place where tile would be appropriate, I think we had better put tile in the bathrooms."

Then Mr. Builder said, "If you are going to have tile, let a tile artist do the work; don't permit a bricklayer to do it."

Here was my chance.

"Certainly not," said I. "No butcher is going to do our tile work." Then, after a moment, I added, "How about stained glass windows?"

Mr. Builder allowed we might have stained glass windows in each bathroom.

"All right, then," said I, "We will have Vanl ingen windows. Nothing but Vanl ingen when he was a kid and called him "Billy." In fact, I knew the whole Vanl ingen family, and to my great satisfaction I found that neither the builder, caretaker, nor secretary knew what I meant by "Vanl ingen windows."

Excelsior! I had scored at last.

"Do you want those vinegar windows in each bathroom?" asked the builder. I did not like the way he was saying "each," as if we were building a modern hotel with a private bath to each room, so I said, "How many bathrooms do we have?"

"Well, originally, we planned for only two, but there was the possibility of a maid and we thought that we had better have a maid's bathroom connected with her room and also a toilet on the first floor, in the laundry."

I reminded him that we were building the house for a nice elderly couple, not for the maid, but the "we's" all agreed that a maid's private bath was necessary these days. So I said I would personally investigate the Vanl ingen windows, as perhaps Mr. Vanl ingen would be too busy to give us prompt service.

The next question that required thought was the color that the interior woodwork should be painted.

(Continued on page 32)
An Authority
on Basements

THIS meter-reader fellow can
tell you the difference two coats
of Medusa Portland Cement Paint
will make in the brightness and
cleanliness of your basement. He
knows his basements! His opinion
of housekeepers, based on his sub-
terranean activities, would not flatter
the average efficient housewife.

Spring a surprise on your family.
Ask your painter for an estimate on covering the walls of
your basement with two coats of Medusa Portland Cement Paint.
Or send to us for complete information and costs, the work
to be done by someone in your family.

THE SANDUSKY CEMENT COMPANY, 1002 The Engineers' Bldg., Cleveland, Ohio
Manufacturers of Medusa White Portland Cement (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste);
Medusa Gray Portland Cement (Plain and Waterproofed); and Medusa Portland Cement Paint.

MEDUSA
CEMENT PAINT
IT'S PATENTED
Who'd ever think it was Zero outside?

"Thank goodness we put in our Newport Boiler last summer! It's biting cold tonight, yet in here we're as snug as can be. And I haven't touched the coal shovel since before breakfast."

One of the first essentials in a modern home is a heater that will provide even heating under all conditions, with least possible attention and lowest fuel expense. The Newport meets these specifications easily, with plenty of extra merit to spare.

Gravity fuels the Newport magazine-fed boiler, in accordance with the weather's requirements and the magazine holds enough fuel to last from one to seven days, depending upon the temperature wanted. Furthermore, small size coal used in the Newport that costs at least $5.00 less per ton positively makes a fuel saving of from 30 to 50%.

It will pay you to investigate the Newport before installing a boiler in a new or old home for the experience of legions of satisfied Newport owners indicates that this is the one boiler which will completely meet your needs.

NEWPORT BOILER COMPANY
Division, Hart-Parr Company
529 South Franklin Street CHICAGO

Here's what may happen To You!

YEs. a common sight to see a natural Slate Roof eventually being applied right over the original one.

This builder thought he "saved" something by using cheap material on his original roof—but leaks soon compelled him to re-roof with slate.

Don't attempt to "save" on your roof. If you don't have the slight additional price for slate, borrow it. It's better to pay a little interest on something that will always retain its value than to pay out the entire principal later in repair bills.

Let us tell you more about slate—the investment roof. Send for our pamphlet "XX."

VENDOR SLATE COMPANY
Easton, Pennsylvania
QUALITY and Modern Protection for YOUR HOME

Herringbone
DOUBLEMESH Metal Lath

You cannot build a modern home today and have it considered a quality home or a modern home unless it employs the advantages and protection of steel. And the best way of obtaining these is to use Herringbone Doublemesh Metal Lath in all wall and ceiling construction. This finest of metal laths provides greater fire safety, greater soundproofness, greater rigidity — all important factors. And by preventing cracks, it assures the permanent beauty of plaster effects. Make sure your home will be a modern home and a quality home by insisting on Herringbone.

Sold by Genfire dealers everywhere. Write for literature.

Genfire Steel Company - Youngstown, Ohio

Manufacturers of a Complete Line of Firesafe Building Products, also Waterproofings and Concrete Preservatives. Branches in all Principal Cities. Dealers Everywhere.

GENFIRE
FIRESAFE BUILDING PRODUCTS
THE SMALL HOME

INTERIORS

FOR interior trim, doors, veneer paneling and hard durable floors, birch is ideal. Its indescribable beauty in marvelous transparent stains that enrich the attractive birch grain, wins the enthusiastic admiration of everyone. Available in many colors and tones — delicate orchid, pastel green, royal blue, mellow browns, silver gray, amber, rich rare ebony, natural or golden, and many others—these new finishes permit a different decorative scheme for each room, all equally lovely.

Interior woodwork of Wisconsin-Michigan birch is an asset to any building. Nearly "mar-proof" hardness assures that your birch trimmed home will always retain a fine appearance.

For Furniture, too birch is a preferred cabinetwood. Today, birch furniture—in early period designs—is again the vogue with people of discerning taste and has attained new heights of popularity that will be perpetuated by the sterling qualities of the wood itself.

GET BEAUTIFUL BROCHURE—FREE

May we send you a complimentary copy of our birch brochure? Contains much information of value and has pictures from homes by eminent architects and decorators—several in color.

THE BIRCH MFRS. ASSOCIATION

THE HOUSE THAT CARPS BUILT

(Continued from page 28)

Having previously decided on white and mahogany for the second floor and chestnut for the first, to be finished in the natural grain, I was somewhat out of patience at this question, and snapped rather rudely, "I thought it was all settled that we were to have the natural grain finish."

"Can't be done," said Mr. Builder. "Folks are picking the natural grain out of the wood and making bootleg whiskey out of it; so the Prohibition enforcement agents have forbidden the exposure of any more natural grain."

When I came to I was tucked away in a nice comfortable bed in a hospital. At first I was afraid to ask what hospital it was for fear it was a "funny house." It seems that the doctors thought I had suffered from a slight stroke. At any rate, they did not think I was too sick to see Mr. Builder, who was duly ushered to my bedside.

"Now what sort of a garage do you want, Mr. Carpenter?" were his soothing words.

"Mr. Builder," said I, "who is the best, highest priced, most stubborn, bull-headed architect you know?"

The builder thought for a moment.

"I think that Felix Framenhousen about fills that bill!" he said.

"All right, then," said I. "You will take your orders from Felix for the garage."

When I awoke, the nurse was standing by my bed in a one-piece bathing suit, ready to go down to the beach. "The Doctor says you are discharged," she said, as she fluttered out.

Then I arose, dressed myself, and walked home.

Tile Walls Are "Everlastingly" Beautiful

YOUR new home will stay like new years longer if you build its walls and partitions with tile. Stucco and plaster stick tight to tile, and, if properly applied, will not crack or crumble. Upkeep expense is practically nothing on such walls—the outside never has to be painted and interior decorations stay bright and clear much longer. Insurance rates are lower because a tile home is fire-safe. It is warmer in winter and cooler in summer. If you ever wish to sell, it will attract more buyers and bring a higher price.

Tile construction will cost you no more completed than when ordinary materials are used.

May we send you the illustrated circular, "How to Use Denison Load-Bearing Tile"? Many small-home builders have found it valuable as well as helpful. No obligation—just write—

MASON CITY Brick & Tile Co.

314 Denison Bldg.

Mason City - Iowa
You can’t take your roof out of the rain and snow

A GREAT DEAL of the winter your roof lies under a blanket of snow. In spring the snow melts. Then comes driving rain—intense heat. You can’t bring your roof inside to protect it from this weather. It must withstand the cold of winter—the heat of summer. Ordinary roofing cannot do this long—that’s why so many people use Leadclad. Leadclad gives you the protection of PURE LEAD, long known to be the best roofing material available. Leadclad is copper bearing steel on which is fused a heavy coating of PURE LEAD.

Leadclad is light in weight and may be applied over any construction that will support tin or composition roofing. If you are tired of paying yearly repair bills for your roof, gutters, flashings, conductors, use Leadclad. You’ll be money ahead.

Leadclad is furnished in beautiful Spanish Tile, dignified shingles and a complete line of drainage products as well as in roll, V crimp, corrugated roofing and flat sheets. "Defying Age & Time" is a booklet which gives you the details of Leadclad economy. Write today for your copy. It’s free.

Leadclad Copper has a pure copper core with a heavy jacket of PURE LEAD. It combines the advantages of both metals and eliminates the disadvantages of each. Very popular with architects for flashings, valleys, gutters and conductor pipe.

WHEELING METAL AND MFG. CO.
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A COMPLETE LINE OF GENUINE LEADCLAD AND APEX GALVANIZED ROOFING MATERIALS

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AXES
ROLLS
LAVES
ROUGH
VALLEYS

ALSO APEX HEAVY GALVANIZED
Fire, Storm or Sun
Won't Harm This Roof
FOR IT'S MADE OF
AMBLER ASBESTOS SHINGLES

Here's what Mr. Kunzelmann says about his roof:

"Permit me at this time to state that I know of no nicer or better roof than one composed of your Shingles."

Satisfied owners are the best endorsement for any building material.

There's an Ambler Asbestos Shingle for every purse and every type of architecture. Among the many reasons why you should insist on this shingle—

It is FIREPROOF
EVERLASTING
ATTRACTIVE
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Write for Booklet "Your Home—
It's Only as Good as its Roof"

ASBESTOS SHINGLE, SLATE & SHEATHING COMPANY
Factories: Ambler, Pa., and St. Louis, Mo.
Branch Offices in all Principal Cities.

Our Heritage of Furniture
(Continued from page 9)

This leads us at once to a discovery about furniture that is rather interesting. We have been talking about rich palatial types, and now we must consider for a moment peasant or cottage furniture, the furniture of those who live in simple houses, and who are really the backbone of every country. Where did they get their ideas for their chairs, tables, and beds? Did they create these themselves out of their own lives?

Apparently not. It seems that peasant styles in every country are really adapted from the fine grand styles of the rich and noble whom the simple people looked up to with such respect. In each neighborhood there would be members of the nobility, a center around which a large peasantry would revolve. This man and his family would go to court and bring back with him some fine beautiful pieces of furniture that he saw while away. Then he would decide to have some more made quite like it, and would often call in a craftsman from among his own people. This man would work on the piece, and then later would make one similar to it for himself or his neighbor.

In this way it seems that furniture styles have worked through from the top down, born very largely perhaps from man's inclination to admire that which seems above him. The one known exception to this process is the Windsor chair. No one really knows just where it did come from, but it seems that it probably is a contribution from the humbler side of life, that it is one piece that has worked its way from the bottom up, while most others have evolved from the top down to simpler, every day forms.

In making his adaptations of the grand pieces he saw and admired the peasant did an honest job, however, quite unlike our cheap copying of fine forms that cannot be made in hit or miss ways. The man from the country really evolved a style of his own from that he borrowed until today peasant styles are a rich course of inspiration. With us I feel that our true Early American furniture might well be called our peasant furniture. Certainly it grew from the fine pieces brought over in the small ships that came from England, ships so small that only very precious things could be brought along. Then as American life developed those heavy (Continued on page 40)
To be truly modern—Heating Equipment must include this Heat Saver

WILL you put a good boiler and good radiators into that house you are building or re-modeling—and stop there—losing a third or more of the costly heat by leakage through the walls and roof? Or will you make your heating equipment complete—and your home really modern—with a thick flexible blanket of Balsam-Wool?

Even in an old home a blanket of Balsam-Wool in the attic will go a long way toward making the heating equipment modern and complete, add to your comfort and save a fifth or more of your fuel bill.

Balsam-Wool is a Heat Saver. Balsam-Wool will cost you almost nothing. The saving you make by installing a smaller boiler and smaller radiators pays all or at least a large part of its cost. The fuel you save ever after is clear gain.

Balsam-Wool—flexible, a full inch thick—is made for heat saving. It is not a substitute for anything else in the house. Whether you are building a new house—or would like to make your present one more modern and livable—you should know more about Balsam-Wool. It is sold through lumber dealers. Send the coupon for free sample and booklet.

WOOD CONVERSION COMPANY
CLOQUET, MINNESOTA

Makers of Balsam-Wool, the Flexible Insulating Blanket. Also makers of Nu-Wood, the All Wood Insulating Wall Board and Lath
Sales Offices in Principal Cities

Gentlemen: Please send free sample of Balsam-Wool and booklet “House Comfort that Pays for Itself.” I am interested in insulation for

☐ A new house ☐ The attic of my present one

Name:
Address:
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Homes with Children

need HERRICK Triplex Insulated

You are building your home for those you love—whose comfort and health mean more to you than anything else. That is why one of the very first things you should make provision for is a Triplex Insulated HERRICK Refrigerator.

Foods Keep in Prime Condition

HERRICK Cold Dry Air Circulation keeps the air moving in a constant circle through the refrigerator, sweeping away impurities and odors. No dampness, no moisture. Foods stay sweet and fresh for days at a time.

Use Either Ice or Electricity

Designed for both. Any model may be equipped for electric refrigeration by placing the cooling tank or coils in the ice chamber and placing the compressor or mechanical device in the basement, or models may be had which contain the whole unit.

Triplex Insulation Insures Maximum Service

HERRICK provides a three-way protection against warm air. The cabinets and linings are non-conductors of heat, and in between is heavily packed MINERAL WOOL, shown by U. S. Bureau of Standards' tests to be one of the most effective insulating materials.

HERRICK Outside Icing

Permits regular icing without bother to the housewife. Saves ice in cool weather. Write for free blue print plans.


HERRICK THE ARISTOCRAT OF REFRIGERATORS

VARIATIONS IN EXTERIOR FINISHES

There was a time when concrete blocks represented so much substantial building material and nothing more. They were sound and economical. They could be counted on to carry loads faithfully. They were useful in foundation material and above grade as backing for brick, stone and stucco.

Sometimes they were prepared with rock faces in imitation of rough hewn stone. Architects did not like that. They did not care for them because the imitation was not very good for one thing, and besides, with blocks all of the same exact form figures were made in the wall by the constant repetition of fixed irregularities that did not bring fine appearances.

But architects have found ways of using concrete blocks in the modern manner of manufacture that give highly satisfactory results. Current architectural magazines commonly carry illustrations showing how this material has been used in houses of considerable expense and elaboration and in simpler ones. Where the utmost has been made of the qualities of the block, fine appearances have resulted. There are a great many ways to do this.

If we cover the block with stucco, that is one way. But it eliminates the block from consideration excepting as a high grade structural unit. On the other hand, if blocks of smaller size are used and they are painted with cement, the form of the unit shows through and a most satisfactory result is obtained.

Other methods of using block may be employed. For one, the block in a variety of sizes are laid up so that the wall has the appearance of random squared ashlar; in other words, a wall of squared stones of varied sizes.

Another method takes into account the fact that the surface of the block may be treated with specially selected sands or gravels so as to obtain variety of coloring and texture. For example, white marble with a sprinkling of black marble or green-black copper slag may be employed to obtain an effect resembling natural marble.

Buff pigment and graded marble chips with a sprinkling of micaceous is employed to produce a sparkling surface similar to stone. The variety of these finishes is, of course, only limited by the invention of the manufacturer and the desires of the designer.

As with the other materials possessing a wide range of form, color and texture, there is often a natural tendency here to over stress these qualities. This must be resisted. Over elaboration, especially on a small house, is never as satisfactory as a well tempered simplicity.

Under the control of a competent designer these qualities inherent in concrete block may be employed to obtain architecture of a sound and lasting character, a type of home building which is by no means commonplace and which under expert management is sure to bring the owner real satisfaction.

Another recently developed product along this line is concrete tile for roofs. Because of the requirements that they be waterproof, relatively rich concrete mixtures are used, with the results that high strengths are obtained. And just as concrete grows stronger with age, so concrete tile becomes better with each succeeding year.
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MOTORISTS along Rural Route No. 1 out of Grand View, Mo., pass this house that seems to have sprung from its very setting.

For this house in this place, Slatefield Blend — heather blue, heather green and purple — was selected by its owner, Miss B. V. Parker, and laid in thatched effect. Bits of brightness were added by using a few Slate Reds in the lower portion, some Fire Bufs in the central part and several Golden Bufs near the top.

There is no other roof in the world just like it and probably no other would have so well suited this house. And that can be said of any house roofed intelligently with Winthrops because there are twenty colors — solid and blended — from which to select the colors for any house in any surroundings.

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Bulletin A-19

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PATENTS PENDING

SPRING RAINS AND GUTTERS

(Continued from page 15)

crimped design on their sides to allow for the same expansion, are apt to split down the corner or side.

One rarely ever sees a house without enough leaders. The worst conditions we often notice are the unrelated position of leaders to the general architectural lines of the house. Many a house is ugly because of the leaders which run like crazy snakes across the facade or perpendicularly to the ground.

Now as everyone knows who has ever owned a house, the trees are in league with the dust of the summer months to plug up the inlets to the leaders. Wire baskets at the mouths, while often forgotten, are quite necessary to keep out trouble. Cleanouts in the cellar to permit one to get at the leader traps are also advisable.

With all these precautions well in hand, with good material in the flashing and gutters and ample leaders, one can look out at the spring rains with confidence. But he who has neglected this part of the house, will be forced, some fine spring day, to look at wet plaster ceilings and drops of unwelcomed water, not harbingers of lovely weather to come, but omens of bills.
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"Is Your Husband That Way Too?"

Asks Bess in that Witching House Bookie, from which this is taken.

"IS YOUR husband that way too? What makes them act like that?

"There's for instance, the way he sprung on me the buying of this old Witching House. I'm ashamed to admit it, but I certainly did lose my temper. I went right at Jim and told him how when he bought his car, he made all kinds of investigations as to the engine, the differential and the labedo, (if there is such a thing).

"But when it came to putting in a heating system, on which our comfort depended for at least seven months, he just off hand signed a contract for a heating system.

To which he replied rather crackly:"

What he said was just plain horse sense. The kind that you can hitch to your heating problem and be sure of the right answer. It's told about in a most human readable way in the Witching House Book. Send for it.
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Our Heritage of Furniture
(Continued from page 34)

pieces of oak, and walnut were simplified into the cupboards; slat-back, ladder-back, and rushbottom chairs, very straight and stiff, and surely anything but comfortable; gateleg tables, long narrow refectory tables that grew from the old trestle tables; later smaller tables were added; and always there were chests.

We probably none of us quite realize the importance of the chest in the development of furniture. It undoubtedly is the ancestor of all box or case furniture. Probably the first chest was made from a hollowed out log in a country where were many trees, and from a hollow stone in a rough rocky country. In early times it served as a seat, a table, often a bed, and of course was always the repository for all sorts of valuables. It was really the family trunk, as well as the safe deposit vault and strong box. The workmen of the Middle Ages contrived the most ingenious locks to insure safety and protection in a day when robbers and bandits were very much the fashion. Sometimes it would take as many as three keys to lock up a strong box, and the real keyhole was not at all the one you saw on the outside. Whenever we think we are today doing the most clever things in the world it is well to take a look back at what men have done in the past. It always makes us a bit more modest in our claims, for men in days gone by have done some very clever things.

For centuries the chest was used in its original form of a big box, a really handy and cumbersome piece of furniture when the truth is told. Then someone, perhaps a woman, discovered that if a drawer were put in at the bottom it helped a great deal. Then it was only a step to two drawers, and three drawers, and finally the chest was all drawers, and we have the "chest of drawers." Writing boxes with slanting tops came into use fairly early, later they were attached sometimes to a table and sometimes to a chest of drawers, and the slant top desk was born.

Then to save bending over someone had the idea of putting a chest of drawers on a framework, and lo the highboy appears. If this word puzzles one, as it may well do, for in English it does not seem to have much meaning, it may help to remember that it probably is derived from the French "hautbois" meaning literally "high wood."

Someone else to save space perhaps piled one chest of drawers on another and
we have the beginnings of the “chest-on-chest.” Thus step by step did the form we are so familiar with today grow and evolve from human needs.

Next to the chest the chair has had the most changes in its form. It is often said that the chair is the most flexible piece of furniture, changing more quickly than anything else under new and different conditions. While the Egyptians, the Greeks, and the Romans made beautiful chairs, it is perfectly amazing to me how slow the people of the Middle Ages were in getting the secret again. For centuries and centuries they sat on chests, benches, and stools. Finally when the chair did appear it was so choice and so special that only the master of the house and the honored guests might sit on it, every one else still using benches and chests. This idea is still expressed today in the “chairman” of the meeting, and we still rise and “address the chair.”

From 1600 to 1800 furniture forms changed and developed more rapidly and more definitely than the world had ever seen before. So when we stop to think of it furniture as we know it is really very modern. From 1600 to 1700 we see a gradual toning down and simplifying of the boxlike, straight line, richly carved, early Jacobean until by the end of the century all the carving has practically disappeared, and the whole contour is lighter and more graceful. Highboys set up on frames have appeared by this time.

In England the end of the 1600’s saw a change in their furniture caused by their having a Dutch king and his English queen on the throne. William and Mary were very much interested in everything to do with furnishing and they brought many ideas with them. Needlepoint was the fashionable embroidery of the day and Queen Mary with the ladies of the court was very busy turning out quantities of this beautiful embroidery for upholstery, bell-pulls, and even for decorative use as pictures on the wall. The furniture of this time is known as William and Mary, a style that our furniture manufacturers began copying in dining room arrangements several years ago. An indication to the real quality of the style is that it has survived all the cheap imitations of it that have been made.

This brings us up to a very significant development in furniture that came in with Queen Anne, another English monarch with a Dutch background. Next month we will pick up the story at this point showing the very significant changes that took place during the hundred years from 1700 to 1800 and a little beyond for good measure.
enclosures have the great advantage of ease. In some cases are so arranged that their filling can be accomplished with ease. Unless the most elegant of them are chosen, such enclosures are not too expensive for the average home—at least, its chief rooms. But the engineers of the University of Illinois Experiment Station concluded their research on this equipment with the statement that "proper humidification cannot be obtained by placing pans on low temperature surfaces such as hot-water or steam radiators unless an excessive amount of water-surface is exposed."

Most warm air circulating heating plants have water-pans built into their fronts, projecting inside their casings, where radiant heat from the firepot converts the water into steam that is taken up with the air-currents and discharged through the warm air registers into the various rooms. This equipment costs nothing, either for purchase or for operation. Unfortunately, engineering tests have shown that evaporation from these pans is limited to a gallon or a half a day. So they are adequate for the smaller humidifying jobs shown to be necessary by our Evaporation Table, but quite unable to supply the required moisture for the larger homes.

One possible disadvantage is present in all these humidifiers except the second type described. They have to be filled, in most cases daily, or else they go dry and then are useless. This has created a need for an automatic humidifier that is at the same time "foolproof."

Such is the fifth type. It consists of an attachment to the plumbing pipes of the house, whereby water is brought down to the front of the warm air heating plant and is introduced through the casing into a series of troughs in which it is evaporated by radiant heat from the firepot. If an excessive amount of water is turned on, it overflows from the first trough into the second, lower one, and from that into the third, and then, if it is not all evaporated, into the ashpit. There it dampens the ashes to prevent dusting and creates steam which aids combustion.

This device is "turned on" at the beginning of the heating season, is regulated during the first few days so as to supply the proper percentage of relative humidity without undue over-flow into the ashpit, and then is forgotten until the following spring, when it is shut off. Tests in representative residences-installations have shown this humidifier capable of evaporating as much as 20 gallons of water a day, and of maintaining a relative humidity as high as 64 per cent.

Of course, advantages of this equipment are limited to warm air circulating heating plants. If your home is heated by another type of equipment, humidity must be supplied by another kind of device. But the big point is that any of those that have been described are infinitely better than none at all. In fact, from the air-conditioning engineer's point of view, it is almost as much a defect in home-construction to omit some provision for humidifying as to omit adequate provision for heating.
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Miami Wall Tile—a superior wall covering at half the price of clay tile.
Of What Are Houses Made?

The Booklets and Pamphlets below describe in an interesting helpful way materials, equipment, and furnishings that you will want to consider for your home. They will be sent for the asking.

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Service Editor, THE SMALL HOME, 1200 2nd Ave. So., Minneapolis, Minn.

Please send me the following booklets as listed in your January 1929 issue. (Order by number.)

Also secure for me free descriptive literature on the following subjects:

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(Continued on following page)
COMMUNIS DEPRESSA) and the savin juniper. All three varieties are low growing and easy to keep within bounds, forming compact interesting groups when planted within a few feet of one another. Still lower varieties not exceeding two feet in height are the tamarix savin, the Japanese juniper, a beautiful blue tinted variety, and the Waukegan juniper, a trailing plant sending out long branches or runners in an interesting fashion.

Among the low growing pines are the Montana pine and a lower compact variety, the Mugho pine. Even though compact, both varieties may be planted in groups.

Among the white cedars or arborvitae are the globe arborvitae, the Siberian arborvitae, and the tall narrow form, the pyramidal arborvitae.

The accompanying photographs are a striking indication of the happy friendship existing between Old Man Winter, Jack Frost, and the Evergreen family. Regardless of the amount of other types of planting, a home without some evergreens is apt to appear bare and uninteresting in the winter.

The planting plan and accompanying plant list represent a well-planned evergreen planting for the front lawn of a small property. About the entrance only low types of evergreens are used. The larger trees such as red cedar, blue spruce, and bull pine are grouped where space between trees will allow normal growth and result in beautiful masses of green, where the individuality of each tree will not be entirely lost. The plan represents clearly the approximate spacing necessary between the various types of evergreens used for entirely different purposes — low foundation planting, group of larger growing trees as borders to the lawn and as enframe ment for the house, and low spreading varieties for steep slopes and walls.
The Architects' Small House Service Bureau

ENDORSEMENTS

The Architects' Small House Service Bureau is the only organization of the kind in the United States, controlled by the American Institute of Architects and endorsed by the Department of Commerce, United States Government.

THE Architects' Small House Service Bureau idea originated in and is approved by the American Institute of Architects, and in order that the development of the idea may retain the character of a professional service and be prevented from assuming the character of a purely commercial undertaking, have appointed a number of local architects whose services may be retained by the organization of the Bureau without the Bureau assuming responsibility for the designs, plans, specifications, or other service of the Bureau any more than it assumes responsibility for the service of individual members of the Institute.

This control exists solely through the right of the Institute to appoint a majority of the Directors of the Bureau, such appointees being able thereby to impose policies consistent with the expressed wishes of the Institute.

"The approval of such policies does not carry with it any interest in or approval of any specific acts of the Bureau in the development of its operation, nor any financial interest or control whatever.

"The approval of the Bureau by the Institute means:

(a) That it approves the idea only.
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"The Board looks upon an architect's work in a Bureau as primarily a contribution to the improvement of the small house architecture of this country, involving houses of not more than six primary rooms."

BOARD OF DIRECTORS

The American Institute of Architects, in looking upon the work of The Architects' Small House Service Bureau of The United States with its divisions and branches and having examined its organization and incorporation papers, the complete plans, specifications, documents and bills of materials, with the designs worked out for local conditions and to use sound materials and eliminate waste, materially simplify home building problems. The form of control by The American Institute of Architects should guarantee a high standard of service. It gives me pleasure to endorse this work and to assure you that the Department of Commerce will do all it can to cooperate with the Institute and the Bureau.

HERBERT HOOVER,
Secretary of Commerce,
United States Government.

Homes Shown In This Issue

Price List and Outline of Service

YOUR purchase of Architects' Small House Service Bureau plans includes all necessary documents—three sets of blue prints covering all elevations and details, three specifications, three quantity surveys, and two forms of agreement. One complete set of reversed drawings may be obtained without extra charge if your lot demands the opposite arrangement of rooms from the original plan. Our technical staff is at your service and will give unbiased advice on any question you may ask.

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To make it possible for the prospective builder to have complete costs figured under local conditions without the necessity of keeping plans which may prove more expensive to build from or less than the builder wishes, we make the following offer:

Plans may be obtained on approval for fifteen days, by sending us your check for the full amount of the service fee. If you retain the drawings your check is accepted as payment in full. Plans may be obtained on approval for fifteen days, by sending us your check for the full amount of the service fee. If you retain the drawings your check is accepted as payment in full. If, for any reason, however, you decide not to build from the plans selected, return them within fifteen days (not counting time in transit) and we will deduct a charge of $5.50 from your deposit, returning the remainder to you.

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The Architects Small House Service Bureau
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The designing of this interior offered several problems that were happily solved with Milcor Products. The result was a room of extraordinary charm.

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