Many of our readers who have restored old storefronts have found that, as well as being aesthetically pleasing, these period restorations are good for business. The following article gives an accurate representation of the commercial architecture of the late 19th and early 20th century. It should be a great help to those involved in the revitalization of Main Streets and central business districts around the country. --Ed.

By Mara Gelbloom

1870

The decade of the 70's saw great innovation in storefront design. For the first time, most storefronts were distinguished from other commercial edifices by the inclusion of a large display window on the ground floor. General use of large, first story shop windows was made possible by technological developments: The improvement and standardization of cast iron fronts which provided a strong frame of light appearance to contain plate glass of newly expanded dimensions.

First Storey Cast Iron Fronts used in conjunction with stone or masonry were the most commonly used materials for small town commercial edifices. Popular stones of this period were brick, brick faced with sandstone, granite, and marble, the latter being the most desirable of these materials, but usually prohibitively expensive. Thus, one might find a combination of a first storey cast iron front and a facade of pressed brick with dressings of white marble.

A second popular combination was brick with architectural terra cotta and light stone, also used in conjunction with the first storey cast iron front. However, buildings constructed completely of stone or masonry were still erected and during this period, sheets of plate glass were often inserted in these facades.

Cast iron was always painted to insure its protection from rust and oxidation. Initially, it was often painted white in imitation of marble, or brown in

(Continued on page 33)
The Flaming Truth About Linseed Oil

By Clem Labine

I WASN'T ALARMED WHEN I awoke at 6:45 a.m. and smelled smoke in the house. We had smelled smoke many times in the past, and the cause always turned out to be something harmless like the oven or the incinerator down the block. Nevertheless, I thought I had better check it out—just to be safe.

AS I CAME DOWN THE STAIRS, the acrid smell of smoke became much stronger. Entering the dining room, I encountered the sickening sight of our kitchen totally obscured by smoke. I tried frantically to locate the source of the fire, but the gases were so suffocating that I was driven out of the room in desperate search of air to breathe.

AFTER A PANICKY CALL to the Fire Department, I decided to make one more attempt to locate the source of the fire and have a go at it with our fire extinguisher. I was able to open a window at top and bottom in the dining room to let out some of the smoke. After taking in a lungful of fresh air I plunged back into the kitchen. Through painfully smarting eyes, this time I could see flame...coming from a paper bag under the kitchen counter.

I GRABBED THE BURNING BAG and stamped out the flames—then looked around for more fire, extinguisher at the ready.

BUT THERE WAS NO MORE FIRE. It gradually became apparent that all the smoke and all the flame had came from the single paper bag. And by the time the Fire Department arrived, I had figured out what had caused the fire...much to my chagrin. I had learned the hard way about spontaneous combustion.

THE PREVIOUS WEEKEND, I had been doing some furniture refinishing with two of my children as helpers. We were putting a rubbed linseed oil finish on an oak sideboard...applying boiled linseed oil with brushes, then rubbing it out with soft paper towels.

AFTER THE SIDEBOARD WAS DONE, we stepped back to admire our handiwork, then I told the kids to pick up the paper towels while I cleaned the brushes. I paid no attention to what they did with the debris...A SERIOUS MISTAKE.

As it turned out, they put the linseed-oil-soaked paper towels into a paper bag—and then placed the bag under the kitchen counter next to the trash basket. The person who took the garbage out that night did not notice the paper bag tucked in the back under the counter. And so the bag was left...until I discovered it 36 hours later engulfed in flame.

I HAD HEARD ABOUT spontaneous combustion before, of course. But it had always seemed like a rare—and improbable—phenomenon. Any awareness I had was not strong enough to make me see to it that the linseed-oil-soaked paper towels were disposed of properly.

LINSEED OIL DRIES by oxidation in air. And the oxidation reaction releases heat. When there is plenty of air circulation, the heat of reaction dissipates harmlessly into the atmosphere. But when rags or paper towels are squeezed up in a tight space such as a can or a paper bag, there is no circulation to carry off the heat. So the temperature starts to build up inside the container. After a while, the mass begins to smolder with the release of much smoke...and finally bursts into flame as the ignition point of the rags or paper towels is reached.

ANY RAG OR PAPER TOWEL soaked with a drying oil should be regarded as an INCENDIARY BOMB! Besides linseed oil—which is the most dangerous—treat with caution any drying oil such as tung oil, and oil-based varnishes and paints. (Non-drying oils such as lemon oil don't pose this hazard.)

NEVER BUNCH UP rags or paper towels that contain a drying oil. There are two ways to dispose of them safely: (1) Best way is to burn the rags or paper yourself in a fireplace, or other safe disposal area. That way you are sure they are out of harm's way. (2) If you don't have a convenient place for safe burning, spread the rags or paper towels out flat and let them dry with plenty of air around them.
How To Plan And Plant
A Knot Garden

By Sue Frisch, Brooklyn, N. Y.

If you have a Tudor or Colonial house, you should plant a knot garden—a geometric design worked out in foliage plants. The lines of the design are usually made to look as if they are woven in and out or "knotted." The overall effect is of absolute serenity, though complexity of design and contrast in color and texture provide continuing interest. If you use evergreen plants the effect is carried through the entire year. Some knot plants flower, too.

Knot gardens reached their height of popularity in Tudor England. Everyone had one, from the rich, who frequently used coats of arms in their complex motifs, to the cottagers, who sometimes used lavender so that sheets laid over the knot to dry would smell especially sweet. Sixteenth and seventeenth century garden books give advice and designs for planting them. A knot garden is still maintained at Hampton Court in England.

When settlers came to America, they attempted—as far as time and resources permitted—to reproduce the gardens they were familiar with at home. The New England Puritans planted practical gardens, but the settlers in the southern colonies planted for decoration as well as for use.

An Elizabethan knot garden was really part of a garden room, and to be authentic, you should have an enclosing wall, hedge or fence (planted with vines such as honeysuckle.) The knot itself should be in the center, with grass, gravel or red sand paths all around and perhaps formal beds of flowers edged with a low border. The perimeter of the knot should be square with the geometric design inside. A simple design using larger plants is the best to start with as the tighter and more complicated the design, the more maintenance it will require. Weave a line of green with a line of gray, or use foliage textures the same way.

The site for a knot garden should be sunny and well drained. The bed can be raised and edged with pieces of slate or boards if desired. The soil should be light and mixed well with compost. If a soil test shows acidity, add enough lime to give a slightly alkaline reaction. Do not add fertilizers until the plants are growing and seem to need it.

Draw out your plan on graph paper. This will help you to estimate the number of plants you will need. Unless you can start with seed, you might want to start with cuttings from a neighbor's garden or from one or two large purchased plants. Be sure to allow room for growth—tiny plants may look silly dotted along, but later they will look terrible and will not grow well if planted too closely.

When the plants in the knot have developed enough, start trimming to keep the lines in shape. Time this carefully if you want flowers. You can use the cut pieces for cooking, for potpourri, in bouquets—or strew them on the path to be crushed and smell sweet as you walk on them. Trim whenever needed, but stop in mid to late July, as later trimming might force winter-tender growth. Fertilization, when necessary, should follow the same pattern.

Edge the square with a small hedging plant such as box, teucrium or santolina (sometimes pinks or English daisies or even oak boards were used.) Mulch the ground in the spaces left by the design using gravel, marble chips, broken terra cotta pots, small pieces of coal or pine bark (spinkle lime on the ground before using bark.) Although the Elizabethans sometimes planted flowers sparsely in the open spaces left in the designs, you will get a purer effect if you put them in separate beds edged like the central knot.

March 1978
Designs For A Knot Garden

Plants that were most frequently used for the lines of the design are hyssop, santolina (gray and green), teucrium and winter savory. Others less common are artemisia, juniper, thyme and thrift. If you think these plants are dull, there are many others from Elizabethan or American Colonial gardens that could be used in a knotted pattern. For instance: lavender, pinks, basil, rosemary (where hardy), parsley, chives, sage, rue and sweet woodruff. Watch out for sweet woodruff—it spreads rapidly, but it is good in shade, has pretty spring flowers, and would make a dense ribbon of green if kept trimmed.

If you do plant a knot garden, try to have it visible from an upstairs window of your house. The changing aspects of the fixed design are very pleasant to watch from above. And whether you look from a distance or walk along its paths, you will be part of a tradition that has been with us for almost 500 years.

Sources For Seeds And Plants

Nichols Garden Nursery, 1190 North Pacific Highway, Albany, Oregon 97321

Seeds and Plants

Park Seed Company, Greenwood, South Carolina 29647—Seeds

Carroll Gardens, Westminster, Md. 21157—Plants

Gardening Publications

Two booklets on herbs are available from the Brooklyn Botanic Garden. One, HANDBOOK ON HERBS, contains a photo of their knot garden which consists of two different squares set together in a rectangle and surrounded by grass paths and beds of herbs. A public garden in your area might have a knot garden you could go and see. The booklets are: HANDBOOK ON HERBS (#27) and HERBS AND THEIR ORNAMENTAL USES (#68). Price is $1.75 each, including postage. Write to: Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, N.Y. 11225.

An excellent guide to period gardens—researching and creating them—is available. Major gardening periods in the U.S. from the 1600's to 1900 are covered (as well as a brief bit on knot gardens) and a plant list for each period. To order FOR EVERY HOUSE A GARDEN, by Joy and Rudy Favretti, send $4.95, plus 50¢ postage, to Pequot Press, Chester, Connecticut 06412.
In the November 1976 issue we described how period effects had been created in The Old-House Journal’s hallway with glazing and stencilled decoration. Part of that project included building a wainscot. Here, the carpenters give details on how they did it.

By Stephen MacDonald & Sunnie Singer

WE BUILT A WALNUT WAINSCOT for the brownstone offices of The Old-House Journal that almost perfectly matches the original wainscot that was installed on other floors of the house when it was built in 1883. The woodwork is truly "the kind they don't make anymore," but we believe that any competent handyperson who has some experience in elementary cabinetmaking can duplicate our results.

THE SECRET is careful planning and precise measuring. First step is to determine the design. In our case, that was simple enough since we were extending an existing wainscot. If you plan to install wainscotting where none exists, it would be wise to begin with some library research. Wainscots have been built in many shapes, sizes and materials, varying with the fashions of the times.*

ONCE YOU HAVE THE BASIC DESIGN, it has to be adapted to each wall. Here's where the careful planning begins. In our case, the wainscot we were copying was 36 in. high, topped by a chair rail moulding, and containing a raised panel surrounded by a picture-frame moulding. (See detail drawing on next page.)

WE WERE ABLE to extend all the vertical dimensions directly to the new wainscot. But we had to determine new panel and stile widths that would "come out even" on each wall—and yet which would remain as faithful as possible to the original. Spend plenty of time with pencil and paper planning each wall individually.

NEXT STEP IS TO FIGURE a lumber order and cutting plan. We made our rails and stiles from 3/4-in. top-quality walnut veneer plywood and our background panels of the same 3/4-in. plywood. (Solid walnut boards are more difficult to obtain—and less dimensionally stable than the veneer.) The raised panel on the wainscot was 1/4-in. burled walnut veneer, which turned out to be rare stuff indeed. Although we were told that such a product was still made, we were unable to find even a single piece in the New York metropolitan area. Eventually we found a plywood fabricator who custom-made a panel for us.

FOR OUR MOULDINGS, we made cross-sectional drawings of the existing mouldings and had them reproduced in solid walnut at a mill.

Stock Mouldings

USING THESE MATERIALS resulted in a first-rate reproduction. But you can get by with less expensive wood—especially if you aren't trying for a close match of an existing hardwood wainscot. Select a veneer plywood if at all possible. A good veneer has a fine appearance, and won't give you the warping and cracking problems that solid boards often do. You can find stock mouldings in a good lumberyard—and can combine two or three stock patterns to make a dimensionally interesting chair rail. Skillful staining or graining can work wonders with inexpensive softwoods.

AN IMPORTANT POINT in buying mouldings is that they must fit the "steps" in the wainscot. For example, the picture-frame moulding against

*The reprint editions of the 19th century architectural pattern books available from The Journal contain designs for wainscots.
the background panel in our wainscot steps back 1/4 in. from the front stile.

WITH ALL MATERIALS in hand, we began by making the required number of stiles and rails. We ripped the 3/4" plywood to the appropriate widths, then crosscut the stiles roughly 1 in. longer than the distance between the top and bottom rails.

USING THE DADO BLADE on our radial arm saw, we cut a 3/4-in. wide rabbet half the thickness of the material—EXACTLY—along the back of each top and bottom rail.

NEXT, measure 1/2 in. from the end on the front of each stile, mark it, and then measure off the exact distance between the top and bottom rail and mark again. This should leave an exact stile length with roughly 1/2 in. on each end. Use a router or dado blade to rabbet each end, this time on the front side, and again half as deep as the stile. If your stock thickness is not exactly the same as the nominal dimension, especially with fine veneers, plywood is slightly thicker or thinner than the nominal dimension.

CUT THE BACKGROUND PANELS 1/4 in. smaller in each direction than the height between the top and bottom rails and the width between the stiles. Cut the raised panels to their finished dimension.

OUR NEXT STEP was to experiment with stains and finishes. We knew that we would have to use different stain mixtures on the various components so that each would match its original counterpart. That meant staining each part individually, and we reasoned that the best time to do that was before they were all assembled on the wall.

WE TESTED SEVERAL MIXES on scraps, then added two coats of Minwax Antique Oil, which was to be the final finish. We weren't going to oil the wainscot before it was assembled, but we needed to see how much the oil would change the color over the stains we were using. When we had the combinations we wanted, we sanded and stained each piece its proper color. The raw plywood edge on the burled walnut panels would show, so we sanded and filled the edges and painted them a dark walnut color.

WE BUILT OUR WAINSCOT over a plastered brick wall, assembling it directly on the plaster. If you are working on a studded wall, it will first be necessary to remove the plaster or
Finished wainscot is a faithful replica of the 1883 original. It is accented with a simple one-color wipe-line stencil.

Installation Details

A baseboard was already in place. We removed the moulding from the top of it, then planed and cut the bottom rail as required to get a level installation on top of the existing baseboard. We then attached the rail to the wall with nails (more about that later). Put the first stile in place in the bottom rail, and put a couple of small wire nails through the lap joint to hold it in place. Try to put nails where moulding will hide them. Measure over to the next stile location and install one there in similar fashion. Continue until all stiles are set.

Now set the top rail in place over the stiles and attach it to the wall, again locating the nails where mouldings—in this case the chair rail—will cover them.

Sources

The custom-made walnut mouldings were produced by Dimension Lumber Corp., 517 Stagg St., Brooklyn, NY 11237.

The burled walnut veneer panels were made by Yonkers Plywood Mfg. Corp., Bordentown Rd. and Cheese Quake Rd., Old Bridge, NJ 08857.

If you're installing over furring strips, none of this should present much problem.

Over plaster and brick, however, we had some difficulties. The first was that neither cut nails nor masonry nails were adequate to hold the top and bottom rails securely, although cut nails apparently did the job just fine in 1883. We struggled nobly, but eventually gave in to the inevitable: Using a masonry bit in a power drill, we bored into the brick and installed wooden plugs so that we could attach the rails with wood screws—three to each 8-ft. length.

Second problem was that because the plaster walls were uneven, we had to place shims behind some of the stiles to hold them tightly against the rails and make a smooth joint.

You now have a framework of rails and stiles. Place a background panel into each rectangular opening and nail it to the wall—being careful to place the nails in the middle area that will be covered by the raised panels.

We attached the raised panels with contact cement and small wire nails. We made a stencil a bit smaller than the outline of the raised panel. We used this to apply a coat of cement to each background panel. Then we coated the back of each raised panel, let them dry, and carefully placed the raised panels on the backgrounds. Then we added two nails per panel for safekeeping.

With a mitre box and back saw we cut the picture-frame mouldings and installed them along with the chair rail and bottom mouldings. Finally, we sank all visible nails, filled the holes with linseed oil putty colored with burnt umber and burnt sienna to walnut color, and applied two coats of oil to the whole works.

The results are quite satisfying. Without looking carefully, you'd never know which wainscot is "the kind they don't make any more" and which is "the kind we just made."

Besides being fine finish carpenters, Sunnie Singer is a child therapist working in New York City, and Stephen MacDonald is Managing Editor of Industrial Design magazine.
imation of sandstone, as stone was still considered the superior material. However, there were those who believed in the intrinsic merit of cast iron and discouraged its use for imitating stone, instead recommending that cast iron be painted any color, except white or brown, that would be in harmony with surrounding architecture.

By the seventies, cast, wrought, rolled or galvanized iron was used for the detailing of many commercial buildings. Cast iron window sills and caps, painted in colors contrasting with the body of the building, were often used to accent the arched or square-headed windows of the storeys above the shop front. These sills or caps were most often designed in the Italianate style, the predominant style of commercial buildings of this era, but they were also designed in the Greek Revival mode or in eclectic styles.

WROUGHT IRON was commonly used for window balconies or roof cresting, while rolled iron sometimes replaced the old, flammable wooden shutters. Galvanized sheet metal, often painted in imitation of stone or wood, was used for such details as cornices, grilles, window guards, railings, roof covering or ornamentation. Initially cornices, mostly Italianate in style, were produced in standard 6 ft. lengths, but in the later 70's 8-10 ft. lengths were introduced.

In towns where the popular wooden mansard roof was prohibited, following the Chicago fire, a galvanized iron mansard roof of standard design might be used. Otherwise, wood was still used for the details of many buildings, as the cornice which was sometimes painted or sanded to imitate stone. Copper might also be used for the cornice or trim, and the fascia board might be either wooden or copper.

In the small town, little attempt was made at elaborate mullioning of the shop window. The display window usually appeared in only two forms: Either as a single sheet of plate glass or as a two-on-two windowpane arrangement.

The windows of the upper storeys were commonly divided into three-on-three or two-on-two. During this decade, the setting of the display window, obliquely, toward a recessed entrance was introduced, an arrangement which lasted throughout the subsequent decades under consideration.

The most common arrangement was either a center entrance with two obliquely placed windows flanking the doorway, or a side entrance with two adjacent sheets of plate glass, supported by cast iron or wooden verticals, also set obliquely toward the doorway.

A more sophisticated solution that occasionally appeared were separate projecting display cases correlating with projecting bays of the upper stories. The panels beneath the display windows were wooden.

The transom had not yet become a decorative feature as it would in the mid-1900's, though it was usually divided into leaded rectangular panes. Canvas canopies, stretched across the width of the shop front, appeared during this decade, though tin or wooden canopies still remained.

1880-1900

There appears to be little difference between commercial front design of the 80's and 90's and that of the preceding decade.
DEVELOPMENT of the shop front continued along similar lines: A storefront open and light in appearance was desired. Thus, the use of cast iron was even more widespread, and the use of stone or masonry piers for shop front construction was eventually abandoned. Two-on-two windowpane arrangements were eliminated in favor of single-sheet plate glass. Canvas canopies now lined the street, almost completely replacing the tin and wooden canopies of the 70's.

1900-1915

COMMERCIAL ARCHITECTURE of the early 1900's was characterized by the installation of large display windows in buildings of the preceding decades. The sight of masonry or stone resting on large expanses of plate glass with no visible support created a visual incongruity that was, in fact, much criticized in contemporary architectural journals.

A SECOND ARCHITECTURAL PHENOMENON of this period was the construction of flat-roofed, one-storey commercial blocks, built specifically to accommodate the large display window. The building appeared as almost all window, merely providing a frame of masonry and metal for purposes of support. In the display windows of both these types of storefronts, strips of metal replaced cast iron or wood for structural framing. The window was usually subdivided by the metal stripping, creating two or three rectangular panes above the major expanse of plate glass. The arrangement of the obliquely set display window leading into the recessed entrance was still retained.

1915-1920

THE VISUAL INCONGRUITY of masses of masonry or stone resting on a sheer expanse of plate glass, much criticized in preceding years, now was overlooked as the shop window became accepted as a distinct architectural entity in itself. It was therefore, during these years, that transom lights and glass panes placed above the display window became quite decorative, a feature anticipated in earlier years by the simple leaded rectangular panes set above the display window.

IN ORDER TO ALLOW MAXIMUM vision into the display area, the ideal storefront window of this era contained no visible structural supports. Cornice posts and obvious metal striping were eliminated in favor of simple metal clamps or clips that fastened the plate glass, either lapped or beveled at its ends. The base or sill of the window was usually 2 ft. above the sidewalk, extending in height about 6 to 10 ft. above that point, and projecting about 3 or 4 ft. into the interior of the store.

THE DISPLAY WINDOW had begun to advance several feet beyond the facade of the building, and as in former years, its sides were set obliquely, thus creating a passageway into the store, in conjunction with the recessed or splayed entrance. The wood panels that had previously covered the space beneath the shop window were often replaced by iron grilles used to ventilate or light the basement.

URING THE PERIOD, there was an interest expressed in the use of brighter colors for commercial architecture. But color was sought through the use of materials that would be bright and varied in appearance, rather than through the use of paint. As all interest was concentrated on the display window, plate glass, metals and light colored marble trim were considered appropriate for lively looking fronts, while stone was condemned as ponderous and dingy.

GALVANIZED IRON soldered together and painted to represent oxidized copper was popular. One might find a frieze of veined marble above a shop front, copper cornices, wrought or cast iron ornamentation around the display window or architectural terra cotta. In almost universal use was stained, leaded, or prismatic glass as decorative features for the
transom or for areas immediately above the display window. The canvas awning, extending across the entire width of the shop window, was retained as a fixture that lent visual variety.

**Graphics 1870-1920**

There was great variety in lettering styles during the period under consideration, and several different types of lettering were often utilized within one advertisement. But the lettering employed was seldom of the P. T. Barnum style that is often mistakenly used today in the hopes of authentically reproducing graphics of this period. Serif lettering, instead, most commonly appeared.

Several different forms of signage also existed during this period. It was quite usual to find advertisements or signs painted over the surfaces of brick buildings. Bold lettering advertising the name of a hotel or restaurant was painted, between the upper storeys, on the surfaces of these establishments.

Graphics were frequently painted, or less often, stencilled in gold leaf on display windows or on office windows above storefronts. Otherwise, signs might be found hung from balconies, crowning rooftops, or affixed to fronts of buildings. In the latter case, these signs were rectangular with segmental arches.

Almost uniformly used were signs printed on the edge of canvas awnings. Symbolic three-dimensional signs were rare; an eyeglass or a boot painted on brick or plate glass could occasionally be found. Projecting vertical signs only sporadically dotted the streetscape.

Visual chaos along the streetfront because of poorly designed or inappropriately placed signage was as much a concern during this period as in the present decade. Lettering painted on every available space of a brick front, and unwieldy signs hung on balconies and projecting from rooftops were unsightly. Then, as now, architectural critics desired an effective, but unobtrusive advertisement.

A suggested solution of the early 1900’s was that space for graphics be included in the design of the storefront. A wide strip of marble or other stone, which could serve as a decorative feature if unused, was recommended for graphic space. Prior to 1900, space for graphics was included as an integral part of the design of more expensive commercial buildings. Thus, graphic styles or forms of signage must be chosen carefully.

**More On Storefronts**

"Main Street - The Face of Urban America" is a new book that presents a diverse portrait in text and pictures of 7 towns and their main streets from 1850 to the present. The excellent photos will aid those involved in Main Street restorations. To order, send $20.00 to: Harper & Row, Publishers, Inc., Mail Order Dept., 10 East 53rd St., New York, N. Y. 10022.

A leaflet is available to help store owners improve their properties in a way that is architecturally and commercially attractive. Copies of "A Practical Guide to Storefront Rehabilitation" are available for $1.00 postpaid, from the Preservation League of New York State, 13 Northern Boulevard, Albany, N. Y. 12210. Special rates available for large orders.
Canvassing A Porch Floor

By Linda Sessions, Los Angeles, Calif.

WE HAVE A LARGE two-storey Mediterranean house that is relatively old by Southern California standards. During the first rain after we had moved in, we discovered a massive leak. Water was pouring through the flooring of a 9 x 13 ft. second-storey porch into the room below. We immediately set out to repair the leak—but soon found out that it presented some unusual problems.

THE PORCH, which forms the roof for the room below, has a wood floor of closely laid boards. When the house was built, a waterproof canvas covering was laid over the floor before the stucco walls and tin edging were finished. The canvas extended under the stucco wall, and this left a nice flat covering with no edges to fray. Fifty years later, the canvas had rotted, providing as much waterproofing as a sieve.

PREVIOUS OWNERS had put down loose layers of tar paper and covered it with a green indoor/outdoor carpet. Although it didn’t look bad, it did not afford any protection in a heavy rain.

AFTER STUDYING VARIOUS re-roofing alternatives, we concluded that re-canvassing would be best. Canvas gives a trim-looking waterproof surface that can be walked on in all weather, without tearing or becoming gummy in the summer. But we learned that no one did canvas roofs anymore as the cost of labor would be prohibitive. An awning manufacturer did outline the procedure for us, which was not difficult—but tedious. Fortunately, Rich is a sailboat enthusiast and knew that our new canvas roof would be similar to a canvas boat deck. So we bought canvas at the awning company and all the other supplies in a marine store. We purchased:

- 10½ yd. of 60-in.-wide #4 Duck Canvas, costing $72.50
- Several cans of waterproof marine adhesive and several cans of marine paint ($66.80)

HERE’S WHAT WE DID: Rich pulled up the old canvas, cutting it where it went up under the wall. He scraped the floorboards clean of any old glue, leaving a smooth, clean surface.

WE KNEW THAT we could not cut and sew the canvas to exact porch size as had been done originally, nor could we tuck the edges up under the wall. We decided to overlap the seams 4 to 6 in., leaving the uncut selvage as the exposed edge. We then ran it up over the tin to meet the wall, a rise of about 4 in. on all sides.

WE CAREFULLY LAID OUT the first piece of canvas, then rolled back one end. We applied glue to the floor boards liberally, then smoothed the canvas into place. Next, we rolled back the other end and started to glue it out from where we had left off. This enabled us to sit on the part that we had initially glued down.

WE DID THE PIECES on the sides last. We had cut the pieces several inches longer than the actual measurement to allow for shrinkage during gluing. But it turned out that the canvas did not shrink, so we had plenty of material.

WHEN WE FINISHED with the floor, we started gluing up the side walls, making sure the canvas was pressed into every inch of the metal. We cut the cloth right at the stucco and gave it an extra coat of glue to stick well at the edges. For the corner drain, we cut and fitted the canvas right down into the pipe and glued it in place.

NEXT, Rich coated the entire canvas surface with two coats of adhesive, letting the first coat dry overnight. This waterproofed it.

LAST STEP was to put on two coats of marine paint over the glue coats. The instructions are to renew the top paint coat when it begins to look dull after several years. We have had several good rains since re-canvassing and nary a wet spot below.
SAN FRANCISCO VICTORIANA has a new catalog of architectural mouldings available. They produce 150 Victorian redwood mouldings in 26 categories.

THESE MOULDINGS CAN be used for restoration or in new construction to restore or create authentic Victorian styles. The 26 moulding categories were used by architects and builders of 1850-1920 vintage houses in San Francisco and around the country.

WHERE APPLICABLE, the mouldings are dated according to the years in which they were most commonly used. They are milled from all-heart redwood.

CONSTRUCTION MOULDINGS include: Panel Mouldings, Astragals, Coves, Quarter Rounds, Crown and Bed Mouldings. There is also a variety of shingles: Square Butt, Chisel, Octagon, Diamond, Fishscale and Sawtooth.

FINISH MOULDINGS include: Door and Window Casings, Decorative Headblocks and Hoods with Cornerblocks that have the same decorative motifs. Wainscoting comes in Tongue and Groove or Batten styles with related Wainscoting Caps. There are also two Plate Rail assemblies, each with three plate grooves.

TO ORDER THIS CATALOG, send $1.50 to: San Francisco Victoriana, Dept. OHJ, 606 Natoma Street, San Francisco, California 94103.