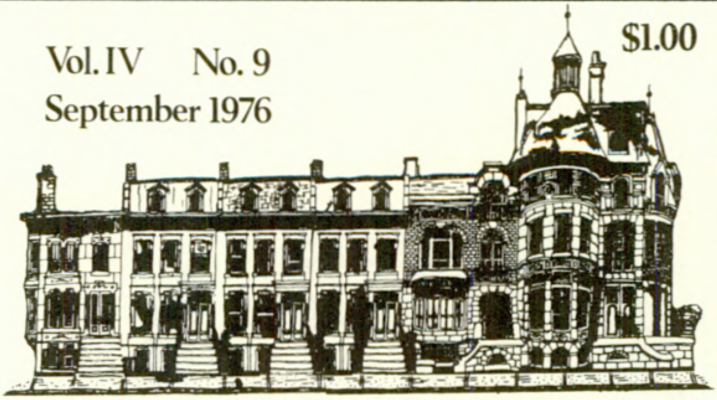
THE OLD-HOUSE JOURNAL

Vol. IV No. 9
September 1976

$1.00



Renovation And Maintenance Ideas For The Antique House

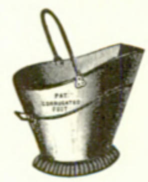
Cooking And Heating The 19th Century Way

By Don Yule

MY ARTIST WIFE and I recently bought a three-storey brownstone in Prospect Heights, Brooklyn, having lived in an apartment-cum-studio in nearby Cobble Hill all the previous six years of our marriage. The house was priced low, as it was unrenovated and needed some work. Mortgage money was expensive and, for me, unobtainable as I am a seasonally-employed singer with an opera company.

SO WE SCRAPED OUR RESERVES together, took a deep breath, closed our eyes, and paid cash for the house. This represented a big, long-range saving in interest, as well as in closing costs, but it did leave us strapped for renovation funds. So we decided to patch-up things as cheaply as possible, and wait a year or so for any expensive improvements.

THE CIRCA 1879 house was really in pretty good shape, considering that no major improvements had been made since electricity was added in the 1920's! One way we saw to make a huge saving was on the heating system, the likes of which few people living are old enough to remember. The house still had the original coal-burning stoves in the kitchen and dining room on the basement floor, and five tons of coal were in the cellar. We knew that the old gentleman who had owned the house prior to us had used these stoves, so we decided that we would continue using them at least through the coming winter, thereby deferring the expense of a new heating system for a year, plus saving on heating costs by burning the coal instead of the far more expensive oil or gas. I had read that 81¢ worth of coal produces the same number of BTU's as $2 worth of heating oil, and gas is more.



THE STOVES were going to need some work before a winter's use could be undertaken. Since one of the main reasons for fixing them was to save money, I undertook the job myself. Besides, I thought it highly unlikely that I could find anyone qualified to do such a job, this side of the grave. I tackled the easier (smaller) one first; the parlor stove.

Repairing The Parlor Stove

HEAT FOR THE FRONT ROOMS of our house is provided by a "Splendid Heater - No. 18" made by Fuller & Warren, Troy, N. Y. Older folks in our neighborhood call it a Baltimore heater. It is actually a base burner which I refer to formally as the parlor stove. Early into our first winter of use, we lovingly christened it "Beelzebub."

BEELZEBUB protrudes from the gray marble fireplace in our dining room, which is the ground floor front room of our six-room row house. The dining room itself is heated by the stove in conventional radiant fashion,

(Continued on page 2)

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RESEARCHING & DATING YOUR HOUSE

The parlor stove has two sets of doors, both with isinglass panels. The mica, or isinglass, glows brilliantly when the stove is lit, making Beelzebub quite a warming and impressive sight on cold days.

THE OLD-HOUSE JOURNAL®

Published Monthly For People Who Love Old Houses

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Published by The Old-House Journal Corporation, 199 Berkeley Pl., Brooklyn, N.Y. 11217. Tel. (212) 636-4514. Subscriptions $12/yr. in U.S. and Canada; $20/yr. elsewhere. Printed at Royal Offset Co., 34 W. 15th St., NYC 10011.

(19th Century Heating--Cont'd from page 1)

but only a small part of the BTU's are dispensed here.

THE LARGER PART of the stove is recessed in the fireplace. It is constructed so that outside air enters on either side of the stove, is warmed as it passes over and around a system of hot pipes (through which the hot gasses from the burning coal are drawn up the flue), then the warm air rises through a large oval "riser" to the parlor floor. Here it exits partly through a grate in the parlor fireplace, the rest of the warm air passing into another riser to the master bedroom on the top floor. The flue pipe passes up through the center of the lower riser as far as the parlor chimney, which rises twenty feet above the roof of our house in order to clear the taller house adjoining ours. There are several controls that regulate how much heat goes to each floor.

THE FIRST STEP was to disconnect the flue pipe so the stove could be pulled out of its recess. From the quantity of soot and ashes in back of the stove, it was obvious that this had not been cleaned out in many years (if ever!) and that there were leaks in the stove, or else the soot and ashes couldn't have gotten there in the first place.

THERE WERE INDEED LEAKS in the stove; iron plates had warped and parted and galvanized steel pipes had rusted through. I removed and discarded the pipes and thoroughly swept out and vacuumed the stove. I also cleaned out the heat risers on the upper floors by drawing a pillowcase stuffed with newspaper through them with a cord, and removed all the soot that had fallen to the bottom of the chimney where the stovepipe entered. The chimney walls proved to be fairly clean; hard (anthracite) coal smoke seems to not dirty up a chimney like wood smoke does.

STANDARD 5-in. galvanized stovepipe was easily obtained from the local stove works for use above the stove. But a harder problem was presented by an inverted V of oval-shaped 7-in. pipe on the back of the stove. I had to make new pipes from sheets of galvanized steel. After first measuring and cutting the metal, I held it in position on the stove by twisting wire around it until it was tight. Then I drilled holes along the seam and fastened it together with sheet metal screws. The seams were sealed with Hercules asbestos furnace cement.

IN REPAIRING A COAL OR WOOD-BURNING stove, it is important that all cracks, seams, holes, etc. be air-tight for two reasons: 1) To keep smoke and burning gasses from escaping where they could contaminate the room air, 2) To control combustion. If air leaks below the level of the coal grate, the coal will be consumed too fast, generating excessive heat. If the leaks are above the coal grate, the draft will be reduced. This might not interfere with an already burning fire, but will make starting a new fire more difficult.

THE FRONT DOORS OF MY STOVE HAD WINDOWS of isinglass (mica) which needed replacement.

While impervious to heat, isinglass is quite fragile and one must avoid touching these panels when using the doors. The panels are held in place by a frame bracket screwed to the inside of each door. Fortunately, a supply of extra mica panels was found in the house.

THE COAL GRATE IS the convenient shaker-type; a special handle is inserted in front of the stove, and this can be moved from side to side and drawn in and out to shake the ashes down into the pan as the fire burns. Unfortunately, the function of this grate tends to be somewhat self-destructive over a long period of time. Coal does not uniformly reduce to ashes as it burns. Clinkers form--rocklike lumps of incombustible impurities. These can catch between the teeth of the two sections of the grate as they slide in opposition, and if care is not taken a tooth or section of the grate can be broken or bent. Again, these cast iron grates can be drilled and mended with steel plates and stove bolts, but here the plates must be fastened to the outside of the grate, away from direct contact with the burning coal, which would soften and consume the steel.

Repairing The Kitchen Stove

ONCE THE EXPERIENCE of overhauling our parlor stove was acquired, I turned to the cookstove which was obviously going to be a greater challenge. To begin with, it is a lot bigger. Six feet high, it is recessed in a large hearth on one wall of our kitchen. The cooking surface has five stove lids; three form a triangle in the center over the firebox, and one is on each side for simmering. Above there are two ovens side by side, and above that a warming oven behind sliding doors.

BESIDE THE STOVE is a thirty gallon cast iron hot water tank. Pipes lead from it to the front of the stove, where there is a hollow cavity in front of the firebox. This "water front" heats the water when there is a fire in the stove, and a gas-fired coil heater beside the tank pinch-hits at other times.

ON THE SIDES OF THE STOVE are air inlets that allow air to enter and pass around the back of the stove and up air ducts to heat the rooms at the rear of the house. From the standpoint of economy, this stove is very significant to us. The same coal fire heats five burners, two baking ovens, a warming oven, the hot water tank, and half of our house. Indeed, the kitchen stove alone provides sufficient heat for the entire house during merely cool weather; I only light the parlor stove when the outside temperature stays below freezing during the day. Moreover, it does this on about 30 lbs. of the cheaper "pea coal" per day. This figures to about $1.20 per 24 hours at today's prices.

BECAUSE OF THE GREAT utility and economy of this stove, it has received more use than the parlor stove and therefore needed more extensive repair. The greatest difficulty lay in the fact that it was impractical to pull it out of its recess. I was able to gain some access to the top, however, by removing several bricks above the mantelpiece. These had been

The cookstove is an Empire No. 3 range, patented in 1868. The Yules also inherited the charming, pot-bellied cast iron tea kettle, designed so that the lower half hangs down through an open stove hole, bringing the bottom closer to the heat.

previously removed and replaced with asbestos cement for mortar when it had been necessary to replace the stovepipe.

PROCEEDING DOWNWARD, the first big problems encountered were the ovens. They are formed by two sheet steel boxes which slide into deep recesses in the stove frame. The trays and guides were cast iron and in good shape, but the boxes themselves were rusted out and collapsing.

WHEN THESE BOXES were pulled out, a large iron recess was revealed, at the top of which was a baffle housing the sliding damper control. These holes connect with the firebox by iron pipes, which have valves to adjust the routing of the exiting gasses. This recess and the pipes all had their share of holes and opened seams.

THE STOVE TOP was a disaster; it had cracked and buckled up towards the center. The lifter holes in all the stove lids and the center partition were burned through, the entire top and front of the stove had split down the middle, leaving a half-inch gap and causing the three center stove lids and their partition to fit poorly.

EVEN WORSE WAS the firebox. The right side was almost entirely gone; the hole had been covered with an old auto license plate (1923) and plastered over with Rutland stove lining, which was crumbling away. The grate and water front were replacements and in good shape.

THE CLEANING OUT was a monumental job. I filled a 30 gallon can with ashes, soot and broken stove lining. New oven boxes had to be constructed from sheets of galvanized steel. Very precise measuring, bending and cutting was necessary so that the new boxes would fit snugly in place. I formed the sides, top and bottom from a single piece with metal screws, lapping over the metal to affect a fairly air-tight seam. I re-used the old oven tray guides and latching brackets, fastening these on with stove bolts.

Don Yule pokes the fire in his kitchen stove. The water front is below the cooking surface where the two pipes carry water to and from the hot water tank on the side.

I WANTED TO MAKE the ovens air-tight so as to exclude all possibility of coal gas infiltration, but I couldn't use solder, as it melts at around 350°. The old reliable asbestos furnace cement solved that problem. I must have used 20 lbs. of cement patching up this old stove. Every seam had to be caulked from the inside only, as I couldn't reach the back. The smoke pipes leading up to the ovens from the firebox were a particular problem because they were located so that I couldn't see my hands while I worked. I had to work "blind" then withdraw my hand and check the work with a mirror.

IT SOUNDS SIMPLE to say that I repaired the stove top with mending plates and stove bolts; but much filing, fitting and thought was required to do this in a way that would leave the stove top as smooth as possible and usable for cooking, yet structurally strong enough to support heavy cooking pots.

I TRIED TWO REPAIRS that quickly crumbled into ruins before I devised a successful repair for the firebox. Since the firebox was 1½ in. larger in dimension on all sides than the firegrate, I concluded that this firebox originally had some sort of fireproof lining. Such a thing was indicated in advertisements I had seen for stoves in old mail order catalogs. Casting about for a substitute, I decided on split fire brick. They are not really split, but rather made half the thickness of standard fire brick. For mortar I used refractory compound the consistency of thick glue, and totally unaffected by heat when hard.

SINCE REFRACTORY COMPOUND cannot be built up to any great thickness, I used the furnace cement to fill in larger crevices. Because the walls of the firebox taper, have rounded corners and three openings for the flues, the task of shaping the fire brick was tedious, and no doubt could be facilitated greatly if one had access to a proper masonry saw. I made do with a hammer and chisel. However, fire brick is cheap so you can afford some mistakes.

Living With The Stoves

HAVING GONE THROUGH a winter with them, we have decided to stay with the coal stoves. Why do I choose to keep our century-old heating plant operating? You may well ask. Of course I can give you practical reasons: it is the cheapest, warmest heat there is; I saved thousands of dollars and much disruption of the house that a new heating system would involve; our little son loves to shovel up coal and dump the ashes. All of these considerations are really secondary, however. First and foremost, I fell in love with the house and its stoves the moment I saw it, and when you love something (or somebody) like that, you don't want to ruin it all by changing everything. Those stoves wouldn't still be here if those who preceded us in this house hadn't cared for them. We feel a responsibility to preserve these stoves, and this house, for those who will follow us here.■

Photos by Jim Kalett.

SO FAR, Don Yule has only told about how he got his stoves repaired and into working condition. In the October 1976 issue of The Journal he describes the heat distribution system and how to fire up and maintain a coal fire. -- Ed.

Remedies For 'Dark, Ugly' Woodwork

By Clem Labine

A COMMON OLD-HOUSE COMPLAINT: "I can't stand that dark woodwork. What should I do?" Most people turn automatically to paint remover. But this can be a needlessly messy—and expensive—solution. Chances are that there is a serviceable finish obscured beneath many layers of wax, grime and shellac. Often, this finish can be revived with a lot less effort than completely stripping and refinishing.

IN PARTICULAR, late 19th century and turn-of-the-century houses often have paneling and woodwork of walnut, mahogany and oak that looks practically black—but which can be revived with minimum effort.

ABOVE ALL, don't plunge in and strip everything off, automatically assuming that the wood will look better "natural." In many cases, a dark finish was applied originally...sometimes because dark woodwork was integral to the design of the house...and sometimes to disguise the fact that cheap, uninteresting woods had been used for the woodwork. More than one person has stripped off dark ugly finish...only to find that they are left with light ugly wood.

THE FIRST RULE is test. There are a variety of revivers you can use. So find the least conspicuous area of woodwork and run a series of test procedures...starting with the easiest and working up to the more drastic and time-consuming.

IF YOU ARE WORKING with the original finish, in all probability it is shellac rather than varnish. Unlike varnish, shellac is readily dissolved by several mild solvents, which means that there are several fairly easy tricks short of total stripping that will rescue the original finish.

FREQUENTLY, the dark color is a combination of the shellac (which darkens with age) plus pigment that was sometimes added to give the finish a darker color. By selectively removing a portion of the finish, you may be able to arrive at a color you like.

● TRY CLEANING first. Mineral spirits (benzine) or turpentine will remove any of the heavy wax build-up. Use plenty of rags or paper towels to wipe the surface. If the rags come off dirty, you are removing considerable surface accumulation. This will leave the surface dull looking. If the color is promising, let the surface dry, and then apply a thin coat of lemon oil or Butcher's wax.

● TRY STRONGER cleaners next—cleaners that will dissolve a portion of the finish. These include proprietary cleaners like Fantastik or full-strength Top Job. Or you can make your own strong cleaner by dissolving 1 lb. of washing soda (sal soda) in a gallon of hot water. Use rubber gloves, and rub down the woodwork with this solution and 2/0 steel wool. Ammonia will also dissolve shellac.

RUB WITH THE CLEANERS until the wood is a shade you like. Then finish as above.

● NEXT COME THE CHEMICAL SOLVENTS. There are several different formulas you can try:

- 15% (by volume) lacquer thinner in mineral spirits;
- 50-50 mixture of lacquer thinner and denatured alcohol;
- Pure denatured alcohol.

START WITH the first mixture because it will take off the least amount of finish. Apply with fine 3/0 steel wool, wetting surface and changing pads as necessary. The appearance of the surface while wet with the solvent is the look it will have when the final coat of wax or lemon oil is applied. When you have taken off enough of the old finish and have the look you want, wash the surface with rags saturated with benzine or mineral spirits.

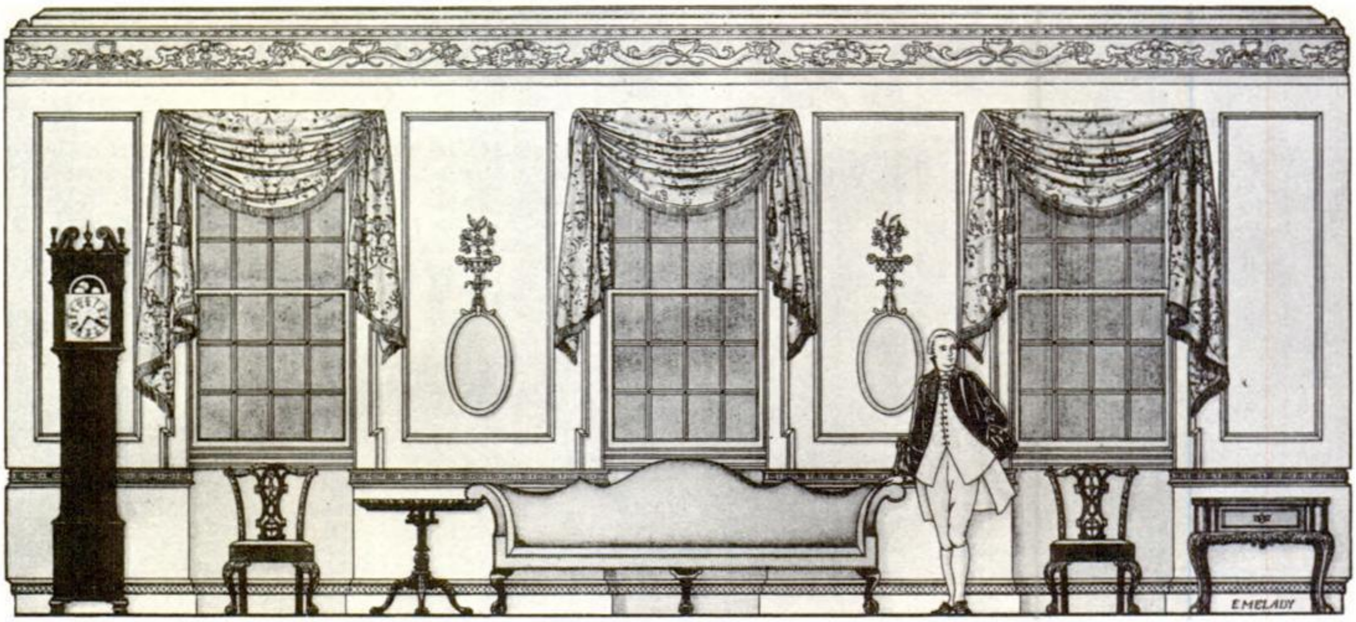
IF YOU WANT A HARDER FINISH on the woodwork than that provided by lemon oil or wax, you can apply a satin finish varnish, or a hard oil finish such as that provided by Minwax Antique Oil or tung oil.

CAUTION: Never apply wax over a surface that has been treated with lemon oil. Unlike tung oil or linseed oil, lemon oil doesn't dry. So the wax will dissolve in the lemon oil and make a gummy mess. Likewise, don't apply lemon oil to a surface that has been waxed. If this disaster does occur, the resulting glop can be removed with mineral spirits or turpentine.

ONLY AFTER all of the above cleaning and reviving procedures have been tried should you move on to the ultimate step of removing all the old finish with paint & varnish remover. Sometimes woodwork that has been stripped entirely of its dark old finish looks very dull and lifeless...leaving the homeowner disappointed—and tired and poorer to boot. ■■

Classic Window Treatments

For The Early American House



THE SWAG VALANCE is the most adaptable window treatment for the period house. Used throughout the 18th century, the swag was then called a festoon and the cascading sides known as jabots. Most early hangings were simply the swag and short cascades (they were rarely long enough to reach the sill) used alone without additional drapes or curtains.

IN THE PICTURE ABOVE, the 3 large windows are draped after the fashion shown in Chippendale's "Director." The fabric is a rare silk brocade with red, blue and green floral sprays (symmetrically placed) against a salmon ground. These hangings are typical of the early swags in that they are simply one long rectangle of fabric, gathered at the corners with a heavy cord. The back edge of the swag is tacked to a cornice board.

THE MOST INTERESTING FEATURE of this window treatment is the varying length of the cascades.

IN THE CENTER PHOTO, a swag is tacked to the cornice board and a French rod (under the swag) holds a single drape. In the first half of the 19th century many variations were used: swag-and-cascades; swag-and-cascades over one or a pair of drapes; or swag-and-drapes.

IN THE GREEK REVIVAL HOUSE swags, cascades and drapes were quite popular. The length of the cascades or drapes were longer--to the sill or floor, and a glass curtain was often used in addition. The keynote of Greek Revival decoration was simple elegance and drapery fabric was silk--brocades, taffetas, damasks. Colors were either light and cool, (light blue, silvery gray, apricot) or (if the furnishings were French) rather royal: purple, emerald green, royal blue, and often trimmed in gold. Window treatments were graceful in line--reminiscent of a Greek toga.

How To Make A Swag And Cascades

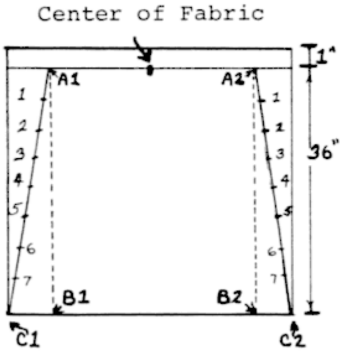
Materials Needed

Muslin for pattern
Drapery fabric for swags and cascades
Lining fabric for cascades (Lining will show--select to match or contrast)
Twill tape
Staple gun and staples

Swag

THE HEIGHT of the window determines the depth of the swag--generally about 16-18 in. deep. The width of the top of the swag is the same as the width of the cornice, but the bottom width of the fabric for the swag should 8-12 in. wider, depending upon the desired finished depth.

Diagram A



Place a piece of fabric 37 in. deep and as wide as needed right side up on a flat surface, and mark center of width at top edge. Draw a line 1 in. below top edge of fabric; on it indicate width of top of swag by marking points A1 and A2, centered on width of fabric. Mark corresponding points B1 and B2 on bottom edge of fabric. Decide how deep the finished swag will be. If finished depth of swag is to be 16 in. allow 5 in. from B1 to C1 and from B2 to C2; if finished depth is 17 in. allow 6 in.; if finished depth is 18 in. allow 7 in. Draw diagonal line from A1 to C1 and from A2 to C2. If you want 5 folds, divide the diagonal line into 6 equal parts; if you 6 folds, divide it into 7 equal parts, etc.

Tack swag to cornice board along one inch allowance at top edge of fabric. Fold at points 1 and pin to A on both sides. Fold at points 2 and pin to A and continue folding and pinning on both sides until all folds are pinned in place, smoothing folds from center out to sides as you work.

Cut off excess fabric on both sides in a straight line perpendicular to the floor. Place twill tape along top raw edge and staple it and the top edge of swag to top of cornice; staple through folds at either side into cornice, making certain staples will be hidden by cascades.

Leaving about 3½ in. beyond last fold, trim away excess fabric along curved bottom edge. Turn under a ½ in. hem.

Cascades

Cascades can be made to any length. For classic proportions, the inside edge should be the same depth as the deepest point of the finished swag. The average cascade is made with three pleats.

Diagram B

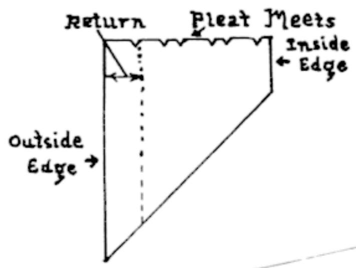
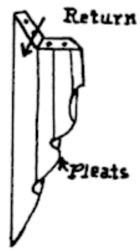
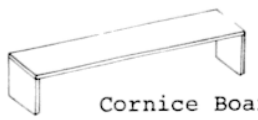


Diagram C





Cornice Board

First, make a muslin pattern. Cut it to shape as shown in Diagram B, with a diagonal line from bottom of inside edge to bottom of outside edge. Allow enough fabric (usually about 4 in.) from outside edge for covering cornice return before starting pleats. Also allow about 1 in. along top edge for folding over cornice, and ½ in. on other three sides for seams. Starting at long side where corner of cornice will fall, fold in three pleats; notch fabric to indicate folds and depths of pleats (Diagram B).

Use muslin pattern to cut cascades and lining pieces. With right sides together, seam fabric and lining together along sides and diagonal edge. Turn to right side and press. Pin top edges together and stitch ½ in. from edge and press. Fold and pin pleats in place; then stitch across top. Bind top edge with matching fabric or finish with tape to hold pleats in place. Make second cascade, reversing long side and direction of diagonal edge. Staple cascades to top of cornice (Diagram C), overlapping ends of swags and covering staples. ■

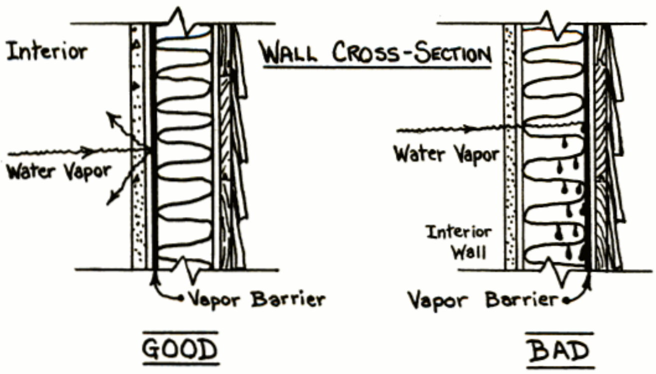
Part II

Insulation And The Old House

By William N. Papian, P.E.
Claxton Walker & Associates

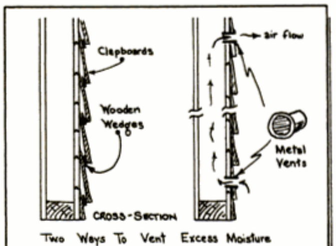
MOST PROBLEMS CAUSED by improperly installed insulation stem from a poor understanding of the condensation factor. Moisture-laden air tends to travel to the outside through walls and ceilings. Kitchens, bathrooms and laundries throw off an amazing amount of water vapor—all of which has to go someplace. In a drafty old house, there are plenty of cracks and crevices that allow the water to escape harmlessly. If you suddenly turn around and tightly seal and insulate every crack, you may generate serious rot and paint peeling problems that you never had before. The solution is to make sure that all water-generating centers have adequate ventilation—and that you understand the principles of vapor barriers.

CONDENSATION PROBLEMS occur in cold weather. As moisture-laden warm air travels through walls, it will soon drop below the dew point and some of the moisture will start condensing out—almost always on the first hard surface it meets. The resulting dampness inside the wall can reduce insulation values and promote rot.



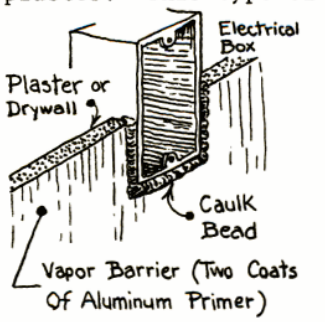
VAPOR BARRIERS are used to prevent moisture from getting inside the partitions in the first place. Vapor barriers should always be placed on the warm side of the insulation—NEVER on the cold side. For example, if you are pouring insulation in the attic floor, lay down a vapor barrier first. (Thin plastic sheeting is adequate.) With blanket insulations, be certain to place the kraft paper or aluminum-foil side toward the inside of the house.

IN SOME CASES—such as blowing insulation into a side wall—it is impossible to install a vapor barrier. In this case, you had better be sure the exterior wall is reasonably porous to air. Most clapboard exteriors are sufficiently porous. If events show that additional ventilation is needed, small wooden wedges can be inserted under the clapboards. In severe cases, metal vents can be used to provide the additional air flow needed to carry the water vapor away harmlessly.



Two Ways To Vent Excess Moisture From Exterior Walls

WHEN LOOSE FILL insulation has been used in side walls, it is also a good idea to make sure that the interior surfaces of the walls are as vapor-resistant as possible. This means spackling all cracks—especially those around window frames, baseboards, etc. Any electrical boxes in the outer walls should be carefully caulked to seal the space between the metal and the plaster. This type of sealing might seem unnecessary, but tests have shown that there is enough moisture loss through the perimeter of an outlet box to form a large ball of frost on the back face during extended cold periods. When this frost melts as the weather warms up, the water released can damage exterior paint films and promote rot inside the wall. In cold climates, sealing of the outlet boxes in insulated walls is especially important in rooms that generate a lot of water vapor, such as the bath and kitchen.



THE SAME PRINCIPLES used in sealing outlet boxes should be applied to all openings in an insulated outside wall. Such openings include exhaust fans in bath or kitchen, air registers and plumbing openings. (Even if your side walls aren't insulated, you should consider sealing these apertures just to cut down on heat loss.)

ADDITIONAL MOISTURE RESISTANCE can be added to side walls with blown-in insulation by coating with two coats of aluminum paint. The decorative paint can then be added on top of the aluminum. This does not offer as much vapor resistance as a continuous membrane—but it helps.

Attic Problems

MOISTURE ESCAPING from the house into the attic tends to collect in the coldest part of the attic. Condensation or frost on protruding nails, on the surfaces of roof boards, etc., indicates the escape of excessive amounts of water vapor from the heated rooms below. If a vapor barrier is not already present, place one between the joists UNDER the insulation. If the insulation is of the loose fill type, the best procedure is to scoop it all up and lay down thin plastic sheeting as described above. Sheeting should lap against the joists for best seal. Less effective—but better than nothing—is the painting of ceilings below the attic with two coats of aluminum paint.

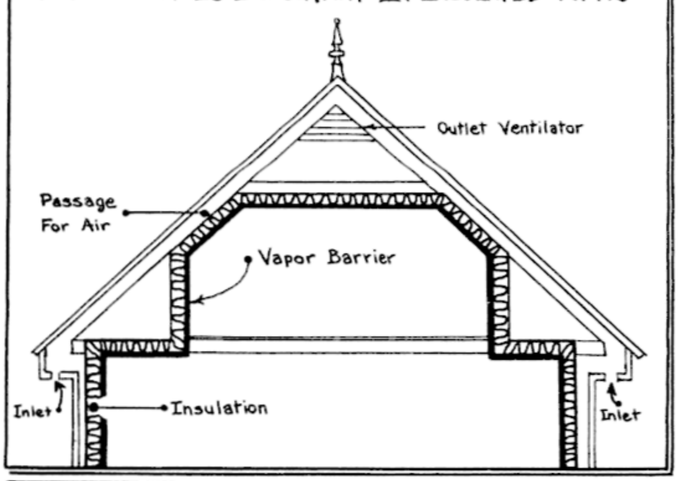
MAKE SURE the vapor barrier fits tightly around ceiling lights and exhaust fans. Caulk if necessary. In addition, the attic should have both inlet and outlet ventilators. Recommended number and sizes of vents for various sizes of attics are given in an excellent government publication.[1]

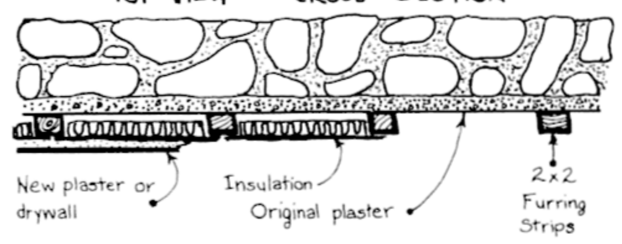
Solid Masonry Walls

THE FULL MASONRY WALL, plastered on the inside, is difficult to insulate because there are no void spaces to fill with insulation. If you are willing to give up some interior space, then insulation can be added to the wall. One technique is to cement insulating foam board directly to the wall. (This can be done with or without removing the old plaster.) The insulating board can be plastered, left exposed, or covered with any desired finish material.

1. "Condensation Problems In Your House: Prevention and Solution." For sale by the Supt. of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price: 75¢. Stock Number 0100-03318.

Ventilation Is Important In Insulated Attic





One Way To Insulate A Solid Masonry Wall

ANOTHER ALTERNATIVE is to attach 2 x 2 furring strips to the wall on 16-in. centers. Then 1-in. blanket insulation can be stapled between the strips. Thicker insulation can be used if you use bigger furring strips. This same procedure can be used to insulate cold basement walls.

THE ABOVE TECHNIQUES have great drawbacks, obviously, for historic houses or houses with rich interior detail. Not only do you lose the original plaster surface, but the trim around doors and windows has to be changed (or moved out) to accommodate the added wall thickness.

A Typical Dilemma

TYPICAL of the questions that arise about insulation are contained in this letter from a Journal reader: "Two years ago we purchased an 1834 Greek Revival house—uninsulated. Some contractors have told us that blown insulation is best. Others tell us that this cuts off air circulation and causes condensation and wood rot. Also, wind enters under the house in one section where there is only a crawl space. Is there any reason why this space cannot be sealed?"

ANSWER: Blown cellulosic insulation should be satisfactory for the side walls. Its moisture handling ability is reported to be superior to fiberglass. Any small amount of moisture that enters the cellulose is absorbed, spread over a considerable volume, then is given up when the atmosphere is drier.

THE INTERIOR WALLS should be made as vapor-tight as possible...sealing all crevices as discussed earlier...and two coats of aluminum paint applied.

THE CRAWL SPACE can be fixed by fastening blanket insulation between the floor joists as detailed in Part I. The crawl space itself should not be sealed off. Enough ventilation should be allowed so that water vapor from the ground can be vented. Ventilation requirements are greatly reduced when plastic sheeting is used as a soil cover to retard evaporation of moisture from the earth. ■■

Reconstructing

Shutters And Blinds

The shutters and blinds are only a small part of the restoration going on at the c. 1880 Glenn House. Our Midwest Editor, Tom H. Gerhardt, is also First Vice President of the Cape Girardeau Historical Association that is doing the work. Tom has written a previous article (Sept. '75) and promises more as the work progresses.

By Tom H. Gerhardt

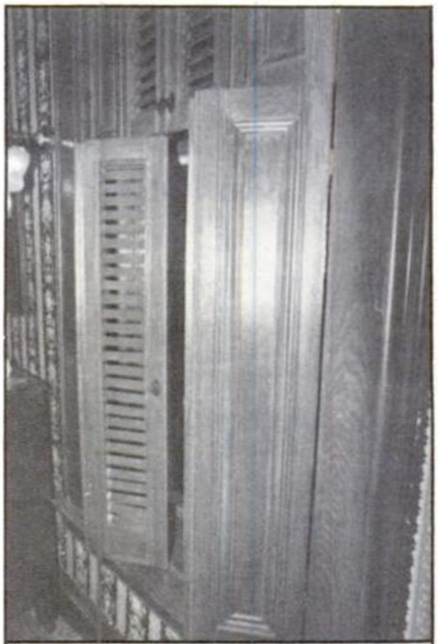
THE GLENN HOUSE had interior window shutters (solid panels) and blinds (louvered panels) on all windows except the servants' room and the kitchen. Of course, to make the hard job of restoration even harder, all of the shutters had been removed and all that was left were hinge holes on the window frames where this important architectural feature had been at one time. Furthermore, there are four different sizes of windows in the House, sometimes with two sizes to a room.

THE SHUTTER-AND-BLIND SEARCH started several rooms back when Association members realized that this problem had to be solved one way or another (not only do the shutters and blinds add greatly to the authenticity of the House and its interior and exterior beauty, but they keep sunlight from spoiling the interior and keep unauthorized persons from peering in from the outside.) The search was a long and fruitless one.

OF COURSE, we really wanted the shutter-and-blind combination that is so typical in this part of the country. The further north and east one goes, the more shutters are found with no blinds; the further south one goes, the more blinds are found with no shutters. These various combinations of all shutters, shutters and blinds, and all blinds seem to have something to do with the climate.

ASSOCIATION MEMBERS FOUND all kinds of old shutters and blinds (and, of course, the wish was to obtain old ones if possible); but usually they were the wrong size, the wrong quantity, or the wrong style. (Shutters and blinds are built to fit the sashes they are milled with. Anyone discarding shutters from an old house is committing a grave sin!)

AFTER THE AUTHOR spent one summer digging through shutters and blinds in Michigan and still had a shutterless house on his hands, he sought advice from commercial mills. Of course, he had already determined that their products



The finished shutters, grained and in place, look quite authentic.

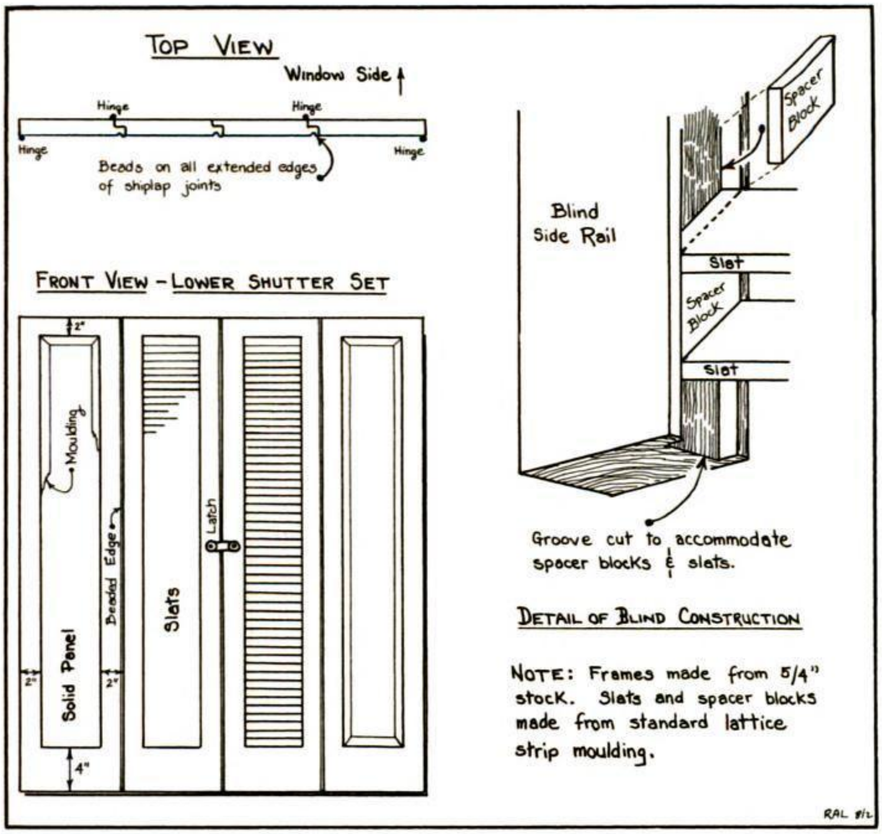
generally on the market are blinds only and will not even meet the thickness specifications as determined from where the remaining shutter stops are on the windows.

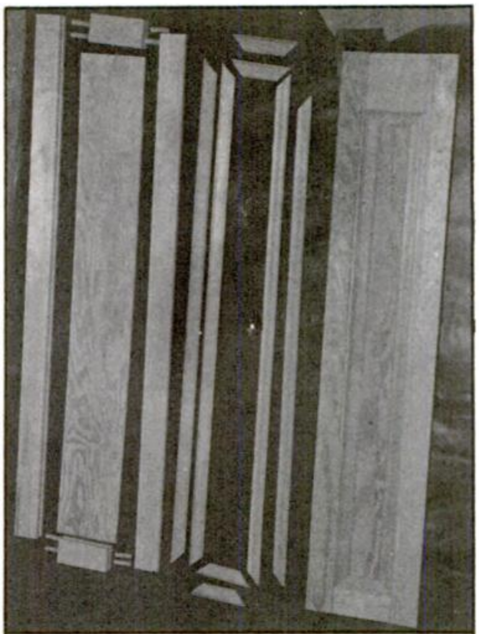
HOWEVER, he did write one concern and sent the plans that had been drawn off of old shutters and blinds. They (in several months' time) returned a bid of over $200 a window and stated that they could not supply and install the moulding required in the shutters. Furthermore, this price did not include installing them to the not-so-square-anymore windows (which is about as much work as making the shutters and blinds).

THEN, Paul Griffith, the Association second vice president, and a local bracemaker and surgical supply dealer, decided he would look further for old shutters and blinds on an eastern trip. Paul called one day to say that he had found a warehouse full and was going to comb it.

AGAIN, THERE WAS NOTHING but the same discouragement as before. But, after Paul called back and stated that he had found a shutter and blind, and was going to use it as a model to make them for the Glenn House, the author thought perhaps that Paul had gone through too many shutters and blinds in too short of a period of time, thereby losing touch with reality.

BUT, HE DID IT. He came back and work began at once. It looked like enough lumber was ordered to build several bookcases (around $200 of #1 pine is required to do a room of five windows). Soon his equipment was busy reducing all of this lumber to ends, uprights, panels, and slats. It looked like a real assembly line when one saw all of the pieces stacked before they were assembled (around 2,000 pieces are required to do a room of five windows).





At right are the parts required for one panel of the upper shutters. At left is a fully assembled lower panel.

PAUL AND HIS FAMILY (everyone participates) used a 10 in. bench saw to cut the lumber to dimensions required. To cut the slot for the slats, they used the bench saw with a 3/4 in. moulding head; and to cut the slot for the panels, the saw was equipped with a dado blade. A drill press equipped with a shaper attachment was used for cutting beads on the leading edges. The same was used for cutting round edges on the slats. Of course, the drill press was also used for drilling holes for the dowel pins that hold the shutters and blinds together.

A JIG WAS BUILT to hold the blind frames while the slats were assembled. Glue was used to hold the slats and spacers in place. Other equipment used was a jointer-planer and belt sander in the various operations. Finally, the shutters and blinds were numbered in order to make hanging them less confusing.

Paul Griffith fits shutters to out-of-square window.

WHEN HANGING the shutters and blinds, much work was required to "straighten" them to the not-so-straight windows (and, #1 pine is not as straight as it used to be, either, which really makes a problem). Sometimes, even extra pieces of wood were added to the shutter uprights to take care of a bow in the window frames.

INCH AND ONE-HALF HINGES were used to hang the shutters and blinds, and old shutter latches (which the Association has been fortunate in obtaining in St. Louis) provide a very authentic look. By Paul and his family donating the labor, the Historical Association has saved a considerable amount of money.

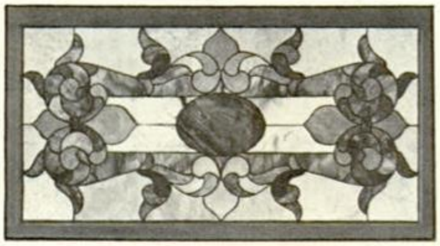
THE SHUTTERS AND BLINDS are sturdy and beautiful. There is only one criticism that can be made and that is that the Griffiths used pine (because the wood in the rest of the room is pine and grained) and this means that there is some swelling in damp weather. A more expensive grade of wood might solve this problem.■

The Wardian Case

The Wardian case, developed by the English botanist Ward, was a delightful way to cultivate ferns and exotic plants indoors. A miniature glass house, the cases were often handsome pieces of cabinetmaking or metal ornament.

By the mid-1860's the Wardian case overtook the hanging basket in popularity and could be found in some form in almost every Victorian home. The terrarium of today is a revival of the Wardian case, but with little thought given to its decorative importance as part of the furnishings.

Products For The Old House



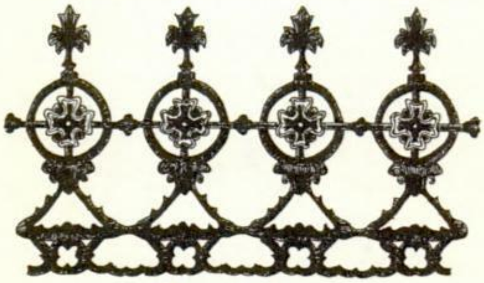
Stained Glass

GENESIS GLASS, Ltd., of Portland, Ore., is the only company we know of still operating in the manner of the legendary Tiffany studios. Not only does Genesis continue to make up leaded stained glass windows—but they also manufacture much of the stained glass they use in their designs.

NINETEEN standard window panel designs in the Tiffany style are available in fixed sizes. Each panel comes mounted in a 2-in. wooden frame, suitable for mounting behind a conventional clear glass window. If desired, however, the panels can be removed from the frame and mounted in a window sash.

PRICES for most of the panels range from \$150 to \$500, plus shipping charges. (All panels are stoutly crated and can be shipped safely.) Many of the standard sizes can be adapted to different dimensions. But there's an additional charge for this customizing work.

ALL DESIGNS are shown in an elegant full-color portfolio. Cost is \$8.00—which is refundable on the first order. Contact: Genesis Glass, 700 N.E. 22nd Ave., Portland, Ore. 97232. Allow 30 days for delivery of portfolio.



Cresting

IRON CRESTING was very popular on Second Empire and Eastlake style houses—and is virtually impossible to replace today. Facing this problem, some old-house folks in St. Louis took the typical do-it-yourself approach: They made some moulds and cast some replicas in fiberglass. Their handiwork now adorns the rooflines of several houses on St. Louis' historic Lafayette Square.

THREE PATTERNS are now available for sale. Cost is about \$10 per linear foot. Black color is moulded right in, but can also be painted a different color. For folder showing the three patterns send 50¢ to: Lafayette Square Reproductions, 1823 Hickory, St. Louis MO 63104.

Custom Sash & Hardware

THE PRESERVATION Resource Center specializes in reproducing millwork and hardware on a custom basis. One specialty is custom-produced sash appropriate for houses of late 18th and early 19th centuries. Sash can be made to any size; special moulding profiles can be copied at additional cost. They will also custom-cast in brass or bronze. All you need is one original to be used as a master. Iron pieces can be duplicated in bronze and a special black patina added.

DATA SHEETS on the custom millwork are available for \$1; data on custom casting is 25¢. Order from: George McNulty, Preservation Resource Center, Lake Shore Rd., Essex, NY 12936.