Preventing Rot In Old Houses

Part II

LAST MONTH'S ARTICLE reviewed the various types of rot fungi that will attack an old house—and the conditions that nourish these little rotters. Water was seen to be the primary culprit, and the various places that water will penetrate an old house were listed.

IN THIS ARTICLE, we'll look at specific measures to keep water from fostering rot fungi, and how to deal with rot once it has gained a foothold.

THE ROOF is the home's first line of defense against water—and it is a line that is frequently breached. The top floor and attic should be checked at regular intervals for the tell-tale stains that disclose that water is becoming an unwelcome visitor.

FINDING THE SOURCE of a roof leak is another matter, however. Water may travel for many feet under the roofing or along a rafter before emerging as a visible leak. If you are really lucky, the leak may be readily apparent from the underside—such as being able to see sunlight peeping through your roof. In this event, mark the spot by driving a nail upward through the roof. That will enable you to locate the exact spot when you go topside to patch.

MORE LIKELY, you won't be able to spot the exact source of the leak from below—so you'll have to make a visual inspection from the top of the roof. Start by locating the point on the top side that corresponds to the stain on the underside. This is accomplished by careful measurements from a reference point, such as a chimney. Now you know that the source of the leak is at—or above—the point you've marked. The checklist on the next page is a guide to the common sources of roof leaks.

MOST MINOR ROOF LEAKS can be repaired with a daub of asphalt roofing compound. Additional life for the patch can be achieved by painting it with liquid roof coating.

EVERY ROOFING MATERIAL has a finite life-span, however, and when it starts to leak because of general material failure, it

(Continued on page 5)
How To Make An Electrical Survey

OLD-HOUSE OWNERS frequently inherit a raggle-taggle electrical system. The first step in updating or expanding the system is to determine exactly how the circuits are divided and the amount of load on each.

HAVING A ROAD-MAP to your electrical system is especially valuable when you want to add outlets or lights; you can see which circuits are lightly loaded and which are filled to capacity. A complete index to your electrical system is also helpful when you want to kill power to a particular fixture; you can flip the correct circuit breaker right away without darkening the whole house with trial-and-error fumblings.

TO MAKE YOUR OWN ELECTRICAL SURVEY doesn't require any special tools—just several hours of time. You'll want to record the information in a good-quality bound notebook...the kind that will withstand years of use. It's also highly desirable to have a helper who can do a lot of the plugging and unplugging while you work at the fusebox.

THE BASIC PRINCIPLE of an electrical survey is simplicity itself: You start in one room and determine by trial and error which fuse or circuit breaker controls each electrical fixture. If you have an old fuse box, you may have to assign your own numbers to each fuse. You will need an on/off indicator for the outlets. You can use any small portable electrical appliance such as a radio or table lamp. Or you can make your own indicator out of a pigtail socket (available at lighting stores) to which you attach a plug. If you have to work alone, you can save some back-and-forth by using a loud portable radio to indicate when power has been cut to an outlet. But overhead lights require visual inspection...which may mean a lot of trips up and down the cellar stairs.

START BY MAKING A MAP of each room in the house, indicating each electrical fixture. Then note beside each fixture the number of the fuse or circuit breaker that controls it. When this is done, set up a second section in your notebook, listing—on separate pages—each circuit in numerical sequence. Then list under each circuit all the fixtures it controls, picking up the information from your room maps.

THIS CIRCUIT-BY-CIRCUIT LISTING usually reveals some surprising things. For example, one homeowner, who had just spent $1,600 on extensive rewiring, found that the electricians had put the refrigerator and dishwasher on the same circuit (major appliances should have their own circuits) while the solitary load on a nearby circuit was the fluorescent light on the kitchen stove!

---

Electrical System Is Cross-Indexed By Circuit And By Room

**Section 1: List Of Loads On Circuits**

<table>
<thead>
<tr>
<th>Circuit #11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back Porch Light</td>
</tr>
<tr>
<td>Outlet On Stove</td>
</tr>
<tr>
<td>Kitchen Overhead Light</td>
</tr>
<tr>
<td>Outlet By Dining Room Window</td>
</tr>
<tr>
<td>Outlet In Hall Next To Kitchen Door</td>
</tr>
<tr>
<td>Bathroom Overhead Light</td>
</tr>
</tbody>
</table>

**Section 2: Circuits In Each Room**

**Dining Room**

<table>
<thead>
<tr>
<th>Circuit #5</th>
</tr>
</thead>
<tbody>
<tr>
<td>电路 #5</td>
</tr>
<tr>
<td>Overhead Light</td>
</tr>
</tbody>
</table>

---

The Old-House Journal
Greek Revival on the Immigrant Road

By Claire Wood

Daniel and Gael Ryan first saw the Butler house standing snowswept and weather-beaten in an icy New Brunswick field in February of 1973. It had been empty for seven years. The windows were broken, sashes rotted, the roof patch-worked with rusty tin. They forced the front door open into three feet of frozen rubble on the parlor floor: Old clothes, broken bottles, boxes of magazines, shards of two hundred window panes, dozens of rats' nests.

The Staircase was Hidden under a mound of debris. The house, built in 1835, had never been plumbed, wired or heated by anything other than wood-burning stoves and fireplaces. Daniel Ryan took one good look, then said to his wife: "You're crazy, it's impossible, and I'm getting the hell out of here!" Fortunately for the house, and happily for the Ryans, he reconsidered.

Daniel and Gael Ryan have many relatives in Canada and have long nurtured a vision of a home and lifestyle there. Their two children, Danette, seven, and Tony, five, have been saving their own money to buy the horse and pony that are their particular part of the vision. The family was settled in Hudson, Mass., when the call came from Gael's aunt in New Brunswick that the Butler house and property were for sale. The Ryans took their savings from the bank and drove 650 miles to Malden, New Brunswick, on the Trans-Canada Highway, three miles from the ferry terminal to Prince Edward Island.

They knew the history of the area, where no white men lived until 1797, and which had been settled primarily during the wave of Irish immigration in 1820. Malden is called the "cradle of the Irish in New Brunswick," and that section of the highway is still known as Immigrant Road. In 1830 the Butler family arrived from Tipperary and settled on 100 acres of heavily timbered land. Not surprisingly, the family found its fortunes in lumber, and it was the great grandson of the original Butler who was offering the property for sale.

Because the Ryans are young and energetic and have a profound respect for what hard work can accomplish—as well as an appreciation of the value of that which is old—Daniel took a second look. To Gael's delight, they bought the house, barn and 45 acres of land for $2,000. Their back yard is a meadow which in the summer yields blueberries, blackberries, raspberries and cranberries. Beyond that extends a forest of blue spruce, and beyond that, a mile away, is the ocean. Taxes on the Ryans' property come to $15 per year, with—as Gael cheerfully says—a discount for payment within 10 days. That's the good part.

The Restoration of the Ryans' House is a triumph of energy and will over seemingly irreversible damage. They began on the day of sale to clean out the trash. They had one shovel and a pair of work gloves which they used in turn to fill the bottom half of an old trunk with debris. Gael then fashioned a harness from bits of rope and hitched herself to the trunk and hauled it back and forth across the icy ground between the house and a distant shed, where all the trash was dumped and ultimately burned. They then boarded up the windows to prevent further weather damage until they could return to work on the house again the following summer.

Between February of 1973 and August of 1974, the Ryans made five trips to Canada, expending a total of six weeks of back-
That experience behind them, the Ryans turned their attention to extensive wall repair, electrical wiring, painting of woodwork, sanding of the 24-in. pine plank floors, and papering the walls with documentary wallpaper. They patched the chimney, reinstalled the two wood-burning stoves, and hooked up the hand water pump. The pump job turned out to be rather complex, since they had to spend days searching for the well pipe, which they knew was somewhere in the back yard. After Danny had dug dozens of holes ("like a wolverine," says Gael) and filled them up again, one morning they noticed a slight depression in the ground and on a hunch dug there—and were rewarded with the pipe and, ultimately, running water. (During the worst of the work, the Ryans relied on Gael's aunt for bed, board and hot showers.)

Thus far, the Ryans have invested around $700 in their restoration—in addition to their countless hours of personal labor. They had hoped to move in by Christmas of this year, but in the frenzy of work last summer they had no time to chop wood for the stoves. The move is now scheduled for spring of 1975. More work lies ahead of them—institution of a bathroom, blowing in insulation, finishing touches on two or three rooms, and major work on the ell and barn. But the house itself is now essentially livable.

Once moved in, the Ryans will live in the house year-round. They intend to farm the land and open an antique shop in the barn. The school for the children is 15 miles away; they'll be picked up at the door by the schoolbus. More importantly, in Gael's words, "they will be free to grow like little weeds" in their backyard meadow and spruce tree forest.

In talking about their old house, Gael says: "We've put in many hard hours, but those hours will yield years of joy. I feel so sad whenever we go past an old house that needs attention. Anyone can clean up an older place. It wouldn't cost much if they put their minds to the task. More elbow grease than money is generally what gets the job done, anyway. At some point, someone suggested to us that we put a match to our old house and build a nice new ranch-style home on the property. I told them I hadn't come 650 miles to burn down a piece of history!"

Ell in the foreground shows the condition of the siding and roof that confronted the Ryans. Danny rigged a scaffold for re-roofing the main section of the house.

Breaking work on the house—which is essentially a simple Greek Revival structure; two storeys with eight rooms and an ell. The Ryans are postponing restoration of ell and barn until they are in residence next summer. The first assault has been on the basic living quarters.

The final clean-out was one week's solid work for them both. Danny then ripped off the old shingles and tin patches, replaced nearly all the roof boards, and laid a new roof. He then rebuilt most of the window sashes and replaced all broken panes. The original, smaller Butler homestead, constructed in 1830, was a fortuitous source of old, unbroken panes. Cost of new glass was held to around $50.

While Gael continued to work indoors, Danny re-nailed the clapboards, then together they stained the clapboards and painted the exterior trim. The red wood stain is more practical than paint since the house is so close to the ocean that paint is inclined to peel easily. Since the exterior wood had remained innocent of paint for 139 years, the dry wood eagerly soaked up four coats of stain and five coats of white trim paint before it was sealed.

The next big job was the interior plaster. The Ryans ripped down eight ceilings, exposing all of the hand-hewn beams. In the general clean-out of the ell, it was decided to tear down the ceiling there as well, which turned out to be the most gruesome part of the work to date. The attic in the ell had been used years ago as a storage place for grain so the heat from the kitchen could be used for drying. When the old kitchen ceiling came down, along with it cascaded hundreds of ancient rat bones and nests.
is time to completely re-roof. For example, wooden shingles have a life expectancy of 15-25 years. The surface of wood shingles gradually weathers away, making the shingles thinner and thinner. As the shingles slim down, they lose strength and tend to snap off in high winds. Wood shingles should be replaced when they have lost half their original thickness.

In northern climates, ice dams can form in gutters and valleys, causing water back-up during freeze-and-thaw cycles. Water backup under shingles will cause leaks in an otherwise water-tight roof. You can prevent ice dams from forming by placing electric heating cables in the affected gutters and valleys.

**Common Sources Of Roof Leaks**

- Cracks in chimney masonry
- Loose flashing around chimneys & valleys
- Loose or missing shingles
- Cracks caused by settling rafters
- Water backup from plugged gutters, or other debris, moss, etc.
- Protruding nailheads
- On flat roofs: bubbles & blisters; cracks where roofing abuts vertical surfaces

**Siding, Doors & Windows**

Exteriors of wooden buildings are normally protected by paint. Paint by itself is not a rot-preventer. Paint's function is to form a continuous film that will shed water... thereby depriving rot fungi of needed moisture. Once a paint film is broken, water can seep into the wood behind. The presence of moisture in the wood tends to blister and peel more paint...admitting more water...and the cycle accelerates.

Caulk and putty are used to plug holes and cracks in siding, to prevent the paint peeling process from ever getting started. Putty is used to plug nail holes and similar holes in a single piece. Caulk, which is more elastic, is used to seal long cracks and joints—especially those between dissimilar materials (like brick and wood) where there will be differences in rates of expansion and contraction.

Cracks that are too wide to be sealed with caulk by itself can first be stuffed with oakum—a specially treated rope-like material that is available at plumbing supply stores and major hardware outlets. The crack can then be spanned with one or more beads of caulking.

**JOINTS AROUND DOOR**

And window frames are quite vulnerable to water seepage—especially at the top. These joints should be thoroughly caulked. In addition, if any rebuilding of door or window casings is required, flashing should be installed over the drip cap as shown in the diagram. The flashing can be of non-corrosive metal—aluminum or copper—or waterproof felt. Flashing should also be used over the drip cap where the bottom clapboard meets the horizontal trim board at the sill.

**SIDING AND TRIM** also benefit from liberal treatment with a high-quality wood preservative—as outlined below.

**The Preventer: Pentachlorophenol**

Pentachlorophenol (sometimes affectionately referred to as "penta") is a great boon to the homeowner in the continuing battle against rot. Creosote—which for many years was the standard wood preservative—has the disadvantages of a persistent odor, plus rendering treated wood unsuitable for gluing or painting.

A GOOD PENTA-CONTAINING preservative (such as "Wood Good" or "Wood Life") not only has no lingering odor, but also performs two vital functions:

- The active ingredient—pentachlorophenol—is an effective poison for the various fungi that cause rot;
- The preservative also contains water repellents that keep moisture from penetrating the wood.

Ready-to-use preservatives normally contain 5% penta. Special concentrates containing 10% or 20% penta can be obtained when a higher concentration is desired to compensate for shallow penetration of preservative into the wood. Penta—unlike creosote—can be painted; in fact, it can act as a very effective primer. Because of the water repellents, moisture absorption into the wood is greatly retarded, which means that the paint is less likely to peel and blister over the years.

Exterior wood should always be treated with preservative before installation. It's best to use wood that has been pressure-treated with preservative, since this process forces the preservative deeply into the wood. When using wood that hasn't been pre-treated, apply preservative by soaking or painting. The best on-site treatment is to submerge the wood in a tub of preservative for 15 min. Bricks can
be used to hold the lumber submerged. Allow an additional 30 min. for the lumber to air-dry before installing. All cutting and drilling should be done before soaking so that preservative will penetrate all exposed surfaces.

If soaking is impossible, the next-best thing is to apply preservative with a brush. Pay special attention to the end-grain, which is highly absorptive. End-grain will absorb a lot of preservative—just as it will absorb a lot of water if not properly treated. Even if you don’t have a tub big enough to soak entire pieces of lumber, it frequently is possible to dunk the ends in a bucket of preservative for a few minutes. Brushing will be adequate for the middle sections. If dunking the ends is impossible, make sure that the end-grain gets a double application of preservative put on with a brush.

CAUTION: Pentachlorophenol is a poison—for people as well as fungi. Any skin that contacts preservative should be washed immediately with soap and water. In addition, some people may exhibit a special skin sensitivity to penta and should avoid working with the material altogether.

On projects where the entire exterior has been replaced with new wood, you might want to consider finishing with an exterior stain (such as Cuprinol) rather than paint. These stains are a mixture of preservative plus pigment. Since they penetrate the wood rather than forming a film, you never have the peeling and blistering problems you can have with paint. Renewing a stain finish is a lot easier than repainting, too.

Dealing With Established Decay

Conducting an inspection for rot infestations once a year will enable the homeowner to isolate and correct rot conditions before they do any great harm—and while the remedies are relatively inexpensive.

Advanced rot conditions are easy to recognize; it is less easy to recognize rot in its early stages. Decay usually causes wood to change color. Most often, the infected wood becomes darker. Some fungi, however, cause wood to lose color until the surface appears whitish.

Where decay is suspected, you can use the "pick test" to make a definite determination. This test is based on the fact that decay causes the wood fibers to lose toughness. Jab an awl or ice pick at an angle into the piece of wood—preferably when wet. Pry up sample of the wood. Healthy wood will produce long splinters. Rot-infected wood tends to lift in short sections, breaking across the grain, without creating splinters.

When decay is discovered, there are three steps—in ascending degrees of complexity—that can be taken, depending on the seriousness of the condition:

1. Eliminate the source of moisture so that the wood dries out completely. If there is evidence of only superficial rot, drying the wood is all that will be required to arrest the growth of rot fungi and to kill those that have gotten started.

2. If there is any doubt about the source of moisture being completely eliminated, the wood should also be treated with preservative. All joints and cracks must be flooded with penta solution. The goal is to get the penta as deep into the wood as water ever has penetrated. Several repeated applications will be more effective than one.

Exterior wood, such as porch posts, wooden steps, etc., that exhibit any sign of rot should be treated at regular intervals—at least every two years. The slightest infection by rot fungi increases the water absorptivity of the wood—and therefore increases the likelihood of accelerated fungi growth. Thus it is imperative to keep the wood fibers saturated with the water repellents in the preservative.

3. If the rot has materially weakened the wood, the affected members will have to be replaced. Preservative will arrest the growth of rot fungi—but it can’t restore strength to wood that has been attacked. All infected wood should be cut back to healthy, non-decayed timber. Contrary to popular belief, infected wood will not contaminate adjacent healthy members—as long as moisture is not present. But if you leave some fungi-infected pieces in place and moisture should be re-introduced to the area, the spread of decay will be very rapid.

Obviously, any replacement lumber should be thoroughly soaked with preservative before installing. For good measure, you should also brush and spray (an ordinary garden sprayer will do) preservative on all timber adjacent to the patch.

In cases involving non-load-bearing wood, it is possible to restore rotted sections by using some of the new epoxy materials. Details are given in the May 1974 issue.

For More Information

An excellent review of rot and its prevention is contained in a 56-page booklet from the U.S. Forest Products Lab: "Principles For Protecting Wood Buildings From Decay." It can be ordered for $1.05 from the Supt. of Documents, GPO, Washington, D.C. 20402. Specify FPL Research Paper #190; Stock No. 0101-00362.
The Classical Orders

CLASSICAL ARCHITECTURE—the designs of ancient Greece and Rome—has influenced the appearance of countless old houses in the U.S. Such diverse architectural styles as Georgian, Federal, Greek Revival and Renaissance Revival are heavily influenced by classical designs. And other styles such as Second Empire will show classical touches here and there.

THE OLD-HOUSE WATCHER will find classical influences such as columns, capitals and entablatures on house exteriors around doorways and porches, window trim and cornices. Inside, you’ll find classical touches in plaster ceiling moldings and decorative woodwork.

THE TERM "ORDER" refers to a complete design for a column plus base, capital and entablature. The proportion for each and every element in the order was meticulously spelled out—based upon the diameter of the column as the fundamental unit of measure. In later centuries, however, house builders and architects would feel free to alter the proportions (and even the arrangement of elements) to suit their own needs.

ILLUSTRATED ON THIS PAGE are the capital and entablature sets of the five basic classical Orders. The Greeks had three Orders: Doric, Corinthian and Ionic. The Romans adapted these three Orders (slightly altering the proportions and some details) and added two more: Tuscan and Composite.

THE TUSCAN, a simplified Doric, is the plainest and most massive of the five. The Doric is distinguished by the triglyphs in the frieze and the upward-turned "D" shape at the top of the column. The Greek Doric has a fluted column while the Roman Doric has a plain shaft. The Ionic Order is distinguished primarily by the volutes in the capital.

THE CORINTHIAN ORDER is most readily identified from its bell-shaped capital ornamented with acanthus, olive or laurel leaves with 8 small volutes at the top.

THE COMPOSITE ORDER is the most elaborate of the five—and the one with the most variations. Its capital is a combination of the Ionic volutes plus the acanthus leaves of the Corinthian capital.
The Romantic Styles
Of A. J. Downing

by Carolyn Flaherty

LTHOUGH DOWNING PREFERRED THE GOTHIC, it was by no means the only style he proposed in his efforts to create for all "the beautiful, rural, unostentatious, moderate home of a country gentleman."

DOWNING BELIEVED there were "no buildings, however simple, to which either good forms or something of an agreeable expression may not be given." To do this, he made even the simplest house "picturesque"—a quality he felt was created by "power exposed." This could be done by projections and emphasis on architectural features of the house, such as brackets and hoods. Downing's artistic nature even saw drama in the deep shadows these features created.

A SMALL STRUCTURE SUCH as this was intended for a family that "that takes care of itself." In other words, servantless. It was most important to Downing that every workingman have the civilizing effect of "smiling lawns and tasteful cottages"—a necessity in a true republic prosperous enough to have so many of its people able to build a home of their liking.

OR A HOME WHERE SERVANTS would also live, Downing designed "country houses," larger and able to incorporate more beauty and picturesqueness in their design than the cottage. A "villa" was simply a slightly larger country house, but as picturesque and romantic as possible.

HIS DESIGNS WERE sometimes his own, or executed by A. J. Davis (Downing lacked formal training and couldn't draw well) or Davis' own designs, or those of Wheeler or Loudon. He specified where they had come from—the object being to show people as many good designs as his imagination and wit could find. These designs drew on architecture from many countries and past eras that fit his idea of the romantic.

DOWNING BELIEVED that the two most beautiful styles for country residences were the pointed Gothic and the horizontal Italian modes. Their outlines irregular and picturesque, and harmonious with nature. All modes referred back to two original styles, and everything else was a modification or variety. They were the Gothic, with vertical lines prevailing, and the Grecian, with horizontal lines prevailing, and both had been adapted to domestic styles.

THE PURE GRECIAN STYLE, with its rigid form that did not bend to domestic needs, Downing thought most appropriate for a temple with its "elegant simplicity."

THE MODERN ITALIAN STYLE—a modified form of the Grecian—featured an "elegant variety" of forms harmonious with the needs of domestic life.

The Italian Style

OWNING THOUGHT THE ITALIAN STYLE somewhat inferior to the pointed and high-roofed Gothic in expressing rural life—its spirit being somewhere between town and country—but its mingling of both was expressive of modern life.

THE ELEGANCE OF AN ITALIAN VILLA was produced by the simple lines of its exterior, but enhanced by the introduction of such "beautiful and refined" features like terraces, balconies, verandahs. The picturesque quality was attained from these irregular features and the variety of shapes. Windows were simple but massively framed rectangles with round or round-headed windows combined in the same building. Arched doorways were often incorporated.

"POWER" was expressed by projecting roofs, often with brackets, and over all the dignity of the Italian square tower, the campanile, bringing elevation and unity to the composition.

SINCE THE IRREGULARITY OF ITS COMPOSITION was one of the elements that contributed to its beauty, future additions, made as a family grew in wealth or number, only added greater picturesque to the Italian villa.

THE GREEK STYLE, on the other hand, was marred by any addition to its original pure and simple form.

DOWNING pre-
pered the Italian style built in stone as it was in Italy. He acknowledged, however, that since Italy was a tree-poor country and America was not, it would often be more feasible to build with wood.

HE ALSO FELT THE ITALIAN STYLE, with its broad verandas and projecting roofs, and balconies with stone balusters, to be more suitable to the southern and western portions of America. However, since even the north had such hot summers, these features were not inappropriate in any part of the country.

ANOTHER PRACTICAL RECOMMENDATION for building in the Italian, or closely related Roman and Tuscan styles, was the fact that builders were experienced with building the Greek style and would have less difficulty with it than the pointed style.

The Bracketed Style

DOWNING'S MAIN WEAPON against the plain, regular, box-shaped house, lacking in "beauty" was the decorative bracket. To even the plainest style, built out of economy, a verandah and a projecting roof could be added. He called these simple cottages an "American Bracketed Farmhouse." He prophesized the immense popularity of this mode in his description of the design. "If we call this style American, it is only because we foresee our climate and the cheapness of wood as a building material, in most parts of the country, will, for a long time yet, lead us to adopt this as the most pleasing manner of building rural edifices of economic character."

DOWNING PROTESTED AGAINST the simple, undecorated roof lines of the Greek style. "Expression of purpose" demanded that the roofs of buildings should be shown and be ornamental. Since the "secret source of the Picturesque is the manifestation of Beauty through Power," then the support of the roof should be boldly and powerfully exposed.

FOR PRACTICAL PURPOSES, the projecting roof kept the house dryer and more thoroughly protected from the weather, and made the upper storey rooms cooler in summer.

WOOD WAS PLENTIFUL, and the local carpenter-builders could freely imitate Downing's designs or create original brackets. So the bracketed, projected roof began to appear on not only the Italian style and the simple cottage style, but became a decorative feature for decades on houses of every kind.

DOWNING'S INFLUENCE was felt most in his native region, the Hudson River area.

Bracketed roofs became so popular and indigenous to the region that Edith Wharton wrote a novel titled "Hudson River Bracketed," featuring a typical, bracketed mansion. The name "Hudson River Bracketed" is still applied to the many homes of that type in the area.

A Tragic End

BEFORE A. J. DOWNING, books on architecture had been "builder's guides" addressed to the carpenter. But Downing spoke to the owner, convincing a large portion of the country that beauty and harmony was possible for all.

ALTHOUGH HE LOVED THE kinds of architecture that lent themselves to grand buildings—and many thought his own home resembled a castle—he argued against very large and ostentatious houses as inappropriate to a young republic. "...The true home still remains to us. Not, indeed, the feudal castle, not the baronial hall, but the home of the individual man—the home of that family of equal rights, which continually separates and reforms itself in the new world—the republican home, built by no robbery of the property of another class, maintained by no infringement of a brother's rights; ...large enough to minister to all the wants, necessities, and luxuries of a republican, and not too large or too luxurious to warp the life or manners of his children."

IN THE SUMMER OF 1850, while abroad, he met and formed a partnership with Calvert Vaux. It was a very brief association. On July 28, 1852, Downing was killed in a steamboat accident on the Hudson River. Downing had been one of the first advocates for public parks in large cities, and Vaux (with Olmstead), carried out Downing's ideas in his designs for Central and Prospect Parks in New York City.

AT THE TIME OF DOWNING'S DEATH, at the age of 36, he was supervising a landscape gardening design, at the request of President Fillmore, for the grounds of the Smithsonian and the entire area from the Capitol to the White House. Never completed, nothing remains of his design today. Only the memorial urn erected on the Mall is left to remind us of the greatest romantic influence of Andrew Jackson Downing.

OWNING WAS NOT REALLY PROMULGATING anything new in interior decoration. The decor of the early 19th century was still classical and much lighter in tone than the later, more opulent decades of the Victorian period. Downing was trying, however, to encourage "taste" in even the plainest home, and a sense of "fitness."

THIS FITNESS WAS EXPRESSED by the use of color and simple furnishings that were appropriate and "essentially country-like" to rural homes. His guidelines can be useful today in re-creating interiors in the many houses built in the decades following 1850, in the styles Downing popularized.

DOWNING ARGUED THAT THE INTERIOR of a house should reflect its exterior architectural style. While a large villa could use brackets, beams and cornices in large rooms to do this, even a small, plain house could introduce some appropriate architectural detail in the wainscoting and woodwork.

HE RECOMMENDED THAT THE ROOMS OF A HOUSE be finished in colors that fit the use of the rooms. "...Nothing is so insipid as to find all the principal apartments (rooms) of a house of one color...without any regard to their use."

HALL, STAIRCASES AND PASSAGES: Cool and sober tone—gray, stone or drab. Simple in decoration, enhancing the effect of the richer hues of the other rooms. Floors of tile—more fitting and durable than carpet.

DRAWING ROOM OR PARLOR: Should exhibit more beauty and elegance than any room in the house. Color should be lighter, more cheerful and gay than other rooms. Walls should be light so that the brilliancy of effect is not lost in the evening. White relieved by gilding, while popular for town houses, should not be used in the country where gilding should be used sparingly. Instead, use delicate tints such as "ashes of rose," pearl-gray, pale apple-green, with darker shades for contrast.

DINING ROOM: Rich and warm in coloring, more contrast and stronger colors than parlor.

LIBRARY: Quiet and comparatively grave in color. Fawn or neutral for walls, bookcases and furniture preferably dark oak, and a carpet to accord with the severe and quiet tone of the walls. Leather best covering for furniture.

BEDROOMS: "May vary from the greatest simplicity and chasteness of color to any light and cheerful style of decoration." Apparently "chaste" and "cheerful" did not go together. Paperhangings also recommended.

WAINSCOTTING FOR THE INTERIOR should be made of native wood of the district where the house is built—maple, birch, ash, black walnut, oak. If, for economical reasons, a hardwood was not used, it should be stained and varnished for the same effect.

WOODWORK: Paint to harmonize with the prevailing tone of the room. It may be lighter or darker than the walls, and generally a quiet, neutral tint, but never the same color, and never white.

WALLPAPER: With papered walls, the ceiling is left white or a neutral tint harmonizing with the prevailing colors of the papers. Popular patterns of the period featured Gothic, Italian or Grecian architectural motifs. Downing disliked the representations of church windows and carved church work, etc. as being too grand for houses, but approved of the "plain" types featuring panels and cornices. He also recommended papers giving the appearance of oak wainscoting—"well-suited to the entry or living-room of a cottage"—because they would give architectural detail to the plainest room. Other types he favored were flocked papers that imitated woven stuffs, and fresco papers that formed the walls into compartments or panels.

Another inexpensive method of creating architectural details was to use "decorative" paper in one solid color on the walls, with strips of paper in harmonious or contrasting colors, cut in strips, and pasted on to form lines, panels and compartments.

CURTAINS: Chintz for the plainest cottages—inexpensive but giving a "pretty effect" is selected to harmonize with walls and carpets. For a heightened effect, there were printed cottons with separate borders to be sewn on. For better curtains—"moreens" (a popular woolen fabric) of a single color; brown, drab, crimson, or blue—more expensive but more durable than cotton.

THE MOST "ARCHITECTURAL" mode of arranging curtains is from a projecting cornice of wood. The molding should be Gothic for a Gothic house, and Grecian for any other classical style. (The May issue of The Old-House Journal gives instructions for making this kind of cornice and a source for period molding.)

O GUIDE THE PEOPLE who would furnish the houses they built after his designs, Downing also gave extensive recommendations on furniture in "Country Houses." He recommended some manufacturers in principal cities and used their illustrations, because they were making "cheap, light furniture for cottages." The pieces were either "Grecian modern"—a slightly classical look to plain furniture, often painted gray, drab, or light blue—or else French and Gothic pieces for larger houses and villas.

DOWNING ABHORRED THE PRACTICE of using ornate furniture in country homes even if the owner could afford it. Extravagant decoration was "in bad taste and out of keeping with the comparative simplicity and ease of manner which ought to characterize rural life."
Helpful Publications You Can Send For

Reading List On Victoriana

Here is an 11-page list of books about the following subjects: Victorian Architecture of San Francisco and other regions, Origins of Victorian Architecture and Decoration, Renovation, and Historic Preservation and Landmarks. The author, publisher and price are given along with a brief review. Put together by Judith Waldhorn of the Stanford Research Institute and the firm of San Francisco Victoriana, they will send you a free copy if you send them a self-addressed, legal-sized envelope with 20¢ postage on it. Send to: Judith Waldhorn, Urban Planner, Stanford Research Institute, Menlo Park, California 94025.

Handcrafted Lighting Fixtures

The worth of a reproduced light is in its kinship to the antique original. The handcrafted lighting fixtures of Patentee Manor are faithful reproductions of 18th century fixtures presently in museums or private collections. The only modification is in the electrifying. Their catalog contains many of the simple, iron, tin and pewter lanterns, sconces and extinguishers used in early colonial times and some of the more graceful brass devices used later. For catalog, send $1.00 to Hurley Patentee Manor, R. D. 7, Box 98 A, Kingston, New York, 12401.

Living With Old Houses

The Greater Portland Landmarks, Inc. has published a spiral-bound book, in notebook fashion, containing a plethora of information designed to help you live with your old house. Sections include: Hardware for Old Houses, Wallpaper, Moving an Old House, Architectural Detail Replacement, Paint, Gardens, Fireplaces and Fabrics. Each section contains a 3 or 4-page historical essay on the subject, a bibliography (with a brief review of the book), and for some categories—places to purchase various items. "Some Notes On Living With Old Houses" is available for $7.50 from Greater Portland Landmarks, Inc., Station A, Box 4197, Portland, Maine 04101.

Wood Floors

The Harris Manufacturing Company has a large selection of parquet and plank flooring made from Appalachian hardwoods. The parquet panels are available in many prices and range from white oak to black walnut. The patterns include Monticello, Chippendale, Herringbone, Saxon and Canterbury. Random width Colonial Plank and distressed grain Frontier Plank are also available finished or unfinished, and with optional wood plugs in walnut or oak. Stairwork, treads and risers, moldings and borders are made of white or red oak. For those inclined to lay out their own herringbone pattern, they furnish slats, double end grooved with splines, made to order only. Free catalog available. Ask for "9: Wood Flooring, Strip, Plank and Parquet" from Harris Mfg. Co., 741 E. Walnut St., Johnson City, Tenn. 37601.

Stained Glass Lampshades

Admiration for the Victorian stained glass lampshades, and the scarcity of these antique shades on the market, has produced an interest in learning how to make them. "Creating Stained Glass Lampshades" is a complete course in learning this craft. The book begins by familiarizing the reader with the general terminology used in stained glass work and rudimentary information about skills and techniques involved. When possible, alternate methods or materials are given for the more specialized ones. Techniques in copper foil and lead came work, as well as information on electrical and hanging hardware are included. To get "Creating Stained Glass Lampshades" by James H. Hepburn, send $4.95 postpaid, to Whittemore-Durgin Glass Company, Box 2065-10, Hanover, Massachusetts 02339.

Old Fashioned Cut Nails

There are two reasons to use old fashioned cut nails. First, in certain types of nailing, they have a much greater holding power than modern wire nails. More important, perhaps, is their decorative use. In places where a nail head will be seen—batten doors, fences, counters, cabinets, paneling, plank flooring, and furniture repair—only an authentic cut nail will give the early American appearance desired. The Tremont Nail Company makes a large variety of these colonial nails. They are manufactured according to old patterns including the rose, oval-bung head and 19th century wrought-head nail. The company will provide a sample kit containing one of each of the twenty patterns they produce. The kit also has a history of nails in America, and price lists and order forms. Send $3.00, postpaid, to the Tremont Nail Company, 21 Elm Street, P. O. Box 111, Wareham, Massachusetts 02571.
Products For The Old House

From Gates To Gargoyles

Gargoyles Ltd. is a very unusual company with a vast collection of architectural antiques and quality reproductions.

It features stained glass ceilings, panels and windows, Victorian and Pre-Victorian (Federal, Georgian, etc.) mantels of wood and marble, terracotta sculptures (survivors of the wrecking ball), chandeliers and lighting fixtures (both antique and reproduction), wooden gingerbread and balusters, cast iron hand rails, gates and benches, and antique doors. Most of these have been rescued from demolition by the owners of Gargoyles.

A visit to their shop or showroom (for larger pieces) in Philadelphia is a mind-boggling experience and certainly the best way to buy. But for those who are too far away, a handsome catalog, representing their current collection, is available for $4.00. Price lists and order forms are included. At your request, bulletins will be sent with notification of sold items and new inventory.

If an item in the catalog is sold, and you would like a similar one, or one just a little different, a photograph of a piece in their collection meeting your description will be sent for a $1.00 charge, credited to your purchase. Periodic auctions are held and they will notify you at your request.

Architectural Design In Brief

Remodeling Old Houses—Without Destroying Their Character" is the kind of book many people pick up only after it's too late. For this is the book that everyone should read before ever setting hammer or crowbar to an old house.

Alas, most of us when we finally take title to the old house of our dreams want to do something immediately—not sit around and read books about architectural design concepts. This 232-page book by George Stephen, AIA, is not filled with do-it-yourself hints and tips—so the more impatient of us are more likely to reach for manuals on hard skills such as plumbing, wiring and the like. Architectural design seems like an abstract subject that we'll get into later when we have more time.

Yet as author Stephen points out, every time you change something—or decide not to change something—you have made a design decision. An accumulation of these seemingly small changes can wreak havoc with the over-all appearance of an old house.

George Stephen is not a purist about restoration. The principles he lays out in the book show how to make the changes that are dictated by modern living—without destroying the details that give the house its character. The book is a brief course in architectural design for the old-house owner.

In treating old-house exteriors, the book covers choosing materials and colors, existing details and new additions, and the over-all design factors that affect the appearance of the house. In addition, there are sections on: How to make measured drawings of your interior; planning a general interior layout; planning rooms and spaces; special details, features and finishes.

As an added bonus, the reader winds up with a greater appreciation of the architectural characteristics that make old houses so much more interesting than their modern descendants.

You can order a paperbound edition of "Remodeling Old Houses" for $3.95 plus 50¢ handling from: Random House, 400 Hahn Road, Westminster, MD 21157.

The Old-House Journal Subscription Story: The Apartment Dweller

Enclosed is my $12 for a one-year subscription to The Old-House Journal.

Subscription is: Gift □ Personal □
Name ________________________________
Address ____________________________________________
City ____________________________ Zip ______
State ____________________________
Donor's Name ________________________________
Mail to: The Old-House Journal, Dept. 7, 199 Berkeley Place, Brooklyn, N.Y. 11217

Jeremy lived in a modern, convenient, clean, trouble-free apartment. He secretly longed, however, to own an old house. Every morning as he slipped through the sterile lobby, Jeremy imagined himself instead striding through his own foyer to stand, imperially slim, atop his own stairs surveying the passing scene.

But fearing scorn from his practical-minded friends, Jeremy dared not give voice to his dream. And thus he despaired of ever taking the first step that would make his dream come true. Then he met Gwendolyn. To her, Jeremy poured out the secrets of his heart. Not only was Gwendolyn understanding—she also knew about The Old-House Journal.

Her gift subscription brought Jeremy knowledge and advice, comfort and support, know-how and confidence. And all, by especial arrangement, in a plain brown wrapper.

Moral: Be a friend in need. Give The Old-House Journal. We'll send a certificate identifying you as the benefactor.

To receive their catalog, illustrated with color and black and white photographs, and information on their variety of services, send $4.00 to: Gargoyles Ltd., 512 S. Third St., Phila., Pa. 19147.