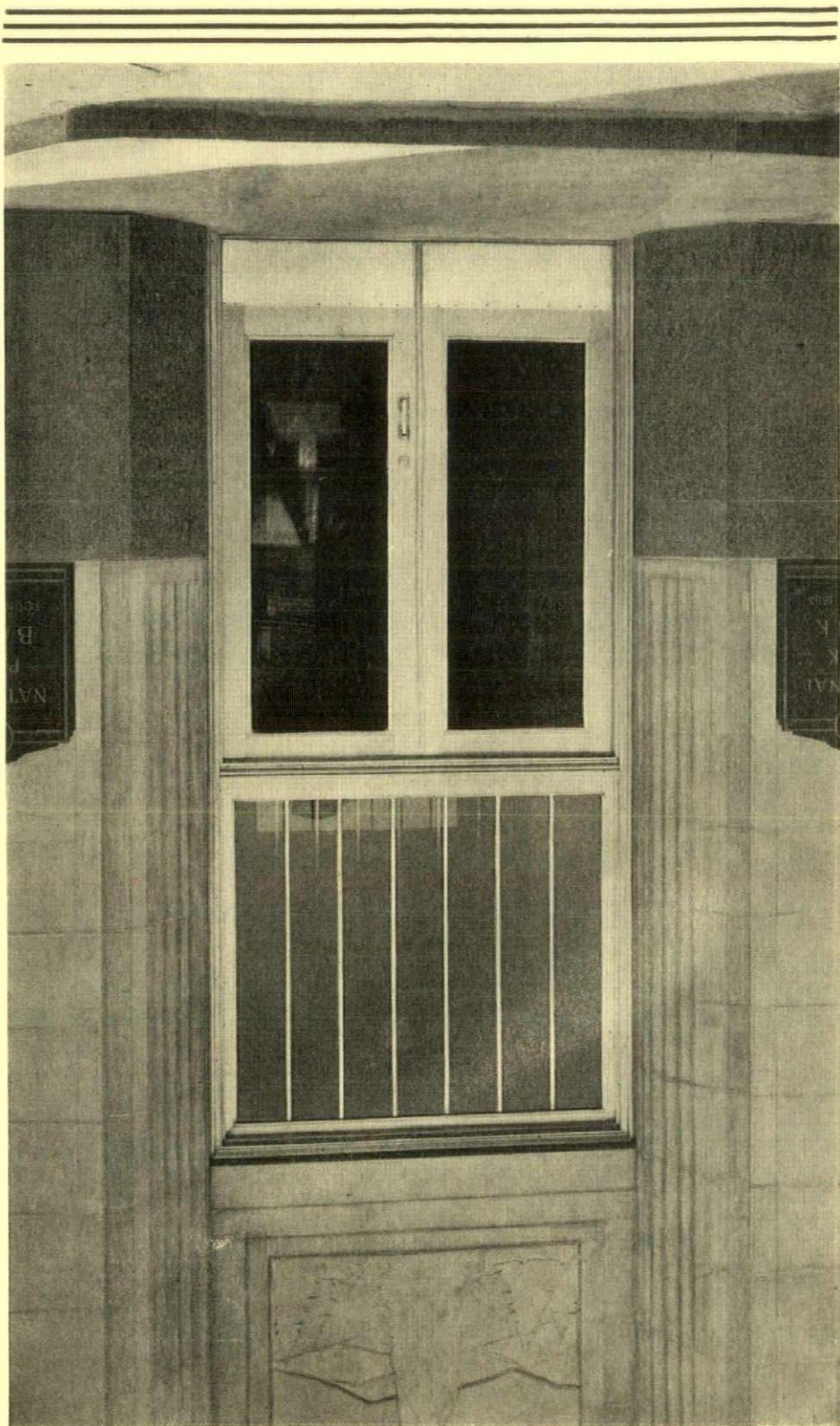


THE AMERICAN ARCHITECT

FOUNDED 1876

July 1931





“MAY I EXPRESS MY SATISFACTION AS TO THE MANNER IN WHICH THESE DOORS WERE MANUFACTURED.”

Signed, Fred F. Willson (Architect)

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DOORS

Architects and owners are quick to recognize skilled craftsmanship and to applaud a finely executed design. Mr. Willson's comment is typical of the sincere spontaneous expressions of approval which follow the completion of a Thorp installation.

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Livingston, Montana

Shanley, Willson, and Hugenin,
Architects; Bozeman, Montana
Thorp Installation: Doors, Frame,
transom, and trim hollow aluminum with satin finish.

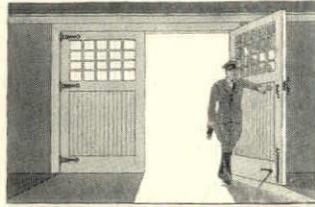
THORP
FIREPROOF
DOOR CO.

Minneapolis
Minnesota

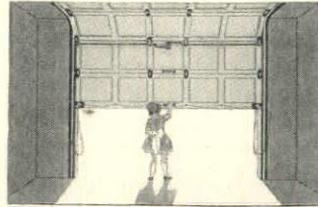
R-W parallel sliding doors.



R-W "Swingtite" doorway equipment (hinge doors).



R-W Over-Way doors, with unique features not possessed by other equipment of this type.



R-W "Slidaside" (around the corner) garage doors.



R-W "Slidetite" doors can be operated easily in any weather by man, woman or child . . . no hazardous center posts in wide openings. (Electrically operated for commercial or private garages, if desired.)

Choose any type of door from the R-W Line

Ease of operation and continued trouble-free performance are the outstanding features of R-W Slidetite doorway equipment. So easily do the doors fold and slide that a child can operate them. All the hardware is *inside* the garage away from the weather. The doors fold inside so snow and ice never interfere. In openings up to 30 ft. width, there are no hazardous center posts. You can operate R-W Slidetite equipment with electric controls or by hand.

Experienced engineering of every part insures silence, economy and other conspicuous R-W features.

Should you wish for the Door-Way (overhead), SlidaSide (around the corner), parallel sliding, or Swingtite (hinged) doors, R-W can supply them. An R-W installation is all the guarantee you need of lasting satisfaction. Send for R-W catalog illustrating all types of doors and select the one you want from the complete R-W line.



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50 years
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The Architect is interested in "Profitability" for his client, and this can be effected by the use of Smith & Wesson Flush Valves. Their ALL METAL CONSTRUCTION does away with the renewal of worn parts.

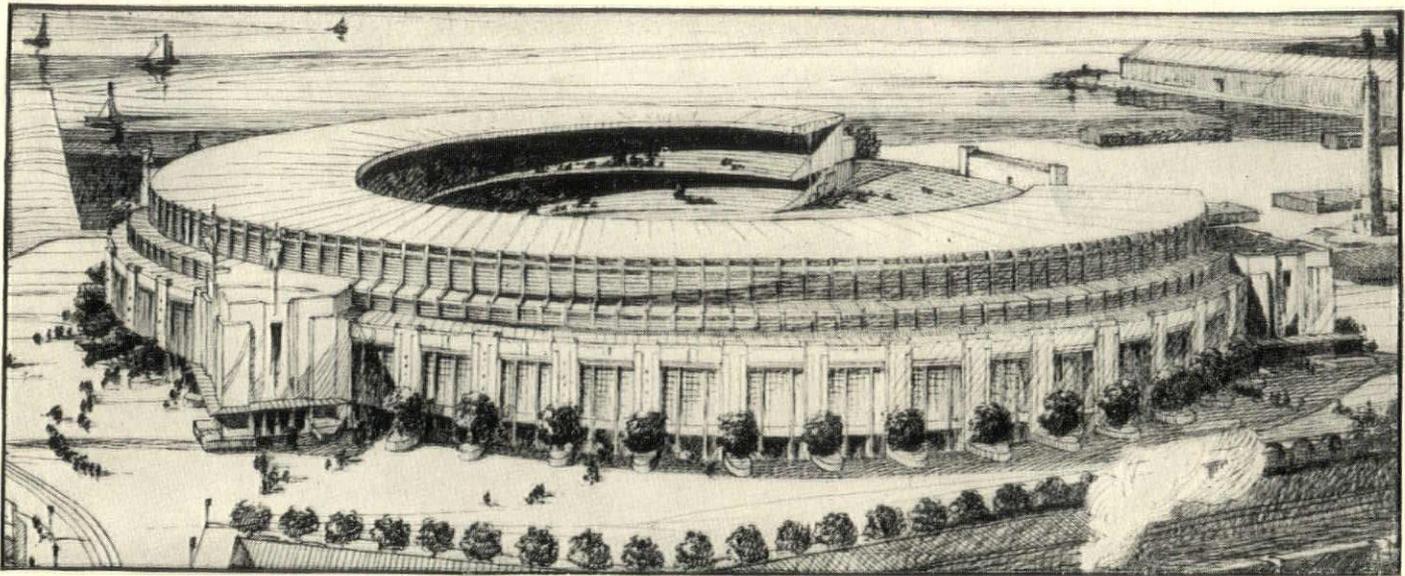
SMITH & WESSON

Flush Valve Division

SPRINGFIELD

MASSACHUSETTS





Cleveland Municipal Stadium. Owner: City of Cleveland. Engineers: The Osborn Engineering Co., Cleveland. Architects: Walker & Weeks, Cleveland. General Contractors: The W. J. Schirmer Co., Cleveland. Aluminum Metal Contractor: The Riester & Thesmacher Co., Cleveland.

What neither Olympia nor Athens could do

Gold and ivory statues by Phidias stood close to that stately stadium at Olympia. Pentelic marble was used for seats in the magnificent stadium at Athens. And yet, with all its classic design and prodigal use of marble and precious metals, Greece never built a stadium to include all the comforts, conveniences and structural advantages present in the Cleveland Municipal Stadium where approximately 180,000 square feet of Alcoa Aluminum are used.

Unknown to ancient Greece, almost unknown to building construction ten years ago, there is no other one metal today that is rightly more popular for certain architectural uses than Alcoa Aluminum. In the Cleveland Stadium, corrosion-resisting Alcoa Aluminum alloys are used for the frieze outside and inside the horseshoe; for the entire faces of the two set-backs with louvres; for the four marquise; for the grandstand ends; for the fascia of the lower tier; for ornamental lighting fixtures, flagpoles and scoreboard. Almost every form of Alcoa Aluminum is used: sheet, screws, nuts, bolts, rivets, paint, extruded shapes, plates and castings. Approximately 180,000 sq. ft. of Alcoa Aluminum add permanence, appearance and economy to this structure.

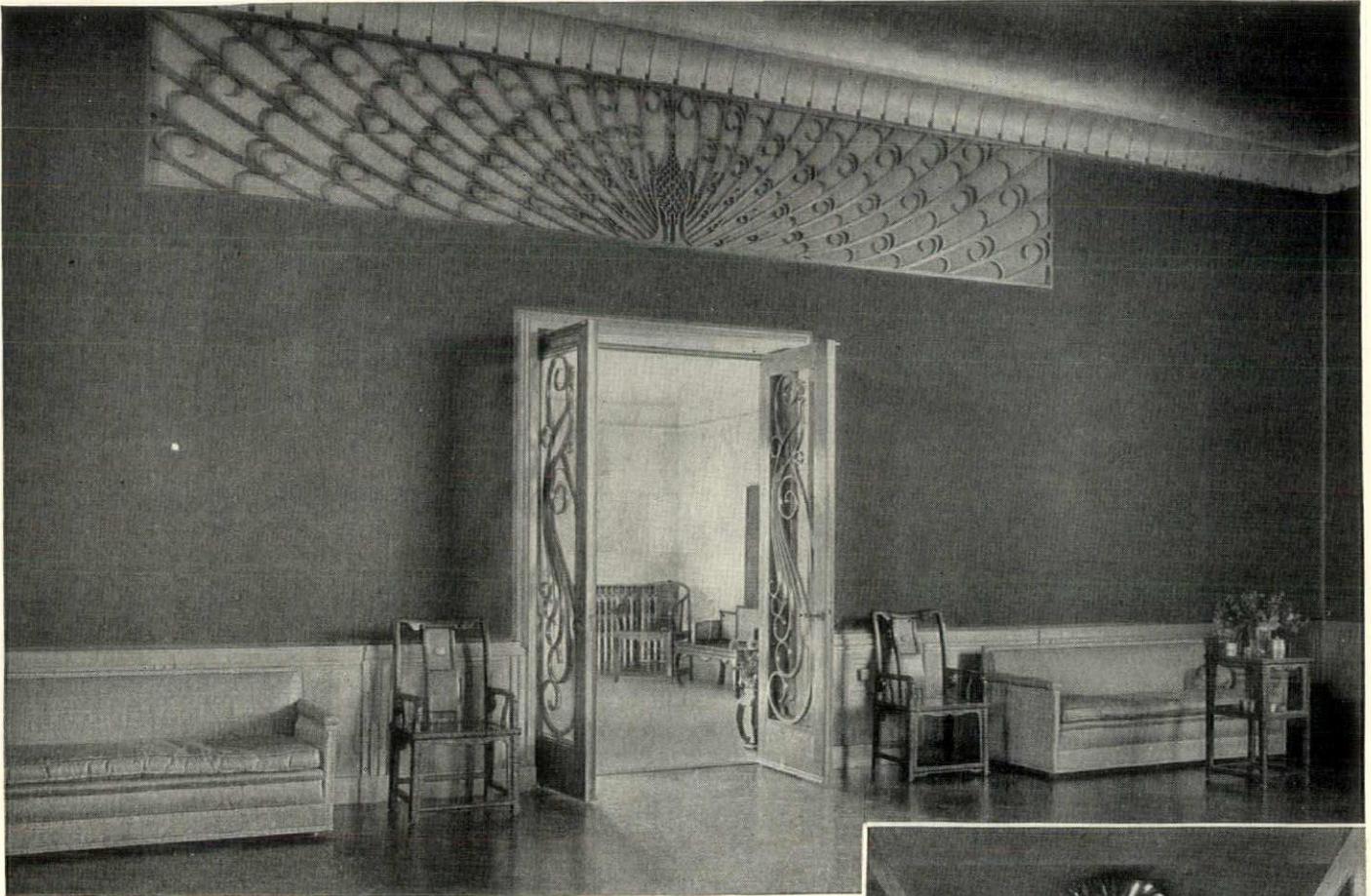
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Alcoa No. 43 Aluminum Alloy is recommended for most architectural purposes. To meet the numerous demands for structural stability, Alcoa Aluminum alloys are available in various tensile strengths. In designing and writing specifications for buildings in which Alcoa Aluminum alloys will form a part, may we urge you to accept our cooperation without obligation? Address ALUMINUM COMPANY of AMERICA; 2440 Oliver Building, PITTSBURGH, PENNSYLVANIA.

Cross section of aluminum louvre wall and fascia used on stadium.



ALCOA ALUMINUM



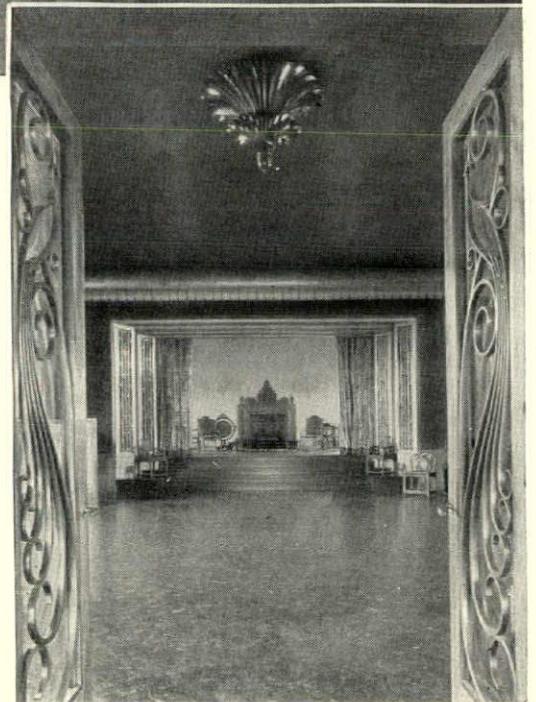
Above: The organ tone grille and entrance doors . . . in bronze. At the right: The grilled entrance doors and the proscenium arch grilles, both executed in bronze.

The Everlasting Beauty of Ornamental Bronze ~ by FISKE

INSPIRED by our feathered friends, the ornamental bronze work of the Lucien M. Tyng playhouse at Southampton, L. I., is another outstanding FISKE installation. This playhouse, remarkable for its architectural beauty, was designed by Peabody, Wilson and Brown. It is illustrative of the ever-increasing use of ornamental bronze by modern architects. Simple and graceful in line, the metal work blends perfectly with interior finishing and decorating.

FISKE maintains complete consultatory and design services which are gladly offered to architects interested in such work.

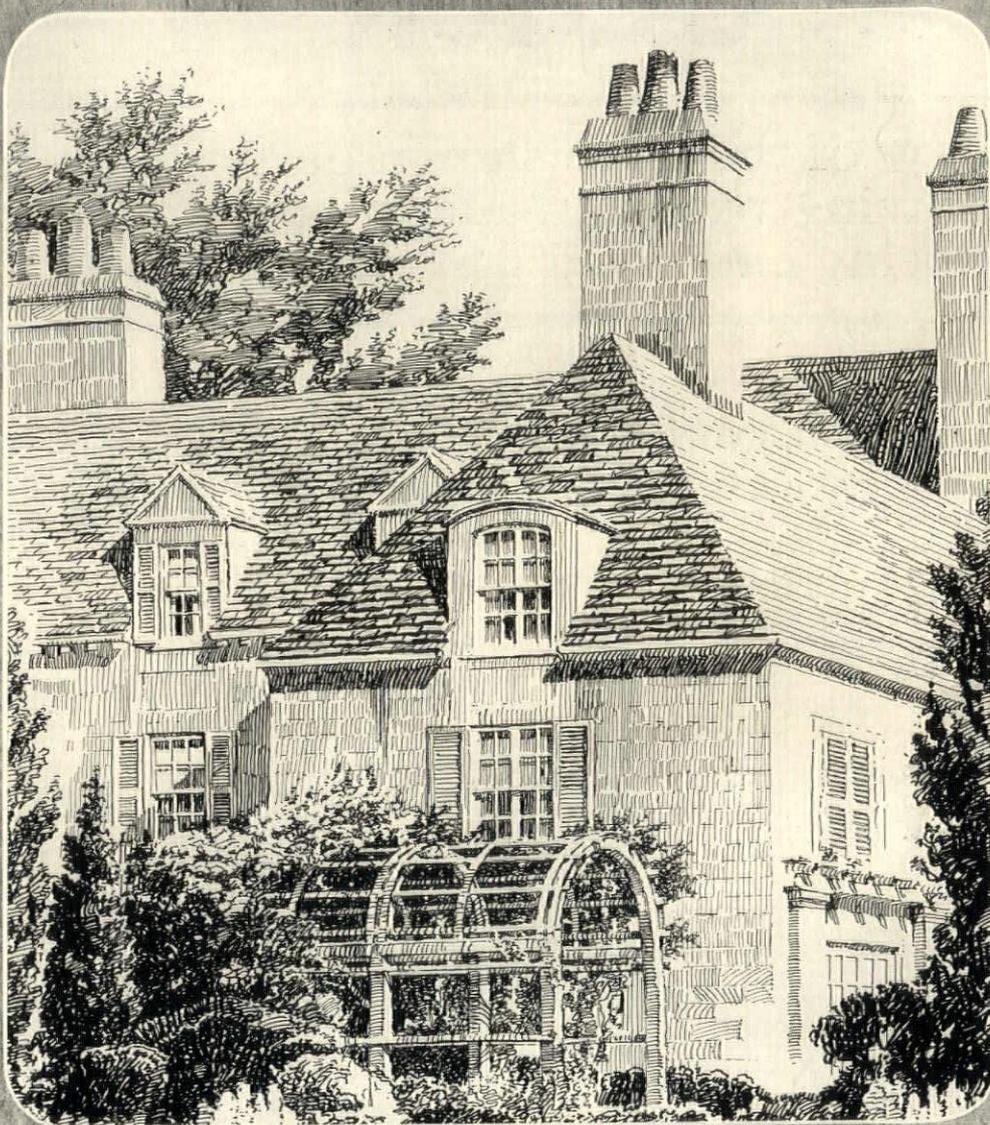
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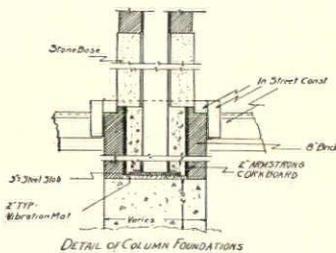
You can solve many Building Problems with **CORK**

A few of them are shown on this and the following page . . . Many other uses are being employed daily by architects

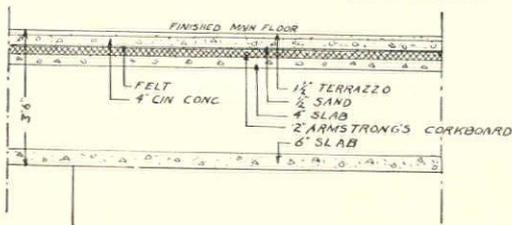
CORK CUSHIONS BUFFALO R. R. TERMINAL

VIBRATION is not admitted to the Buffalo passenger terminal of the New York Central Railroad. Columns and floors over track levels and over streets are sheathed with 2-inch layers of cork. Cork also insulates the passenger concourse and waiting room against outside temperatures. The sketches here show how it was applied.

Wherever moving machinery causes vibration, cork muffles both the vibration and the noise that accompanies it. Whole buildings can be isolated with Armstrong's Vibracork as well as all types of machinery.

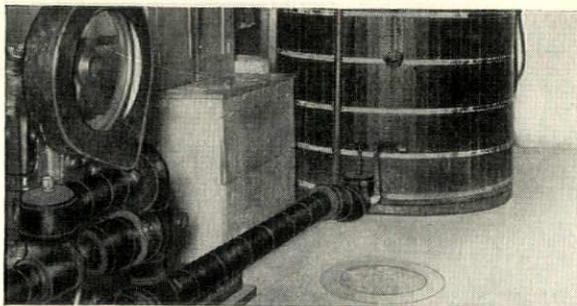


DETAIL OF COLUMN FOUNDATIONS
The sketch above shows detail of insulation around columns; that below, detail of floor construction.



FLOOR CONSTRUCTION UNDER PASSENGER BRIDGE

CORK KEEPS DRINKING WATER COOL



Armstrong's Cork Covering insulates these drinking water lines at the Kansas City Athletic Club, Kansas City, Mo.

Cool drinking water, in adequate quantity and of good quality, is imperative in modern buildings.

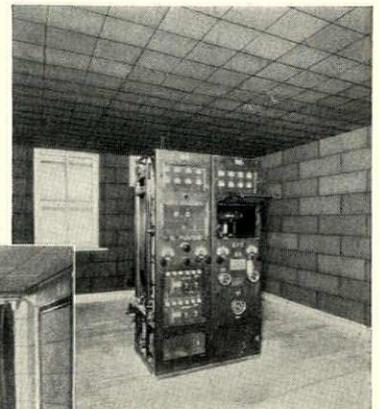
Guests in hotels, tenants of office buildings and apartments, visitors to public buildings, students in school, and workers in shops, mills, stores, and factories are entitled to easy access to cool, wholesome, palatable water.

Armstrong's Cork Covering is the ideal insulation for refrigerated drinking water systems and all cold lines. It prevents refrigeration loss, is durable, easily applied, and presents a neat finished appearance.

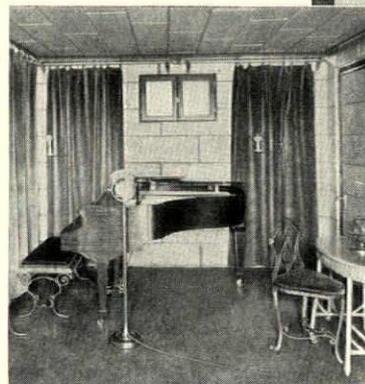
CORK QUIETS BROADCASTING ROOMS

Air-borne sounds yield to the quieting influence of Armstrong's Corkoustic. For instance, radio station WCFL in Chicago is completely quieted by cork panels on the walls and ceilings.

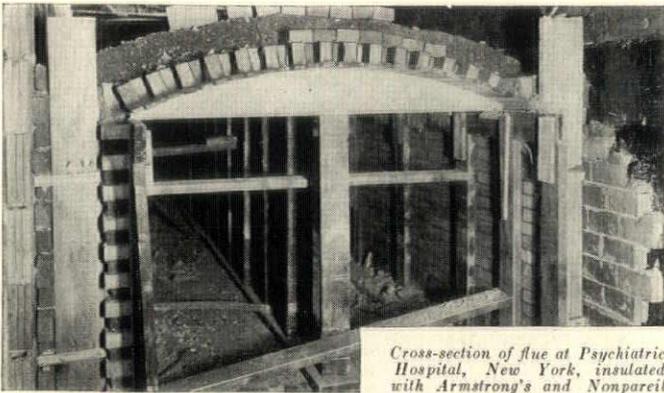
Corkoustic is more than just a practical acoustical treatment. It insulates as well. And it lends itself to many decorative designs. Used either plain or with water paints, Corkoustic is a distinct aid in decoration.



Above: Generator Room of WCFL, where Corkoustic walls and ceilings cut down sound.



Left: Studio of station WCFL, insulated and quieted with Armstrong's Corkoustic. Cork tile quiets the floor, too.



Cross-section of flue at Psychiatric Hospital, New York, insulated with Armstrong's and Nonpareil Insulating Brick.

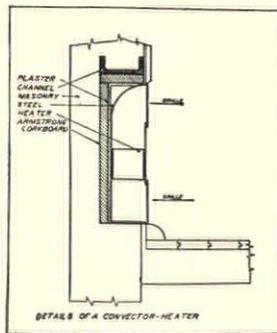
INSULATING BRICK LINE N. Y. HOSPITAL FLUE

New York's Psychiatric Hospital has lined a huge flue and stack with a layer of Nonpareil Insulating Brick, which forms a barrier that keeps heat away from patients' rooms.

Armstrong's and Nonpareil Insulating Brick are widely used for insulation of industrial furnaces. Armstrong's Insulating Brick are recommended for temperatures up to 2500° F.; Nonpareil up to 1600° F. Both Armstrong's and Nonpareil Insulating Brick are machine-sized to insure tight joints. Both brick are structurally strong.

CORKBOARD INSULATES RADIATOR RECESSES

In modern structures radiator recesses are insulated with Armstrong's Corkboard. Walls must be kept thin to save space. But the thinner the walls, the more heat is lost through them — unless its passage is stopped. Heat must be thrown into the room to be effective — not conducted outdoors by brick or steel. Because of its insulating efficiency and durability, architects are choosing Armstrong's Corkboard to perform this new function in modern office buildings throughout the country. Permanent insulat-

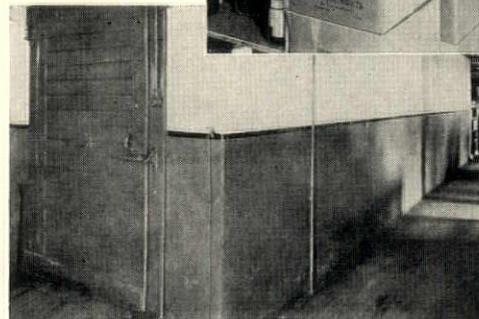
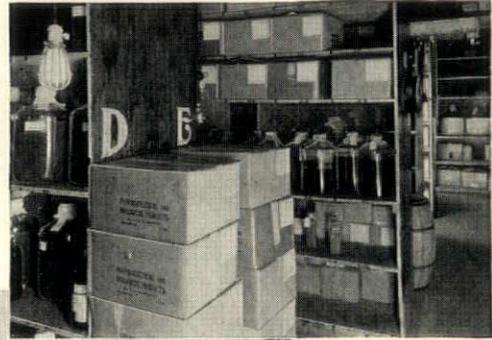


This sketch shows how radiator recesses are being insulated with corkboard in modern office buildings.

ing efficiency is assured when Armstrong's Corkboard Insulation is specified. Corkboard not only has a low coefficient of thermal conductivity but also a high resistance to moisture. Structural strength, light weight, and ease of application are added advantages.

CORK GUARDS SERUMS AND VACCINES IN LILLY PLANT

Right: These are some of the products made by the Eli Lilly Company and held at constant temperatures by Armstrong's Corkboard Insulation.



Left: Another view of the Eli Lilly laboratory in Indianapolis, showing insulated refrigerator door.

The world-famous Eli Lilly Company of Indianapolis, manufactures serums, vaccines, and other pharmaceutical supplies. Constant temperature is imperative. So Armstrong's Corkboard guards the Eli Lilly plant against temperature changes. Temperature charts show how well this task is accomplished—recording a variance of only two degrees.

There are many other important and practical uses of cork being employed daily by architects. Many times Armstrong engineers are called in to recommend the proper methods of installation. They would welcome an opportunity to help you.

Bring your files up-to-date with recent copies of bulletins on Armstrong products. We'll gladly send them to you—address Armstrong Cork & Insulation Company, 936 Concord Street, Lancaster, Pennsylvania.

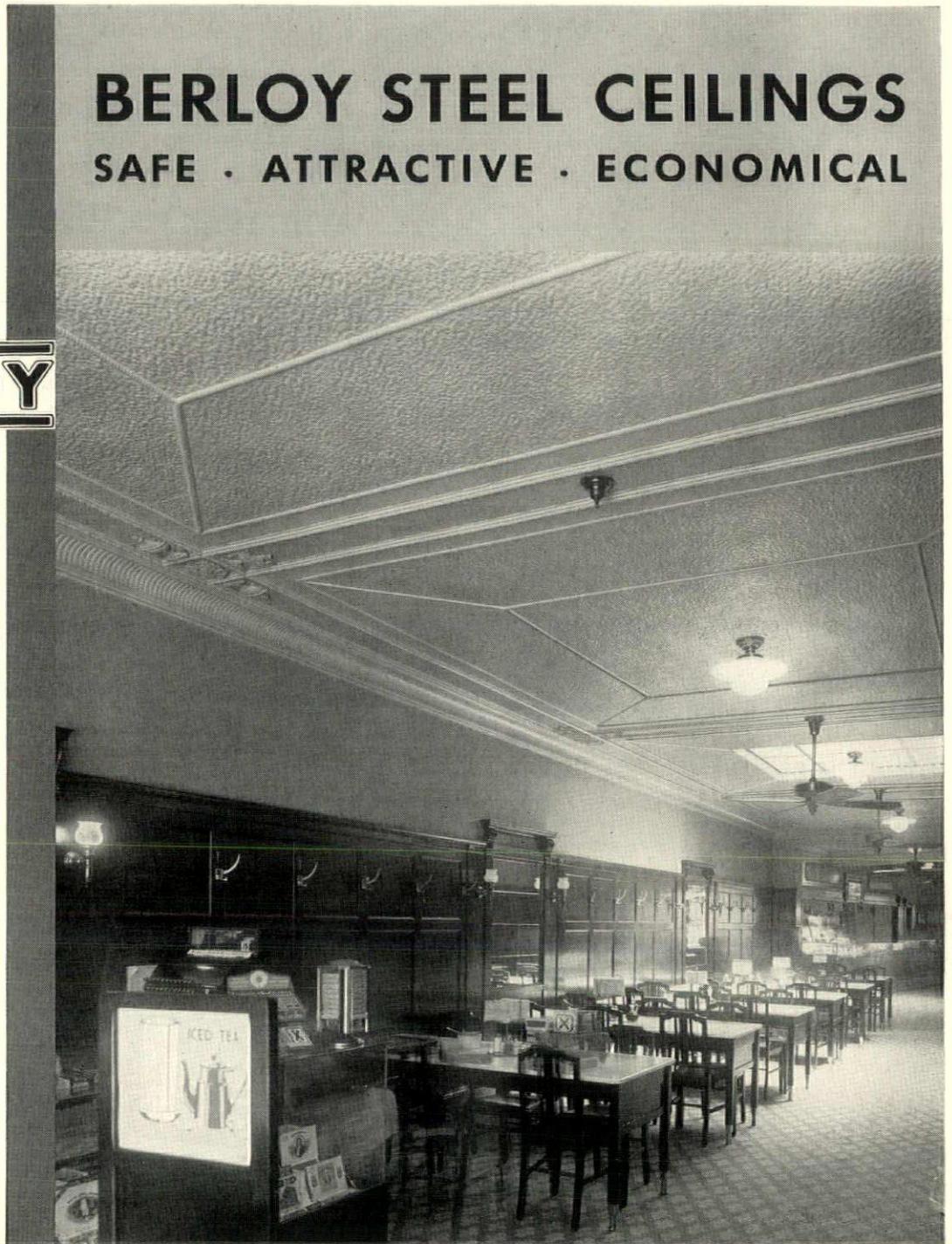
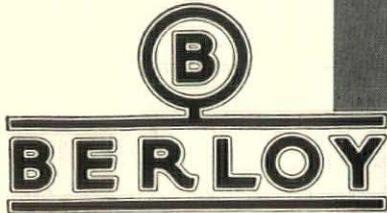
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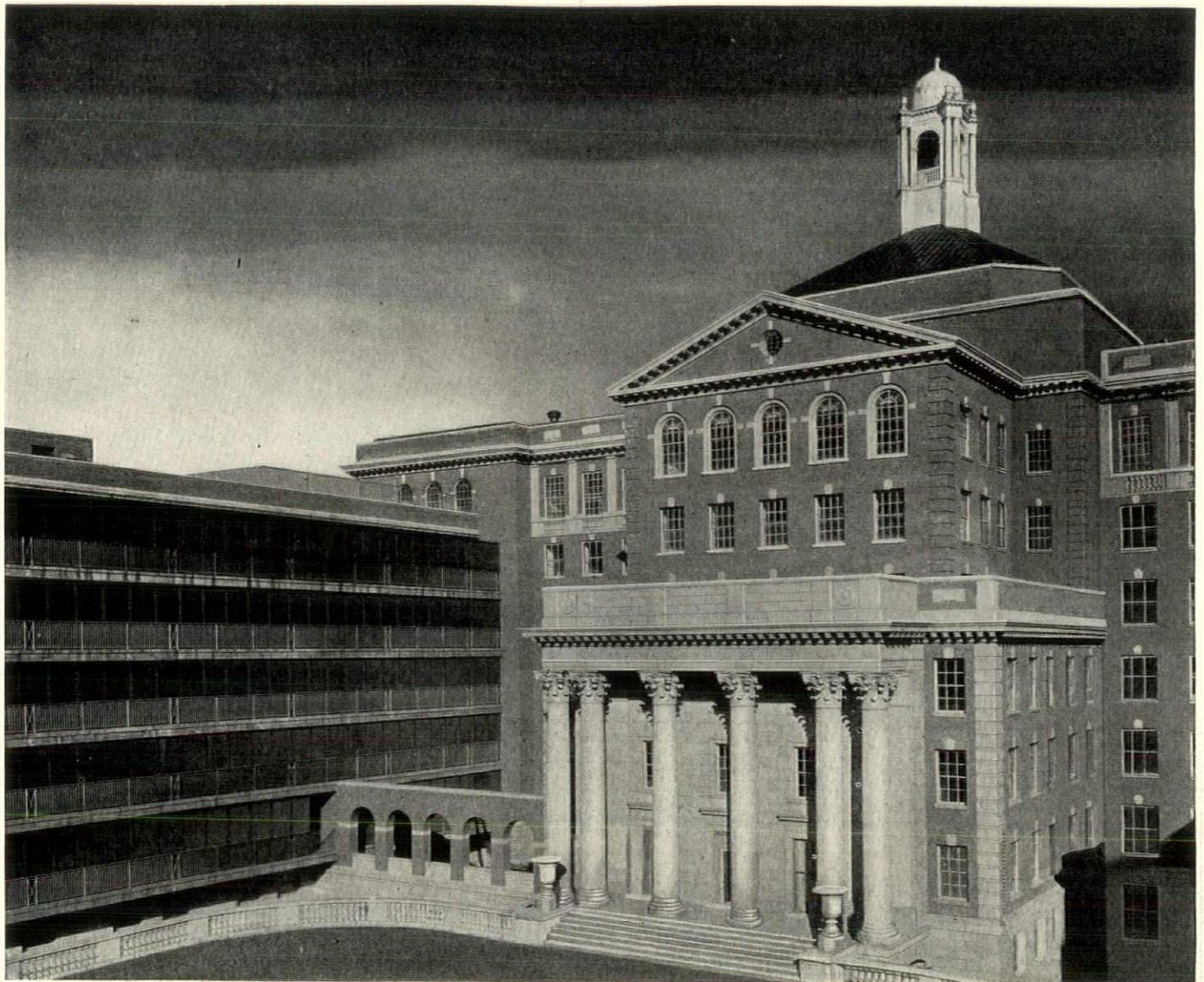
General Offices: 570 Seventh Avenue, New York, N. Y.

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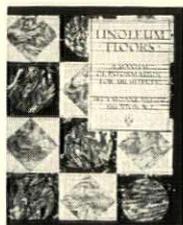
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hospitals in which W. & J. Sloane Double-Waxed Linoleum has been installed. To this distinguished list is now added the New Haven General Hospital, New Haven, Conn.

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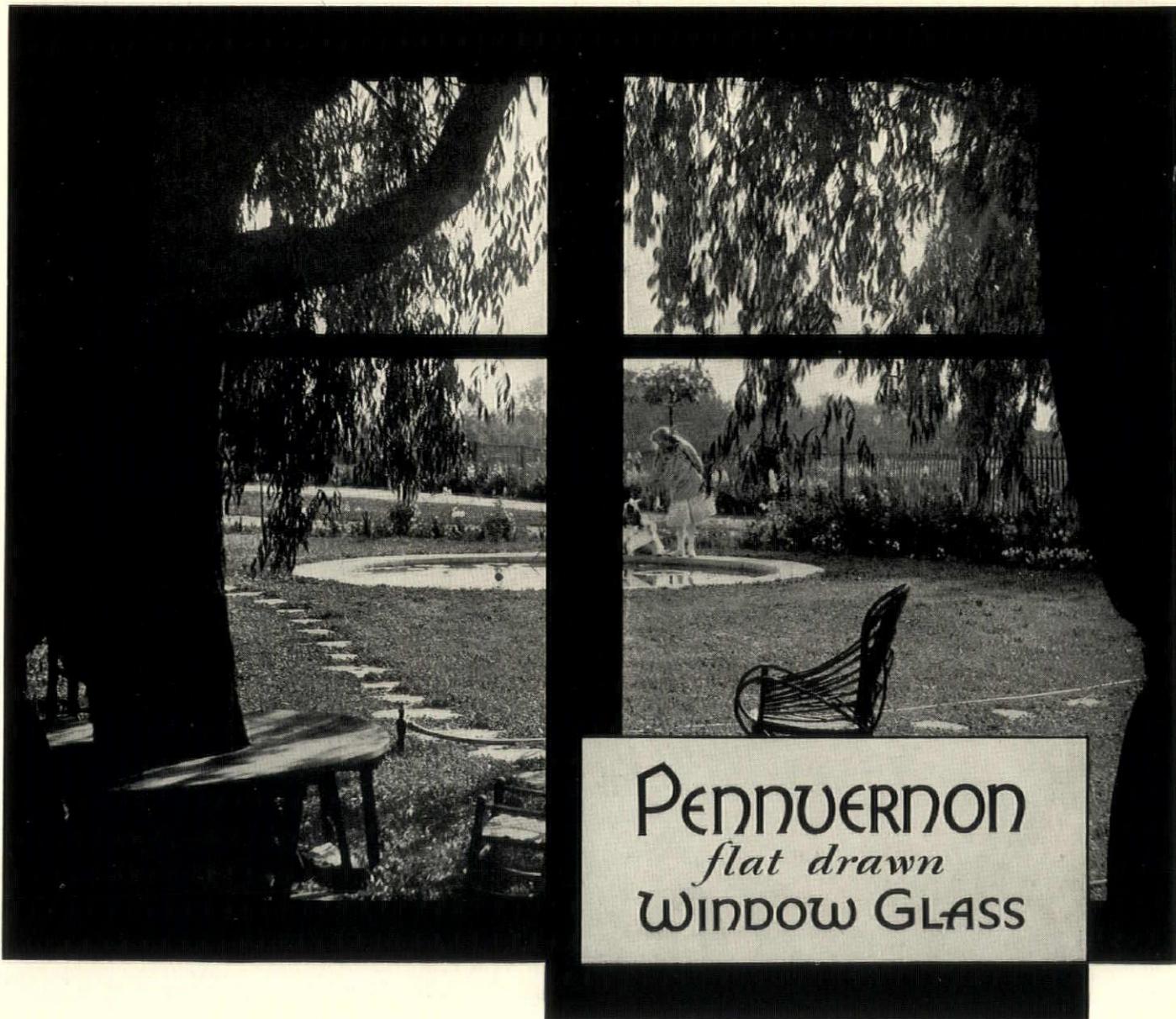
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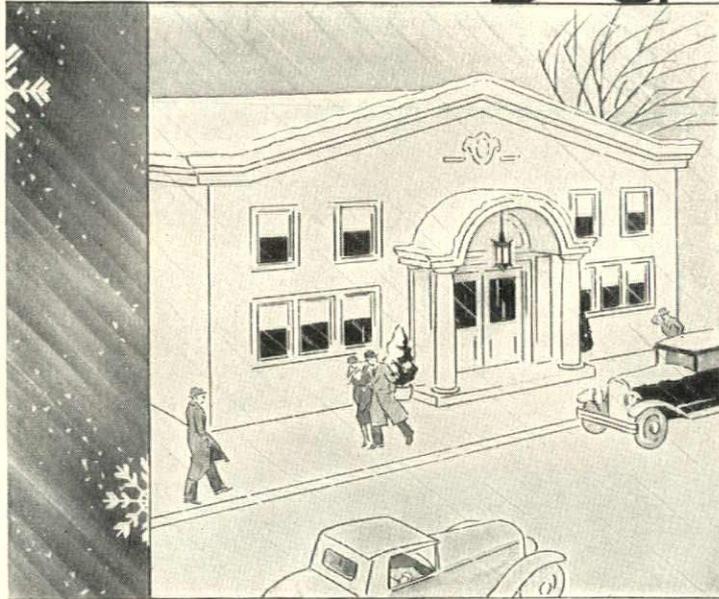
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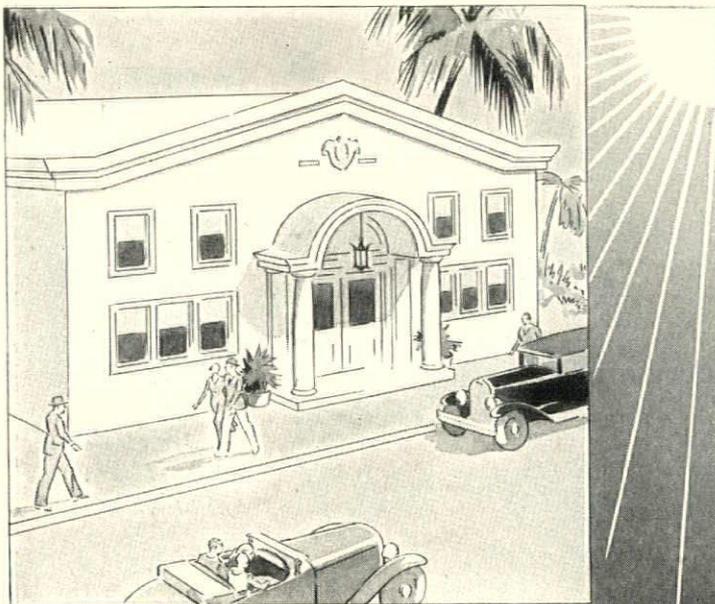
Pennvernon is available at the warehouses of the Pittsburgh Plate Glass Company—one in every important city—and at all leading glass jobbers. Ask us for large or small samples of Pennvernon—inspect them—and be convinced that there is a new and better window glass. Write also for our special booklet describing Pennvernon's manufacture. Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.



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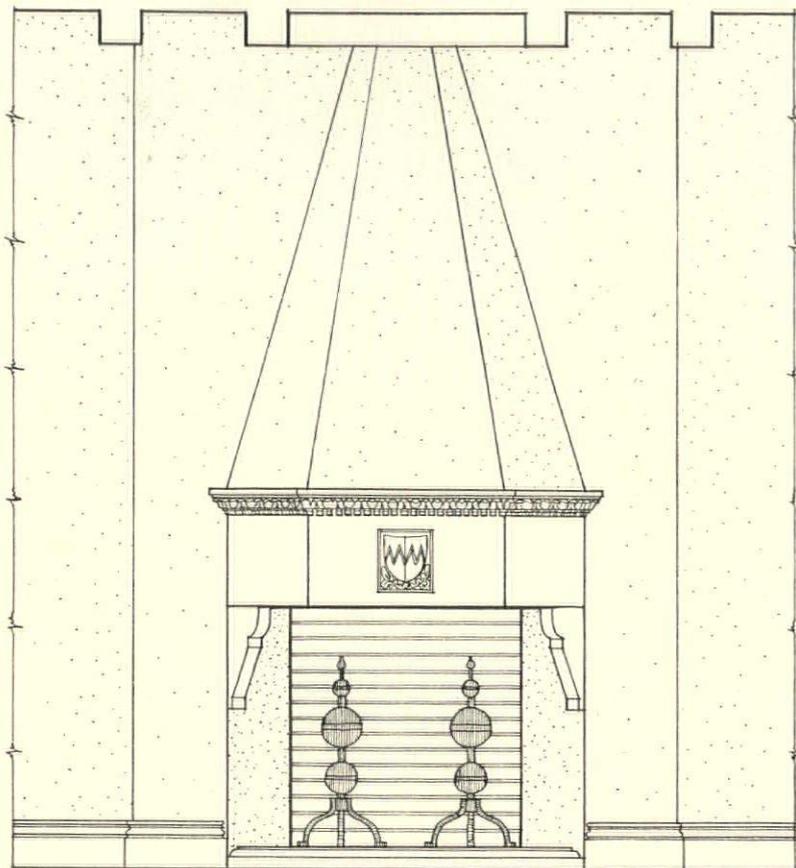
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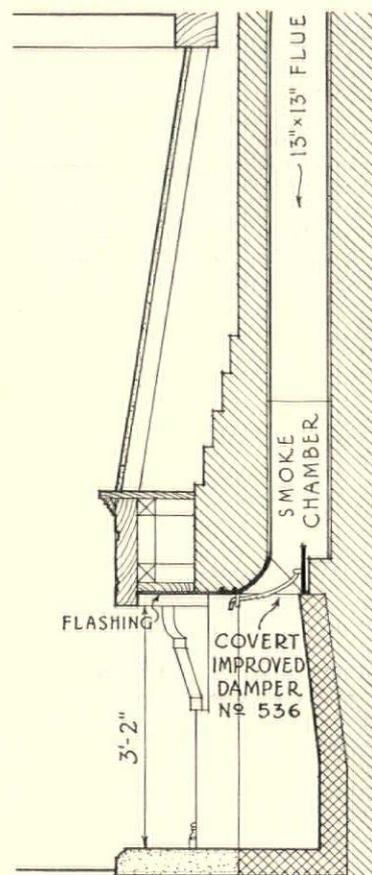
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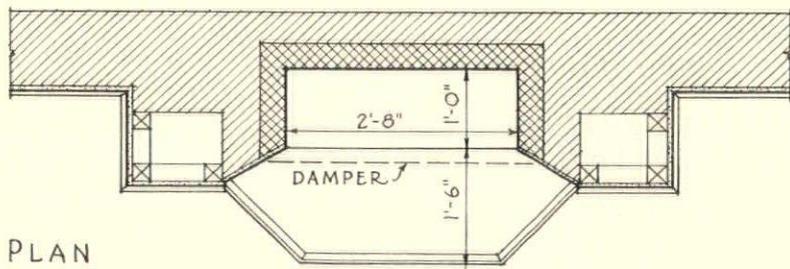


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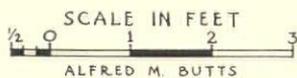
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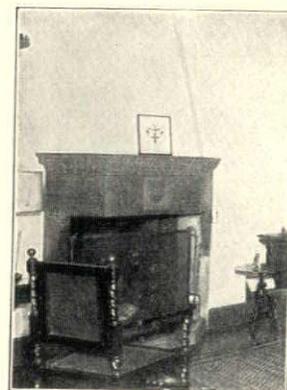


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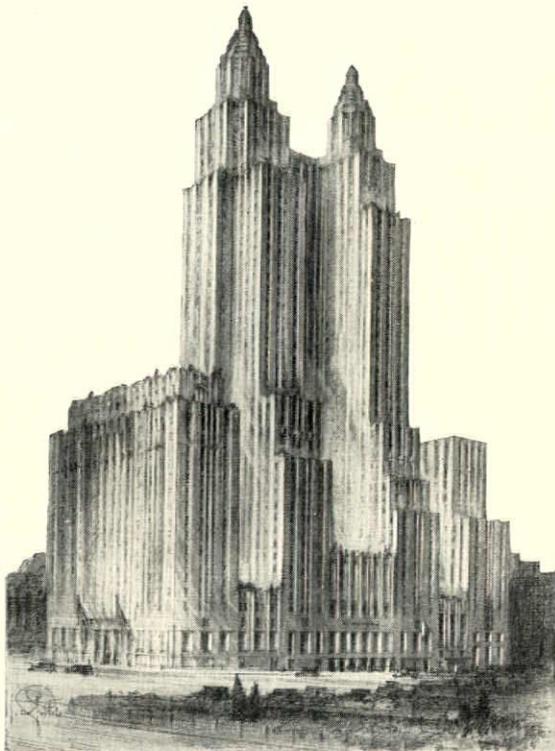


Courtesy American Historical Society

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Some of the more important guests at The Bradley Martin's famous ball held in the Grand Crystal Ballroom of the Waldorf-Astoria in 1896

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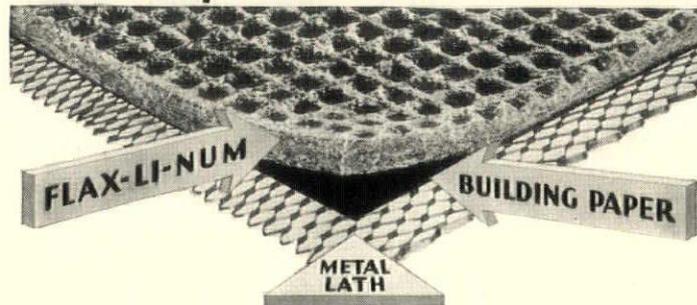
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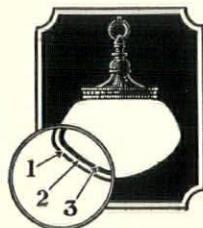
In addition to the other fields of service for Celestialite previously referred to in these columns, this special glass is ideal for use in the hospital, where good lighting is a vital matter to both patients and staff alike. The next-to-daylight radiance of Celestialite, only the result of a perfect globe, is uniformly maintained by the rigid inspection of the product.



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- [2] A layer of white glass—to diffuse the rays and soften the light.
- [3] A layer of blue glass—to whiten and improve the quality of the light.



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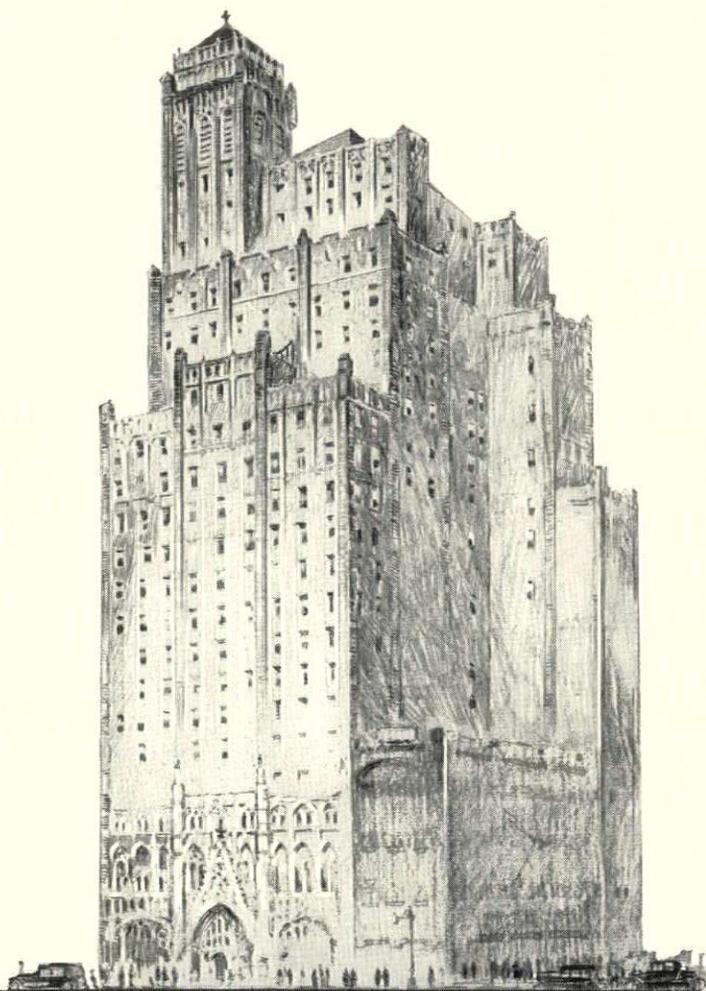
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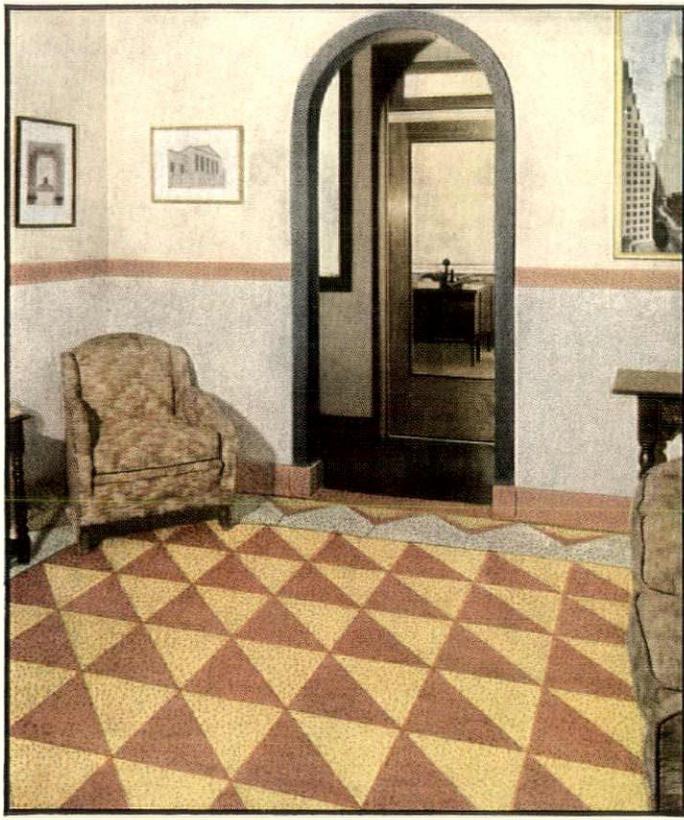
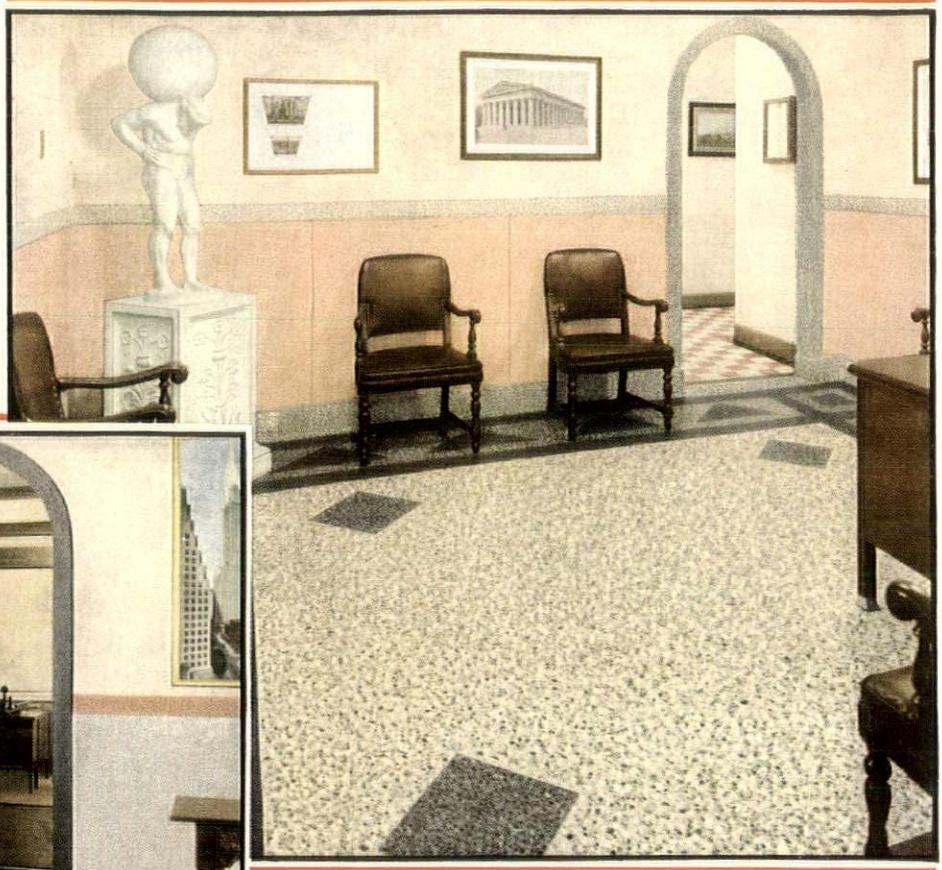
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This Month's Cover

STREET IN LE CANNET

ON the French Riviera is a little village known as Le Cannet, full of quaint and picturesque spots which lure the artist. One of the oldest of the streets in this village was chosen by Mr. Wallis as the subject for this month's cover. The water color was developed by him from the rough pencil sketch shown above.

Frank Wallis was for many years a designer in the field of domestic work having been connected with the office of Henry W. Rowe for about three years. He became interested in painting screens and over-mantels because of his keen interest in color and composition.

The chief interest of Mr. Wallis now is landscape painting, portrait, and still life painting in all media. He recently returned from a two years' stay abroad. His work has been exhibited in Paris and in prominent galleries in New York. He is the joint author of two books, "Down the Tiber and Up to Rome," and "Down Dalmatia." His studio is located at 10 East 9th Street, New York.

BENJAMIN FRANKLIN BETTS, A.I.A., *Editor*

ERNEST EBERHARD, *Managing Editor* WALTER E. DEXTER, *Advertising Manager*
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NEXT MONTH

BUSINESS—An idea that brought one architect 20 jobs

LIGHTING—New developments in use of tube lighting

SWEDEN—How Sweden is evolving its new architecture

THE AMERICAN ARCHITECT, Published monthly by INTERNATIONAL PUBLICATIONS, INC.
Fifty-seventh Street at Eighth Avenue, New York, N. Y.

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And the Government is Still in the Architectural Business!

By BENJAMIN F. BETTS, A.I.A.

ON May seventh representatives of The American Institute of Architects, American Engineering Council, Associated General Contractors of America, and The Producers' Council presented to President Hoover a memorandum relative to the utilization of the entire construction industry in expediting the Federal Building Program. The memorandum was prepared and presented to the President as a result of action taken by The American Institute of Architects at its sixty-fourth convention.

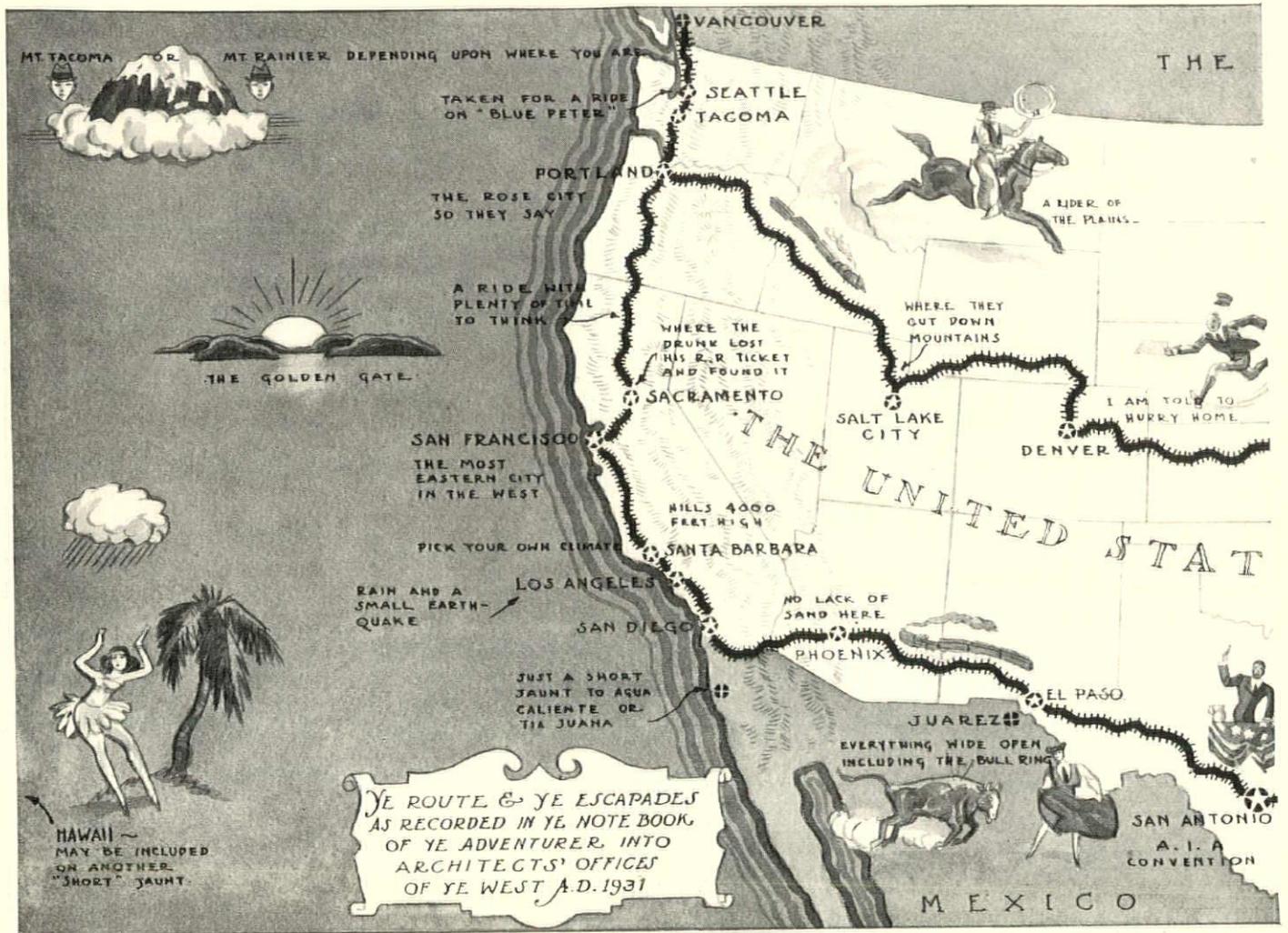
President Hoover is stated to have expressed himself as anxious to do anything possible to expedite the program and referred the committee to Major Ferry K. Heath, Assistant Secretary of the Treasury. Major Heath was called away from Washington but arranged a meeting with Judge Wetmore, Acting Supervising Architect, and Mr. Martin of that office.

THE Committee was assured by Judge Wetmore and Mr. Martin of their "intention to cooperate in every possible way feasible." This statement has been made many times in many months. The result of the conference was what anyone familiar with the situation could have forecast. And apparently the Government intends to stay in the architectural business.

Tangible results will not be obtained until the weight of mass opinion is brought to bear upon those with authority to act. Through the petition published in the May, 1931, issue of THE AMERICAN ARCHITECT, this magazine has furnished the construction industry and the public with a form on which it can register its opinion.

If architects as leaders in the building industry believe that the Government should not continue in the architectural business, no time should be lost in obtaining the necessary signatures so that the petition can be presented to the authorities in Washington as promptly as possible. It is important that the petition be representative of the industry and public opinion throughout the United States.

If the petition has not been circulated, DO IT NOW.



» » RECOLLECTIONS of

By Benjamin F. Betts, A. I. A., Editor of The American Architect

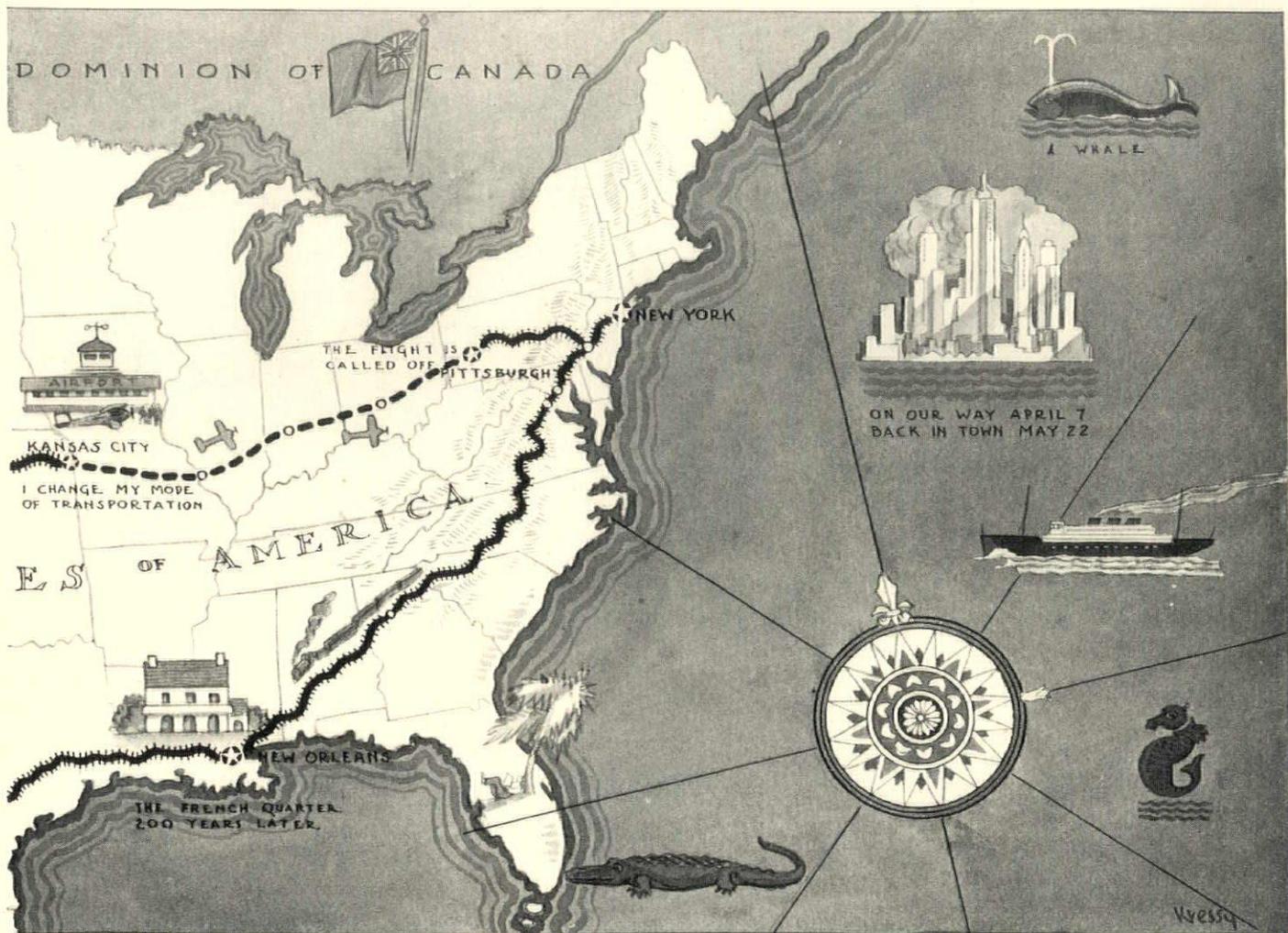
INASMUCH as the sixty-fourth convention of the American Institute of Architects was to be held in San Antonio, the editorial director suggested that I go on out to the Pacific Coast. "Just a short jaunt," said he. The short jaunt part was possibly all right but it ran into nearly seven weeks as far as time was concerned. He also suggested I get my work caught up before I left. Well, a magazine never gets caught up anyway and after I almost missed my train on the night of April 7, I soon forgot to worry about how high work piled up on the desk. It was too late then to do anything about it anyway. And it's surprising how well things go along without you, after all. Maybe all editors ought to disappear for a year or so and see if they are as necessary an evil as some folks think they are.

Twelve hours out of New York headed for New Orleans, I awoke from the best night's sleep I ever enjoyed on a train and had a whole day in which to work hard at doing nothing. The day was warm, balmy and clear, a welcome change from the April shower of the night before. There is something about the steady "pull"

of an express and the song of the wheels clicking over the rails, monotonous though it is, that produces a quiet contentment and makes one satisfied to gaze lazily upon the country side, and its life which unfolds like a "movie"—and *rest*. Here and there trees were beginning to turn green, cherry blossoms were in bloom, and miles of track disappeared in the distance.

As the train tears along through the Carolinas one occasionally sees a one-story shack or log cabin; colored women stirring the week's wash in great iron kettles over open fires; a colored mammy with her arms full, balancing a large bundle on her head; two mules being given a ride in a truck; and men, women and children standing along the track gazing after the train as long as it remains in sight.

Another night on the train and New Orleans becomes a reality. One lingers in the old French quarter of the city, wandering from court to court, gazing in the numerous "antique" shop windows or allured in. Stimulated by the interest of local architects, many of the fine old buildings in the quarter are being preserved for pos-



a Very Pleasant Trip

terity. The little theatre has been built in character with the neighborhood and is worth a visit. The "air" of the quarter is reminiscent of Charleston, perhaps due to the buildings being close to the street and the prominence of iron-railed balconies. Incidentally, one wonders how the balconies remain so well in place on their supports of flat iron bars, perhaps one-half by three or four inches deep, anchored in the masonry walls. Tired of wandering about, one may end up at Antoine's or Galatoire's for a delectable dinner, which may well be Oysters Rockefeller, Trout Meuniere, or Crab Louis and drip coffee.

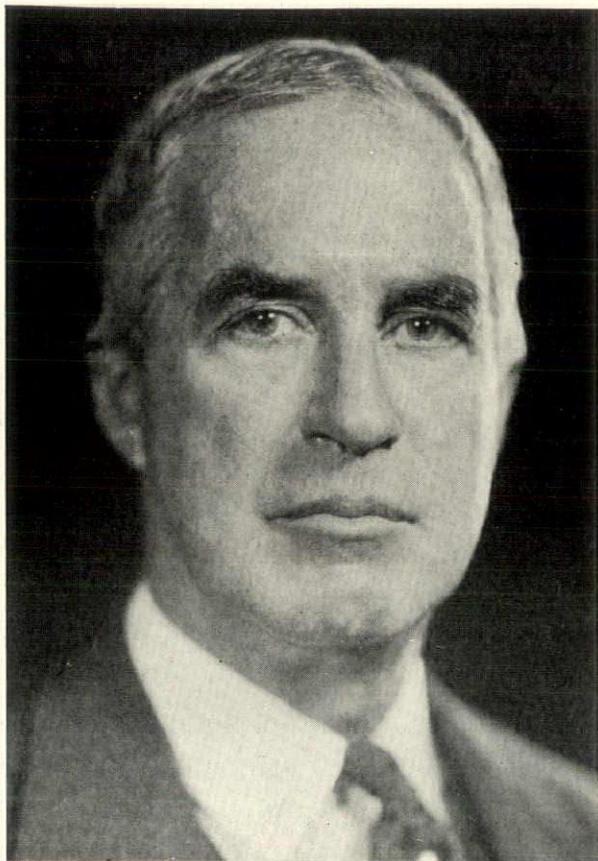
Weiss, Dreyfous and Seiferth are the architects for the new Louisiana State Capitol building at Baton Rouge. The steelwork of this building is well along. Moise Goldstein has been awarded a Government building to design. So at least two offices in New Orleans are busy right now.

Solis Seiferth, while strolling along Canal Street, told me that many of the old buildings in the downtown section have been altered time and again, usually to the extent of a new street front. Architects who like system should know Rathbone DeBuys of New Orleans. Those who have little taste for system should learn about how

he utilizes system to get things done. Possibly Mr. DeBuys will tell us in the near future how he does it and why the system works.

San Antonio has a Mexican atmosphere that gives the city a character all its own. The missions partly restored, partly in ruin, are a mecca for architects and tourists. Harvey Smith, who enjoys a good reputation locally and elsewhere, did a most creditable job in restoring the old Governor's Palace, which is practically in the heart of the city. The business section of San Antonio has a metropolitan air to which contributes the Smith-Young tower, designed by Atlee B. Ayres. The Menger Hotel proved to be as unusual a place in which to hold an Institute convention as any architect could wish for. The pleasure of attending a convention there was heightened by a cordial spirit of hospitality, employes and entertainers in Mexican costumes, the patios overlooked by second story balconies, to say nothing of the alligators which are said to be several hundred years old, or one hundred anyway.

In many ways the recent convention of the Institute was like many others held in recent years. A little fun relieved the tension of numerous sessions. After all, good fellowship is a rather (Continued on page 99)



A D E F I N I T E P L A N

To Keep Men at Work...

By

COLONEL ARTHUR WOODS

Chairman of the President's Committee for Employment

If a country is laid waste by a great flood, what do its inhabitants do? Do they merely lament their unhappy fate, provide for the victims of the disaster, and then sit back and hope that the next flood will be less severe?

They might have done this once; but the modern way is to call in the engineers, take stock of what has been learned about the action of floods, strengthen the dykes and levees, and put into operation every precautionary measure against the possibility of another inundation.

Our country is now recovering from the effects of an economic catastrophe whose consequences reach further than those of any flood seen in our time. We, too, have the modern point of view. We are not sure exactly what causes depressions; but we are doing our best to find out. We *are* aware of certain measures which can be employed in keeping out depressions; and we are engaged in strengthening our bulwarks by every such measure that can be brought to bear.

It is doubtless true that none of these measures is a panacea. But with the grim evidences of depression's consequences all around us, we can scarcely afford to neglect any remedy that will aid in stabilizing industry and in keeping down unemployment. It is my purpose herein to commend to your attention one such measure which I believe will be an important factor in our dealing with future downward swings of the business pendulum.

What happens when a depression hits business is an

old story to us all. People get cautious, cut down their expenditures, shun any business move which has any suspicion of risk or which lays them open to possible loss. Obviously, one of the first industries to feel this paring down of expenditures is the construction industry. Few people are going to put up office buildings or create new residential developments during a period when prospective customers are down in the cyclone cellar waiting for the storm to blow over.

Sometimes—for economic cycles move by degrees and depression is a gradual development—a diminution in building may be symptomatic of a slump in business. It may reflect conditions elsewhere in our economic system, indicating perhaps that consumer buying has shown some fluctuation, or that stocks of goods are accumulating heavily. The whole system is so involved that it is very hard to tell just where and when a depression does start. But a falling off of building is likely to be the first opportunity we have to observe its approach.

In the same way, a slight picking up of building may be our earliest indication of a resumption of normal business activity.

In a normal year in this country, ten billions—ten thousand millions—of dollars are spent on construction work. Of this sum, taking it in all its various ramifications, as well as the amount of labor spent on materials, some eighty per cent goes to labor. An industry of this size is necessarily a key industry; and yet it remains an industry very vulnerable to depressions. It is not diffi-

» » » "WE MUST LOOK TO THE ARCHITECTS FOR

THE PROBLEM

- What bulwarks can be erected to prevent depressions?
- 10 billion dollars are spent on construction in a normal year; 8 billions of this goes to labor.
- The construction industry is a key industry. How can it be made to act as a cushioning buffer?

THE ANSWER

- 3½ billion dollars are normally spent annually on government works: federal, state, county and municipal. This is 1/3 of all construction.
- Plan all public works well in advance. There is now, set up in Washington, a permanent advanced planning board for federal public works under Secretary Lamont and intended to do this very thing.
- When private construction slows up, speed up public construction.
- State, county and municipal authorities should actively cooperate in this program since they do 13/14 of the country's total public construction.

cult to see, furthermore, that a body blow to this industry is felt in widespread and disastrous consequences to business and employment generally.

What, then, can be done to avert such a blow, or at least to set up a cushioning buffer?

The answer, I think, is clear when we consider that of our yearly ten-billion-dollar construction program, three and one-half billions are expended on public works. Of this amount, the Federal Government's share is about one-fourteenth; the other three and one-quarter billions are expended in state, county and municipal programs. This shows where the bulk of public works lies.

In previous depressions, the authorities have tended to follow the example of residential and business construction, and pare down expenditures for public works.

Today, however, it is realized that, at the beginning of an industrial depression, when private construction is slowing up, if public construction could be increased proportionately, this move could hardly help lessening the threatened severity of the depression and keeping employment more nearly at a level than it could otherwise be. If we can evolve machinery for increasing public construction at the right and vital time, I believe it will have important effects in mitigating depression and employment. But can we?

I think the answer is strongly in the affirmative. The

Federal Government, in fact, has already shown the way to the country as a whole. This year, to meet the emergency need for construction, it has extended its public works budget to nearly three times the usual amount, demonstrating conclusively that public works can be advanced in time of emergency. But of even greater significance is the advanced planning board for Federal public works, recently set up in Washington—a permanent organization functioning under the chairmanship of Secretary of Commerce Robert P. Lamont. This board is designed to provide machinery for the expediting of Federal construction at critical times, in sufficient volume and in time to be effective.

By the advanced planning of public works it should be possible to get sites selected, blueprints completed, litigation, financing and authorization ready, so that, at a moment's notice, building programs can be put into operation. When an advancing depression casts its shadow over business, these programs can be brought speedily to the pick-and-shovel stage, bolstering the construction industry, maintaining purchasing power and putting money into circulation.

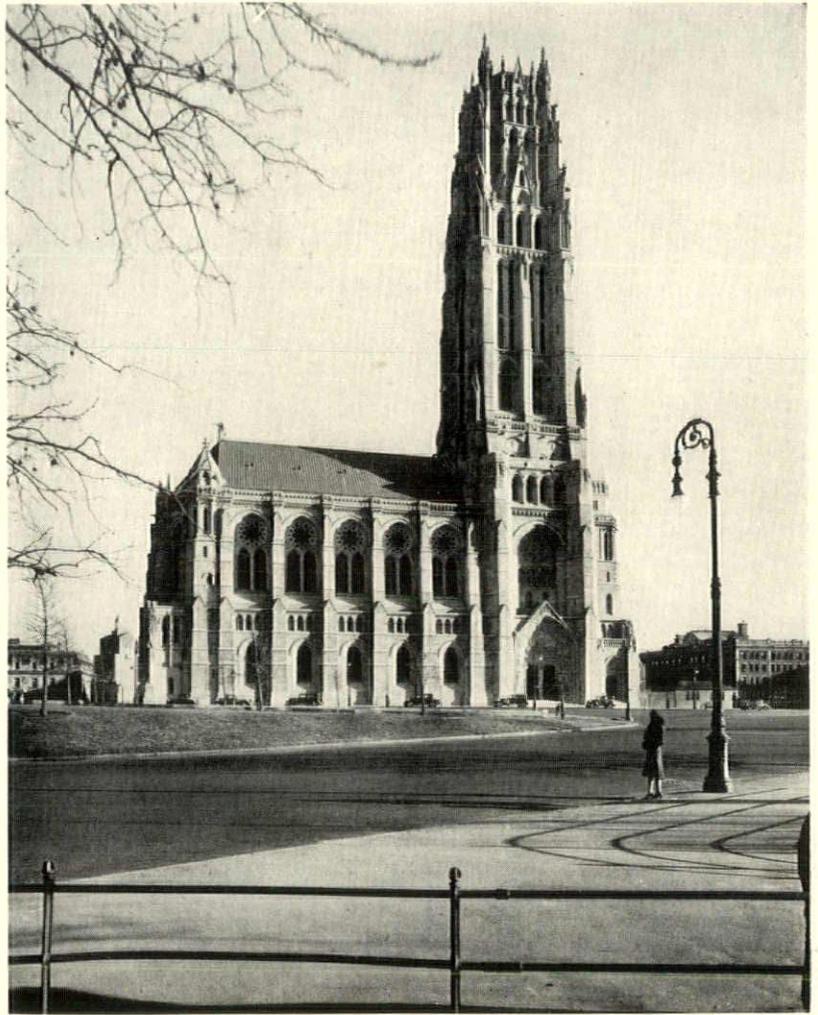
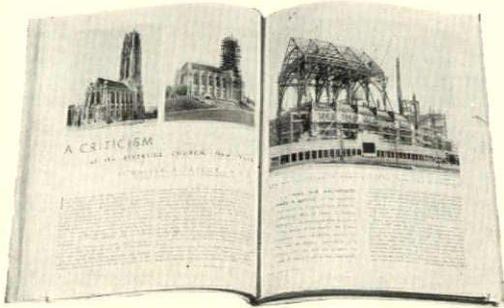
Such programs, it should be emphasized, consist only of projects that the public definitely needs. There is no thought of planning public works that are not needed in the orderly growth of our nation, merely to supply jobs. It is a case of doing (Continued on page 76)

LEADERSHIP IN STABILIZING CONSTRUCTION"

An Answer to a Criticism . . .

LAST MONTH the case against the use of Steel-Gothic in a modern building was ably presented by Walter A. Taylor, A.I.A., lecturer in history of architecture at Columbia University.

THIS MONTH, Charles Crane, speaking for the architects, explains why they feel they were justified in combining Gothic precedent with a modern steel structure.



Why We Made It Gothic

By CHARLES CRANE

of the office of Henry C. Pelton, Architect; Allen and Collens, Associated Architects

IN his case against the architecture of the Riverside Church, Mr. Taylor draws conclusions that are subject to many differences of opinion. While the so-called modern tendency in architecture, so loudly extolled by Mr. Taylor, is possibly the beginning of a new and distinctive style, nevertheless up to the present time no definite characteristics of this new style not subject to controversy amongst the "modernists" themselves have developed; witness the private exhibition of those whose works were not accepted at the recent exhibition of the Architectural League of New York.

Why should we throw overboard all precedent in architecture, at least until we have something worth while to take its place? A study of the history of architecture shows a gradual evolution and a blending of one style with another in intermediate periods. This is normal growth.

The Riverside Church takes the architecture and

ornament, call it scenery if you will, of a superb period and combines it with a modern building, completely equipped with the necessities of today's conditions. Is this so horrible? Gothic architecture is fundamentally Christian; it is a style developed by and for the followers of Christ.

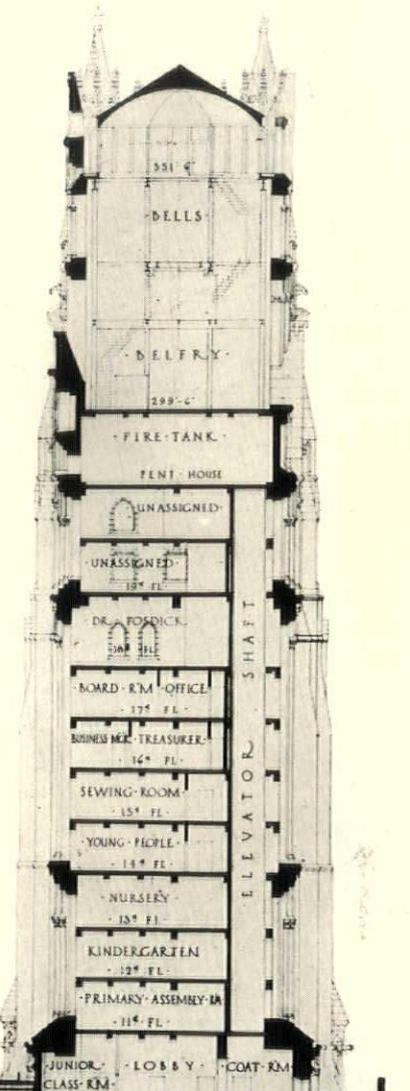
Unless totally biased, one cannot help but admit that the Gothic provides a beautiful and ecclesiastical atmosphere for the conduct of religious services. It furnishes possibilities for the expression of tradition and history in the carving and ornament and in the stained glass windows. No other so-called architectural style exceeds it in this respect. Of course, one may say, go ahead and develop a new style of equal beauty and more in keeping with our modern life, but new styles in architecture do not come like rabbits out of a magician's hat. They develop gradually and grow slowly.

Undoubtedly, at the present (Continued on page 122)



2,500 WORSHIPERS had to be accommodated; proper audition and sight lines were an absolute necessity

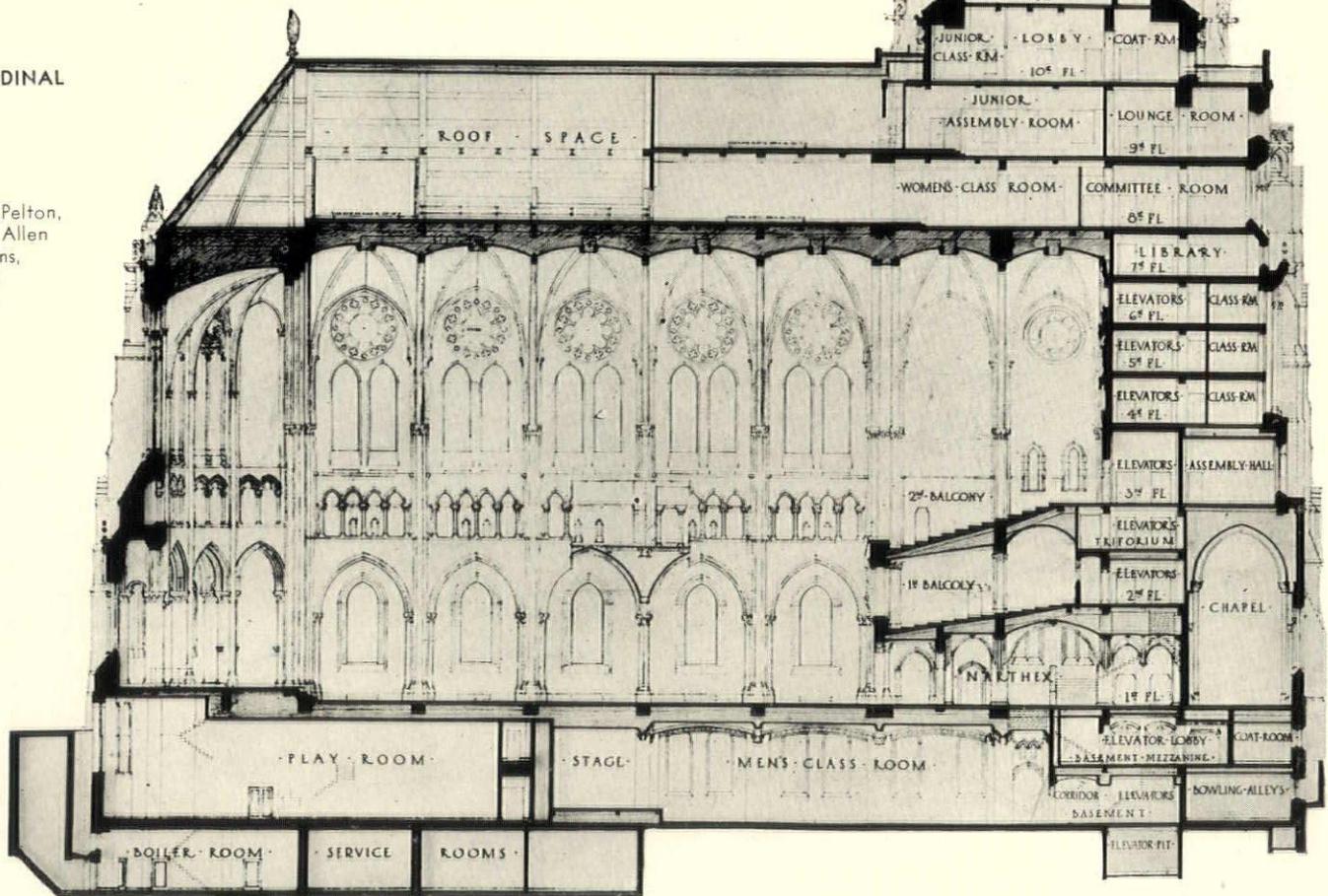
THE PROBLEM
 Ecclesiastical atmosphere
 •
 A house of worship
 •
 An office building
 •
 A style of acknowledged beauty



LONGITUDINAL SECTION

showing activities

Henry C. Pelton, architect; Allen and Collens, associated architects



Planning for AWNINGS

By BYRLE OSBORN

President Monitor Awning Supply Co.

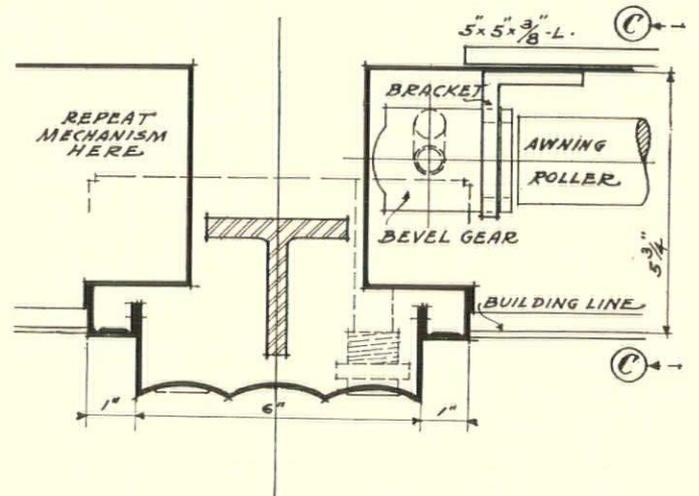
RECENTLY the New York Association of Architects passed a resolution relating to awnings, from which the following is quoted: "Hereafter our Association objects to indorsing the old style rope awnings, as on our latest designed and constructed buildings our aim is not accomplished. Results of our efforts are being marred and often entirely destroyed by the use of awnings." This opinion is shared by reputable awning men who not only welcome suggestions but invite the cooperation of architects. Conversely, there are certain practical awning details which architects should have in mind when constructing new buildings.

Not only should the architect design or at least approve the design of the awning, but he should also select the cloth, thereby making sure that the completed product will be in keeping with the design of the structure. If possible, a recess box, approximately 8" high by 7" deep, should be built into the structure at a height above the sidewalk which will be discussed later in this article. If Anton lateral arms are used, 3" must be added to the bottom of the box. Regardless of the material of which the box as a whole is constructed, at the ends there must be a substantial anchorage of steel, concrete, wood or brick for the worm gear and blank end bracket. If the awning is over fifteen or eighteen feet long, center support anchorages must be also provided, although it is advisable to eliminate roller center supports so far as possible as they rapidly wear out the cloth where they bear upon it and soon leave a dirty strip on the cloth in their wake.

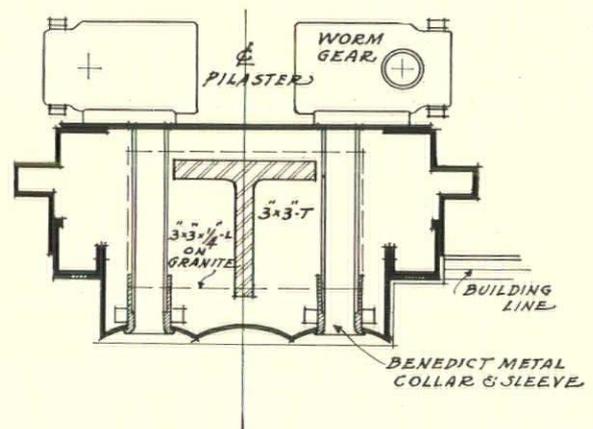
If the construction will not allow for a recess box, an exterior enclosure should be provided to protect the cloth from the weather, birds, bats and squirrels. This can be placed on the front of the building, requires a space of about 8" in width, and forms a hood over the awning. Or, if there is sufficient depth for only a part of this enclosure but not for an entire recess box, only a portion need be recessed; the balance can project from the building.

It is highly important that the selected cloth harmonize with the general design. There are four types of cloth commercially available, i. e., flat color such as white, khaki or painted duck and woven Venetian sail cloth; figured, having flowers or conventional designs painted upon the cloth; striped, either painted or woven; and combinations of these.

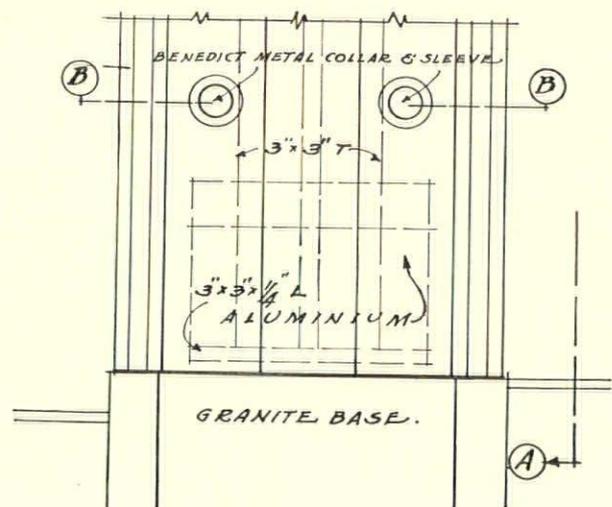
White or khaki duck are the least expensive cloths made but have little decorative value. Venetian sail cloth made especially for awning use, while dignified



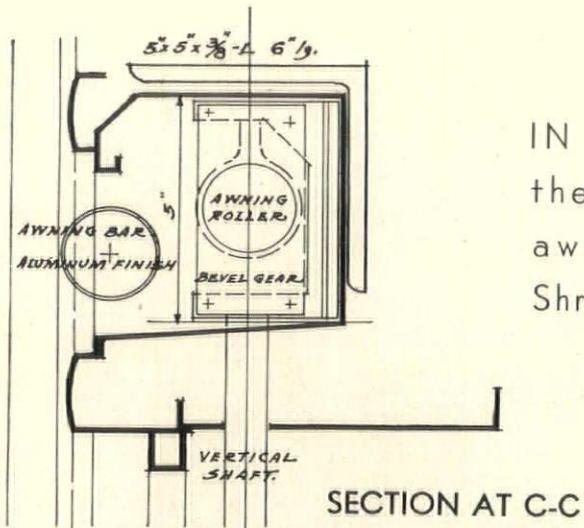
PLAN D-D THRU AWNING POCKET



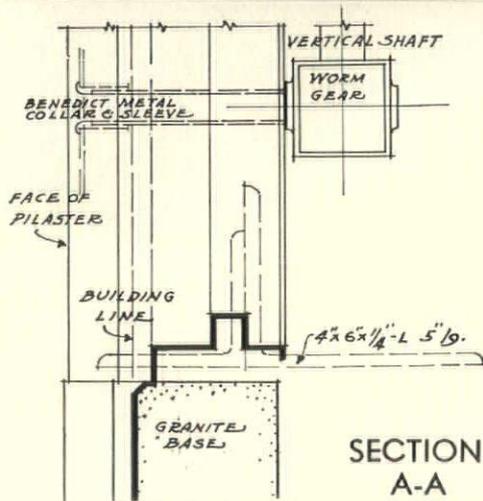
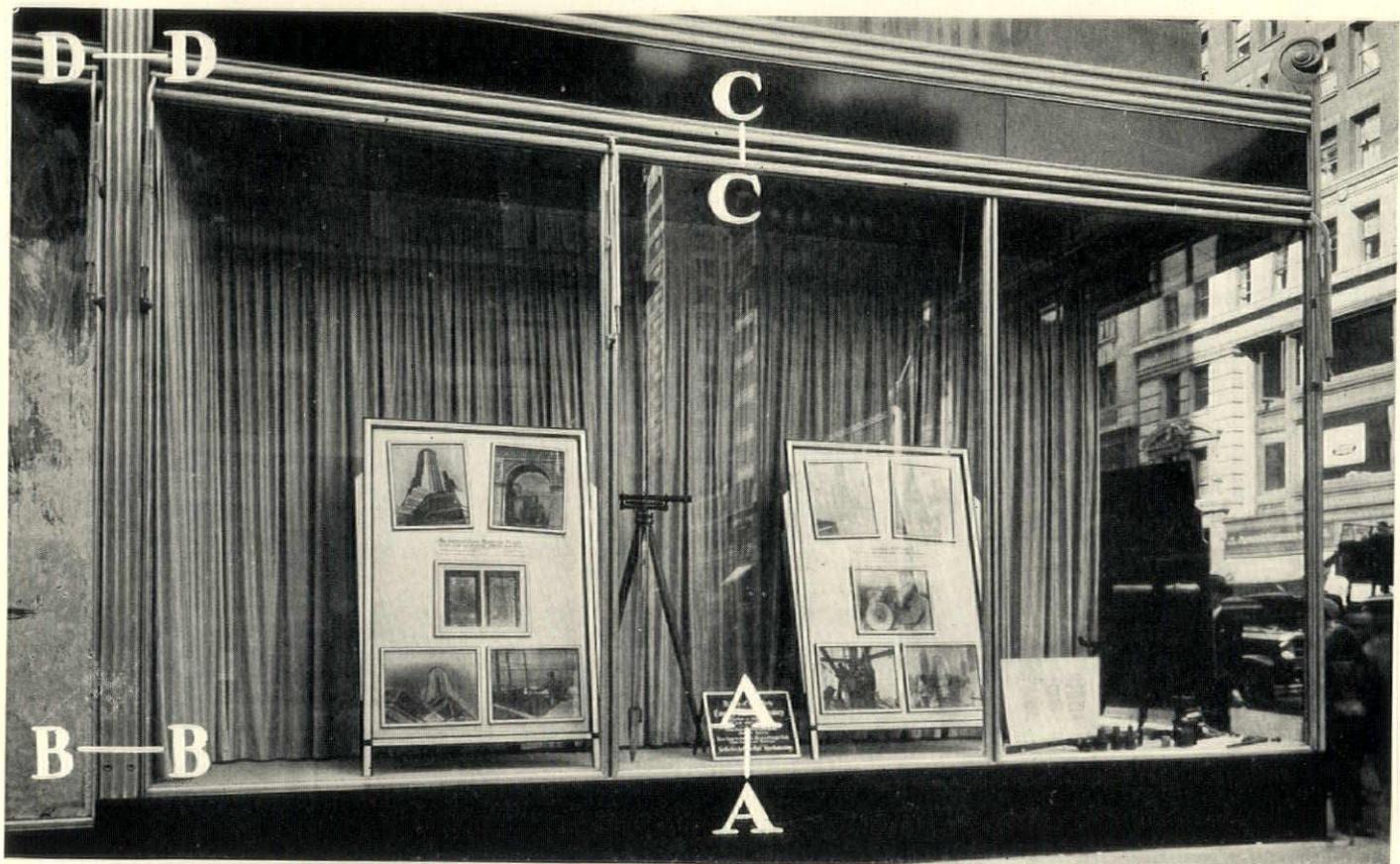
PLAN AT B-B



ELEVATION OF PILASTER AND BASE



IN THE EMPIRE STATE BUILDING
 the architects made show window
 awnings a part of the design itself
 Shreve, Lamb and Harmon, architects



and beautiful, has found little vogue except when used in combinations. Flat painted cloths, while suffering from the objection common to all painted cloths, namely that in cities the oil in the paint collects and retains soot and dirt, nevertheless opens a rich field esthetically and commercially. By using different colors on the top and under sides of the awning, a variety of effects may be obtained. Gay colors are customarily favored for the top or exposed portion, whereas it may be fatal to use the same color on the under side where it is reflected in display windows or into the shop. Painted cloth, thus far, is the only satisfactory solution to this problem.

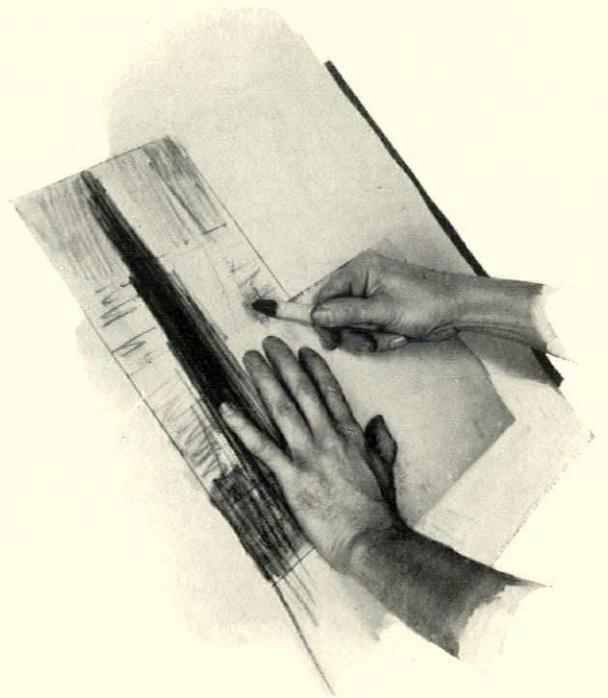
Figured cloth has not been used to any extent outside of southern California and Florida, although it has been used in a few northern cities. Buffalo, for instance, has a number of shops, catering mostly to women, (Continued on page 86)



How Hugh Ferriss Draws

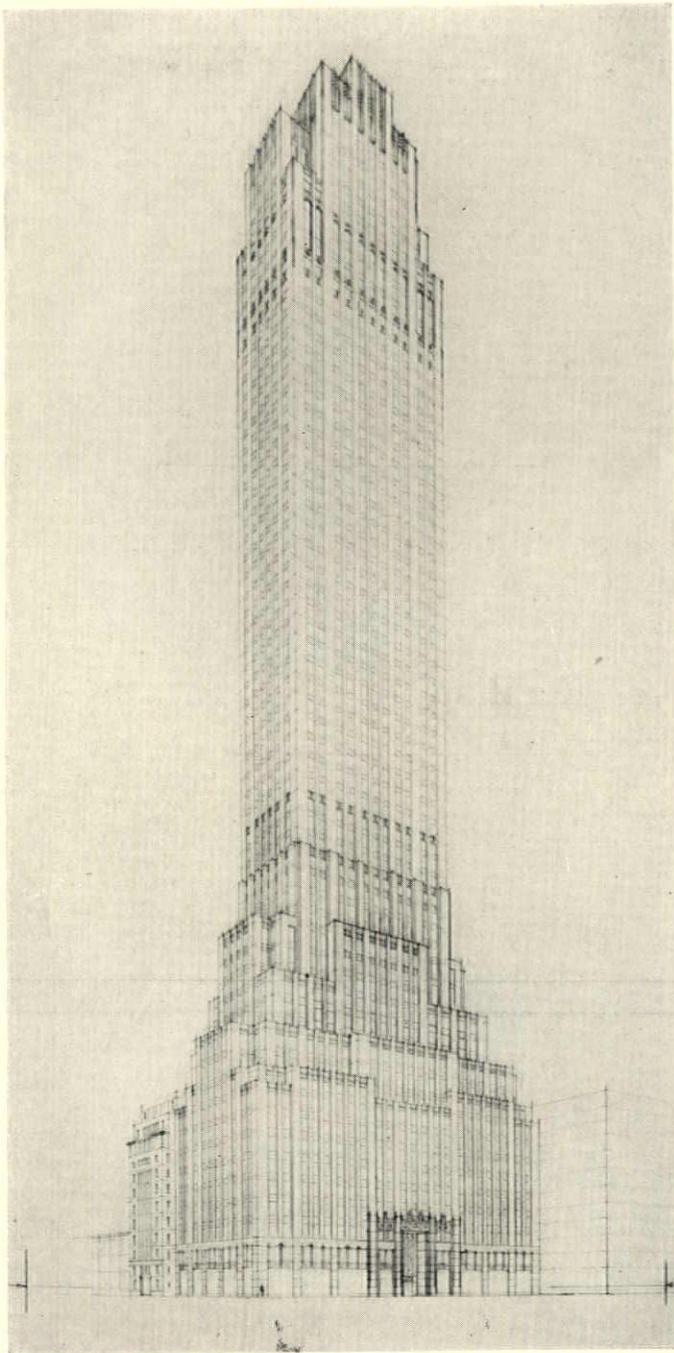
by *Hugh Ferriss*

HUGH FERRISS has specialized in architectural rendering for the past fifteen years, this being in conjunction with his work as a consulting designer. He was trained at Washington University and in drafting rooms in St. Louis and New York. He has lectured on architectural visualization at Yale, Columbia and other universities; contributed the article on rendering to the Encyclopaedia Britannica; is author of "The Metropolis of Tomorrow," a collection in book form of his designs and renderings; is consultant to the Architectural Commission of the Chicago World's Fair; is a licensed architect in New York, and holds the honorary degree of Master of Architecture, University of Washington, St. Louis.



INTERESTING HANDS!

"Flexibility, Imagination,
Individualism,"
says the Chiromancer



FIRST—THE LAYOUT, MADE IN REVERSE

... 1. The perspective, 40" high, drawn in reverse on tracing paper, using a B. Wolff's carbon drawing pencil. After serving its purpose in making the second stage, it was kept so that it could be referred to for details.

SECOND—THE RENDERING IS STARTED

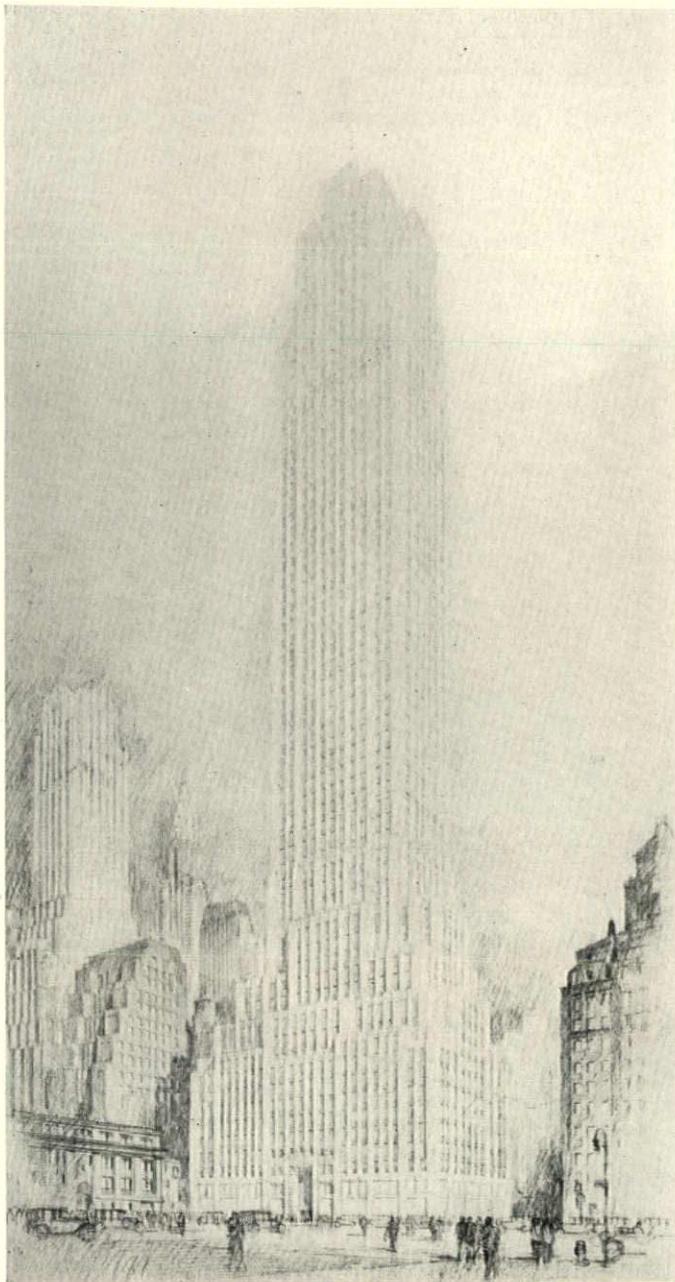
... 2. A sheet, five feet long and 36 inches wide, of Dietzgen's Clifton paper, cold pressed, mounted on muslin, was stretched on the drafting board and the layout transferred to it by rubbing.

The site of the projected structure was visited and a sketch made in reverse of its setting; this was enlarged on tracing paper to the scale of the rendering and transferred to the drawing paper.

Using a B. Wolff's crayon, T-square and triangle, the more important transferred lines were penciled in. Much of the detailed indication of the layout, not being essential in the earlier stages of rendering and in any case soon to be obliterated by the first general tone values, was momentarily neglected.

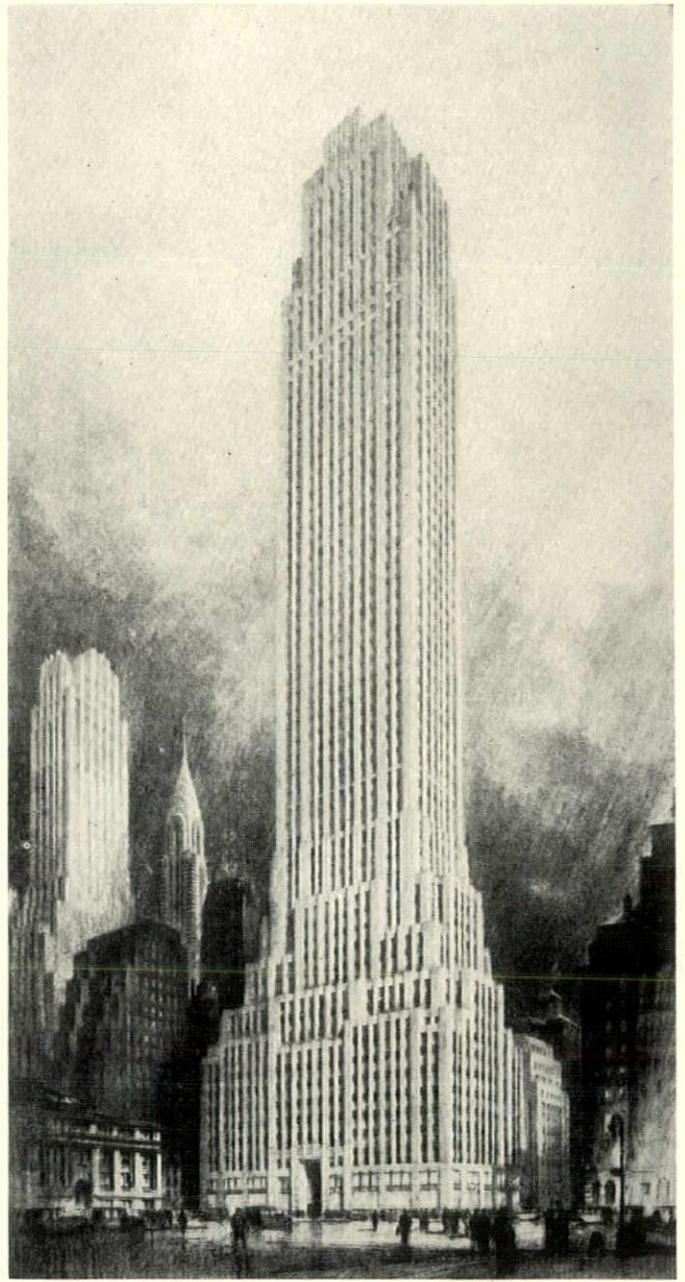
SIX PROGRESSIVE STAGES IN RENDERING A PROPOSED BUILDING

KENNETH FRANZHEIM, Architect



THIRD—FREE HAND LINES ARE PENCILLED IN

. . . 3. Having determined upon a scheme for tone values, free-hand lines of varying strength were pencilled in overall, thus placing on paper, at predetermined locations, carbon particles which are the material for the tone values of the next stage.



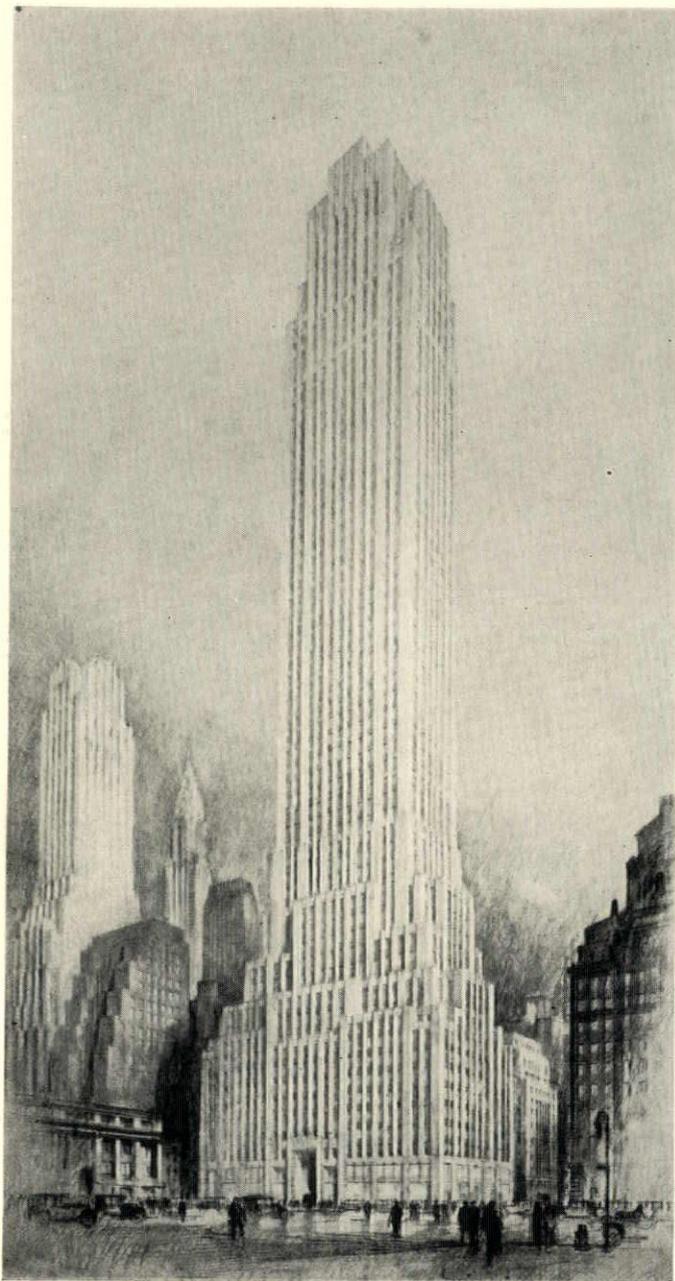
FOURTH—LINE WORK IS THEN STROKED INTO TONES

tically obliterated; the intention is to indicate the presence of masses not by literally outlining them but by effecting certain contrasts in juxtaposed tone values.

For example: for the nearest corner pier of the tower, the definition consists of three tones, the darkest being the cast shadow on the windows; the intermediate, being the left hand face of the pier; and the lightest, its right hand face. These, respectively, were produced as follows: shielding both faces of the pier with a sheet of bond paper, typewriter size, so that the left hand edge of this sheet coincides with the left hand edge of the pier, a paper stump is drawn sharply over the pencilled shadow of the windows, consolidating the lines into a single tone. The paper shield was then moved to the right so as to cover only the right hand face of the pier, and the stump drawn, more lightly, over the exposed surface. The right hand face of the pier remains for the moment untouched.

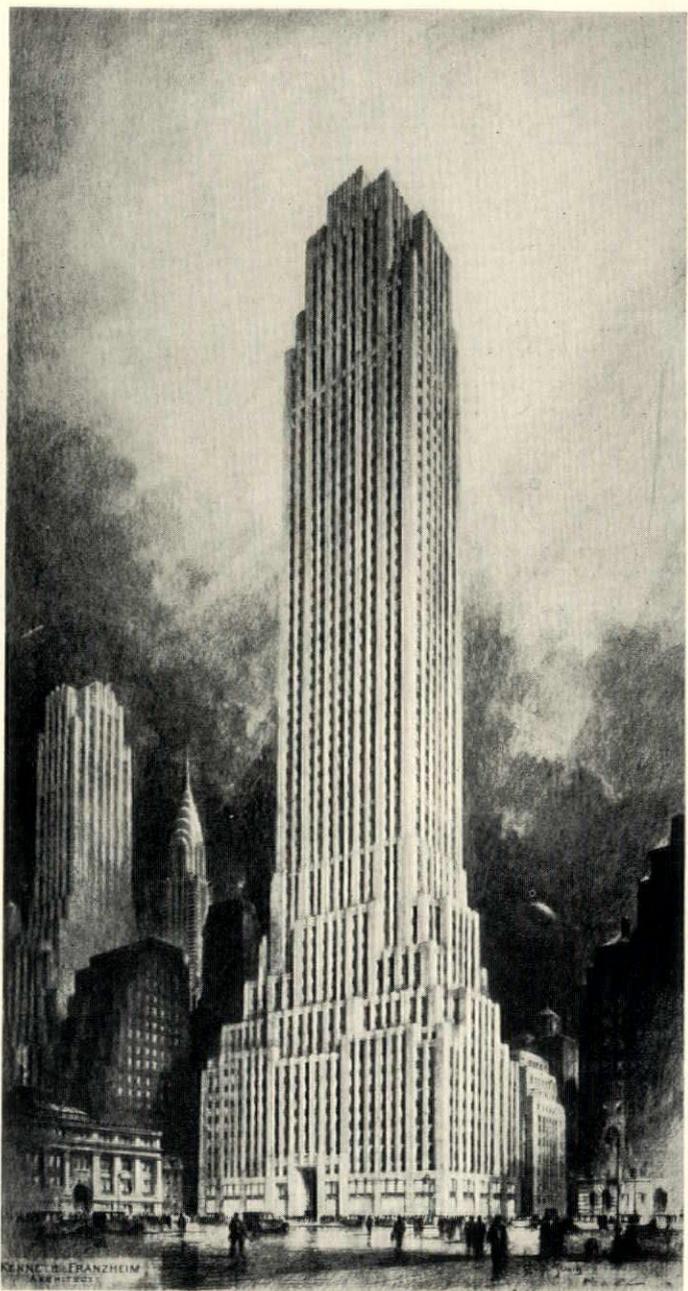
. . . 4. The line work of the third stage was then stroked into tones, using a paper stump and, for broader tones, a gloved forefinger. In this process, drawn lines, as such, become prac-

» » » LAST FOUR STAGES SHOWING HOW



FIFTH—PREVIOUS STEPS REPEATED WITH MORE DETAIL

... 5. The three steps thus far employed—i.e., (1) guide lines drawn with T-square and triangle, (2) free-hand lines serving as material for tone values, and (3) consolidation of lines, by paper stump, into tones—were repeated but with greater emphasis and with greater attention to detail. A fourth step was added: the surfaces which were to be lightest of all were cleaned with a kneaded eraser—again using the paper shield to assist in defining edges of tones. Where a thin line of this lightest tone was desirable, as in the case of certain reveals, a slit of proper width was cut in the paper shield with a safety razor blade and the kneaded eraser applied through it.



SIXTH—THE RENDERING IS COMPLETED

... 6. Generally speaking, a rendering of this type advances simply through repetitions of the sequence whose various steps have been mentioned. When the steps are first taken, it is with the intention of leaving on paper an image which, while architectural indication is still quite faint and detail is lacking, already suggests all pictorial elements in their intended relationships with each other. It is somewhat as though one were putting down a first general impression of a building seen at a distance and not yet distinctly.

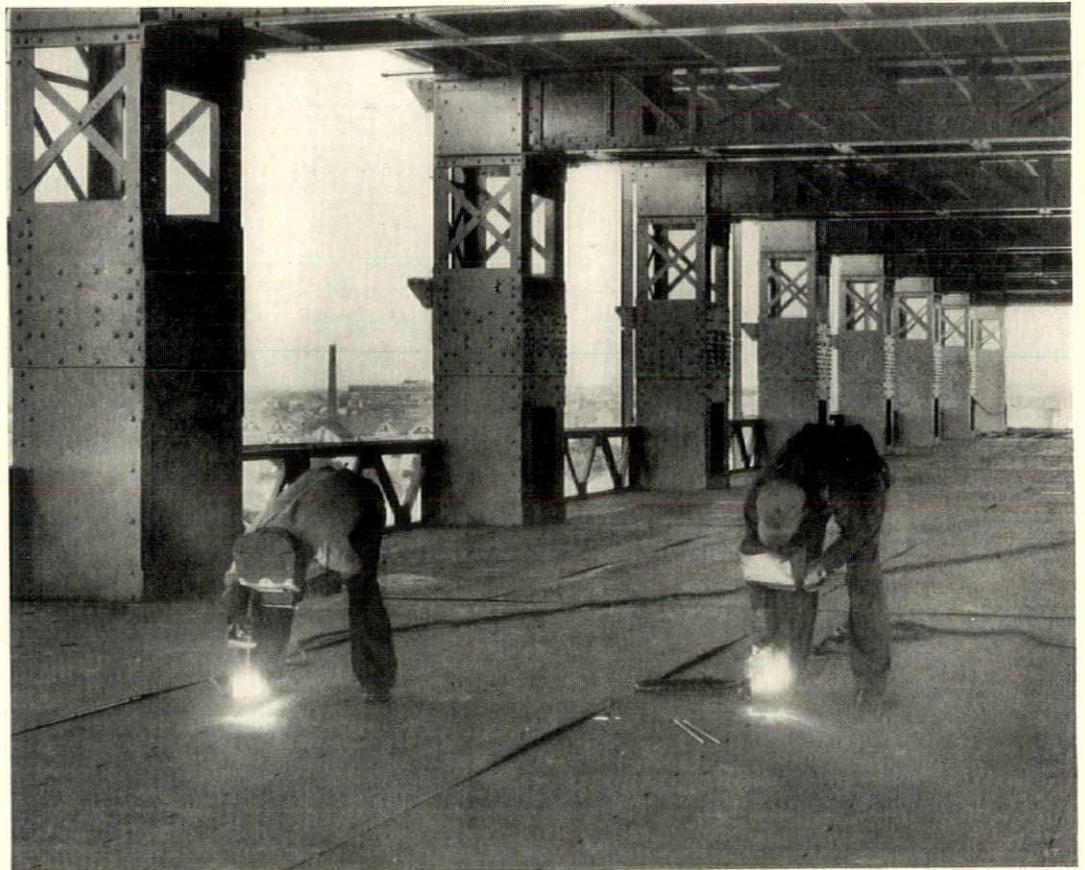
When the sequence is repeated, the definition becomes stronger and more detail appears, as if one were approaching more closely to the building itself.

Obviously, one could, at will, go on repeating the sequential steps—coming “closer” to the subject—seeing more and more detail. If his intention is to produce an impressionistic sketch with pictorial values uppermost, he will not, when employing this technique, repeat his steps often. In any case, the point is to stop when one has “seen” as much of his subject as best serves his immediate purpose.

HUGH FERRISS DRAWS

FOR JULY 1931

LESS
WEIGHT
•
LOWER
COST
•
NO
RIVETING



"Battledeck" FLOOR

By HENRY PENN

District Engineer, American Institute of Steel Construction

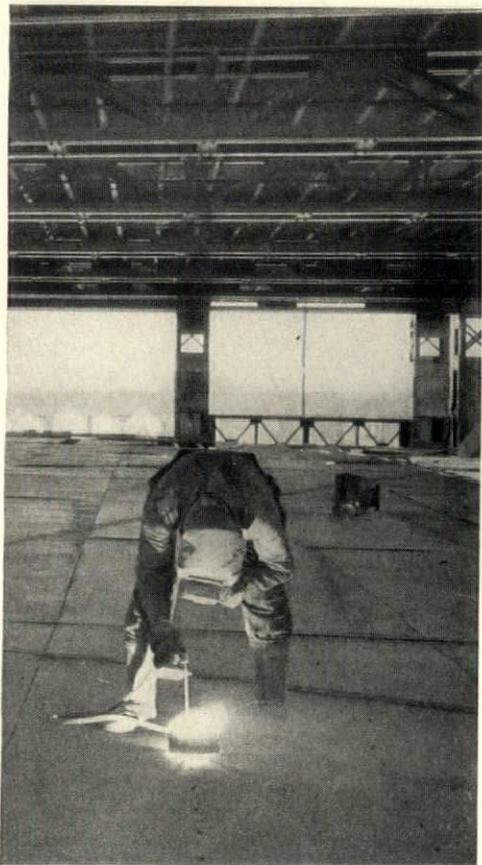
ON every hand there is much evidence of thought and research being applied to improving building construction in quality and decreasing its cost in response to the present economic conditions. Many of these improvements have been specific to one particular element of the building and among them is the fire-resistive floor construction. The floor is the essential element of the building because it supports all of its movable contents, which is the primary purpose of all buildings. The floor must be suitably enclosed to provide protection from the elements for the contents, healthful and comfortable occupancy conditions and security. In addition to adequate structural strength and durability, the floor must possess other qualities:

- (1) Minimum construction cost and weight.
- (2) Minimum maintenance cost and easily altered for changes in building occupancy.
- (3) Fire-resistance and soundproofness adequate for the particular use and occupancy.
- (4) Contribute to the distribution of forces induced by wind pressure on high buildings.

Few, if any, of the floor constructions in present use possess all of the qualities enumerated. Each of them may possess certain inherent defects that may be waived in a particular case, but which will condemn its use in many others. The first quality will, because of its nature, incite continual attempts to improvement.

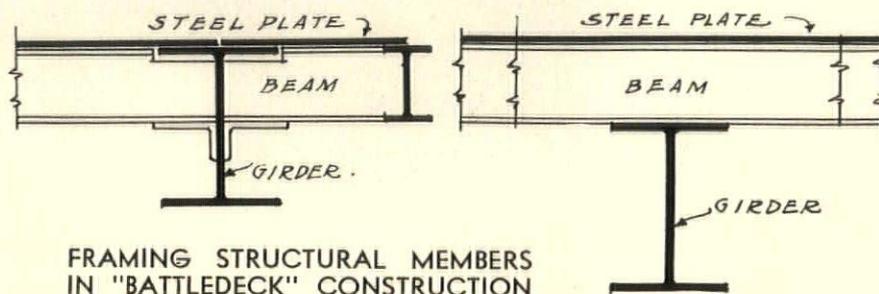
A floor construction that does possess, with proper designing, the qualities enumerated is of economic importance. It is found in the "Battledeck" floor construction recently adapted to commercial buildings. This type of floor construction has for many years been used in the most luxurious quarters of passenger steamships and also in their storage and mechanical quarters. It is the only suitable floor construction around the open hearth and other furnaces in the steel mills. Its use range is comprehensive.

The battledeck floor is a combination of steel plates of various thicknesses, from 18" to 96" wide, with steel I-beams. The plates are welded to the top flanges of the beams, as well as to each other at the joints, making a continuous sheet of steel covering the entire floor. This construction is the economically advan-



WELDED THROUGH PUNCHED HOLES

Floor plates were welded to the beams through slotted holes 2" long and $\frac{3}{8}$ " wide spaced 12" o.c. in the plate. The slight buckles shown do not appear in the finished floor. Research Laboratory Building, A. O. Smith Corp., Milwaukee, Wis. Supervised by E. W. Burgess, construction engineer, A. O. Smith Corporation. Holabird & Root, consulting architects



FRAMING STRUCTURAL MEMBERS IN "BATTLEDECK" CONSTRUCTION

Above left, recommended method of framing beams into girders. . . Above right, framing beams on top of girders

CONSTRUCTION

tageous T-beam section and is designed accordingly, resulting in a stiffness equivalent to a beam of twice the depth, less one inch, of the supporting beam used.

The continuity of the steel plates at the girders is effected as shown in the accompanying sketches. When the plate is combined with the spandrel girders, the construction becomes an horizontal girder effective for distributing the loads from wind pressures. The plate is designed to support the load between the beams and because of its continuity the bending moment used for design purposes is greatly reduced. The beam is next designed in combination with the plate as a T-beam section. The plates are welded to the top flanges of the I-beams either continuously along the seam between the plates or through $\frac{13}{16}$ " punch holes spaced 12" on centers. An automatic machine has been devised for welding the continuous seams between the plates.

A material saving in field erection work may be attained by shop welding large sections or panels. The edges of the sections or panels are made of channels, back out, and they are bolted to adjoining sections through the webs, back to back of channels. The size of the sections is limited only by transportation and erection conditions. The loss of continuity and consequent increase in weight may be more than offset by the reduced erection costs.

This construction is fireproofed in light occupancy

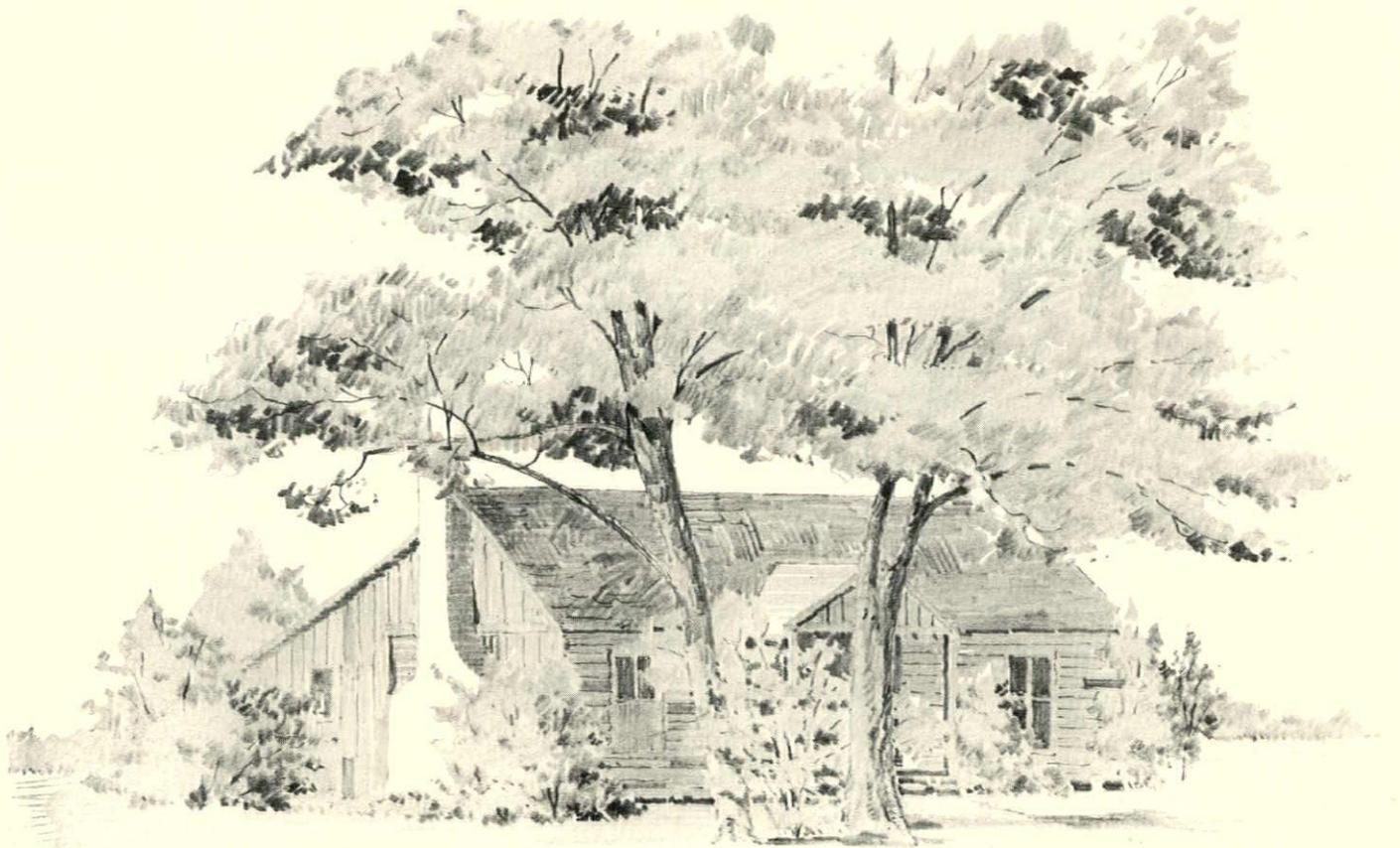
buildings having comparative light fire hazards, by a metal lath and plaster ceiling attached to the lower flanges of the I-beams. For greater fire hazard occupancies a hollow tile or 2" thick gypsum block, spanning from beam to beam, is supported on and covers the lower flanges of the beam, installed after the steel plate is in place. The ordinary floor finishes provide ample protection to the top of the floor plates. In fact, molten steel escaping from furnaces does not damage a battledeck floor.

Sound proofing is related to sound conduction which is prevented by interposing sound absorbing materials between the sound source and the sound conducting construction of whatever kind. Sound conduction and stress travel are equally rapid in a material; it is very high in steel. Alternate layers of materials having different specific gravities reduce the conduction of sound by changing the sound velocity at each new surface. Sound conductivity in battledeck construction is reduced by applying a layer of mastic, wood laid on a coat of asphalt, felt and linoleum, cork or rubber tile, felt pad and carpets or rugs. The ceiling contributes to preventing sound transmission to adjacent spaces. The relative sound conductivity of battledeck floors is being determined by the U. S. Bureau of Standards.

The battledeck floor presents a smooth surface which is welded through punched holes, (Cont'd on page 88)



NEGRO SHACK, Memphis, Tennessee



NEGRO SHACK near Wilson, Arkansas

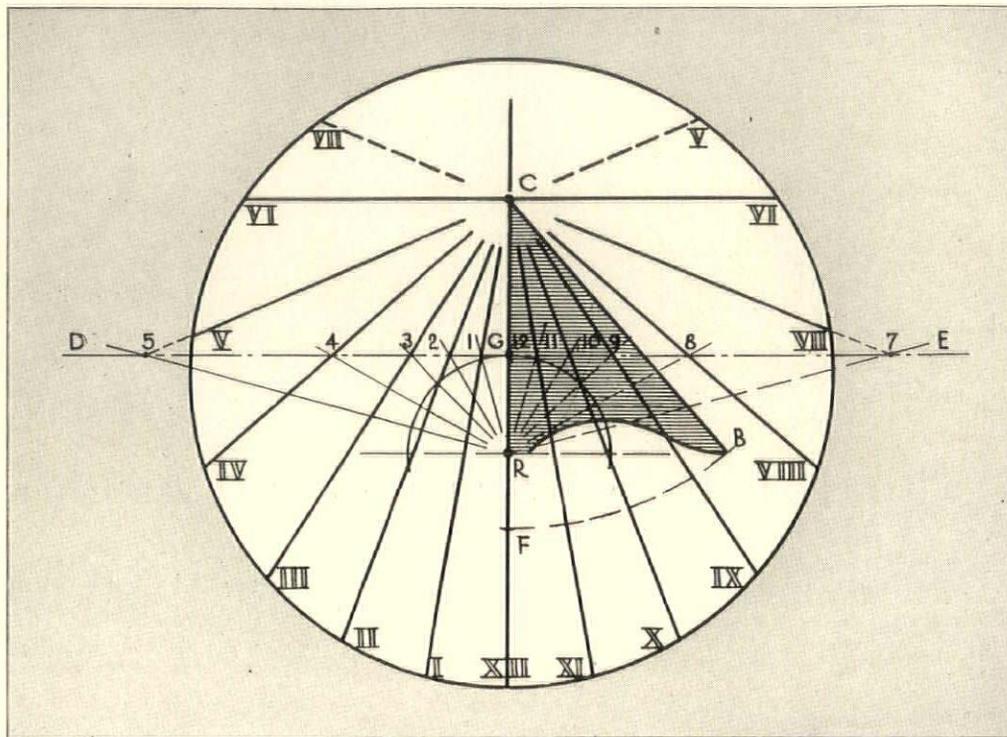
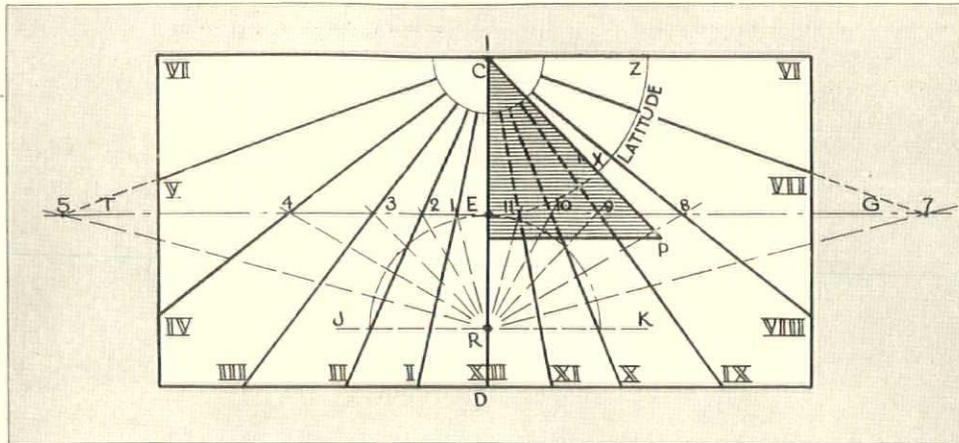


Figure 1

CONSTRUCTION OF HORIZONTAL DIAL

- 1...First draw the horizontal line marked VI-C-VI near the top of the sheet.
- 2...At about the middle of this horizontal line, the point C here, draw a vertical line marked here C-R-F-XII; this will, of course, be at right angles to the horizontal line.
- 3...At any point on the vertical line, and as far from the point C as the size of the drawing will allow, draw a second horizontal line marked D-E.
- 4...From C as a center, draw an arc of a circle with the compass, from the vertical line to the right; this is the arc marked F-B. Measure off on this arc with the protractor, from F, the number of degrees equal to the latitude of the place. This dial is designed for latitude $40\frac{1}{2}$ degrees; so the distance F-B would be $40\frac{1}{2}$ degrees, which is the measure of the angle between the vertical line and a line drawn from C through the point B. The triangle R-C-B shows the shape of the gnomon which casts the shadows on the hour lines; its use is explained below.
- 5...With the compass measure the shortest distance from the point G, where the second horizontal line crosses the vertical line, to the line C-B; measure off this same distance from G to a point below on the vertical line, which point mark R.
- 6...From R as a center draw a semi-circle just touching the second horizontal line at G.
- 7...Draw another horizontal line through R completing the half circle.
- 8...Divide the semi-circle into 12 equal parts, 6 parts on each side of the vertical line. Since a half circle contains 180 degrees, the division points would be 15 degrees apart; so the division may be done with the protractor.
- 9...Draw light lines from R through the division points of the semi-circle, and long enough to touch the second horizontal line at points which mark 1-2-3-4-5-6-7-8-9-10 and 11.
- 10...Lines from the point C through the points marked 1-2-3-, etc., will be the hour lines of the horizontal dial, to be marked on the edge for the hours, V-IV-III-II-I-XII-XI-X-IX-VIII-VII. The first horizontal line is the hour line of VI o'clock. Earlier hours in the morning or later hours at evening are found by extending hour lines before and after VI through C as shown by the two dotted lines marked V and VII.
- 11...The gnomon, mentioned above, is a thin plate of any material, about triangular in shape, having an angle (R-C-B), shown at C, equal to the latitude of the place. The gnomon must be set upright, at right angles to the dial face, exactly on the vertical line, which is also the hour line of XII o'clock, and with the angle for the latitude exactly at C. So long as this angle is kept the rest of the gnomon can be made any size and the short side can be cut out as design may demand.
- 12...The dial must set absolutely level, with the face horizontal, and the point C toward true south.
- 13...When the hour lines have once been found, they, too, can be made of any length and the dial face any shape—round, square, oblong, etc.

Figure
2



CONSTRUCTION OF A SOUTH VERTICAL SUNDIAL

1... The general scheme of construction is the same as for the horizontal dial with two exceptions:

a—The horizontal line of the drawing (VI-C-VI) is not only the hour line of VI o'clock as before but it is both the earliest hour in the morning and the latest hour at night which the dial can show.

b—The angle of the gnomon at C between the vertical line and the line marked here C-P is found by drawing an arc of a circle downward from the horizontal line at any point as Z, and measuring off a number of degrees equal to the latitude from Z downward to a point which will be X; then draw the line through C and X to P here, though the line can be any length. The angle of the gnomon then is the angle R-C-P. The sloping edge of the gnomon is sometimes called the stile and the edge which sets on the vertical line the substile.

2... Therefore draw the horizontal line VI-C-VI first near the top of the sheet.

3... Draw the vertical line C-D about the middle at C.

4... From C as a center draw an arc of a circle downward from the horizontal line at Z; measure off the

degrees of latitude of the place from Z downward to X; draw the line through C and X to any point as P.

5... At any convenient point as far below C as the size of the drawing permits, as at E, draw another horizontal line quite long. This is the line marked T-G.

6... With the compass, measure the shortest distance from the point E to the line C-X-P; set off this same distance from E downward to a point marked R on the vertical line.

7... From R as a center draw the semi-circle; divide it into 12 equal parts, 6 parts on each side of the vertical line; find the hour points on the line T-G numbered 1-2-3-4-5-6-7-8-9-10 and 11 and draw the hour lines from C through these points on T-G.

8... The gnomon must be generally triangular in shape as shown by the shaded part of the drawing and should be as thin as possible. It must be set exactly on the vertical line with the angle of the gnomon at C. Since this dial stands upright, the gnomon angle will open out downward from C.

9... Place the dial on a vertical wall or in a vertical position, with the point C at the top and the face of the dial toward true south.

to private students. Then the king had his own private dialist, Nicholas Kratzer, whose portrait by Holbein is well known. Kratzer was called "the deviser of king's horologies" at the court of the English king.

It was a favorite conceit of many of the early dialists to make dials on the ceilings of rooms where sunlight could be reflected.

Because of the necessity for some sort of public timepiece, sundials soon became a part of architectural decoration. Dials on churches made their appearance in Great Britain, soon after the Norman Conquest. The church, however, used dials chiefly to indicate the canonical divisions of the day and the times of prayers. The East still uses dials on its mosques for the same purpose and often includes in the dial a line pointing toward Mecca.

From about the seventh century until the beginning of the nineteenth century, sundials were the common timepieces throughout the so-called civilized world. There were few clocks even by 1800 A.D. and they were, of course, costly. One thing which actually retarded the

perfection and general introduction of clocks was the effort of clock makers to imitate the unequal hours of the sundial.

It is worth noting that, even to this day, in those corners of the world where living is still an art, the sundial is an acceptable timepiece. After all, such an ingenious arrangement as standard time is a concession to haste and exacting modern requirements.

Of all varieties of dials, these three are of first importance: the horizontal dial, the vertical dial facing south, and vertical dials facing east or west.

In order to make a dial at all it is necessary to know how to measure angles which lines make with each other. This is done with a protractor.

Since the earth is round, places on its surface are located north or south of the equator by the distance in degrees; this spacing is called latitude. Every place has a latitude and sundials must be made for the latitudes of the places where they are to be used. Latitude may be found from any good map, from some almanacs, from any local

surveyor or government office. There are on the market, now and then, sundials for sale; they are usually of the horizontal kind. Since they can be made for but one latitude at a time, a stock pattern is worthless in other places than that for which it was made.

It therefore becomes necessary to design a sundial for the latitude in which it is to be used. The construction of the ordinary or horizontal type of sundial is described in Figure 1.

The construction lines of all dials should be drawn lightly, in pencil, because they are to be erased when the hour lines have been found. Also the shape and angle of the gnomon should be transferred to the plate of which it is to be made and the gnomon erased from the drawing. The gnomon is, of course, a separate part of the dial and is only drawn on the same sheet with the hour lines for convenience sake. Therefore the gnomon is to be made as a separate piece according to the size and shape calculated on the drawing; then fastened to the face of the dial at right angles, at the place indicated.

Vertical dials grew out of the necessity for public timepieces. Since the most public places were the walls of buildings, it was natural for sundials to be placed on them. So the early architects developed the vertical type of dial and in time made it a modest part of architectural decoration.

East dials show the morning hours from sunrise until nearly noon; and west dials show the afternoon hours from shortly after noon until sunset. All these dials must stand upright, vertical, and face exactly true east or west as the case may be.

The construction of a south vertical dial is described in Figure 2, and of a west vertical dial in Figure 3. An east vertical dial would be made in the same manner as would the west vertical dial, starting with the horizontal line; however, the point C would be selected toward the left hand; the sloping hour line of VI, making the same angle with the line A-B, would slope to the right and downward below C to the left. Also the hour lines, in an east dial, being parallel to the hour line of VI, would also slope downward from right to left.

CONSTRUCTION OF A WEST VERTICAL SUNDIAL

Figure 3

1... First draw the horizontal line A-B near the top of the sheet.

2... At any convenient point toward the right hand, as C, draw a line sloping upward toward the left hand, making an angle with the horizontal line equal to the latitude of the place; this will be the line VI-C-VI. Extend this line downward below C; it will be the hour line of VI o'clock and the line upon which the gnomon must set.

3... From C as a center, draw a circle, not too large, for reasons which will appear as the construction progresses.

4... Through C draw another long, sloping line at right angles to the hour line of VI (VI-C-VI). This will be the line J-K.

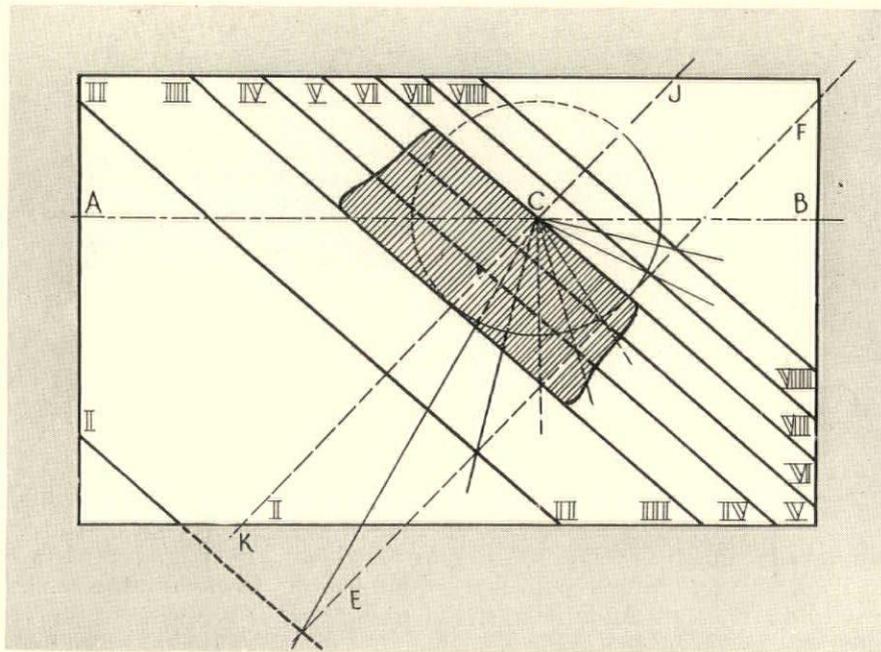
5... At the lower edge of the circle and just touching it, draw another long, sloping line parallel to J-K. This will be the line F-E.

6... Divide the lower half of the circle into 12 equal parts, 6 parts on each side of the line J-K; draw lines from C through each division point in the half circle and long enough to touch the line F-E at points numbered 1-2-3-4-5, etc.

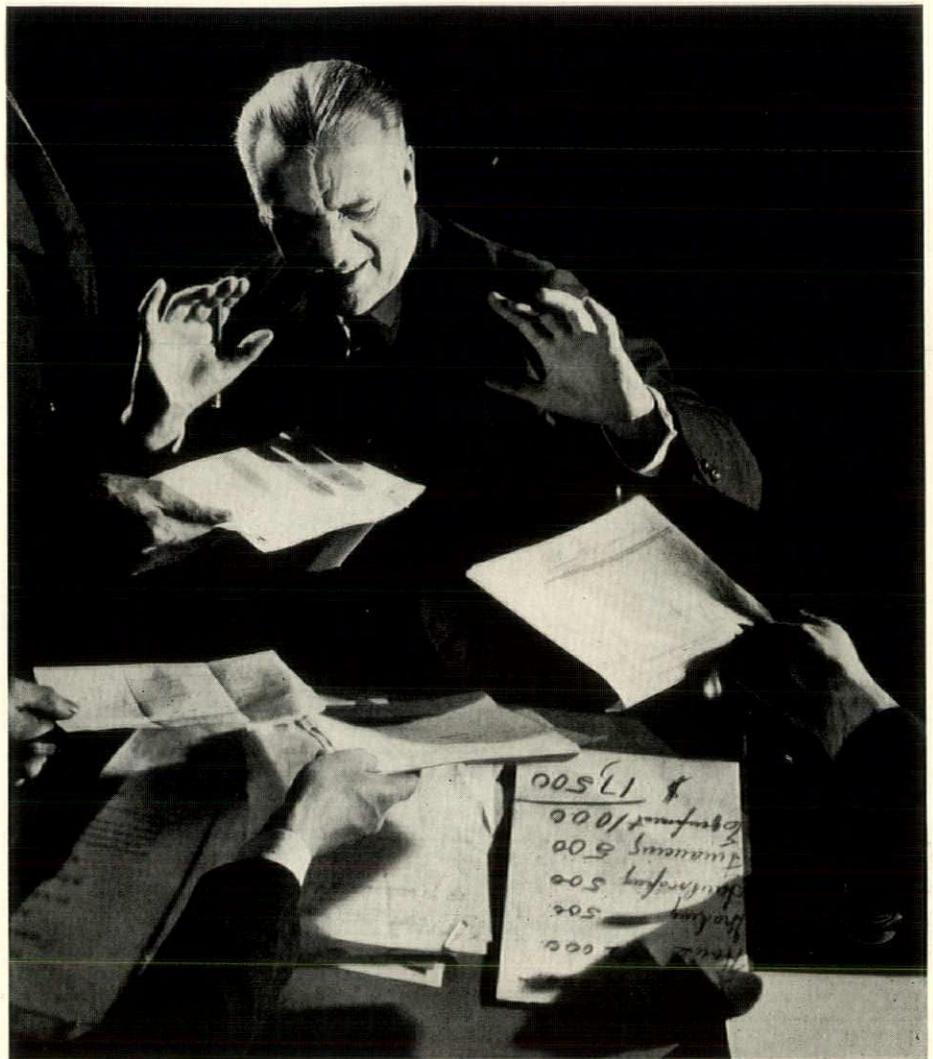
7... Lines through the numbered points and parallel to the hour line of VI (VI-C-VI) will be the hour lines of the west vertical dial; the hours are all in the afternoon, marked as shown, I-II-III-, etc.

8... The gnomon for this dial will be generally rectangular in shape as shown by the shaded part of the drawing. The top and bottom edges must be parallel and as far apart (height of gnomon) as the distance between the hour lines of VI and III. The gnomon must be set exactly on the hour line of VI at right angles to the face of the dial.

9... Set the dial in an upright position, facing true west, with the side upwards which is so marked; it can be placed on a west wall if there is one.



"If the client wants a complete package we must give it to him or else make way for those who will"



Shall We Give Him ... THIS

THE movement to "sell architecture to the man in the street" is making fair headway, and the idea has been given much publicity. Funds have been raised, and architectural journals have opened their columns for discussion of the subject.

It may be pertinent therefore to inquire at this time, "When the 'man in the street' has finally become 'architecture-conscious,' to use the latest selling cant, and has become convinced that good architecture is both esthetically desirable and economically sound, just where will the architects get off?"

"Why, they will get increased business, of course!"

But will they? I, for one, have my doubts. Not that the business of architecture will not be augmented, or that the quality of design will not tend to improve. These results may be looked for as the logical outcome of any effort made to "sell" architecture to the public.

But, whether architects will individually profit by these

efforts, whether the profession will be in any notable degree elevated from its present position of dignified impecuniosity, is a matter of opinion. There are other factors, other tendencies, which are and have been for many years eating into the business and income of architects, and which will never be solved or checked by "selling architecture to the man in the street."

These tendencies are at work in every city. They are resented by architects and deplored by the editors of the architectural press, the good builders, and by material manufacturers. I refer to the tendency and practice of large realty concerns to employ an architect on a comparatively meagre salary, and from his training and experience reap financial benefit, whereas the architect receives nothing beyond his salary, which is usually ridiculously small considering his long training, his priceless skill and practical technical knowledge.

Here is a typical case. In a certain Eastern city, where architecture is thoroughly "sold" to the public, an ex-

Merely "selling" architecture will



OR THIS?

BY ROSSEL
EDWARD MITCHELL

Architect and Engineer, Washington, D. C.

perienced and well-financed firm of real estate operators developed a beautiful tract of ground as a first-class residential section. In this suburb they erected during a period of five years more than three hundred houses at an average selling price, exclusive of land, of \$20,000 each. Mr. "Man-in-the-Street," therefore, paid about six million dollars for his architecture. Had these residences been handled by individual architects, charging six per cent for plans and supervision, the total compensation to the profession would have been \$360,000. Five practicing architects, planning twelve houses per year each for five years, would have been assured a gross income of \$14,400 per year, each, if they did no other work.

But, instead, the capable architect who handled this work—on a salary—received perhaps \$25,000 for his five years' work.

The other four presumptive architects, who could also have earned a good living out of the development, received nothing from it. Perhaps they were compelled

also to seek employment with other real estate concerns, or throw away their invaluable training and enter other lines of activity.

The realty operators, on the other hand, collected all the profit on the architect's genius and experience. They profited on the building construction, on the land, on the sales, and on the service.

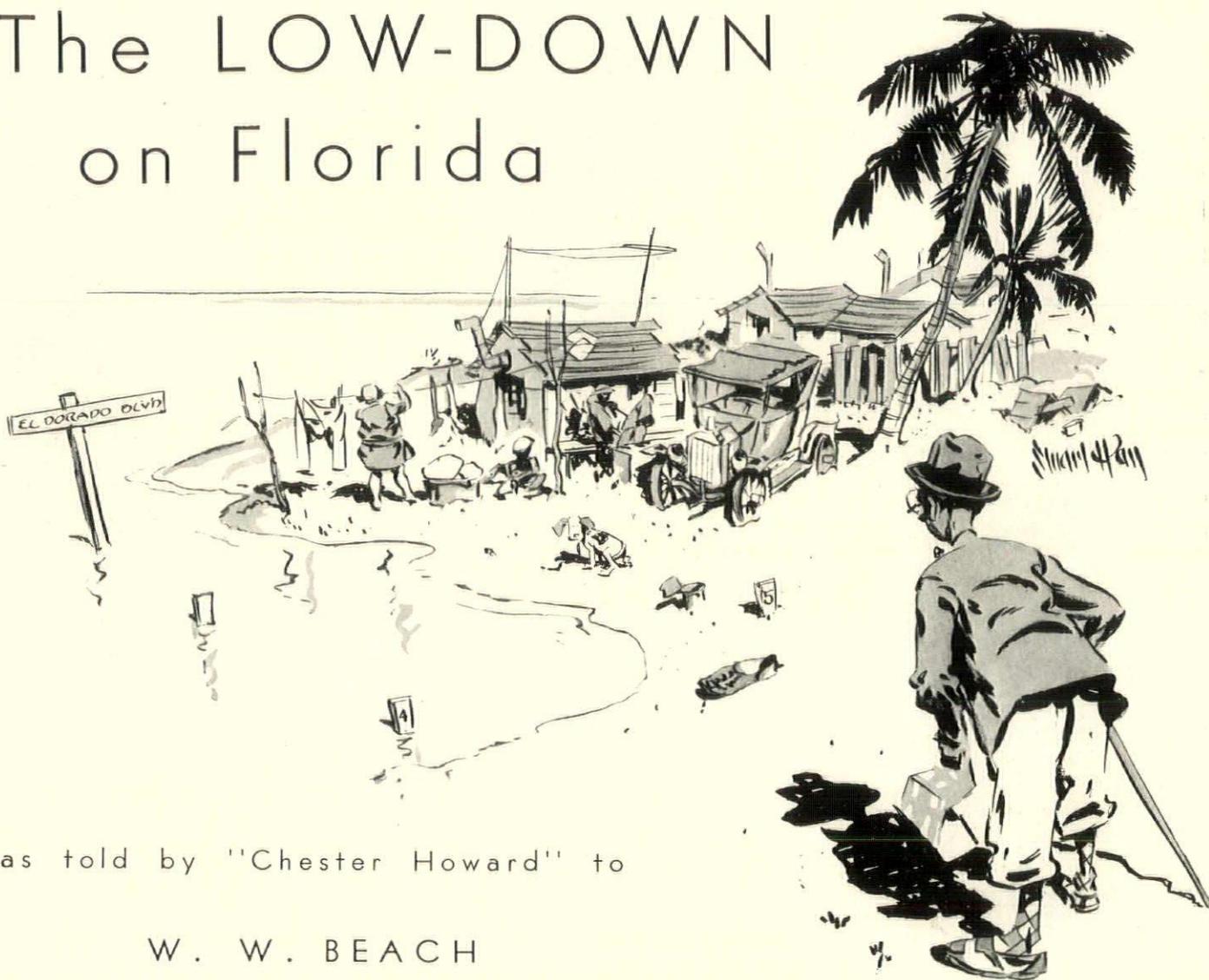
It is not the purpose of this article to decry such methods. I am not certain but that these "realtors" have taken—from the standpoint of the owner and investor—the "man in the street"—a step in the right direction toward solving the building problem as related to better class houses. For, after all, it is the ultimate consumer whose interests must receive first consideration.

It must be admitted that the purchasers of these three hundred houses obtained certain things for their money that five architects working individually, *could* have given them, but would probably *not* have given them, due to circumstances

(Continued on page 114)

not help the architectural profession

The LOW-DOWN on Florida



as told by "Chester Howard" to

W. W. BEACH

CHICAGO ARCHITECT

One could hardly expect an expensive landscape artist to depict neighboring property that didn't belong to them

WELL, we hit Florida in October, 1923, just in time to grow up with the country, you might say. Anyway, we grew up with the boom. And, you know, it's a funny thing about that Florida boom. I've read a good deal about it and listened to folks discuss it, but, being on the inside as I was, things always seemed a lot different to me from the facts that were dished up to the public. Now, get me right, please, I'm not knocking Florida and I'm not trying to take a sock at the legitimate real estate business. What I mean, they're both all right, if let be, but when one of these high-pressure realty promotion concerns starts in to boom any given locality, I don't care whether it's Florida, Hollywood or Byrd's Little America, then and there is the time for the easy mark to clamp the padlock on his pants pocket—and I don't mean maybe.

When we first arrived on the scene, it appeared that the realtors were merely doing a reasonable amount of subdividing in the suburbs of the principal towns and cities, to supply a legitimate and rapidly increasing demand from those who could afford winter homes in the

Sunny South. As yet, they hadn't begun to go quite so hog-wild on the proposition, like they did later.

We drove on over to one of the East Coast places that looked real good to us. I won't say which it was, but, as far as that is concerned, it might have been any one of 'em, East or West Coast. They were all alike. In fact, as has been said, the effort of the realtors seemed to be to make their subdivisions as little like Florida and as much like Flatbush or Oak Park as possible, with some newly created "spinage" architecture to supplant the palmetto and nigger-shacks they were burning, day and night. Perhaps it was the burning that drove the vermin into the towns, for we were bothered by them considerable at first.

"Yeh," quoth a native, "you-all Yankees think the ants an' mice an' roaches is bad, but, let me tell you, the realtors is a damn-site worse pests." And I reckon the old boy was right at that.



"And I reckon the old boy was right at that!"

The most valuable sites fronted on the ocean, but these were never on the market. You had to have some pull even to get a quotation on one. Next came those on the bayou, and so on down the line, values decreasing as the distance inland increased; that is, until some guy happened to think of the "Country Club Place" idea and neglected to have it patented. There-

In order to give you a more or less comprehensive idea of how the stuff was pulled, I'll just make a composite of the methods of the last three concerns we were with and tell it as if it was all the same outfit. At first, of course, the subdividers had been doing their own financing, in a small way. That was before we got there. They'd buy up a small tract at anywhere from ten to forty dollars per acre or, maybe, the owner would promote it himself. Anyway, they'd have it plotted, cleared, and the sewers, water and walks put in, perhaps pave it, then get a service company to agree to run the gas and electric mains, and then start the selling.

But, presently, this got too slow for both the realtors and their customers. So, towards the end, they didn't wait for the improvements, but started the selling from their beautiful prospectuses and landscape drawings. They'd get all set for a big sales opening day, as soon as possible after a legal transfer of the property could be had, before the water colors were dry on the artist's dream. And, ye gods! How those landscapists could dream!

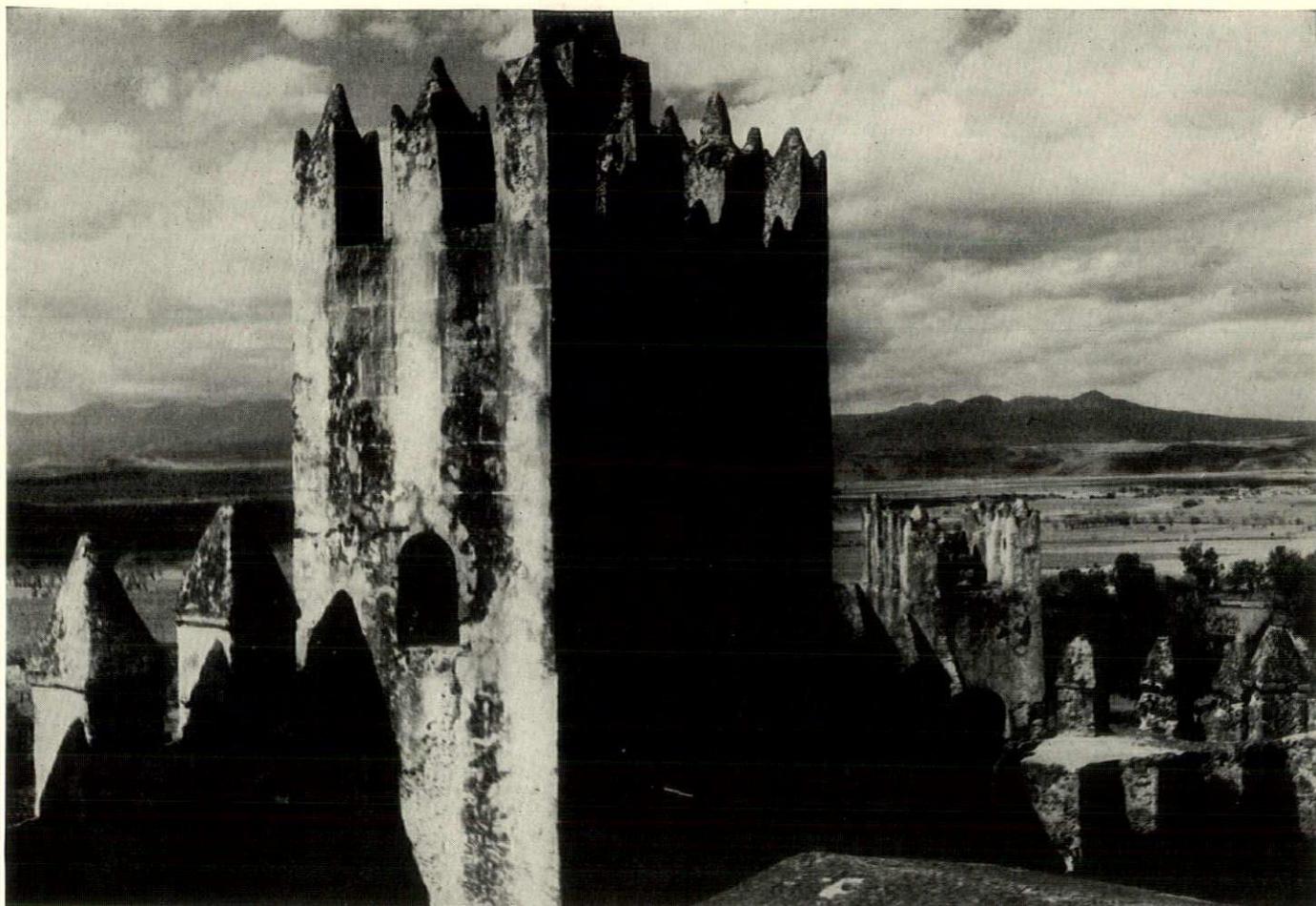
A day or two before the regular opening, there'd be a pre-opening for the especially favored. We binder-boys would be getting ready for this a week beforehand, showing plots while improvements were still in process and everything so unfinished that we could not be absolutely certain as to locations. Meanwhile, the sales managers would be establishing prices, taking into consideration a lot's size, frontage, distance from the ocean, distance from the lagoon, bayou or lake, or whatever they called the inner stretch of water, and relation to the nearest Dixie Highway. Every main north and south road was "Dixie Highway," you know.

after they were able to boost the prices of lots inland from the main drag and otherwise worthless. At first, we took our prospects out to the tracts and helped them pick out their sites, but, by 1925, the customers got so eager that we let them do their own picking. Of course, if one didn't know his onions, he might discover that he had laid down his binder for a choice lot close to the city dump or a negro shanty-town. One could hardly expect the promoters to go out of their way and pay extra to have an expensive landscape artist depict neighboring property that didn't belong to them and was not being offered for sale.

By the time for said pre-opening, there'd be a couple o' hundred surveyors and laborers working on the property, clearing, grubbing, burning brush, setting stakes, grading, et cetera. Masons and carpenters would be working on the foundations for half a dozen houses, with concrete mixers grinding away, and everything looking like business.

Harry was a division sales-manager and I was his head-salesman. During the two or three days between the pre-opening and the formal, I'd sign up from ten to fifty binders, and get a hundred to five hundred down on each, depending upon what the market would bear—what the sucker admitted he had, in other words. Harry had five other salesmen and took a ten per cent cut on all our commissions, besides drawing full commish on all his direct sales. There was no "front money." We paid all our own expenses, except that the company provided any necessary bus transportation to outdoor sales, and they financed the advertising, eats for excursions, band music and all such overhead. Toward the end, they quit fooling with excursions, however. (Cont'd on page 92)

DRAWINGS BY STUART HAY



SOLDIER INFLUENCE is shown in the crenelated walls of the sixteenth century Atlatlauca convent church

YESTERDAY AND TODAY IN Mexican Architecture

an interview by Eugene Clute with DR. FEDERICO E. MARISCAL

Dr. Mariscal recently visited the United States as official representative of the Mexican Government at the 50th Anniversary Exhibition of the Architectural League of New York, at which his country exhibited. He is a past president of the Mexican Society of Architects, the oldest instructor of architecture at the University of Mexico City, and is honorary member of several European architectural societies.

THE characteristics of our people—their nature, sentiments and traditions—which gave vitality and beauty to our old architecture, exist today in new forms which must find a new artistic expression. Out of these national characteristics, together with modern construction and our own materials, we are endeavoring to fashion a suitable architecture. Mexico

has been supplied bountifully by Nature with fine materials with which to enrich her buildings; beautiful onyx, colored marbles, white marbles and granites. These are in addition to the red volcanic lava that is one of the chief materials of our old buildings.

To understand the architecture of Mexico, one must understand something of the influences which have affected its development. Mayan architecture, and later the Toltec, is the architecture of a civilization buried and almost unknown when the Spaniards came to Mexico, its influence not to be felt until the present century; these two great civilizations had been superseded by the Aztec. The Spanish Conquest wiped out all trace or remains of Aztec buildings because of their religious significance, and also because of their desire to utterly disrupt the natives in their campaign of terror. And so our present architecture has drawn no inspiration from Aztec sources, for these had disappeared. But the Maya



FLYING BUTTRESSES of Baroque character seem like the recollection of a whimsical dream city.
The Santa Rosa convent church in Queretaro, built during the Seventeenth Century

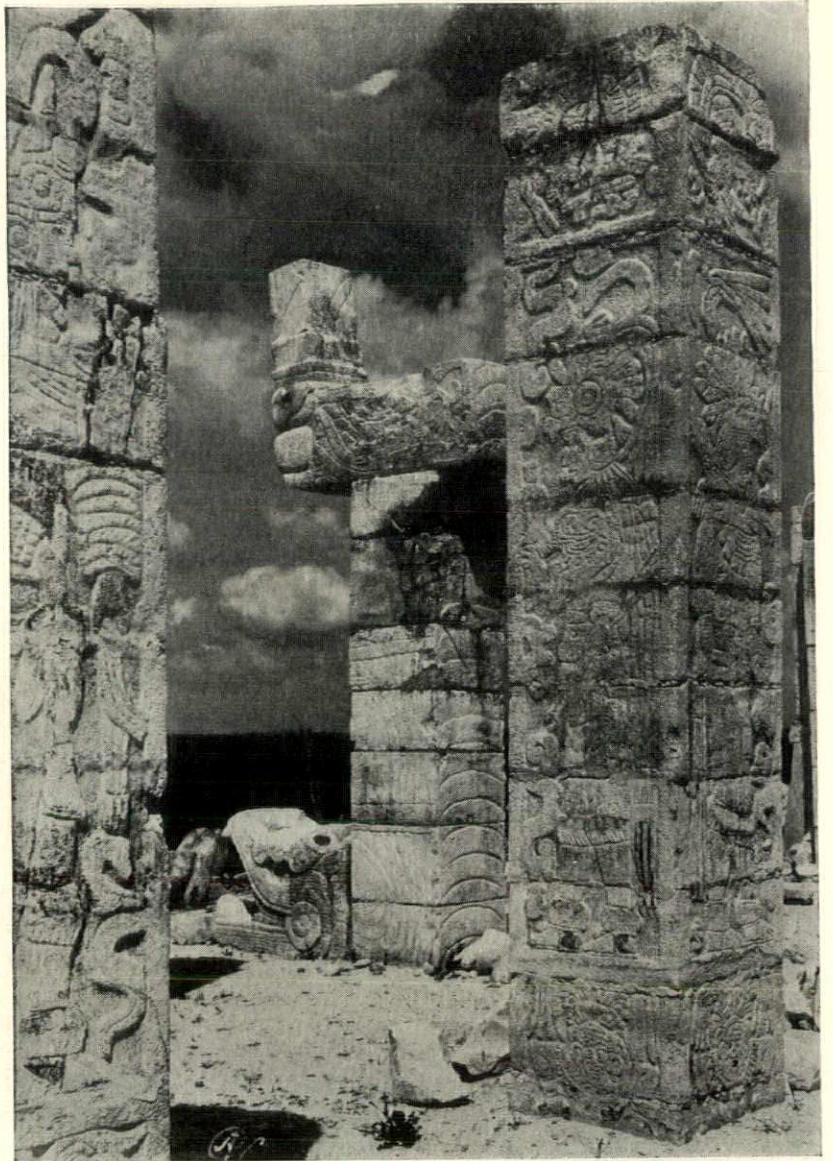
MAYAN ARCHITECTURE made profuse use of flat ornament, often highly colored, in conventionalized plant, animal and reptile forms. The illustration is a detail of the last Maya period, "Temple of the Warriors," at Chichen Itza, Yucatan; the serpent head is Toltec

and Toltec, buried under earth and tropical growth when the Spaniards came, was left untouched by them.

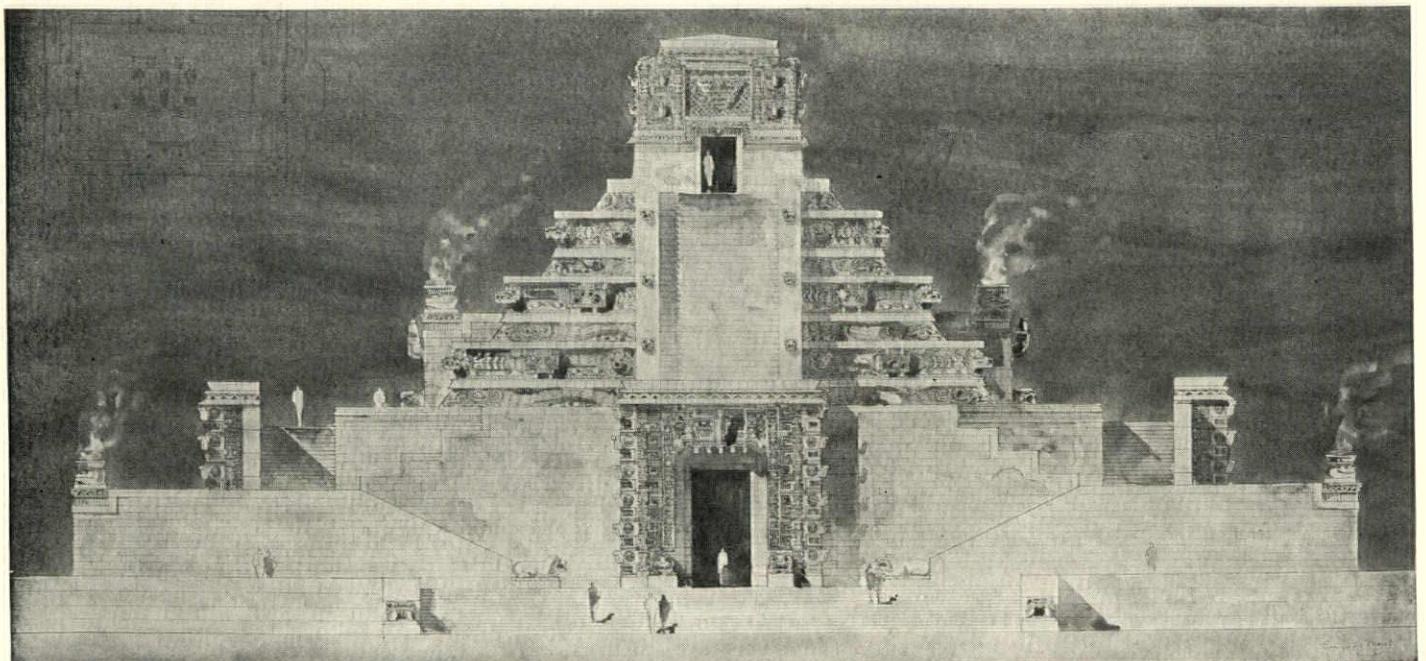
Mexican architecture started with what we call the "colonial" period, divided roughly into that of the sixteenth, seventeenth, and eighteenth centuries. The early architecture of Mexico had its best expression in the church, the convent, and the mansion. Many of the early architects brought from Spain were friars, who built their own churches.

The materials found in Mexico played no small part in always giving a distinctive native character to its architecture. The principal material was a spongy volcanic rock called Tezontle, in color like a red raspberry. This was used in contrast with limestone of light color and, later, colorful tile.

The Spanish conquest of Mexico occurred in the sixteenth century. Their architecture, as usually happens in such



A PEACEFUL PEOPLE . . .





TOLTEC ARCHITECTURE was strong and vigorous, often making use of geometrical forms and inclining towards the grotesque; bright colors were widely used. The illustration is a detail of the recently excavated Toltec citadel, Quetzalcoatl, at Teotihuacan, State of Mexico

A FIGHTING RACE

cases, was largely a copying, for the first fifty years, of what they had seen and remembered of their mother country. But as these men were soldiers and had to build to protect themselves, their structures partook of the nature of fortresses, and exhibited a splendid simplicity. The natives, though clever workmen, took little part in the artistic development of their early works and built the early structures as they were told. After the first fifty years, as the country developed, Spanish architects began to exert a more direct influence.

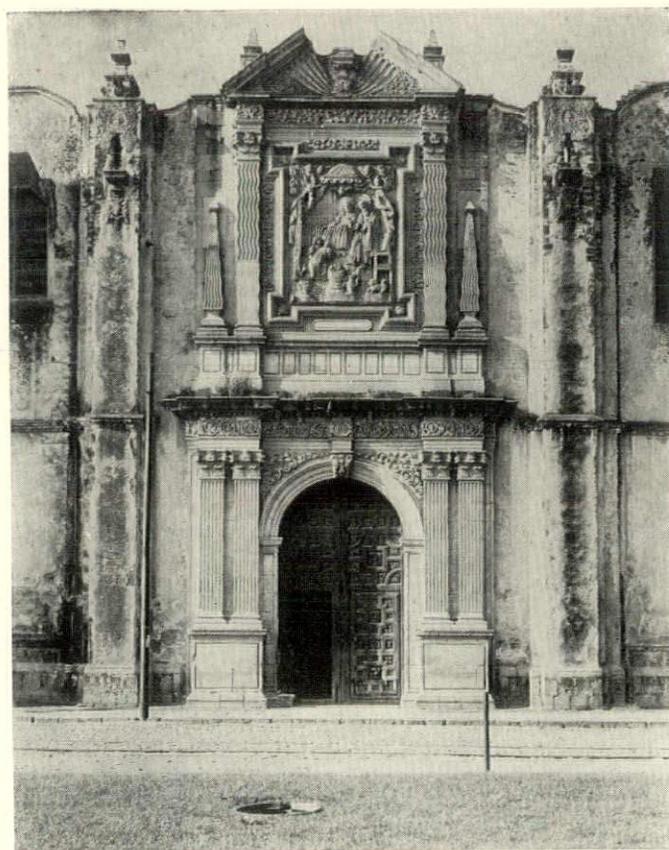
But as time went on, the natives gradually began to work with more freedom and to take more active part in

MODERN MEXICAN ARCHITECTURE is making use of Mayan motifs for flat surfaces and Toltec motifs for set-backs or where vigorous relief is in order. At left, design for a museum, Enrique del Moral, architect. Braziers commemorate the "Feast of the Fire," celebrated on this same site in ancient times

the design of what they were doing. Their influence began to be felt and their fine and striking decorative sense came into play. When the tile industry with its Moorish-Chinese-Spanish influence was introduced into the city of Puebla about 1630, it found splendid raw materials and Indian potters of ability. Cholula, a city close to Puebla, had been an important center in pre-Cortezian times; there the best pottery had been made. Tile was so suited to the climate and to the decorative ideas of the native craftsmen that it rapidly came into general use. Domes began to be covered, the wainscoting and even entire facades were covered with tile. The colonial architecture of Mexico came to have that character and brilliant coloring which gave it an oriental flavor in harmony with the native Indian buildings. Nevertheless, one can see the Spanish-Moorish influence throughout the designs.

The seventeenth century saw buildings based more or less on projects approved in Spain, and the architecture of Mexico during this and the following centuries naturally was strongly influenced by the styles favored in the mother country. But where these tendencies were austere, as in the Herrera style, they could not be assimilated in Mexico as they were not in accord with the environment and love for the elaborate which always had been characteristic of previous races which, through intermarriage, had now begun to develop a new people. The characteristics of this seventeenth century were the dome and baroque decoration, which gradually developed into the Churrigueresque style of the eighteenth century.

Eighteenth century architecture has two outstanding types: first, that which used the column as a basis and was profuse in ornament of foliage and volutes, in breaks and curves in the pediments, and in multiple and various pinnacles; these columns were more or less decorative and were totally covered with ornament, sometimes affecting a twisted or Salomonic form. Second, the Churrigueresque, where the ornamentation was even more lavish, using the Churrigueresque pilaster for support, and a balustered pilaster surmounted



17TH CENTURY, above. Detail of main portal, Regina convent church, Mexico City

18TH CENTURY PORTAL, at left, of 17th Century Collegio Mayor, St. Pedro y St. Pablo. Ornament above door is coat of arms of University of Mexico, which has been added recently

MODERN, at right; above motifs combined in portal

by a pseudo-Corinthian capital over its third section to form a baluster. The dome during this period formed the characteristic skyline in Mexican cities, particularly the polygonal and the hemispheric dome. The chapel of El Pocito, at Guadalupe, is a culmination of the principal characteristics of this period. Towards the end of the century, a reaction against the Churrigueresque took place, taking the form of a renaissance with a classic elegance much influenced by the Spanish architect, Tolsa, and the native architect and artist, Tres Guerras.

Then came the revolution in Mexico, with independence declared in 1810. There began a search for new forms, new vogues, in everything. The art and architecture of the periods of Louis XIV, XV and XVI, and the Spanish Bourbonic, all left their imprint on Mexican architecture during this century.

Towards the beginning of the present century, excavations began to reveal the ancient Maya and Toltec structures. But these were merely fragments of primary interest to archeologists. It was not until the last ten or fifteen years that excavations had proceeded far enough to enable architects to visualize the style of these so long buried buildings. And now, Maya and Toltec in-

fluence have come to exert some influence on our decorative designs and architectural schemes in some locations.

Modern tendencies in Mexican architecture lie along several distinct lines. One group is particularly interested in the Mexican colonial work and in basing the design of modern buildings on this precedent—because the logical use of material at our disposal and rational solution of our standards of living. Another small group is being much influenced by Mayan and Toltec buildings recently excavated. Still another group is in sympathy with the world wide modern tendency, desiring as radical a change as possible.

But regardless of what their stylistic inclinations may be, Mexican architects are giving first consideration to the functional requirements of buildings of all kinds and the most modern methods of construction that are adapted to the purpose are employed.

Both climate and tradition have caused the retention of the patio as a distinctive feature. Business buildings as well as residences are commonly built around an open central court. There are no tall buildings, for they are not needed. Furthermore, the soil in the City of Mexico, which is

(Continued on page 98)



MAIN PORTAL, NEW NORMAL SCHOOL, City of Mexico, a combination of colonial motifs. The wall is surfaced with a red lava aggregate in lime mortar; the carved details are of gray volcanic stone

. . . As It Looks

Let Us Tell the Children

JUST as the Bank for Little Folks, illustrated elsewhere in this issue, lays the foundation for future as well as present business by educating children to the advantages of thrift and so developing future large depositors, so should the architectural profession seek to bring about a widespread appreciation of good architecture by appealing to adolescent minds and thus be developing future profitable clients. Children are willing and eager to learn things which interest them. They are all familiar with many buildings. How those buildings came into being is extremely important to them; it is a natural part of their education. Educational authorities should see that they come to know at least a little bit about building, for expenditures for housing and buildings for business purposes constitute perhaps the largest single item of the average man's expenses.

Sullivan's Philosophy

SPEAKING before the sixty-fourth convention of the American Institute of Architects at San Antonio, Eliel Saarinen said: "Louis Sullivan once explained to me his philosophy of architecture. When he finished he said: 'That is the only right thing to do.'

"I looked skeptical and said: 'Do you think so?' 'Yes,' he answered, 'that is the only right thing to do—for me. You have to consider what is right for you.'"

That brief statement speaks volumes. That theme could be developed from several points of view, each to one's own liking. It is food for thought. "You have to consider what is right for you."

Architects Can Help to Rent

THERE is no one man who so thoroughly understands the advantages of a building as the architect who designed it. As part of his regular service to clients, it is well within his province to suggest to an owner features which may be advertised and sold to the renting public. It is quite possible that the day may come when progressive architects will offer such advice as part of their regular service. Architects who are promoters, and there are many such, know that good ideas are salable even in times when there is little work to be had. Why should they not, in addition to suggesting what should be a profitable building for a certain site and advising how financing may be secured, go beyond that and explain just how the market for that building may best be tapped?

Lumber to Keep On Advertising

MANUFACTURERS of lumber, at their recent national convention, approved a permanent lumber promotion program calling for the expenditure of a million and a half dollars annually. The plan includes adver-

tising, research, field work, and publicity. The use of advertising by this industry has not only helped to promote a cooperative spirit, but, of far more importance to the country, has helped to improve the product itself. Out of it has come grade marking; out of it has come a greater regard for honesty in advising grades and species for the purposes to which they were best suited. Advertising has the habit of doing those very things. Once a backward industry starts to advertise, it is apt to find the flaws in its methods of manufacture and merchandising and consequently to be better able to serve the public.

Public Speaking

PUBLIC speaking is an art neglected by too many professional men, and architects as a whole are no exception. The ability to address a group, large or small, with authority and convincingness is an asset possessed by few. Yet it is an accomplishment not difficult to attain. Self-consciousness, perhaps the greatest stumbling block, is partly a matter of will power, partly one of being absorbed in one's subject, but more a matter of practice in standing up and talking before groups of people. To speak with conviction one must believe in his topic and must develop the argument logically. With well arranged notes and some preliminary practice, one can be sure of giving a reasonably good talk. The practice of standing up to dictate letters is an aid to cultivating the ability to think clearly when "on one's feet" and no opportunity should be passed up that affords a chance to practice the art. Many could well afford to join a school class in public speaking. Students in schools of architecture would do well to elect a course in public speaking. Meetings of architectural societies and Institute chapters can be made good training fields for practice in public speaking. This is too important an asset to be overlooked.

High-Cost Cheap Construction

THE Tyler Company publishes a well edited house organ called "The Latch String." The following is an extract from an editorial in a recent issue. "The man who buys low-quality goods for personal use practices false economy. . . . Many people buy cheap when they build a home. . . . Before he had been in such a house a year, the owner had to spend \$90.00 to have the main girder jacked up and additional posts inserted. . . . Plaster fell from the ceiling, and that meant replastering and redecorating. The man saved a thousand dollars by investing in a cheaply-built house, but he signed more than a thousand dollars' worth of checks trying to replace faulty construction and strengthen a jerry-built job."

This is one kind of mistake from which architects can save owners who wish to safeguard what is probably their largest single investment of hard earned money. This is the kind of information the public needs to have.

to the Editors . . .

"If You Are Going to Build"

MANY requests for copies of the booklet, "If You Are Going To Build," continue to be received each day and in return many letters are received commenting upon the value of the booklet as a means of reaching the layman. Several architects have stated that the argument for engaging an architect as presented in this booklet is convincing. Others state that it cannot fail to strengthen the general appreciation of the architect's services. Many architects have ordered copies for distribution. The Michigan Society of Architects ordered two hundred copies of the booklet. The booklet was prepared with a specific problem in mind. Placed in the proper hands, it should cause many laymen to pause and consider the employment of an architect.

Banker Values Architect

A BANK will loan from twelve to fifteen per cent more if a capable architect is employed and wise construction methods followed, according to Rome C. Stephenson, president of the American Bankers' Association, who also feels that employment of architectural service will produce a house that has an added rental value and a quicker sale. He states, "Even in modest homes the client is overly anxious to express his—usually her—individuality, but uncurbed individuality, freakishness, unwise expenditure is usually detrimental to the loan, rental and resale value of the property. The capable architect, while expressing this individuality, also tactfully diverts it into modern conveniences and money-saving equipment." Because of thousands of foreclosures and repossessions, bankers have come to realize the necessity for better planning and better building in the interest of sound finance.

Cooperation With Builders

THE American Builder and Building Age in its April issue comments on the editorial, "Can we sell architecture to the small house buyer?" published in the March issue of THE AMERICAN ARCHITECT. The editorial is commended and the suggestion made that "architects can reach this market for their wares by taking the same route that many manufacturers of building materials and supplies have already used so profitably, namely through the contractors and builders . . . if architects will approach these builders . . . real progress will be made . . . architects will find that the contractors and builders are conscious today as never before of the appeal and the money value to them of style and design in even small houses." The editorial further states that the builder needs an architect on his consulting staff and, if architects will cultivate the acquaintance of builders, a "long step will have been taken toward the goal of getting more architectural merit in American homes." There is merit in the suggestion. It is worth trying. To the answer

that many builders will not pay what the architect's service is worth, the question may be asked, do these builders understand what the service is worth to them and to the public who buy their product?

Billboard Advertising

PASSAGE of the Engle bill regulating and taxing billboards in Maryland is a victory for the foes of unsightly roadside advertising in that state. In Maryland, the location of roadside billboards is now under the control of the State Roads Commission, which is given authority to remove signs which endanger traffic. Billboard practice in that state was attacked on the basis of public safety, appearance of the sign boards, and the obscuring of scenic beauty. Public sentiment has proven to be a strong factor in this question which has been agitating many states. Billboard advertising has developed into a well established business. Had it proceeded on the basis of due regard for the right of the public to enjoy America's beauty in safety, there is no reason to suppose that its business would not have gone on undisturbed for many years. Perhaps the agencies handling this type of advertising will revise their practice in a manner agreeable to the public.

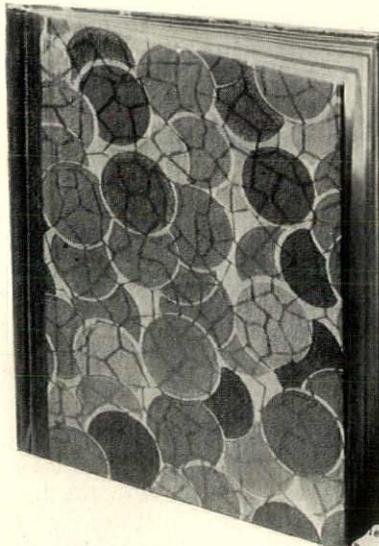
A Good Time To Clean House

PREPARE for war in time of peace is advice that may be applied to activities other than military. These quiet, peaceful times in the building industry may well be made an opportunity for architects to perfect themselves for work that must eventually arise. If busy years have indicated a lack of proper organization, or suitable, efficient office system, there can be no better time than the present to correct the condition. This is a good time to clean out the files and set the office in order. Introspection in many cases may be worth while—introspection that will discover one's individual deficiencies accompanied by a resolution to find a remedy and cure in preparation for better future service to the public and self. Most architects are so well grounded in the principles of design and esthetics that time could be spent to advantage in studying the principles of business—business methods and business getting. NOW is a good time to do it.

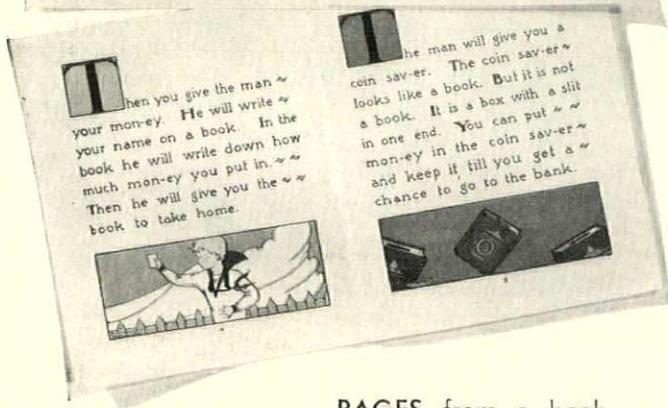
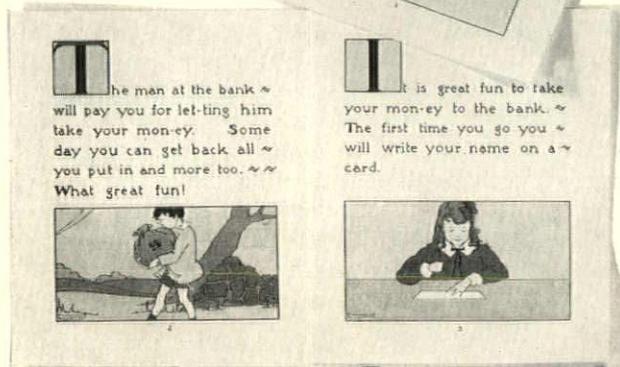
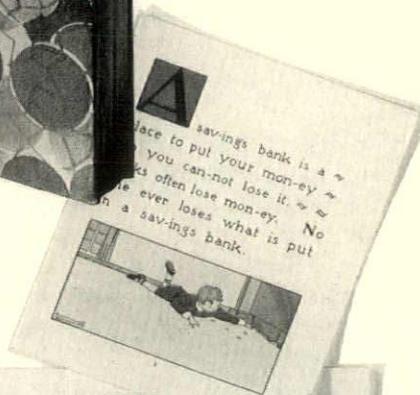
What Is Expert?

AT a dinner of the Architecture Club in London, Herr E. H. Rütter of the German Embassy in that city said he was not an expert in architecture. His definition of an expert was a man who knew more and more about less and less! A definition of expert in Webster's Dictionary is "knowing and ready from much practice; clever." Perhaps Herr Rütter is not an expert in architecture, but apparently he has other qualifications that entitle him to be called an expert.

CHILDREN Like this Bank



A BOOK
for the
Little Folks



PAGES from a book printed in colors, telling Little Folks all about the banking business. Architects wishing a copy may get it without charge by writing to Thomas B. Jameson, assistant treasurer, Boston Five Cents Savings Bank, 30 School Street, Boston, Mass.

BLOTTERS used are specially for Little Folks



SAVE
Money is not the most important thing in the world. It is only a tool, but it will do more things—it will put more things at your command—than almost any other tool of man. Therefore SAVE, even at a sacrifice! For "save" merely means, do not waste. "SAVE!" You will find it worth while in the end.
Open a bank account with us.
Children are welcome!
**THE BOSTON
FIVE CENTS SAVINGS BANK**
The Bank for Little Folks
696 CENTRE ST., JAMAICA PLAIN
THE BANK WITH THE CLOCK

"The major factor in attracting the children is the perfect propriety of the architecture . . . That was the foundation of our publicity"

Thomas B. Jameson
Assistant Treasurer



FLAGS AND HEROES with whom children are familiar decorate the foyer

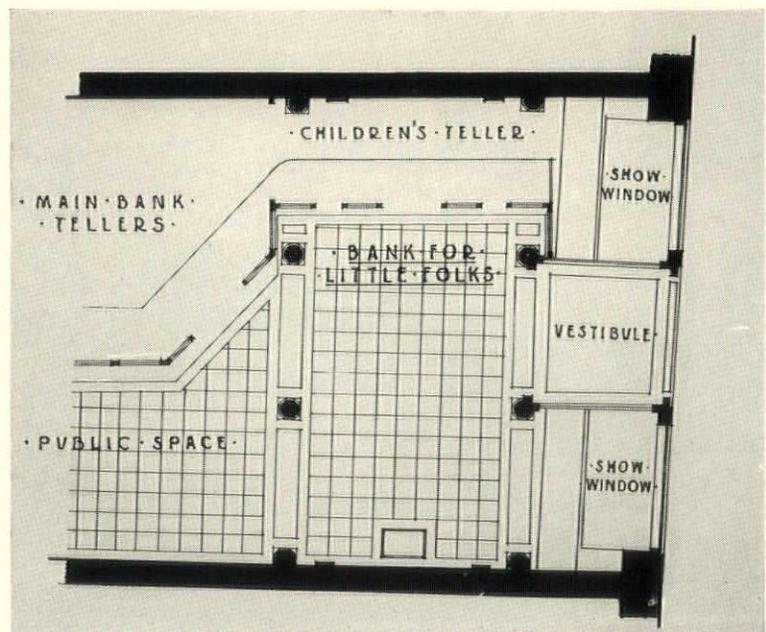


BUILT TO SMALL SCALE for Little Folks' comfort. The banking counter is thirty inches high and twelve feet long. Furniture throughout the department is also small scale. Jamaica Plain Branch, Boston Five Cents Savings Bank. Andrews, Jones, Biscoe and Whitmore, architects

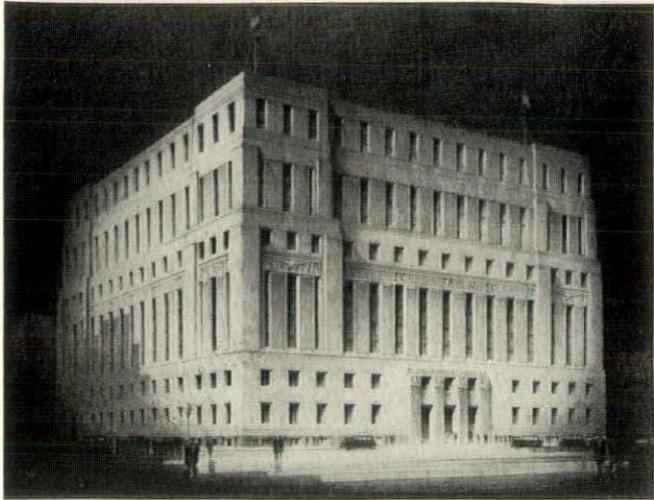
THAT children will like and patronize a bank designed specially for them is indicated by the success of the Bank for Little Folks. Out of 901 accounts opened during the first seven days of business, 450 were those of children. These youthful depositors have shown themselves well able to handle money and the experience of the bank's officials with them has been of the happiest.

These children, when they grow up, will be well educated as bank customers. There is an immediate added profit, however, in that they are influencing their parents towards making use of this bank.

Little folk depositors were secured by advertising in the local newspaper and through booklets and blotters which children secured by coming to the bank in person. The booklet illustrated on the facing page made a special hit and many children who saw others with a copy came in and asked for one, too. This idea is one which could well be suggested to prospective clients.



WHAT ARCHITECTS



FEDERAL BUILDING, Detroit, Robert O. Derrick, Inc., architects. Basement and twelve floors to house the post office, Department of Justice, Department of the Treasury, etc. Appropriation, \$5,650,000. Sketch plans approved by the United States Treasury Department

OHIO has adopted a law which provides for the examination and registration of architects by a state board of examiners. This law was fostered by the Ohio State Association of Architects under the leadership of its president, Walter R. McCormack, Cleveland. This law does not prevent others than architects from filing plans, but they may not call themselves "architects."

RESIDENTIAL building costs are down from 10% to 15%, according to figures from five different centers gathered by the American Face Brick Association. In making the survey, a typical English house was used with three bedrooms and a studio living room two stories high. The average additional cost for face brick backed by clay tile or for face brick backed by common brick, over drop siding on wood frame, was 8.6%; for face brick veneer on wood frame, 6.4%.

Residential Costs Down 15%

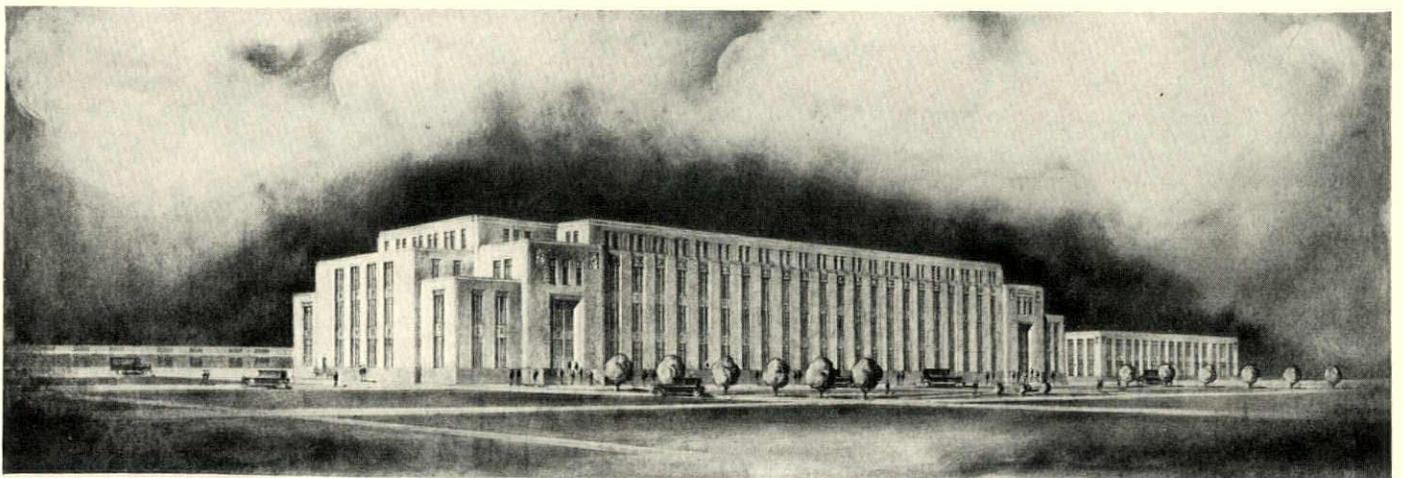
H. G. Wells Thinks All Cities
Should Be Rebuilt

Ohio Registers Architects

LETTING of Government building contracts will be investigated by the Federal Trade Commission, under the direction of C. W. Hunt, chairman. In this inquiry the Commission will investigate and report facts relating to the letting of contracts for the construction of Government buildings, particularly with a view of determining whether or not there are or have been any price fixing or other agreements, understandings, or combinations of interests among individuals, partnerships, or corporations engaged in the production, manufacture, or sale of building materials with respect to the prices or other terms at or under which such materials will be furnished contractors or bidders for such construction work; and that the chief examiner make such investigation and report to the Commission.

"AT least one quarter of the entire population of the United States receives directly or indirectly a substantial part of all its income from construction," according to Assistant Secretary of Commerce, Julius Klein.

REDUCTION in interest rate on first mortgages from 6% to 4½% was advocated by Albert H. Leiberman, real estate broker, in a recent address before the South Philadelphia Realty Board. He said that if interest rates were not lowered to keep pace with reduced rentals, "I am afraid our largest trust companies will find themselves unwilling owners of a lot of real estate property."



POST OFFICE which is to be built at Minneapolis, Minn. Magney & Tusler, Inc., architects and engineers

ARE TALKING ABOUT

Federal Contracts Investigated

25% of Population Receive
Income From Construction

Percentage of Income for House

EVERY city in the world ought to be entirely rebuilt, according to H. G. Wells, the author, who, in recently addressing the Royal Institute of British Architects, said: "We must accept the possibilities of rehousing all mankind, rebuilding every city in the world and reclaiming roads and country-side. I think we can well look forward to the time when towns will rebuild themselves as we now go to the tailor for a new suit of clothes.

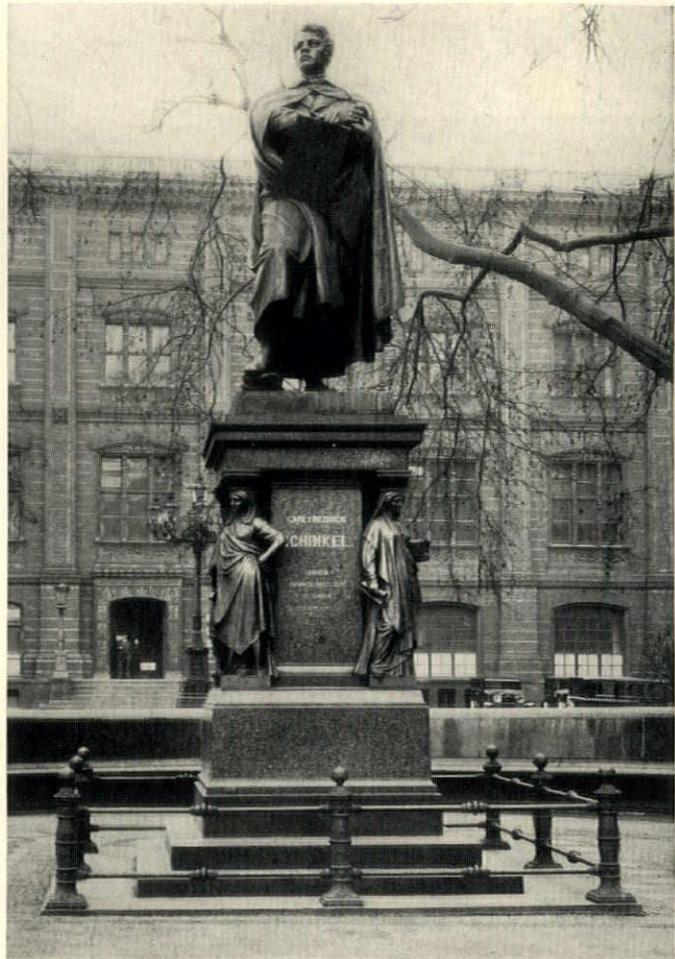
"We can look forward to the time people will no longer think of living in houses a hundred to a hundred and fifty years old, haunted by the ghosts of the men and women who lived and died therein."

"PAYING two years' salary for the keys to his own home is sound economics for the American workman," according to the House Building and Home Owning Committee of the United States Building and Loan League. The ratio of 1.9 times the annual income between home costs and salaries from \$175 to \$400 a month was held true. For incomes between \$100 and \$150 a month, the estimate was 1.75 times the yearly income. These figures were arrived at from associations in cities over 20,000. Slightly lower estimates were reported from building and loan officials in smaller towns.

The result of the survey on monthly incomes of \$400 and less was:

Monthly Income	Average Cost Estimate from Towns Over 20,000	Average Cost Estimate from Small Towns
\$100	\$2,100	\$2,000
150	3,200	2,500
175	4,000	3,500
200	4,500	4,000
225	5,100	4,500
250	5,600	5,000
300	6,700	5,600
400	9,000	7,100

OWNERS of public buildings owe a greater degree of care to visitors or customers than do owners of private buildings, according to a recent court decision. The plaintiff was making a purchase, observed an employee standing at her right, took her purchase and, supposing that the employee was still standing there, tripped over him as he knelt, and sustained serious injuries. The court, in sustaining the verdict in the plaintiff's favor, held that: "A business visitor is entitled to expect warning of any reasonable risk. The character of the place



FREDERICH SCHINKEL, architect, whose 150th birthday is now being celebrated. He was one of Germany's most famous architects, and designed many well-known buildings in Berlin

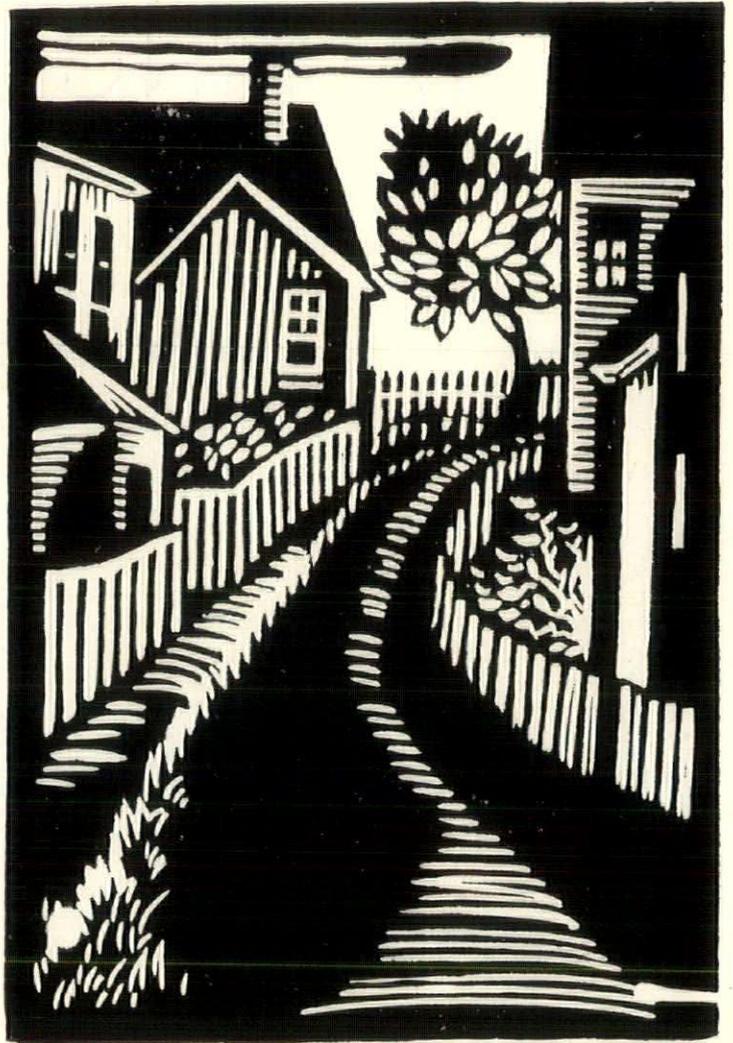
is important. One entering a store, theatre, office building or hotel is entitled to expect that far greater preparations to secure his safety will be made than one entering a private building."

THIRTY-TWO men from the building trades are employed in the construction of the average house, according to an analysis of over 2,500 residential projects, made by Sears, Roebuck & Co. In 1930, this company employed more than 80,000 building trades workers.

FORTY-FIVE per cent of the families in the United States have incomes of less than \$2,000 a year, it is estimated by Standard Trade and Securities. Another forty-five per cent receive from \$2,000 to \$5,000.

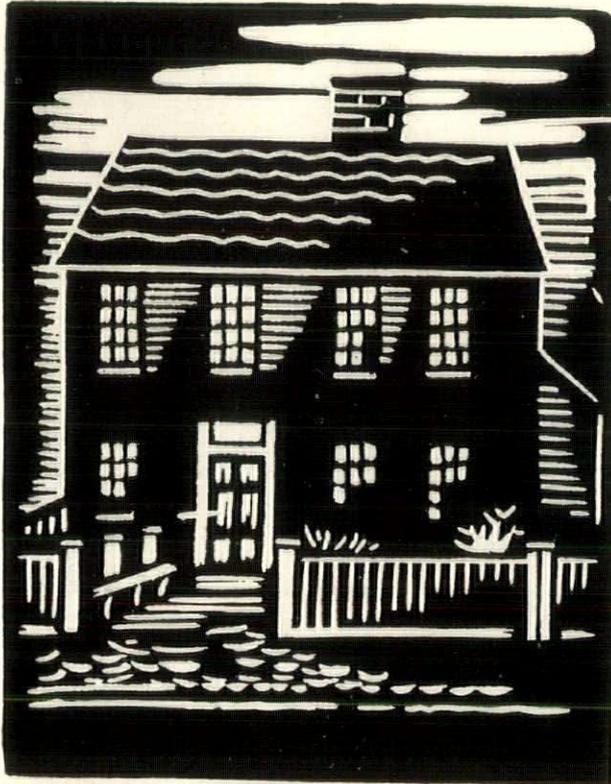
ALL buildings in New York City are being used as a picture screen at night by the Paramount Hotel, which is using a 400 million candle power searchlight to cast a stenciled advertising message on such buildings. The owner of the hotel states that he will shortly cast motion pictures on the clouds. (Continued on page 80)

FENCES
Nantucket



WESTERMAN

OLD HOUSE, Nantucket



WESTERMAN

LINOLEUMS . . .

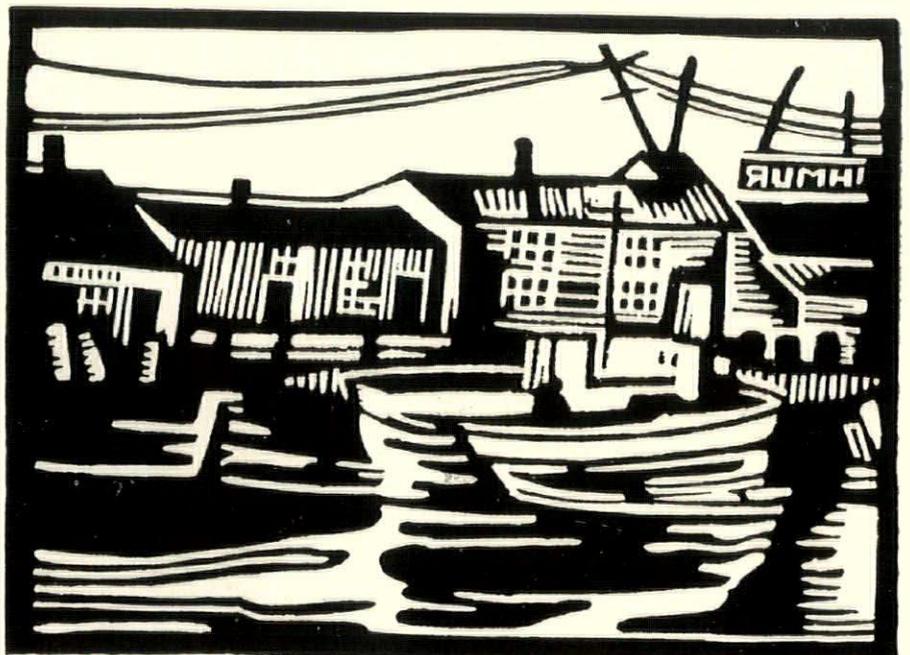
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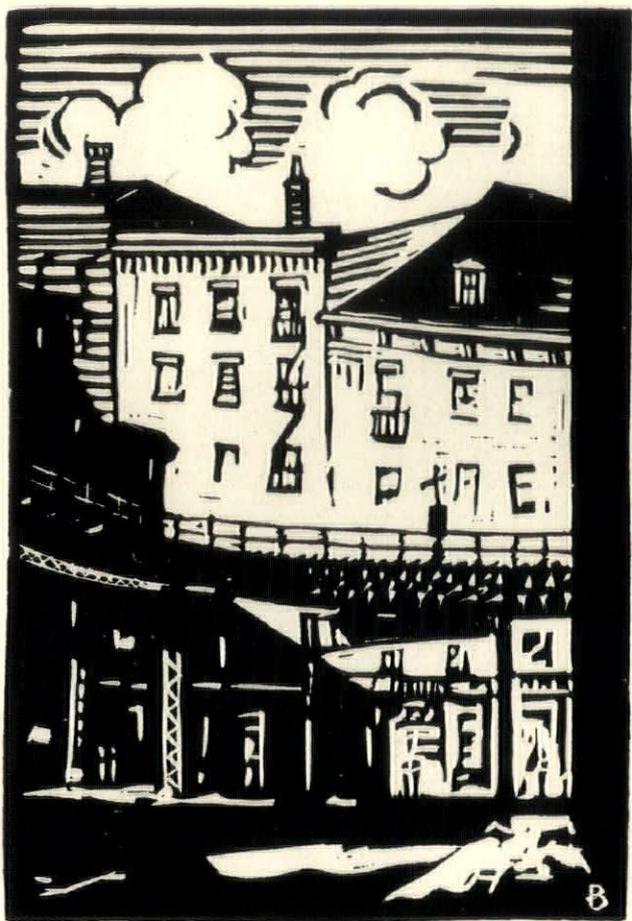
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WHEN ONE PARTNER DIES

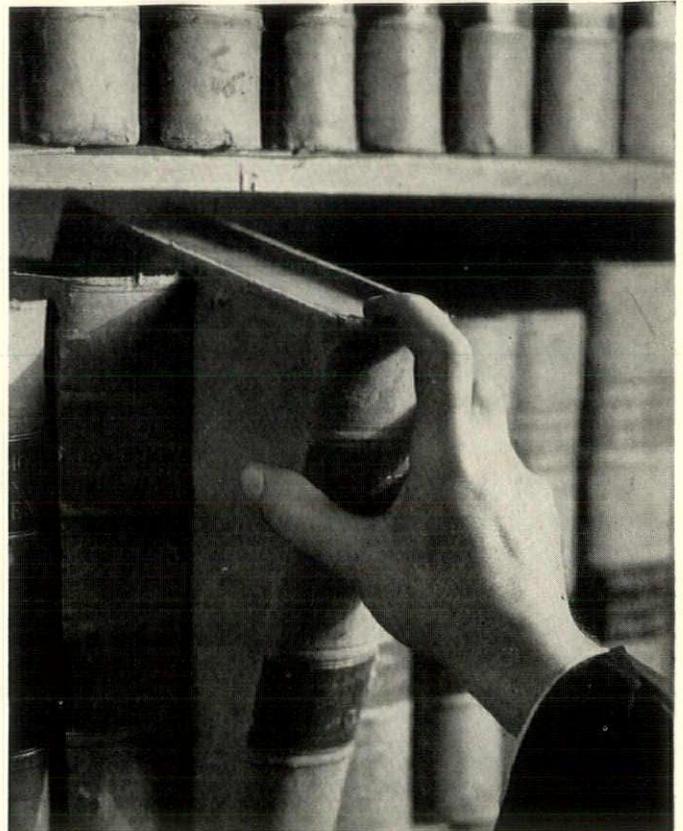
who can Issue Architect's Certificates?

By George F. Kaiser, LL.B.

●WHAT HE DID. In a contract entered into between Jensen, a contractor, and Brady, a property owner, it was provided that the former should construct a designated building to the satisfaction of Ackerman & Smith, a firm of local architects. The owner reserved the right to make alterations in plans and agreed to pay the contractor \$75,000 in installments, balance upon completion, payable on architects' certificates.

Smith, one of the architects, died. Ackerman, his partner, issued various certificates for payment which were paid without objection by the owner, except the payment on the final certificate. When the owner continued to refuse to pay, the contractor sued him for the balance due under the last architects' certificate.

WHY HE DID IT. The owner contended that the



death of Smith terminated the power to issue certificates for payments, as provided for in the contract, and that the owner was not bound.

WHY HE SHOULDN'T HAVE DONE IT. The court, in deciding that the contractor was right in his claim and that the owner's contention was wrong, awarded judgment to the contractor and said:

"As has been seen a power confided to two or more private agents must ordinarily be executed by all of them jointly and the death of one of them, therefore, where the authority is joint, renders the further execution of the agency impossible, and it is therefore terminated. Where, however, the agency is joint and several the death of one agent does not terminate it.

. . . If Plans and Specifications are Followed, is Contractor Liable for Failure?

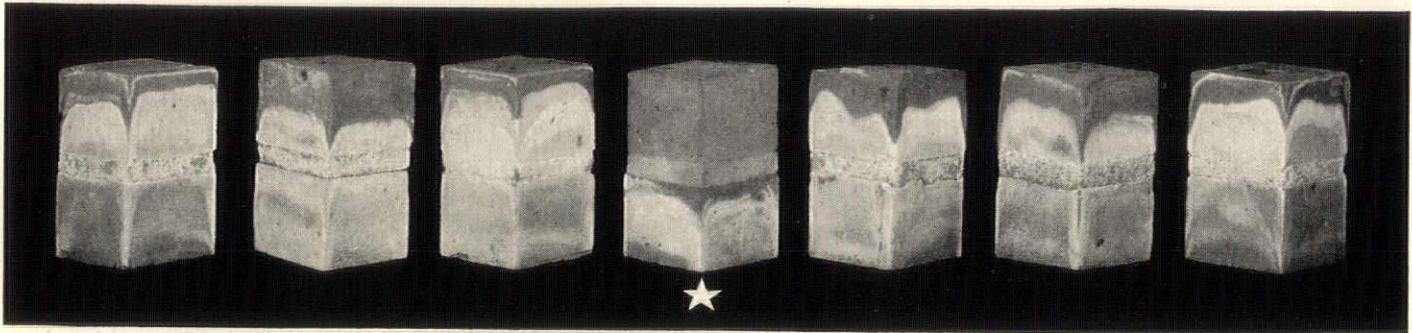
●WHAT HE DID. Kerler, a builder, entered into a contract with Thornton, an architect, to erect a building according to the latter's plans and specifications, which were intended to exclude water from the cellar. When the job was finished, Thornton refused to pay, claiming that the builder had failed to make the floors waterproof; he pointed out that, under the contract, the work was to be turned over to the owner by the builder in perfect order and guaranteed absolutely damp and waterproof for five years from the date of acceptance of the work, any dampness or water breakage within that time to be made good by the contractor.

WHY HE DID IT. Thornton's refusal to pay was based on his belief that even if the builder had conformed in every respect to the plans and specifications

he could not recover unless he made the cellar floors and walls absolutely waterproof.

WHY HE SHOULDN'T HAVE DONE IT. In a New York case decided on a similar state of facts, the court said: "As to the five-year guaranty clause wherein the plaintiff agreed to turn the work over 'in perfect order and guaranteed absolutely water and damp proof for five years,' and to make good any dampness or water breakage during that period, this we think applies to the material and workmanship, but not to the plan. . . . If the work was faithfully performed according to the plan and specifications, and the failure to secure a water-tight boiler room was wholly owing to the defective design of the defendant, the plaintiff would be entitled to recover."

This TEST



HAS THE ENTIRE BUILDING FRATERNITY TALKING *about* CARNEY CEMENT MORTAR!

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The specimen laid up in New Carney Cement, which is marked by the star, together with six specimens of other manufacturers were made. The mortar for all was mixed, one part cement to three parts sand by volume. The same quality bricks were used, in all cases. The sand and water were identical and all specimens were exactly the same age. They were immersed in sodium sulphate solution (a common cause of efflorescence) to a depth of one-half inch. They all stood in this solution

for 48 hours. In every case excepting in the Carney specimen, the sodium sulphate solution was drawn up by capillary attraction through the mortar joints into the top bricks. In the Carney specimen, the action was fully checked at the joint—which emphatically demonstrates two things—the effective resistance of this new material to the spread of efflorescence and the complete water-tightness of Carney Cement.

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Outer doorway, Escuelas Menores, Salamanca. From "Architectural Details of Northern and Central Spain"

ARCHITECTURAL DETAILS OF NORTHERN AND CENTRAL SPAIN

By Gerstle Mack and Thomas Gibson. Published by William Helburn, Inc., 15 East 55th Street, New York. 104 Measured drawings and 55 photographs; size 10 $\frac{1}{4}$ x 13 $\frac{1}{2}$; indexed; price \$16.

AN excellent collection of Spanish details intended as a source book. All drawings are reproduced at commonly used architectural scales; molding profiles and details of ironwork are drawn to exceptionally large scale, generally one-half or one-quarter full size. Each subject is illustrated by a photograph as well as drawings.

The book is divided into seven subject sections: façades, patios, ironwork, doorways, windows, ceilings, and wood doors. There is a preface telling something of the general characteristics of northern and central Spain.

PRINCIPLES OF CITY PLANNING

By Karl B. Lohmann. Published by the McGraw-Hill Book Company, Inc., New York. Illustrated; indexed; 395 pages; size 6 x 9 $\frac{1}{4}$; price \$4.00.

TO fill the need for a single volume assembling in readily accessible form the results of various investigations and the latest discussions of important aspects of the subject, this book has been written." So reads a sentence from the preface to Mr. Lohmann's book that gives the key to what he had in mind.

The book covers the physical characteristics of cities,

the city planning movement in America, streets and street systems, traffic control, transit and rapid transit, airports, parks and park systems, playgrounds and playfields, subdivision of land, housing, zoning, public buildings and building groups, regional planning in metropolitan areas, legal authority for city planning, educational and promotive work in city planning, etc.

Mr. Lohmann is professor of landscape architecture, University of Illinois, and a member of the American Society of Landscape Architects, American City Planning Institute, National Conference on City Planning, and the American Civic Association.



Shop center, Arrowhead Lake, Cal. From "Principles of City Planning"

ARCHITECTURAL DRAWING

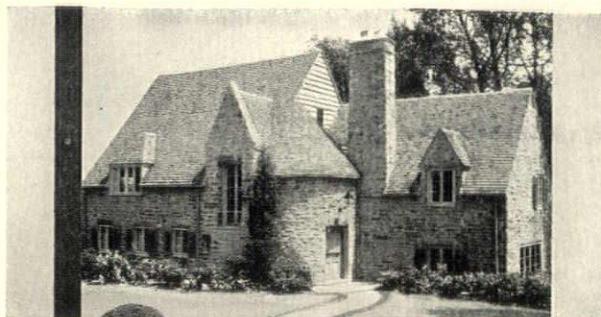
By Cyril A. Farey and A. Trystah Edwards. Published by Charles Scribner's Sons, New York. Illustrated; 96 pages of text and many plates; size 7 $\frac{1}{2}$ x 10; price \$7.00.

IT is important to know how to sketch, but, after all, the choice of subject is even more important. In the middle of the last century, when in this country the art of building had reached its very nadir, the sketching habit was more prevalent than ever before or since. And the more the architects sketched, the more execrable did their architecture become. This is not an argument against sketching. To the student the advice should not be 'Forbear to sketch,' but 'Sketch with discernment.'

This common sense observation from the first chapter indicates that there may be found throughout the book not only practical ideas on drawing but a philosophy that leads one on to think for one's self. The book covers the choice of media and materials; point of view and composition; lighting, shadows and reflections; color treatment and rendering; architectural surroundings and accessories; measured drawings; sketching; competition draftsmanship; and so on. There is an appendix and a bibliography. Many illustrations are in color.

Mr. Farey is Associate of the Royal Institute of British Architects; Gold Medalist, Royal Academy Schools;

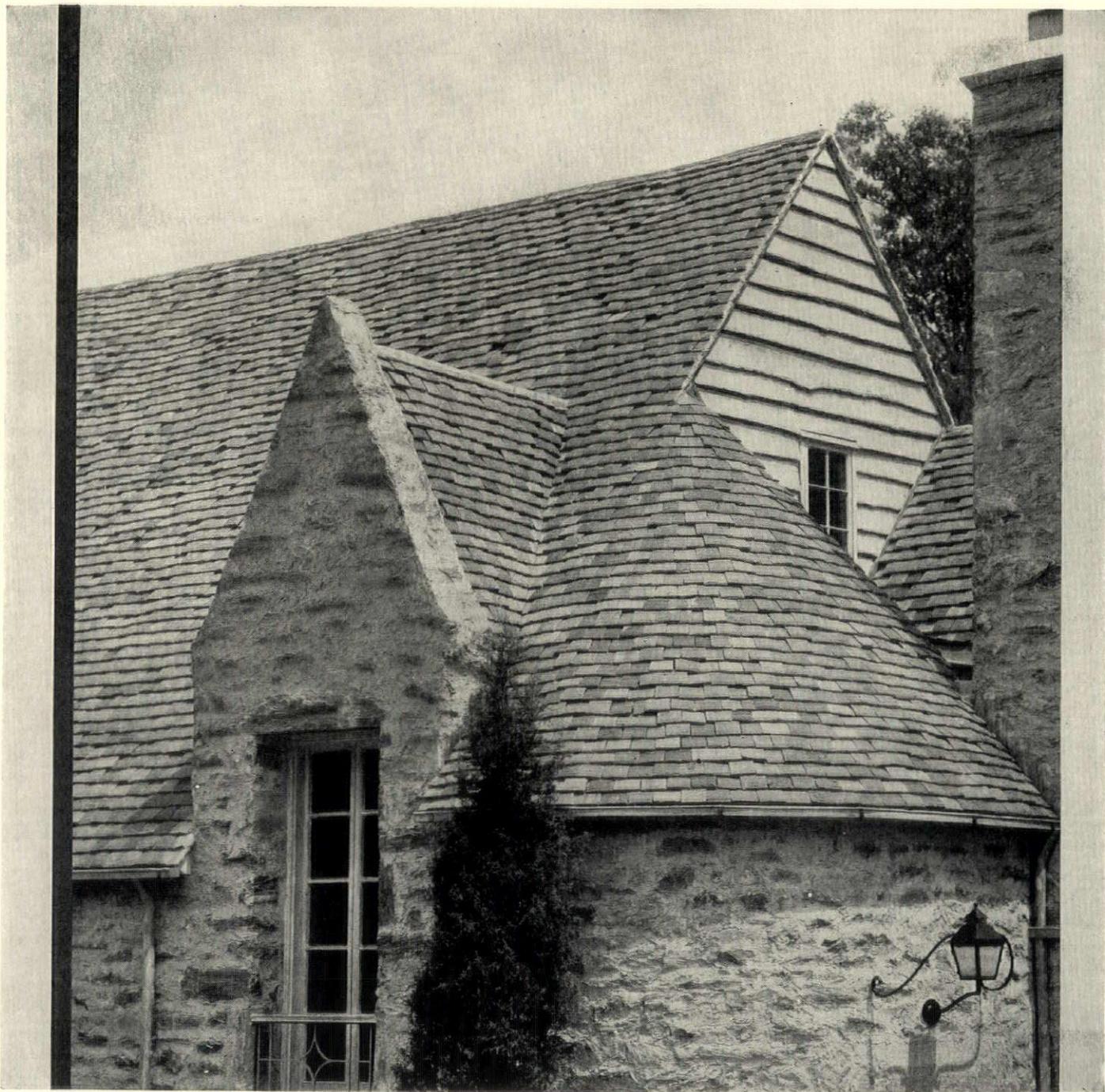
SOFT RED predominates in this tile roof that complements so fortunately the stone work and green foliage of the trees. Ludowici Brittany Shingle Tile is used, with especially skilful treatment of valleys and ridges. A wide range of patterns and colors makes Ludowici Tile the most adaptable of roofing materials, beautifully applicable to buildings large and small of all types of architecture. The reasonable first cost is the last, for such a roof endures forever. Your attention is called to our pages in Sweet's and we will gladly mail you our new catalogue. A representative will call upon request.



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Old House, Corner of the Friars, Canterbury. Drawn by W. M. Keesey. From "Architectural Drawing"

Soane Medalist, R. I. B. A.; Tite Prizeman, R. I. B. A. Mr. Edwards is Associate of the Royal Institute of British Architects, of the Town Planning Institute, and of the Institution of Structural Engineers.



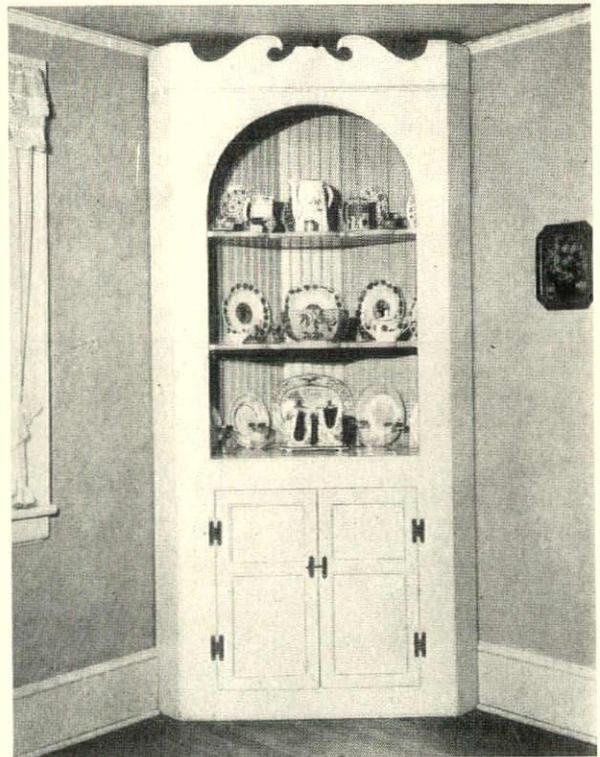
Garrett Homestead, near Edgemont, Chester County. From "Early Domestic Architecture of Pennsylvania"

EARLY DOMESTIC ARCHITECTURE OF PENNSYLVANIA

By Eleanor Raymond, A.I.A. Published by William Helburn, Inc., 15 East 55th Street, New York. 290 photographs and 26 plates of measured drawings; size 9 1/2 x 13; price \$20.

A BOOK said to be the first attempt to bring together, in any organized or complete form, photographs and measured drawings of the earliest domestic buildings of Pennsylvania. Most of the buildings chosen for illustration have not been published before and, so rapidly are they being made way with, that some of those photographed last summer have already been torn down.

The book is divided into sections covering religious buildings, school houses, bridges, mills, houses and their details, interior details, farm outbuildings, fences, gates, porch details, doorways, etc.



Corner cupboard made as described in "The Home-Owner's Manual"

THE HOME-OWNER'S MANUAL

By Dorothy and Julian Olney; Published by the Century Company, New York. Illustrated; indexed; 240 pages; size 5 1/4 x 7 1/2; price \$2.50.

HOW to lay a cement walk, how to repair a burst pipe, how to hang wall paper, how to make built-in furniture—these and many other such items of information are contained in this book, where the data is given in simple form easy for the average lay mind to understand. The book is, of course, intended for the owner after his house is built; it informs him on up-keep and gives him information that may be worth many dollars.

Some of the chapter headings are: Tools and Woods, Carpentry, Painting and Wood Finishing, Wall-papering, Plumbing, Electricity, Heating Systems, Furnace Operation and Fuels, Outdoor Woodwork, Cement and Stone Work, the Lawn, Annual and Perennial Flowers, Shrubs and Trees, etc. There is an appendix containing tables of weights and measures, fuel tables, etc.

INDUSTRIAL RELATIONS IN THE BUILDING INDUSTRY

By William Haber. Published by Harvard University Press, Cambridge, Mass. 591 pages, size 6 1/4 x 9 1/4; price \$5.00.

THIS book seeks to describe the major industrial problems in the construction industry, to relate them to the technical changes taking place and the business methods prevailing therein, and to present the elements out of which a more stable industrial relations policy can be evolved." That is the purpose of the book. It is a purpose well served, for the book gives an excellent analysis of the building industry from all angles and should lead to a better understanding of the industry and how to correct its ills. (Continued on page 110)

Detroit Skyline Goes A. D. T.



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BEFORE SAYING . . .

"Consult an Architect" SHOULD WE CLEAN HOUSE?

By ALEXANDER LEWIS, architect, Miami Beach, Florida

THAT little phrase, "Consult an Architect," has caused much comment and controversy among architects all over the country. All of us undoubtedly favor the use of the phrase and, in general, believe it to be sound advice to the prospective builder. But, can we find means to eliminate that qualifying "in general?"

We are prone to talk about competition; competition from the contractor, the designer-builder, the chain store building campaigns, and even the lowly Jerry-Builders. The only real competition we need to have disturb us is the competition from our fellow architects—and that isn't a worry, it's a blessing.

Designer-builder competition should be condemned in no uncertain terms but, first, the profession as a whole should be above reproach. In South Florida we have several concerns of "realtor-designer-builder-landscaping-decorator" classification who execute their work in a manner superior to that done by many architects and sometimes the advice "Consult an Architect" sounds rather meaningless. These designer-builders are competitors who have no regard for our dear architectural ethics and sometimes, it seems, for business ethics either. But are we in a position to condemn them?

Our condemnation produces very little more than an echo. There is not a city in our country where architects and contractors are not aware of the presence of members of our profession who are unqualified, untrained, and corrupt and dishonest. But they are allowed to continue their practice without protest! Who have a better right to protest than architects who labor under such a handicap?

We recall the local case of a man who was forced to leave this state because of his corrupt practice. Only financial reimbursement from the man's family protected him from prosecution. This man moved to another state and continues to practice as an "architect." More recently, an alleged architect opened an office in Miami with the announcement of a nice commission for a residence. Within a week he had swindled a number of gullible contractors and in a short time he was in jail. The newspaper publicity given the matter was a disgrace to the building business as a whole and to architects in particular. Such flagrant cases have injured the profession immeasurably, for the fable of the one bad apple in the barrel is especially applicable to our profession.

The solution of this problem will not happen in a week; it will take years. If, as a profession, we conduct a campaign of house cleaning and elevation of professional standing, with actual results, the problem of eliminating that competition, and along with it much of the

competition from the designer-builder, will solve itself.

The logical method of eliminating those not qualified to practice architecture is through the State Board of Architecture. Local chapters of the Institute and local architectural organizations are often called upon to pass judgment on applicants for state registration. In the same way, they could advise as to the qualifications and fitness of practicing members and work toward the eventual elimination of those who are detrimental to the profession and to the building business. The present method, in vogue in most states, for accepting candidates for registration by examination, or because the applicants are graduates of accepted architectural colleges, is a satisfactory procedure. However, because an architect is registered in one state is no reason why he should be accepted in another, and because an architect has once obtained registration is no reason why forever more the registration should be renewed.

ARCHITECTS like to refer to the code of ethics practiced by lawyers and doctors and once again they show us the way. An attorney is admitted to the bar after examination but that isn't the end. If subsequent actions in practice warrant, he may be disbarred and an end made of his misuse of the privilege to practice law. Similar methods protect the medical profession and revoking of a medical license is not uncommon. A possible recourse for the architectural profession would be the refusal of the state board to grant renewed registration to members who have had unprofessional charges preferred against them by their local colleagues. We could thus be rid of unqualified, undesirable, and unscrupulous members of the profession.

The State of Kentucky has recently enacted legislation to provide for a State Board of Architecture and the Board, a well selected group of men, is making a fight to raise the standard of the profession. The Board in that state has a great opportunity but they will need courage and determination. Encouragement should be given the Board by every member of the profession.

The betterment of the profession does not mean only that we will earn more and better commissions and that we will be able to lift our heads higher in pride of our vocation, although those are inevitable results, but also that the public attitude toward the profession will be improved. Propaganda and advertising will not produce that improved attitude of the public and the client, unless we, as a body, merit that increased respect and regard.

We do need to take drastic steps and it is entirely possible that one day there will be only two general classes of architects, good and better, and without a tremor we can advise, "Consult an Architect."



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THE READERS

Have a Word to Say

• A SUGGESTION ON "THE GOVERNMENT SHOULD GET OUT OF THE ARCHITECTURAL BUSINESS"

Editor, THE AMERICAN ARCHITECT:

I AM more convinced than ever that the action should not be directed solely against the Treasury Department, either as contemplated by the A. I. A. Public Works Committee or as outlined in your program. . . . 'is there any real assurance that what Mr. Mellon can abolish, cannot be reestablished by a successor?'

In regard to that part of your own suggestion, that the petitions be directed at the Treasury Department, what about the other sixteen agencies which are engaged in the designing of buildings of one sort or another under various and sundry departments of the Government? Are we not in fact attacking a principle rather than a particular transgressor?

. . . It has long been our conviction that redress can only have permanent assurance through the legislative channels and, once we have aroused our representatives in Congress to the point of championing our cause, the victory is more than half won.

. . . I also feel that a coordinate campaign by the Producers Council, representing the material manufacturers industry, and the Associated General Contractors, representing the construction industry, would be in the nature of "shock troops" and, backed up by crystallized public sentiment through the support of local Chambers of Commerce and other civic organizations, would insure a decisive victory.—*Roland E. Borhek, president, Washington State Chapter, A. I. A., Tacoma.*

• WE MUST LET THE GOVERNMENT KNOW WHAT WE THINK

Editor, THE AMERICAN ARCHITECT:

MANY of us in Indianapolis can remember that when our present Federal building was built, there was difficulty in convincing the government bureaus of the necessity for an adequate site and for the employment of capable architects.

May I suggest that your article, "Fifty Years of Agitation, June, 1931," should be reprinted in a form for extensive circulation? I do not believe that the present organization of the office of the Supervising Architect of the Treasury will be inclined to give contracts for the designing of smaller buildings to other architects. They are, very naturally, satisfied that their own work is good enough.

But I believe that a campaign of information to the members of the new Congress might produce some legislation requiring capable private architects on government work. The new directory of the members of the next Congress has not yet been printed, but a complete list may be obtained at Washington.

If a complete list of proposed locations for new

post office buildings could be secured from the Treasury Department, the people of each community where a new building is to be erected might be aroused as to the importance of having the best architects in America employed for this work. Such a campaign should be well under way before the next meeting of Congress.—*Lee Burns, Burns & James, architects, Indianapolis.*

• SPECIFICATION CLAUSE THAT SAVED MONEY

Editor, THE AMERICAN ARCHITECT:

ON the testimony of seven general contractors, out of eighteen, who submitted remarkably close bids on a forty thousand dollar private residence to be constructed at Glen Head, Long Island, the enclosed copy of page 1 of our specification, entitled "Intent," saved the owner more than our fee.

We let the general contract for \$35,000.00. Our preliminary professional estimate was \$42,000.00.—*Robert Tappan, Tappan & Peek, Architects, Forest Hills, N. Y.*

INTENT . . . The Owner is building this house as a speculative investment. While the plans and specifications call for a moderately high class job, the *intent* of the Owner and his Architect is to so cooperate with the General Contractor that he may function in a way satisfactory to all concerned.

Rigid and inflexible interpretations of the plans and specifications will be avoided. Substitutions will be allowed. The term "or equal" is not to be found in these specifications. If the General Contractor can satisfy the Architects that there is good reason, or economy, for a substitution, it will be made, and the saving credited to the Owner's account.

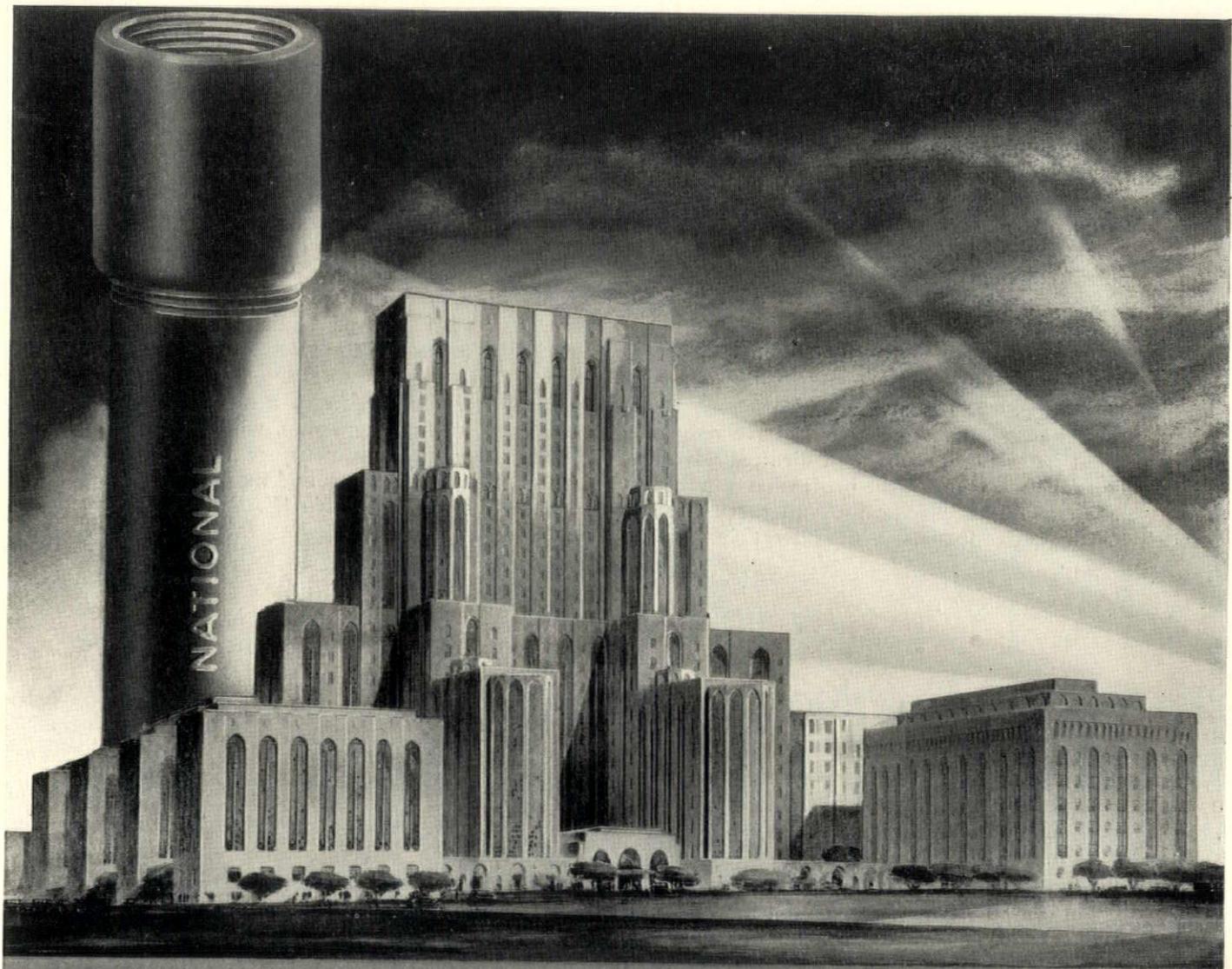
Every effort will be made to help the General Contractor produce a satisfactory and workmanlike job. The Architects have been in business long enough to know that they are not infallible. They don't know it all. They welcome suggestions from the General Contractor during the progress of the work, and would add that, if this job is successful, the Owner intends to construct more houses—meaning more business for all concerned.

• A PLAN TO GET THE MONEY TO ADVERTISE ARCHITECTURE

Editor, THE AMERICAN ARCHITECT:

IT looks as if everybody fights shy of doing anything definite or seriously proposing any definite plan of action in regard to advertising. Well, I have one and although it may not be any good I will outline it.

Nearly every state has a Society of Architects or similar organization. Why couldn't we all get together and maintain a central office in Chicago or New York, supporting it with funds from each of the state organizations and presided over by a board elected by them? Let



IN THE LIGHT OF PAST EXPERIENCE

NEW YORK HOSPITAL—CORNELL MEDICAL COLLEGE ASSOCIATION

Architects: Coolidge, Shepley, Bulfinch & Abbott, Boston, Mass., *Heating & Ventilating Engineers:* Buerkel & Co., Boston, Mass., *Plumbing Engineers:* James A. Cotter Co., Boston, Mass.
General Contractor: Marc Eidlitz & Son, New York City, *Heating Contractor:* Almirall & Company, New York City, *Plumbing Contractor:* John McMillan Company, New York City.

The second great consolidation of a medical school with a hospital in Manhattan during a space of two years, is to be housed in appropriate new buildings between Sixty-eighth and Seventy-first Streets, overlooking the East River. This union will be provided with the best plant equipment, technical facilities, and organization of personnel that can be brought together. In the magnificent building that has been planned, the major specifications of piping, so varied and so important in a modern hospital, call for NATIONAL Pipe. Thus precedent grows and accumulated experience enlightens new undertakings. Thus also, among well-informed users, there is increased recognition of—

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NATIONAL PIPE

each member of each organization pledge one per cent of his gross fees and pay this money to his organization, which in turn will forward it to the central office for its maintenance and activities. This could be made one of the requirements for membership. This method of payment would not be a burden to any individual or firm because it is automatically regulated by the volume of business done. The amount of money thus collected should be sufficient to carry on a very complete advertising campaign of definite benefit to every architect.

This central office would be for the purpose of "Advertising" only and should have whatever employees necessary to carry out the work of distribution and collection of data and be the connecting medium between the architects and a first class advertising expert employed by the Governing Board.

The office I mentioned would have only one purpose. That is, to carry out a well directed advertising campaign for the benefit of the profession as a whole, the association members specifically, and through such channels and by such methods as the advertising expert

prescribes. The campaign should be national in its scope and also have as much local advertising in each community as the funds will permit.

As you know, I am not a Bolshevik, and really quite ethical, but I also recognize the necessity of earning a decent living and, while I think personal or individual advertising would become very distasteful, still I believe we are badly in need of professional advertising directed by an advertising professional. The articles printed in the architectural publications exhorting the dear public to consult an architect are just so much wasted effort because the public does not read architectural publications. The place for such articles is in the periodicals read in the homes and to print them in such places costs money. To get the best results, I agree with you that we must have the services of a highly trained advertising agency and my suggestion, while very crude, shows one way of getting the money with which to carry out the job. We need less talk and more action. Am I right or am I "all wet"?—*Edwin W. Byers, architect, Flint, Mich.*

To Keep Men at Work

(Continued from page 25)

now something that would have to be done anyway in a year or two—not of doing something now just for the sake of doing it.

The prompt expedition of projects already planned, provided it is properly timed, can have an effect out of all proportion to its size. But to reach its maximum effectiveness it should be on a large scale; and this can only be done through the earnest cooperation of our state, county and municipal governments, in whose hands rest the planning and timing of the great bulk of the country's public works.

To accomplish this purpose, furthermore, federal, state and local governments alike should, to the greatest possible extent, exercise restraint in the building of works which the public welfare does not call for immediately. There is a great deal to be said for the policy of restraint when times are good, and expansion when times are hard. It is estimated that one-half of our total public works program can, without great difficulty, be postponed to periods when business is slowing up. Is it not reasonable to assume that, by careful planning and the judicious exercise of restraint when times are good, a reserve can be built up and used as a dam to keep back the next depression wave?

The operation of this principle might work in another way also. We all know that, as the business cycle works, a depression usually follows a period of boom. The policy of restraint when times are good might prevent the public authorities from adding some of the weight of public construction to an already top-heavy boom. It would keep public business from competing with private business for labor, capital and materials during a rush of building.

And it would be cheaper. Building costs in a period

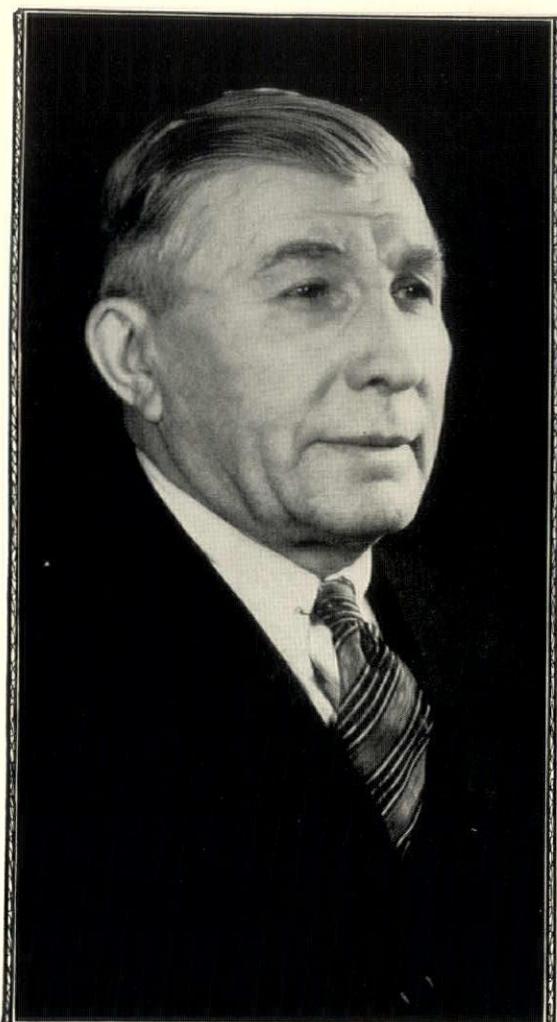
of depression are necessarily lower than in times of boom, when the price of materials goes up. The burden on the taxpayer is therefore bound to be less than it would be if the program were undertaken during times of abnormal or even normal business activity.

While it is true that the construction industry is the most obvious beneficiary of public works undertaken in depressed times, it is equally true that what affects this industry affects the whole structure of business. Industries and professions are interdependent to an increasing degree. What is good for the grain industry is good for the wholesale hardware industry. What spells business for the general and sub-contractors and the building material men spells business for the architects. In the employment emergency we have been passing through, the falling-off of construction has had a profound effect on architects all over the country.

It is readily apparent that what tends to make the construction industry less vulnerable to depression will make for stability in the architects' profession.

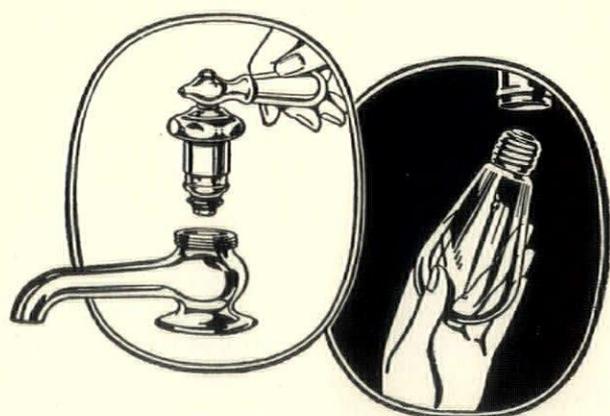
The local adoption of the advanced-planning policy, to make public works available for periods of depression in the years ahead, will depend on the extent to which the merits of the policy are grasped by local authorities. In discussion of the policy, architects everywhere are sure to have a most influential voice; for it is on their vision that the town, city or region depends for much of its esthetic and physical development in future years.

One must look to the country's architects for leadership both in the adoption of the advanced-planning policy in public construction, and in the making of plans which will not only beautify our great urban centers but will also provide work for many thousands of able men when it is most needed.



-that's all we spent last year for repairs on

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NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY TO KEEP IN TOUCH WITH THE PROGRESS MADE BY PRODUCERS



Improved Steel Casement Window Installation

The Detroit Steel Products Company, Detroit, Mich., has announced that Fenestra Steel Casements are now available with wood "surrounds" made of red wood already fitted and attached with copper coated screws in a bed of mastic. Cutting and fitting on the job are said to be eliminated by this new development, installation requiring only the time of setting the unit in place and plumbing it.

Steel Curbing

Steel curbing is a new, flexible, landscaping material for use in making flower beds, grass plots, gravel walks, crushed stone drives, courts, gardens, etc., manufactured by the Detroit Steel Products Company, Detroit, Mich. It is made from automobile spring steel, 3" wide by 5/16" thick; standard lengths are 12', with punching for bolting 6' o.c. Steel angle stakes and tee stakes, for ends and intermediate locations, are punched for bolting.

Fiber Air Filter

A Fiber Air Filter has been placed on the market by the Burt Air Filter Corp., Akron, Ohio. This is a dry type filter which employs for its filter media a pad made up of layers of cloth fiber of various densities. It is made in several variations as to size of cell and resistance of filter media. The filter is cleaned by using an ordinary vacuum cleaner.

Temperature Regulator for Coal Fired House Plants

The Minneapolis-Honeywell Regulator Co., Minneapolis, Minn., has announced an all-electric motor-driven temperature regulator for coal fired house heating plants. It is called the Electric Janitor and is designed for the moderate priced field.

Flexible Expansion Joint

The Croll-Reynolds Engineering Company, 17 John Street, New York, has placed on the market a new type of expansion joint for pipe lines under the trade name of FlexoDisc. This joint is said to permit free movement of the piping without strain through the use of a flexible heat treated nickel steel expansion element, welded to forged steel flanged heads which are guided relative to each other to permit longitudinal movement only. A special design is available where lateral or angular misalignment must be provided for. No packing is required. The joint is declared particularly suitable for risers and other piping of steam and hot water heating and supply systems.

New Type of Rigid Conduit

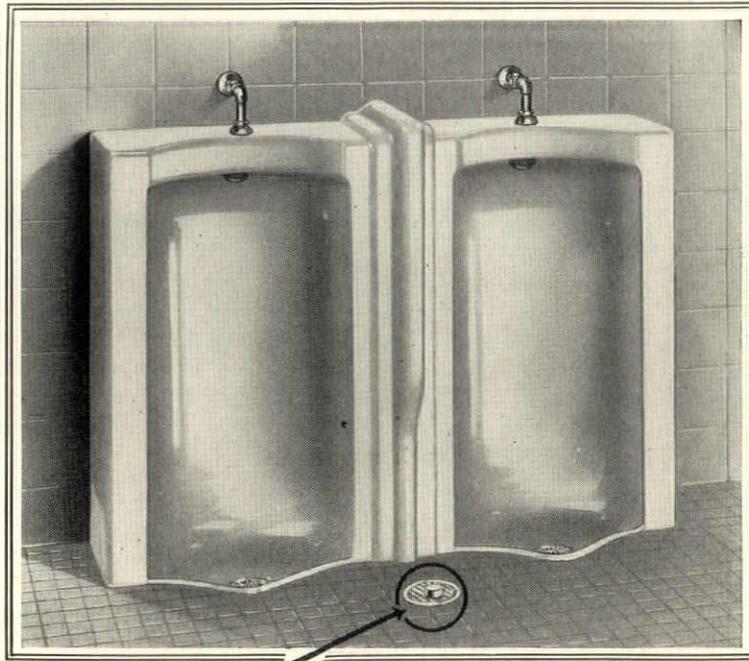
Rigid conduit which, in the smaller sizes, can be bent across the knee without tools, is an improvement in wiring construction materials, announced the General Electric Company, Bridgeport, Conn. It is said that the new conduit can be cut and threaded more easily, and that it gives a clean cut, firm holding thread.

Arcola Gas Boilers for Hot Water Heat

Gas boilers for small houses, garages, shops, tea rooms, offices, etc., have been developed by the American Radiator Company and are furnished with and without insulation, according to whether or not the boiler itself is to act as a radiator. The apparatus is especially designed for use in hot water heating systems and no basement is needed. There is a water cooled base making it possible to install the apparatus on any type of flooring material.

General Service Centrifugal Pump

The Ingersoll-Rand Co., 11 Broadway, New York, announces a new Cameron general service centrifugal pump, designated as the Class RV. The unit is designed for any pumping service requiring a small or medium capacity unit for operation against moderate heads. It is suitable for applications such as circulating and cooling systems, standpipe and water supply systems in factories, warehouses and apartment buildings, and general transfer and handling service of any reasonably clear liquid.



Urinal stalls G 15506, equipped with Water Controlled Foot Operated Flushing Valves

Serving convenience without sacrificing economy

Urinal stalls equipped with the Crane Water Controlled Foot Operated Flush Valve have outstanding merits. The most important features are:

1. **HEALTH PROTECTION**—No possibility for infection, as the hands are free from contact with the fixture.
2. **CONVENIENCE**—Convenient to operate; step on the push button and the flush is accomplished.
3. **ACCESSIBILITY**—Not necessary to tear out floor if valve leaks, as flush valve is concealed in a utility corridor.
4. **MAINTENANCE**—Main valve is in a utility corridor and is easily accessible for adjustment. Auxiliary floor valve with connections are located in a water-tight cast iron box, built into

the floor and can be removed or replaced without disturbing floor.

5. **SANITATION**—Exposed parts reduced to minimum, as the push button is the only exposed part.
6. **APPLICATION**—Especially recommended for use in *public and semi-public buildings* such as railway stations, office buildings, schools, hospitals and factories.

Through the whole line of Crane plumbing and heating equipment the same ingenious working out of every detail, in the light of knowledge of conditions to be met, is found. Crane plumbing specialists will gladly work with you in selecting materials exactly suited to your specifications.

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Fittings

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NEW YORK OFFICES: 23 W. 44TH STREET

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New Type Drawing Board Top

The "No-Ink" drawing board top, introduced by the W. H. Long Co., 420 North Clark Street, Chicago, is a drawing surface intended to speed up work and result in cleaner lines. The top is a white composition which is said to give a permanent smooth drawing surface that is stain and scratch proof and that can be washed with soap and water. The regular drawing paper is attached to the surface of the board top, eliminating manila paper, and a 3-H or harder pencil is used. All lines are drawn with a double stroke and with a slight pressure on the pencil; the pressure of the first stroke ridges the paper, and the back stroke fills that valley evenly with lead, resulting in a solid, evenly edged line as readily reproduced as ink lines. Changes can be made in any line by use of the usual rubber. As the hard lead lies in a valley, the lines are declared not to smudge when worked over for any length of time. The device is $\frac{1}{8}$ inch thick and comes in any size sheets.

Duo-Purpose Lighting Fixtures

A dual function is performed by the new Duo-Purpose lighting fixtures in which are embodied ordinary Mazda Lamps to furnish illumination for general lighting purposes and in another circuit of these same fixtures is used the new General Electric S-1 Mazda Sun Lamp for ultra-violet radiation. Thus the new fixtures give in one unit adequate illumination for vision plus ultra-violet health lighting. Made by the Ivanhow Division of the Miller Company, Meriden, Conn.

New Design Hoisting Machine

The Watson Elevator Company, 407 West 36th Street, New York, has introduced a new design of hoisting machine claimed to effect economy in initial cost, maintenance and power, together with precision floor stops and uninterrupted operation. It is called the Duplex Elevator and makes use of a single speed, high speed, squirrel cage A.C. motor. It consists of two complete

hoisting machines combined in one unit which drives a traction sheave through differential gears, one machine being geared to drive the sheave faster than the other; it thus provides a range of car speeds.

Wall Units of Atlantic Terra Cotta

Mechanically made wall units of terra cotta have been developed by the Atlantic Terra Cotta Co., New York, for construction or facing of interior or exterior walls and partitions. They have the qualities of regular terra cotta and are stated to have a lower initial cost. The units are available in 8 x 16 in. and 9 x 14 in. rectangular shapes, also in geometric shapes such as diamonds, etc., with bonds of two, four, six or eight inches. Mitters, cappings, bands, sills, and lintels are also made in this new type of terra cotta. For use in office buildings, schools, hospitals, and other types of buildings.

Window Muffler

Preventing outside noises from entering a room when the windows are opened is the object of a new product introduced by the F. E. Berry, Jr., & Co., Inc., 182 Tremont Street, Boston. The device is of glass in a frame and operates on the principle of reflecting sound back into the street instead of allowing it to enter the room.

Individual Room Temperature Control

The Modustat is a new automatic modulating orifice system of individual room temperature control made by the Minneapolis Honeywell Regulator Co., Minneapolis, Minn. It is intended for use with two-pipe steam, vapor or vapor-vacuum systems only.

Fenestra Built-in Windguards

Fenestra steel casements, made by the Detroit Steel Products Company, now are being made with a built-in windguard at the sill. This windguard consists of a bottom sash which tilts as desired.

What Architects Are Talking About

(Continued from page 61)

CREAKING floors are the most frequent cause of complaints from tenants, according to an investigation made by the Chanin organization, New York. Irwin S. Chanin, as to the remedy, reports, "We found that the parquet type of floor, which causes the most trouble, is laid on a rough flooring, resting on wooden sleepers. Thus two or three layers of wood are susceptible to the expansions and contractions caused by steam heating and atmospheric moisture.

"We believe that we have developed a creak-proof floor through a process of laying the parquet flooring in plastic cement directly on monolithic concrete."

ANATIONAL advertising campaign is being planned by the United States Building and Loan League, of which savings and loan associations throughout the

country are members. Ben B. Hazen, president of the Portland Savings & Loan League, Portland, Ore., is chairman of the national advertising committee, and will report at the annual convention in Philadelphia, August 11 to 15. Radio and magazine advertising are being considered, with individual associations using newspaper space.

BELIEVING that most violations of tenement house laws grow out of ignorance or misunderstanding, the Housing Section of the Welfare Council of New York City is undertaking a campaign to acquaint tenement owners and dwellers with the laws affecting them. The first step taken was condensing the 80,000 words in the multiple dwelling law into a leaflet of 800 words.

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THE HERMAN NELSON CORPORATION



When you specify the Herman Nelson Invisible Radiator you are performing a two-fold service for your client.

You are assuring him, first, of a heating method in key with modern trends, because this compact heating unit fits within the wall—occupies no space in the room.

You are assuring him, second, of proper heating results because the Herman Nelson Invisible Radiator incorporates engineering principles proved correct by years of successful heating experience.

The Herman Nelson Invisible Radiator comes completely equipped with a sturdy, correctly designed steel case, graduating damper and choice of six authentic grilles. For larger and taller buildings, where access to control valves is required, a special removable panel is provided.

If you are planning any type of building that will have a steam, hot water, vapor or vacuum heating system, specify Herman Nelson Invisible Radiators for client satisfaction. Do you have our catalogue? A request will bring it to you.

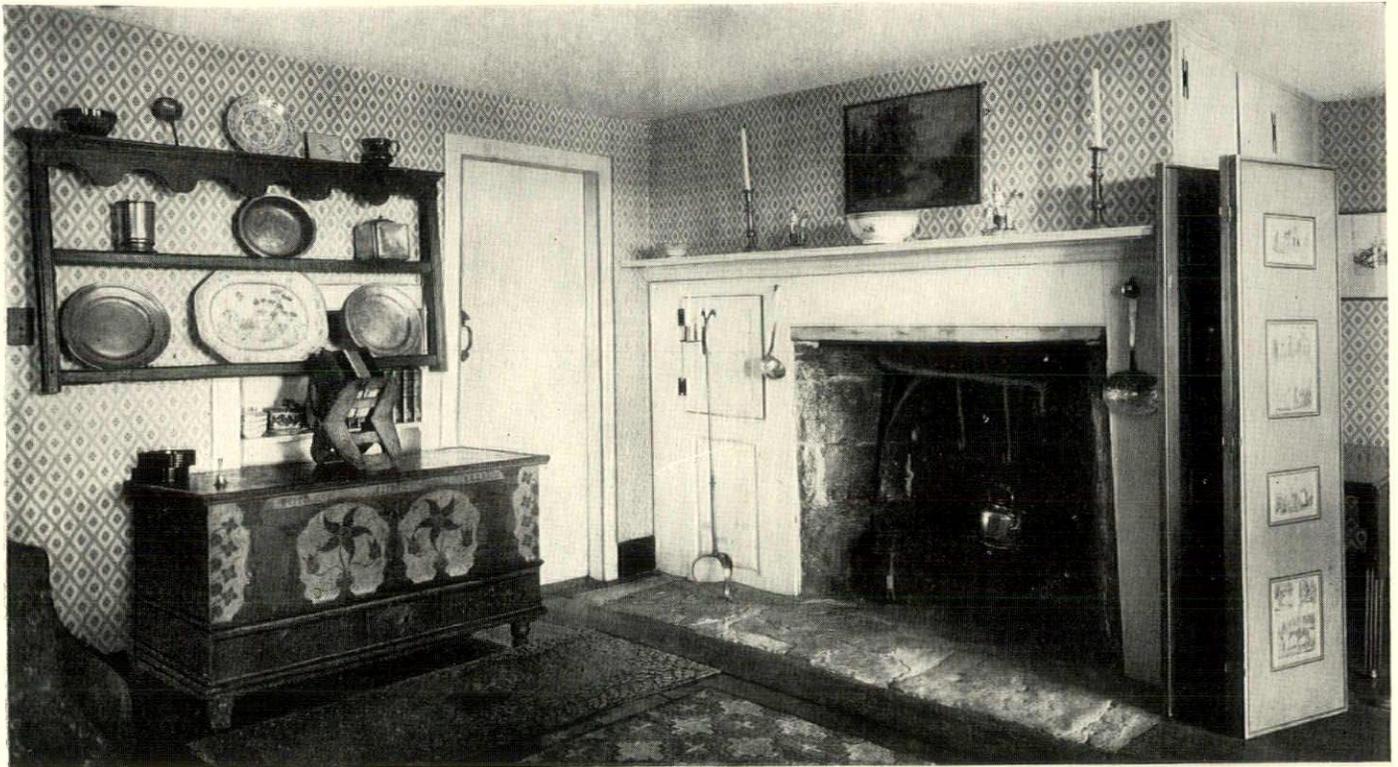
HERMAN NELSON *Invisible* RADIATOR

The Herman Nelson Corporation are makers of the *Univent System of Ventilation*, the *Her-Nel-Co System of Ventilation*, the *Herman Nelson Invisible Radiator*, the *Herman Nelson hiJet Heater*, and other heating and ventilating equipment.

A HERMAN NELSON PRODUCT

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The living room of a remodeled farm house described in *Good Housekeeping* for July. Charles S. Keefe, architect.

X was the architect

The chief obstacle to the progress of good domestic architecture is the lack of popular knowledge of the architect and the value of his services. He is, to many people, the unknown quantity. Or at best, an artistic sort of chap who draws pretty pictures of houses that always cost more. Give them a "practical" builder every time!

Not quite a year ago, *Good Housekeeping* began its

own campaign to change this situation. Under the guidance of a board of distinguished architects it inaugurated an architectural department which, to quote the head of the department of architecture of a Western college, "surpasses any attempt being made to educate the public to an appreciation of good architecture".

In short, *Good Housekeeping* is making good domestic architecture a subject of major importance to thousands of potential home builders. In every city and town where its 1,800,000 readers live, it is creating a greater appreciation of the architect's services and a greater demand for them.

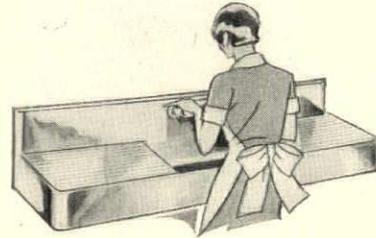
Soon *Good Housekeeping* feels it will be possible to say: "X was the architect!"

GOOD HOUSEKEEPING
Everywoman's Magazine

Kitchen decorating problems solved . . .

NEW MONEL METAL SINK blends

with every color scheme



● The kitchens of the homes you are designing need no longer present difficult problems in color planning. The new standardized Monel Metal sink permits you to achieve complete color harmony with any scheme of decoration you—or your clients—may specify.

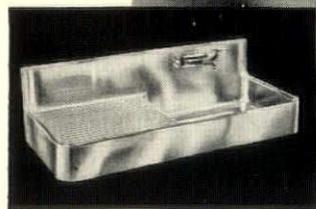
These modern rust-proof, chip-proof sinks have the rich, mellow beauty of fine silver. They have a satiny finish that is softly reflective—never glary or dazzling. Their neutral gray tone blends perfectly with every kitchen color...making it possible to change the decorative scheme at any time in any way.

Designed by Gustav Jensen...built to last a lifetime...priced within reach of the average pocket-book, these beautiful sinks offer the following advantages never before available in any sink:

Eight Points of Superiority . . .

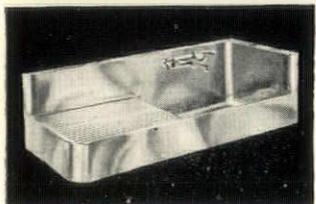
1. Rich, lustrous beauty with a satiny, glass-smooth surface.
2. Rust-proof...highly resistant to corrosion...easy to clean and keep clean.
3. Solid metal clear through, with no coating to chip, crack or wear off. Steel-like strength gives lifetime durability.
4. Neutral, silver tone that blends with any kitchen color scheme. Gives new freedom to kitchen decoration.
5. 10 standardized models and 6 standardized sizes. A model and size for any type of kitchen.
6. 31% more working space than an ordinary sink of same nominal size.
7. One-piece construction of heavy gauge Monel Metal. No joints or seams. Reinforced and sound-deadened.
8. Standardized construction and quantity production bring prices within reach of the average purse.

The new standardized Monel Metal sinks are on display at showrooms of plumbing supply houses and plumbers. An architects' file data folder on these new sinks will gladly be sent on request. Write for data booklet A. I. A. File No. 29H6.



Single drain board Monel Metal sink. Available with either right- or left-hand drain board, and in nominal sizes of 50" x 21" and 41" x 21".

Double drain board Monel Metal sink. Made in nominal sizes of 72" x 21" and 60" x 21".



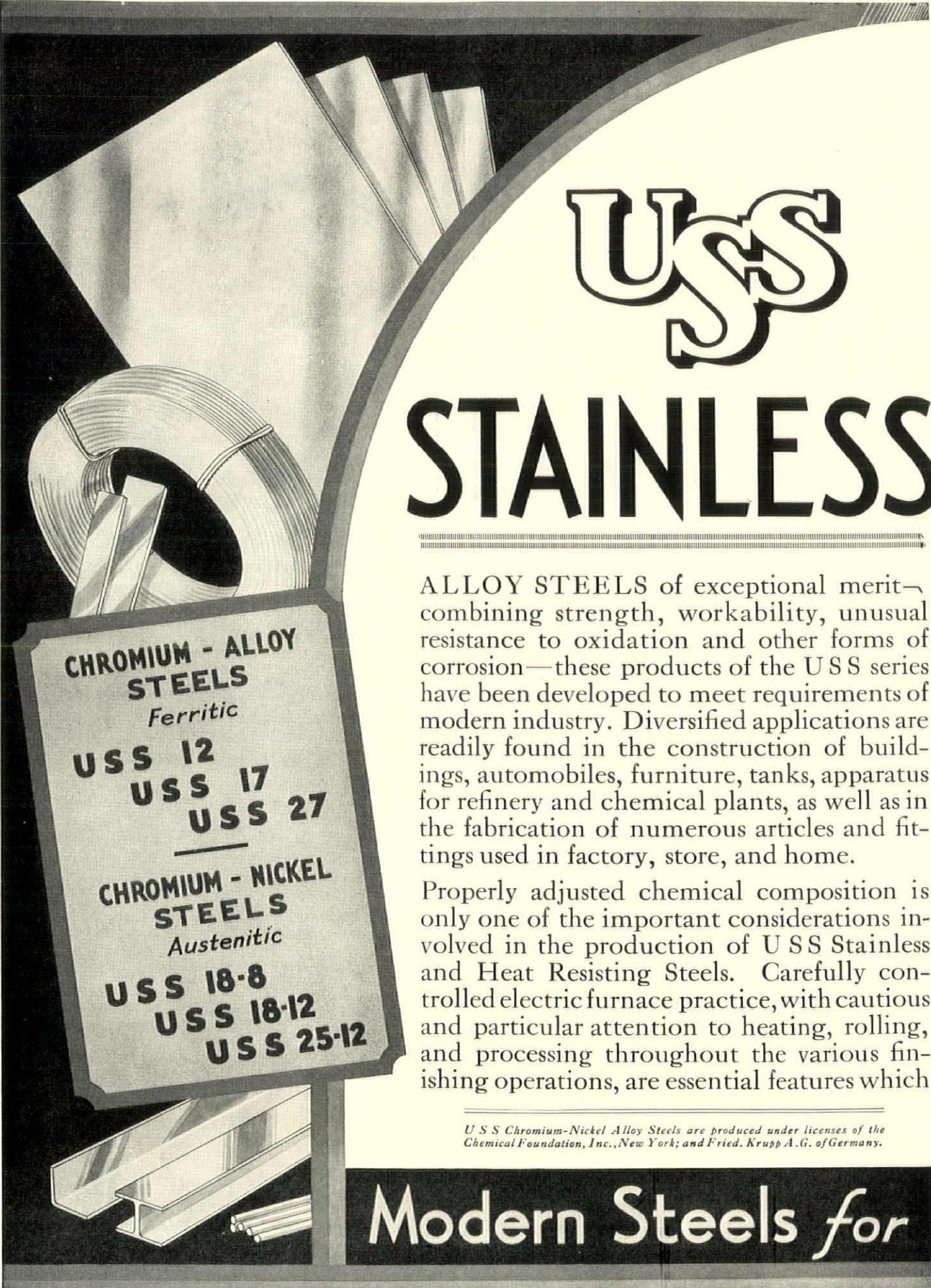
Monel Metal corner sink. Available with corner splasher at bowl end and with drain board either right- or left-hand, and in nominal sizes of 51" x 21" and 42" x 21".

Monel Metal is a registered trade mark applied to a technically controlled nickel-copper alloy of high nickel content. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

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MONEL METAL
 MODERN AS TOMORROW



THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL ST., NEW YORK, N. Y.



USS STAINLESS

ALLOY STEELS of exceptional merit—combining strength, workability, unusual resistance to oxidation and other forms of corrosion—these products of the USS series have been developed to meet requirements of modern industry. Diversified applications are readily found in the construction of buildings, automobiles, furniture, tanks, apparatus for refinery and chemical plants, as well as in the fabrication of numerous articles and fittings used in factory, store, and home.

Properly adjusted chemical composition is only one of the important considerations involved in the production of USS Stainless and Heat Resisting Steels. Carefully controlled electric furnace practice, with cautious and particular attention to heating, rolling, and processing throughout the various finishing operations, are essential features which

U S S Chromium-Nickel Alloy Steels are produced under licenses of the Chemical Foundation, Inc., New York; and Fried. Krupp A.G. of Germany.

Modern Steels for



and HEAT RESISTING ALLOY STEELS

contribute a major share to the excellence of these alloy steel products.

Five subsidiary manufacturing companies of the United States Steel Corporation, engaged in the production of U S S Stainless Steels, have devoted their facilities to the material expression of these cardinal principles. The companies listed below invite your inquiries.



American Sheet and Tin Plate Company, Pittsburgh
Sheets and Light Plates

American Steel & Wire Company, Chicago
Cold Rolled Strip Steel, Wire and Wire Products

**Carnegie Steel Company, Pittsburgh, and
Illinois Steel Company, Chicago**
Bars, Plates, Shapes, Special Sections and Semi-Finished Products

National Tube Company, Pittsburgh
Pipe and Tubular Products

Pacific Coast Distributors: COLUMBIA STEEL COMPANY, San Francisco
Export Distributors: U. S. STEEL PRODUCTS COMPANY, New York City

Typical Uses:

- ☐ **AUTOMOTIVE and AERONAUTIC**—For radiator shells, hub caps, lamps, bumpers, moldings, polished parts and fittings, hardware and trim, airplane parts and instruments.
- ☐ **MANUFACTURING and INDUSTRIAL**—Machinery and furnace parts, dampers, fans, preheaters, pumps, conveyors, turbine blades, nozzles, plungers, and machinery specialties.
- ☐ **CHEMICAL**—Vats, tanks, stills, digesters, condensers, retorts, paper and pulp manufacturing equipment, circulation systems, and laboratory apparatus.
- ☐ **OIL REFINING**—Bubble caps, still tubes, linings, heat exchangers, ducts, containers, tanks, agitators, and other refining equipment.
- ☐ **FOOD HANDLING**—Pasturizers, tables, hospital and hotel kitchen equipment, restaurant fixtures, cafeteria trays, food preserving and dairy machinery and accessories, ice cream and milk containers and utensils.
- ☐ **ARCHITECTURAL**—Structural members and supports, hinges and hardware, decorative metal embellishments, flat surface facings, moldings, doors, grilles, panels, and ornamental work.
- ☐ **HOME APPLIANCES**—Kitchen equipment, cooking and canning utensils, furniture, cabinets, electrical appliances, sinks, plumbing fittings, stoves, ranges, and tableware.
- ☐ **MISCELLANEOUS**—Packing house equipment, soda fountain counters and fixtures, display cases, humidors, handles, hooks, trays, golf clubs, skates, switch boards, metallic mirrors, laundry machinery, tank cars, railway car parts and fittings, and many other uses where beauty and resistance to corrosion are important factors.

Modern Requirements

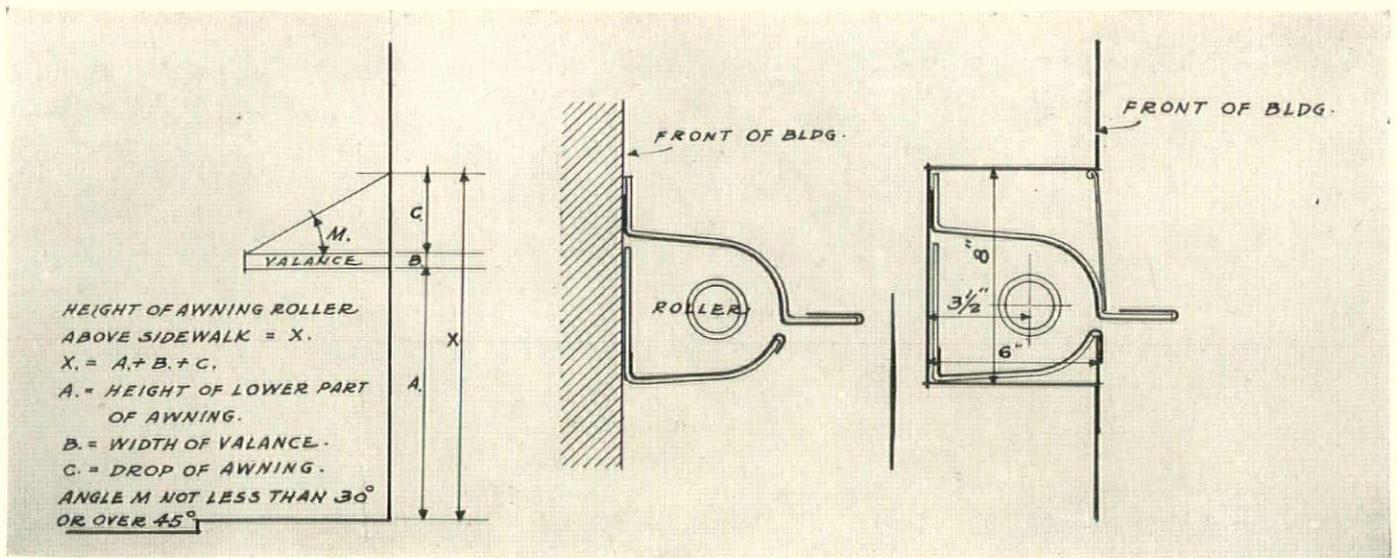


Diagram of height above sidewalk and projection; typical detail of awning boxes on face of wall and recessed

Planning for Awnings

(Continued from page 29)

shaded with awnings of light blue flowered cloth. In the proper setting, figured cloths are often especially effective and a desirable contribution to the appearance of the building.

The most commonly used cloths are either painted or woven stripes, although the former has the dirt collecting disadvantage already mentioned. A wide variety of brilliant color combinations are obtainable in the woven stripes and the dyes used are now reasonably fast.

The fourth type of cloth, calling into play the imagination of the designer, consists of combinations. Venetian sail cloth is often used for the body and on either end a strip of figured stripe, especially made for the purpose, is used. The rich but sombre color of the sail cloth is thereby relieved by the brilliant color and design of the figured strips on the ends. Combinations of this type are often selected for highly decorated shop fronts.

After the awning is in place, the owner should be advised about its preservation and upkeep. At frequent intervals it should be hosed with a stream of water of sufficient force to loosen up and carry off the dirt and soot. If not protected by a recess box or enclosure, the awning should be removed in the fall and stored in a clean dry place during the winter, for experience has shown that one winter's exposure to snow, sleet and ice will lessen its life by a year.

A recent development is the awning laundry. The cloth is washed and, except for sun fading, restored to its original color, giving practically a new awning. Store awnings should be laundered at least once a year and, if in a smoky community, twice a year.

There are five types of awning raising devices—the rope pull-up, spool roller, chain, bevel gear and worm gear. Except for less expensive and small house awnings where the rope pull-up still finds a place, the worm gear has practically supplanted all the others. Used in connection with a long handled hook and eye, it elimin-

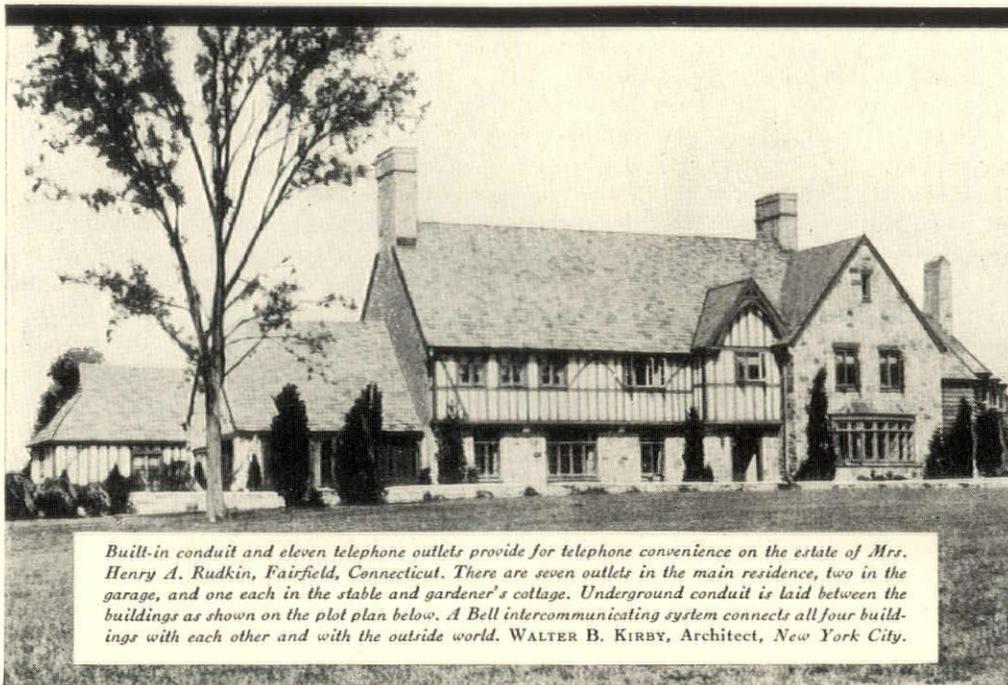
ates an unsightly gear box on the face of the wall.

Two raising mechanism refinements consist in running the gear shaft down inside the wall and winding up the awning from within the building. The concealed shaft can be attached to an electric motor and the awning raised and lowered by touching a button.

Of arms, there are four types. For larger awnings, such as are stretched over terraces, the Kloes outrigger arm provides strength, positive adjustment and reliability. For smaller awnings, the Anton lateral arm is less expensive, amply strong and gives clearance under the cloth from roller to front bar. It requires, however, an exceptionally staunch anchorage at roller height as the strain on the supporting brackets, although considerable, is concentrated within a small bolting area. For awnings of average size, providing there is sufficient room and strength of material to attach the arms to the building—and it is surprising how often this simple detail is entirely neglected on buildings today—the old fashioned straight arm, having the projection and height equal, is preferable, especially as it lends itself readily to decorative treatment. A variation of this arm appears where the projection and height are unequal, thereby requiring a slide rod and either automatic chain or rope and pulley adjustment to raise the wall end of the arm in place after the awning has been lowered.

The rope and pulley device used in connection with a slide rod arm offers one advantage over all other types of arm, which many awning makers feel overcomes the disadvantage of exposed and unsightly ropes and pulleys, in that it stretches the cloth, giving to it an exceptionally smooth set, especially where the awning is particularly flat.

Several companies manufacture ornamental arms, usually in bronze, and many architects design special awning arms. It is to be hoped that the latter procedure will become more general practice and thus avoid the incongruous proximity of unsightly gas pipe arms used



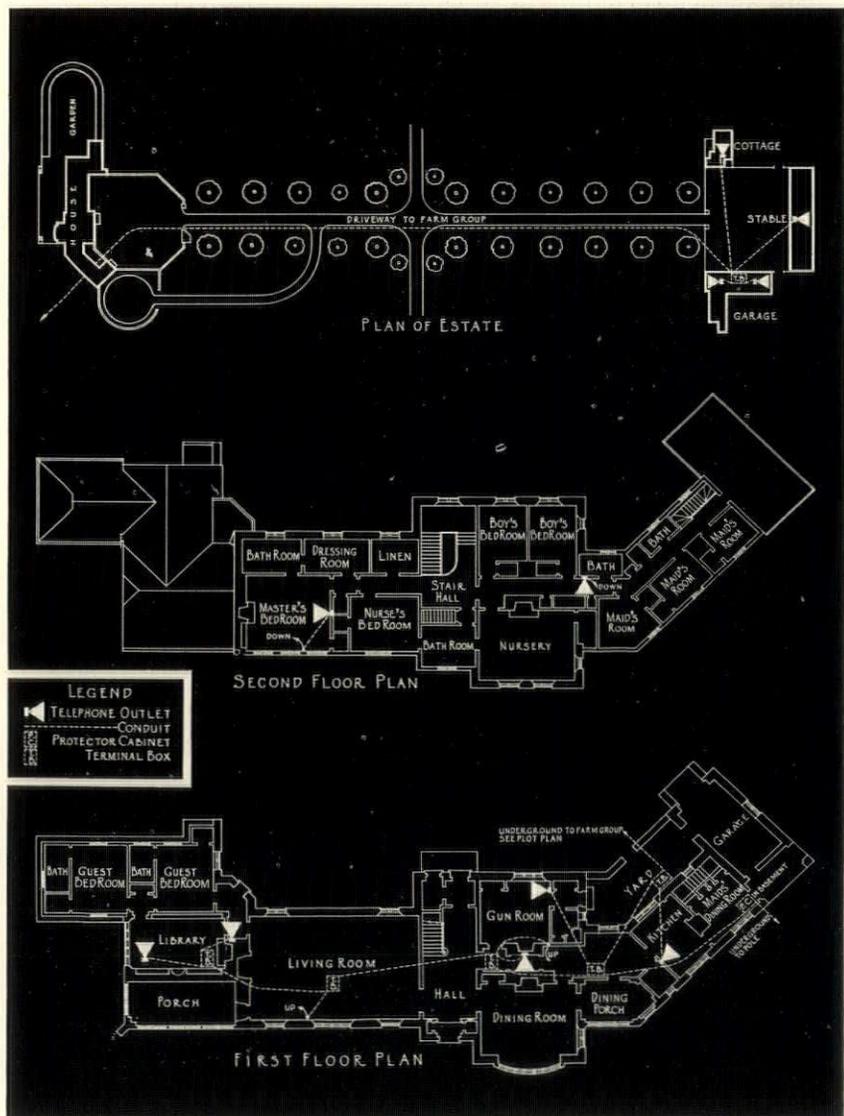
Built-in conduit and eleven telephone outlets provide for telephone convenience on the estate of Mrs. Henry A. Rudkin, Fairfield, Connecticut. There are seven outlets in the main residence, two in the garage, and one each in the stable and gardener's cottage. Underground conduit is laid between the buildings as shown on the plot plan below. A Bell intercommunicating system connects all four buildings with each other and with the outside world. WALTER B. KIRBY, Architect, New York City.

PLANNING BUILT-IN TELEPHONE CONVENIENCE FOR THE LARGE ESTATE

TELEPHONE convenience, on the large estate, is best achieved by careful planning in advance. Often the main residence requires communication from room to room and there are distant outbuildings with which direct communication is also desirable. All such calls can be handled as simply as ordinary calls to the outside world—and over the same Bell telephones.

Let your local telephone company help you provide for this kind of convenience. They'll explain the Bell intercommunicating system best adapted to your project. They'll help you plan a layout for telephone conduit, which, built into walls and floors and run underground between buildings, conceals all wiring, protects against certain types of service interruptions and permits telephone outlets to be located wherever they are most convenient.

This advisory service saves you time and assures lasting telephone satisfaction to your clients. There is no charge. Just call the Business Office.



with a highly finished facade of copper, bronze, brass or steel.

A wholesome and welcome tendency is that of cutting down the size of, or eliminating entirely, the awning valance, and thus leaving the front bar bare. This bar may be of iron pipe or tubing, painted, or of bronze or brass tubing. The valance has always been more or less of a problem. Originally a decorative feature, its esthetic virtues soon lose their value amid the grime and dirt of the large city. To date there has been found no adequate method of protecting the valance in recess box construction, and soon it becomes tattered, torn, and dirty. Its entire removal seems to be the only way of preserving intact the appearance of the awning as a whole. Incidentally, it is interesting to observe that San Diego, famed for her modernity, has an ordinance which specifies that "ragged or dilapidated awnings are prohibited."

The height above the sidewalk of the recess box or roller depends upon the sidewalk clearance required by the local municipal building code. As Portland, Oregon, alone specifies the height of the bottom of the awning box above the sidewalk, this height must be secured in the case of other cities by adding the clearance above the sidewalk, the width of the valance, if any, and the rise of the awning.

The awning should make an angle with the horizontal of not less than 30 degrees so that the cloth will not

lie too flat to stretch smooth and also so that it will not provide a convenient lodging place for lighted cigarettes and cigars. Unless a special slide rod is used the angle cannot be more than 45 degrees. A happy medium between these two, or an angle corresponding with that of neighboring awnings, is advisable.

Before the details of the awning are approached, the architect should build the awning into the building. It has been seen that a smooth strip of surface seven or eight inches wide, and free from projections, must be provided for the awning in case there is no recess box. In any case the awning superimposes upon the face of the building a horizontal line which, even though awnings are not to be used along the entire facade, should be considered as a part of the completed design. By providing an 8" band along the entire front at awning roller height, the awning itself will not stand out too prominently or detract from the unity of the design as a whole.

Unfortunately, the awning, being a poor and unwelcome relation in the building field, is nevertheless, a necessity and must be given its share of consideration. When rolled down it may occupy from 15 to 40 per cent of the facade but unhappily receives but a fraction of the time, thought and money given to the remainder. Practical and esthetic considerations warrant the giving of whatever time may be necessary to justify the humble awning as a factor in architectural design.

"Battledeck" Floor Construction

(Continued from page 35)

in which depressions if any, can be filled with mastic. A departure from a true plane of $\frac{1}{8}$ " in 12'0" might well be permissible. By the use of asphalt preparations, practically all of the floor finish materials can be fastened in place. The installation of pipes and conduits in floor constructions is usually a complication. Header lines can be placed in corridor dropped ceilings from which lateral branches can be run between the floor beams, or the ceiling can be dropped below the floor beams sufficiently for that purpose.

In a 20' x 20' floor panel for a light occupancy building, the floor finish, steel and metal lath and plaster ceiling weigh 30 pounds per square foot. This light weight permits a reduction in the cost of the girders, columns and foundations in a 20 story building of 15.4 cents per square foot of floor area, the sum of 3.1, 5.9 and 6.4 cents per square foot respectively. The foundation saving is spread over 20 floors. Costs are based on 4.5 cents per pound for steel, 25 cents per square foot for girder covering and \$50.00 each for piles. The shallow battledeck floor construction permits the construction of 21 stories in the same height required for 20 stories of ordinary construction.

The seven-story laboratory building of the A. O. Smith Company, Milwaukee, is built with battledeck floors. The company erected a test panel which performed, under test, according to the calculated results. To it with an asphalt compound various floor finishes

were attached. It required a force of 7 pounds per square inch to detach the wood floor from the steel plate. The floors were accurately installed and the air gap under a long straight edge was less than $\frac{1}{8}$ inch. No other material in floor construction can be erected with the same degree of accuracy.

Based on comparisons with other standard constructions the company concluded that "The dead load in each column would be approximately 100,000 pounds less than the dead load if steel joist and concrete slab construction were used, resulting in lighter columns and smaller foundations."

The Chicago and Northwestern Railroad Company is erecting an express terminal in which battledeck floors are used to secure a shallow construction suitable for limited headroom. A residence in Ravinia Park, Chicago suburb, owned by Henry Dubin, architect, has floors and roof made of battledeck, shop welded in large section as previously described. Slate and cork tiles are installed on the first and second floors respectively. The roof has a 2" layer of cork board, asphalt coating, impregnated roofing paper and slate tile for the wearing surface.

The battledeck floor has been used successfully in residences, school houses, office buildings, open hearth platforms, a dock, garage, laboratory building and warehouse.

NOW, AMBLER OFFERS ARCHITECTS Any Desired Roof Shade

in "Weathered Effect"
Asbestos Shingles



By an exclusive process just developed, Ambler is able to produce practically any shade desired by the architect who wishes to complete his design by specifying a certain roof blend. Only a short additional time to match a submitted sample is necessary to insure the architect a "Weathered Effect" rigid asbestos shingle, enduring and fireproof, in the particular tint effect wanted.

Not only in color, but in physical appearance, the Ambler "Weathered Effect" Shingle is superior, with its permanent reproduction of an old shingle roof.

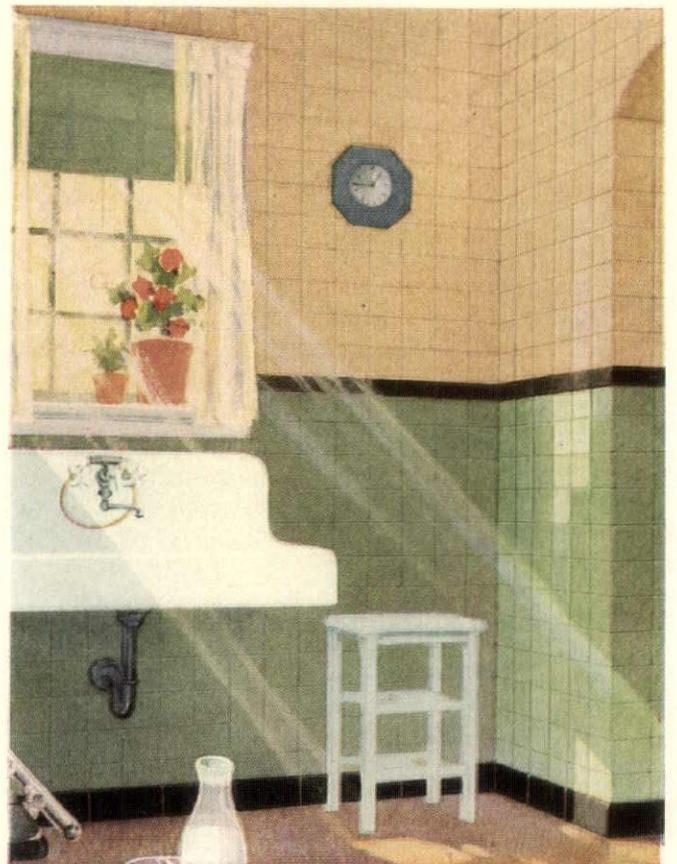
The standard colors, (any of which are subject to change if required, as above described), include Royal Red, Sylvan Green, Lindenwold—a mossy green-black—and four blended tints of soft autumnal browns known as "Rustic Blend."

Ambler Watile

Ambler Asbestos Watile is a pure mineral composition, made of asbestos fibre and Portland cement compressed into rigid, lasting sheets. Watile's hard glossy surface combines perfect sanitation with a most pleasing appearance. Many attractive color combinations are available. Watile is readily installed. Like all Ambler products, it is fireproof and permanent, and should not be confused with inflammable substitutes.

FIREPROOF
Ambler
**ASBESTOS
PRODUCTS**

Ambler Asbestos Shingle & Sheathing Co.
Ambler, Penna. St. Louis, Mo.



Write today for samples and prices for your files on both these products, and keep Ambler Shingles and Ambler Watile in mind on your future specifications.

INTERNATIONAL CASEMENTS



Residence, Sterlington, N. Y.

John Russell Pope, Architect

INTERNATIONAL CASEMENTS—both Custom-built and Cotswold—now are available equipped with screens. Special hardware permits the casement to be opened and closed without disturbing the screen which, however, may be detached instantly to operate awnings or clean the glass.

INTERNATIONAL CASEMENT CO. INC.
JAMESTOWN, NEW YORK

NO SHADOW-SHAVING AT THE NEW MAYFLOWER!

"Edge-Lites are among the finest things we've ever done for guest comfort," says hotel man

Picture yourself as a guest entering a room in your hotel. Turn to the bath, the first haven for arrivals. Do you find a lone bulb in the ceiling, or a fixture casting shadowy illumination over the mirror? Do you look forward to shaving under your chin and around your jowls, twisting like an eel, under that doubtful light? Would a woman guest enjoy such a murky make-up mirror?

Then step into a chamber in Theodore De Witt's Mayflower Hotel. What brilliance in the bath! For there are Henkel "Edge-Lite" Cabinets. Flanking each cabinet are "Edge-Lite" fixtures, movable at will around the mirror. Putting bright light just where it's wanted on the face. Illuminating the room with even radiance. And actually costing less than a cabinet plus the usual lighting fixtures.

Leading Hotels Using "Edge-Lites"

"At the new Mayflower Hotel our 'Edge-Lites' look beautiful; everyone is delighted," writes Theodore De Witt, President. "'Edge-Lites' impress a guest at the times when he's most impressionable—when he arrives, and when he arises in the morning," says an experienced hotel man. That's why within less than a year after their announcement, "Edge-Lites" went into the Town House, New York; are specified in the 1,000-room National Railways Hotel, Vancouver, B. C.; and a dozen other great apartments and hotels; and now even the last two unfinished floors of the new Schroeder Hotel at Milwaukee have "Edge-Lite" Cabinets and Bathroom Illumination.

"Edge-Lites" are valuable competitive aids for new hotels; they're new; they're readily seen and appreciated. And there's nothing better than "Edge-Lites" for refurbishing older hotels; for economy, you can install "Edge-Lite Aplakays," smartly adaptable to any existing cabinet or mirror. Get the facts on "Edge-Lite," the new Bathroom Illumination that's storming the whole hotel world! Beautiful, informative catalog on request. HENKEL EDGELITE CORPORATION, 902 N. Franklin Street, Chicago.

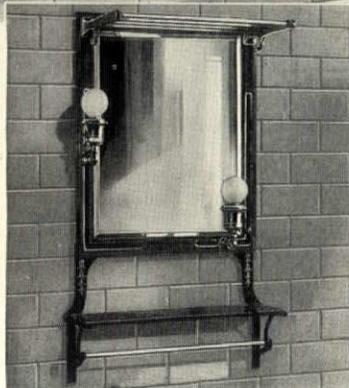
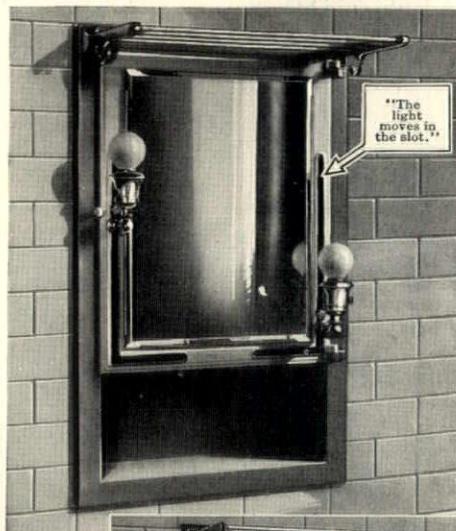
HENKEL "EDGE- LITE"

Passed by Fire Underwriters. Trade-Mark Reg. U. S. and Canada. Pat'd and Pat. Pend. U. S., Canada and Foreign.

FOR JULY 1931



Mr. Theodore De Witt, President of the Mayflower Hotel, who speaks enthusiastically about his "Edge-Lite" Cabinets and Bathroom Illumination.



Above, the new Mayflower Hotel, Akron, Ohio's newest hostelry. Equipped throughout with "Edge-Lite" Cabinets and Bathroom Illumination. (Graham, Anderson, Probst & White, Architects.)

At left, above, the "University," "Edge-Lite" Cabinet. 19x30x5 in., 3 shelves. 16½x20½ in. mirror. Ivory door, green box. Has two "Edge-Lite" fixtures that "move in the slot" at a finger touch. Passed by Board of Underwriters. Used in the Mayflower Hotel.

At left, the "Gramere," also installed at Mayflower Hotel. Has mirror, two "Edge-Lite" fixtures, towel rack, no cabinet.

(A-4851)

90.7% EFFICIENCY AFTER MORE THAN 3 YEARS CONTINUOUS OPERATION

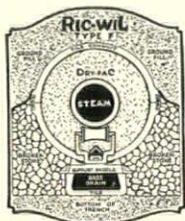
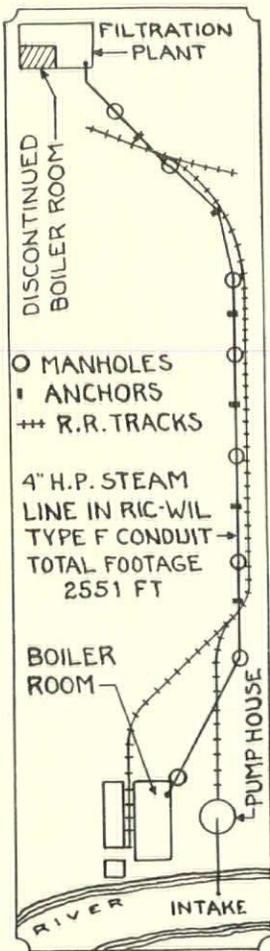
In 1927 the Cincinnati Water Works installed a 4" H. P. steam line in a 10" Ric-wil Type F Conduit System. This line, with a total footage of 2551 ft., runs from the river pumping station to the filtration plant, eliminating a boiler at the latter point.

This line, in continuous operation since December, 1927—approximately 3 1/4 years—was tested for efficiency on February 20, 1931. At the time of this test the pressure at Boiler Room was 60 lb. gauge and at Filtration Plant was 35 lb. gauge—a total pressure drop per 100 feet of 1 lb. The test showed an over-all efficiency of 90.7%. However, as no corrections were made for loss at manholes and piping inside buildings, the actual efficiency was higher than 90.7%.

And since December 1927 this line has not cost one cent for maintenance.

An exceptional case? Not by any means—just the logical result of a properly installed Ric-wil Conduit System. For Ric-wil Systems are completely engineered and mechanically correct—the installed cost is low—and the results are definitely known in advance.

Upon request we'll gladly send a detailed report of this Test. And, if you have an underground steam pipe problem, Ric-wil Engineers will be glad to assist you. As we are manufacturers of several types of Conduit Systems, Ric-wil Engineers can recommend impartially the System best adapted to your particular problem.



Cross section of a single pipe installation in a Ric-wil Type F Conduit System.

THE RIC-WIL COMPANY

1562 Union Trust Building Cleveland, Ohio

Branches: New York • Atlanta • Chicago
AGENTS IN PRINCIPAL CITIES

REG. U. S. PAT. OFF.

RICWIL

CONDUIT SYSTEMS FOR
UNDERGROUND STEAM PIPES

The Low Down on Florida

(Continued from page 49)

Well, prior to the summer of 1925, everything in Florida was jake. During the previous winter, it was a bum week when I didn't pull down at least two thousand dollars. Of course, living was high and going higher, but we could afford it.

We continued to sell a little all during that summer, for there was the largest summer-tourist business that season that the state has ever known, at least, so I was told. Unfortunately for us, however, a large percentage of the visitors were poor whites from adjoining states who drove in expecting to find employment where such extensive improvements were under way or projected. Some of them nearly starved before they realized that we "native sons" were only looking for victims who had money to throw away, not for people who were trying to earn it.

Realtors were crowding on each others' toes, and we could begin to see that only those who were able to put across the fast ones would last out another season. Meanwhile, all the big financial advisers in the country were busy telling the public how firm a foundation had Florida—how they had investigated (they should have said "invested") conditions, and how sound they believed the state's natural advantages to be. So the suckers kept coming and the realtors were getting every possible break and fixing to take every conceivable advantage. Our company had secured the name of every hotel registrant in Florida during the preceding season and spent part of the summer circularizing each one. We advertised for salesmen in every northern city and induced all that could to come down—at their own expense. Harry was made sales-manager of three new subdivisions and made me division-manager of one. These were opened up in November, but that was rather early and the sales slow. From then on, we used every imaginable device to pep things up.

OUR main office was a little bit the swellest proposition in Wall Street banking rooms that you ever saw. And you should have lamped our system, whenever a prospect or possibility hove in sight. First, the uniformed doorman brought him or her in and turned said him or her over to an usher who wore a frock coat and had a carnation in his button-hole. He conducted the victim to the information desk, where the charming girl would make a note of what was wanted, and the caller was then taken to the luxurious waiting room, whilst the information clerk pushed a button and summoned a uniformed messenger, whom she despatched with the note to one of the salesmen—though she may have been hollering across the room at him five minutes before. If the party happened to be a genuine prospect, a signal would be given and the whole works would start. One or two dummies would come in and get treatment similar to that of the prospect, others would follow and go direct to salesmen's desks, still others would be politely met at the information desk, while salesmen would be calling on the dummies in the waiting room to discuss the lots they "looked at yesterday." Soon, every phone in the room would be busy and men and girls would be

Painted Decoration

BANKS
CHURCHES
CLUBS
SYNAGOGUES
HOTELS
RESTAURANTS
THEATRES
PUBLIC BUILDINGS

Under the direction of the Architects, we have executed decoration in the following buildings:

- Empire State Building New York City
SHREVE, LAMB AND HARMON, ARCHITECTS
- New Waldorf-Astoria Hotel New York City
Main Foyer, Lobby, and Appurtenant Rooms
SCHULTZE AND WEAVER, ARCHITECTS
- National Title Guaranty Co. Bank Brooklyn, N. Y.
CORBETT, HARRISON AND MacMURRAY, ARCHITECTS
- Club Boca Raton Boca Raton, Florida
SCHULTZE AND WEAVER, ARCHITECTS
- 120 Wall Street, Lobby New York City
FIRM OF ELY JACQUES KAHN, ARCHITECTS
- City Bank Farmers Loan and Trust Co. New York City
CROSS AND CROSS, ARCHITECTS
- Horn and Hardart Restaurants (2) New York City
F. P. PLATT AND BRO., ARCHITECTS
- Roxy Theatre New York City
WALTER W. AHLSCHLAGER, ARCHITECT
- Paramount Theatre Stapleton, Staten Island
C. W. AND GEO. L. RAPP, ARCHITECTS
- Warner Bros. Madison Theatre Albany, New York
THOMAS W. LAMB, ARCHITECT
- St. James' Cathedral Chicago, Illinois
MAYERS, MURRAY AND PHILLIP, ARCHITECTS
- St. Catherine of Sienna's Church New York City
WILFRID E. ANTHONY, ARCHITECT
- St. Thomas' Chapel (timbered ceiling) New York City
TALBOT F. HAMLIN, ARCHITECT
- St. Gabriel's Church Washington, D. C.
MAGINNIS AND WALSH, ARCHITECTS
- Temple Beth Elohim Brooklyn, New York
MORTIMER J. FREEHOF, ARCHITECT

RAMBUSCH
Painting, Decorating and Murals
2 West 45th St. New York City



Pilaster,
Paramount
Theatre,
Staten Island
New York

C. W. & G. L. Rapp
Architects

chasing back and forth, with deeds in one hand and half a dozen checks in the other.

It was sure a busy hive, and all this atmosphere just to impress the one or two genuine prospects. For the same reason we, of course, marked up as "sold" more than half the lots on the plots of the particular subdivisions most recently opened, though ninety-five per cent of them were more'n likely still on our hands.

But, in spite of all this elaborate faking, the sales didn't increase like they should, with winter coming on and the tourists pouring in. Too many of them were either gun-shy or didn't have anything to invest. At least, they were not following the directions of the prominent financial advisers. It presently became all too plain that it was not going to be as good a season for us realtors as had been forecasted. The over-production of Florida lots seemed due to meet up with an unaccountable under-consumption—all the enthusiasts to the contrary, notwithstanding.

About this time, we began to adopt the only tactics that ever bothered my conscience in connection with that whole smelly Florida business. And it has been worked a-plenty in other places, I've noticed. I mean the scheme of advertising for salesmen, merely for the chance of selling lots to amateurs when they come in to answer such ads. Under these false pretenses, we sales managers would take charge of the poor suckers, lead them on with our big talk, find out how much money they had and have all or most of it deposited as a down payment on the lot we selected for them on the plea that, in order to be an enthusiastic sales person, he or she

must own a lot (as we did) in the property we were boosting, just as a mark of confidence, before a prospect could be logically expected to be converted into a customer.

WHAT chance had the innocent boobs against our experienced selling ability, I ask you? Of course, we failed to mention that our own binders generally amounted to "the sum of one dollar and other valuable considerations," while their shakedown varied from a hundred to a thousand, averaging say two-fifty. But I don't think that one ever escaped, once we got him inside the office. The deposit made, the new sales person would likely be handed a telephone directory from his home town and some copies of a mimeographed letter, and be told to send one to every person he knew, the new hand paying the postage. They usually lasted about a week or two, after which the desk "to which they had been assigned" would know them no more.

I remember one lad from Atlanta, however, who truly thought he was going to become a realtor. He was so tremendously impressed with our front that he was willing to pay his entire capital, \$850, down on a "choice" lot in a Country Club Place, but I advised him to keep a hundred of it in his jeans, as it might be a day or so before his first sale, and he would need a little to carry him over. Damned if he didn't spend nearly all of it for eats and postage before I could check his youthful enthusiasm. This was late in November when, so far as Harry and I were concerned, the end was already in sight. Honestly, I felt so sorry for that poor kid, with

AN INSTANCE OF Undivided Responsibility

On the New York Curb Exchange Building, the execution of all ornamental metal work was intrusted to Halback. This included aluminum spandrels and window sills, ornamental entrances, doors, window grilles, ornamental stair rails, directory boards, etc.

Facilitated by this single control, building schedules were rigidly maintained and the work carried to satisfactory completion.

New York Curb Exchange Building
New York City
Starrett & VanVleck, Architects
Thompson-Starrett Co., Builders

HALBACK
C. E. HALBACK & CO.
Banker Street, Brooklyn, N.Y.
WORKERS IN METALS FOR ARCHITECTURAL PURPOSES



TE-PE-CO'S *Speedway* « « . « *A Fast Seller with Quick Action*

CLOGGING of the passageway in a water closet is a frequent source of trouble, caused by people attempting to dispose of articles that will not pass the contorted trapway of ordinary closets.

Te-pe-co Sanitary Engineers designed the *Speedway* to overcome this trouble. The entire trapway being larger than its opening in the bowl will obviously pass anything that enters it. For this reason, it is particularly adapted to schools, public comfort stations, industrial and commercial buildings.

It is made with back supply for connection to a concealed or seat action valve, in both the regular and juvenile height.

THE TRENTON POTTERIES COMPANY
 Trenton, New Jersey, U. S. A.

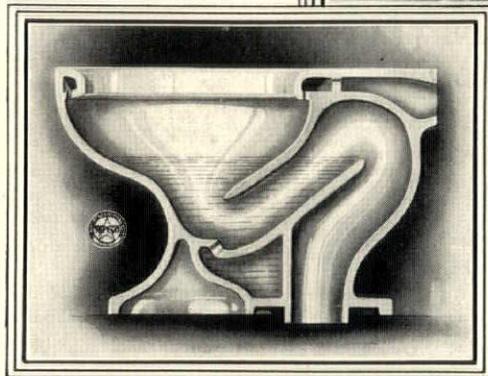
National Showrooms
NEW YORK CITY
 101 PARK AVENUE
 Entrance on 41st Street
PHILADELPHIA
 Architects' Bldg.,
 17th & Sansom Streets

Branch Offices
BOSTON and CHICAGO

Export Office
 115 BROAD STREET
 NEW YORK CITY



Plate 4521-T—Back Supply Speedway Equipped with Flush Valve. Other models shown in Catalogue.



Details of construction, showing large water surface and unobstructed passageway.



OUR GUARANTEE

We make but one grade of ware — the best that can be produced—and sell it at reasonable prices. We sell no seconds or culls. Our ware is guaranteed to be equal in quality and durability to any sanitary ware made in the world. The Te-pe-co trade mark is found on all goods manufactured by us and is your guarantee that you have received that for which you have paid.

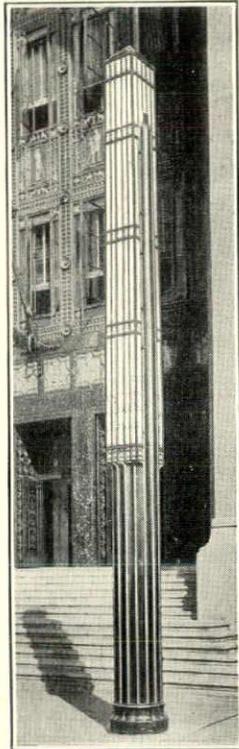
Some of the Recent Installations of the Speedway

- | | |
|-------------------------------------|-----------------------|
| Agricultural School, District No. 1 | Grosse Point, Mich. |
| Ketchikan High School | Ketchikan, Alaska |
| Saeger-Hokendauqua School | Hokendauqua, Pa. |
| Williamson Hotel | Williamson, W. Va. |
| Uhllein Job | Milwaukee, Wis. |
| Grand Riveria Theatre | Detroit, Mich. |
| Providence Gas Service Bldg. | Providence, R. I. |
| Wilson Theatre | Detroit, Mich. |
| New York Herald-Tribune Bldg. | New York City, N. Y. |
| Arcade Bldg. | Asheville, N. C. |
| Detroit Office & Newspaper Bldg. | Detroit, Mich. |
| Sunbury Converting Works | Belvidere, N. J. |
| Raytheon Mfg. Co. Factory | Newton, Mass. |
| Florence Critterton Home | Detroit, Mich. |
| Parochial School | Yeadon, Pa. |
| Nurses' Home, St. John's Hospital | St. Louis, Mo. |
| Texas & Pacific Hospital | Marshall, Texas |
| St. Thomas Hospital | Akron, Ohio |
| French Broad Hospital | Asheville, N. C. |
| Children's Ward, Tuberculosis Hosp. | Wallum Lake, R. I. |
| Yankee Stadium | New York City, N. Y. |
| Park Pavilion | North Milwaukee, Wis. |
| Belcher & Loomis Warehouse | Providence, R. I. |
| Filbert Wholesale Bldg. | Philadelphia, Pa. |
| Coroner's Court Bldg. | St. Louis, Mo. |
| J. L. Hudson Store | Detroit, Mich. |
| St. Joseph's Seminary | Cleveland, Ohio |
| Chemistry Bldg., University of Ohio | Columbus, Ohio |
| Jupiter School | Buncombe Co., N. C. |
| Boardman School | Boardman, Ohio |
| High School & Jr. College | Asheville, N. C. |
| Junior High School | Indianola, Ohio |
| McDonald High School | McDonald Township, O. |
| Leesburg School | Leesburg, Fla. |
| Weaverville School | Weaverville, N. C. |
| Ontario School | Columbus, Ohio |
| Duke Power Co. Bldg. | Charlotte, N. C. |
| Fox Film Production Plant | New York City, N. Y. |
| West Virginia Pulp Plant | Mechanicsville, N. Y. |



EXTERIOR LIGHTING FIXTURES

by
SMYSER-ROYER



Flood Light Standard
FIDELITY MUTUAL
LIFE INSURANCE
COMPANY
Philadelphia, Pa.
ZANTZINGER,
BORIE & MEDARY
Architects

THIS flood light standard in Cast and Wrought Iron is typical of the fine craftsmanship in exterior lighting fixtures by Smyser-Royer. It is 26 feet high and is one of a pair designed by Zantzinger, Borie and Medary, Architects, to serve as a flood light standard and street lamp for the Fidelity Mutual Life Insurance Co., in Philadelphia. Beauty of design has been blended with craftsmanship in metals to produce a fixture as enduring as the building itself.

SMYSER-ROYER COMPANY
MAIN OFFICE AND WORKS YORK, PA.
PHILADELPHIA OFFICE . . . 1700 WALNUT STREET

that unbounded faith in his splendid South, that I persuaded him he could do much better in personal contact with his homefolks in Atlanta, and I got him a ticket and told him not to come back until he'd gotten binders on at least two lots. I sure hated to see the poor fish stay in Florida and starve, as it looked to us like a good many were fixing to do.

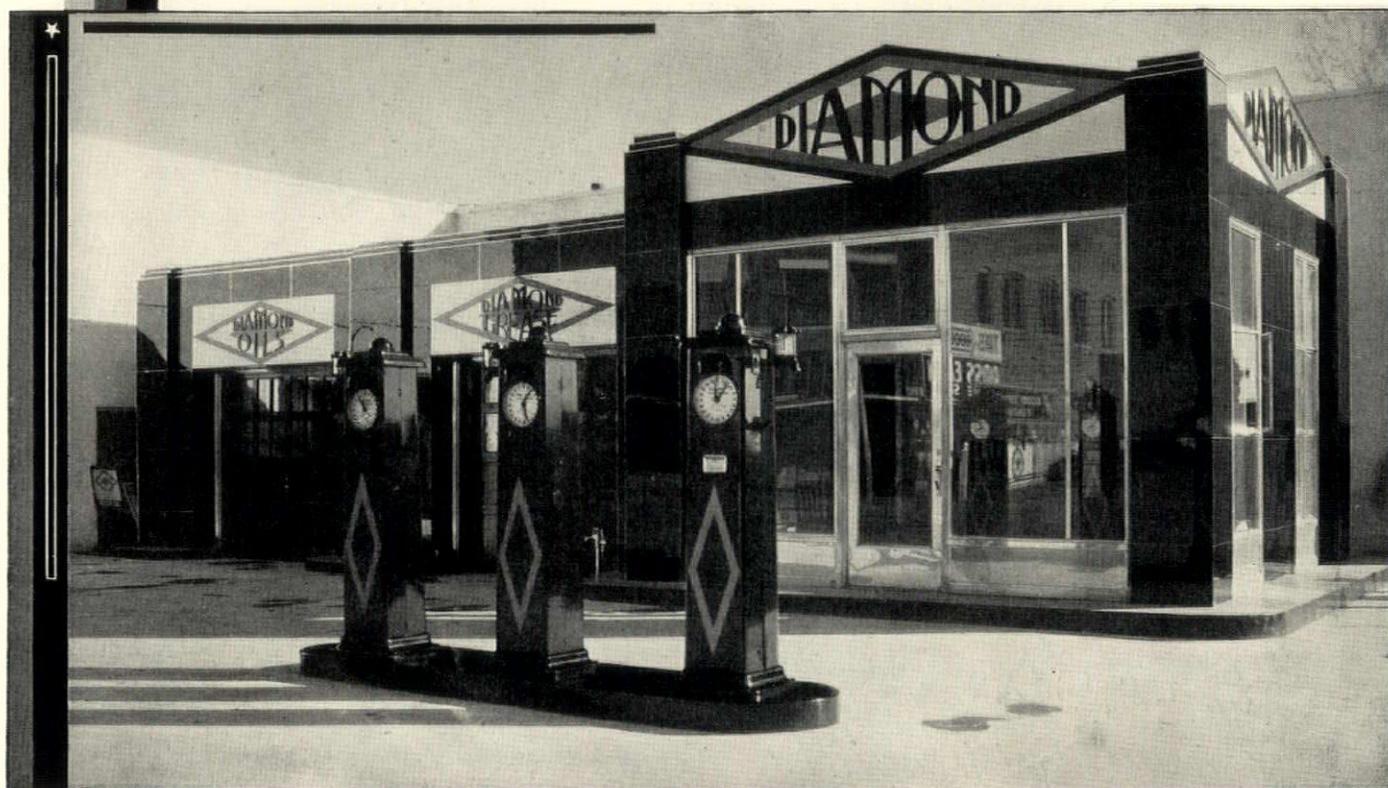
About this time, Harry and I decided to pull our freight. He had doubled his stake and I had over a hundred grand, all my own. We also had several investments in Florida real estate, including a section of a certain Country Club Place that had been unloaded on us in a settlement we had fought to a finish with a corporation of bloodsuckers for which we had made some wonderful sales.

Harry contacted a noble bird from Philadelphia who seemed to be rolling in coin. He was a retired banker on his first trip to our section, in which he had been commissioned to pick up some choice medium-priced lots for a small syndicate of former bank customers. It seemed he was just made-to-order for us. Harry took him to see some high-priced stuff that scared him almost too much, then I got hold of him and overpriced some second grade, after which the astute purchaser asked me to quote on the identical lots that Harry had shown him. Of course, he couldn't know we were in cahoots, for each of us took a mild jab at the other. I named my closest figure to him, being sure it was enough higher than Harry's so he'd know which of us he wanted to do business with.

LA TE that same afternoon, Harry hooked him on our own private piece of swamp land and accepted a five thousand binder on twenty-five choice lots in "Fendell Country Club Place." We intended to get away that night, but were delayed by a slow collection and the irate Philadelphian jumped Harry early next morning. Sometimes those Quakers aren't so slow as reported. But this one didn't, even then, realize the kind of salesman he was up against. If he had, he'd have gotten old William H. Burns himself to act for him. Harry was terribly shocked when the old duffer mentioned "fraud," saying he'd found the lots were more than half under water and were directly across the road from the city dump. But Harry can hand out the best brand of soothing syrup ever concocted, and was soon explaining the meaning of "Fendell" as applied to the subdivision, and reminding the customer that he had told him that the chief reason he was buying cheap was that he was in advance of improvements which included the dredging of a lake just north of his lots and the filling and draining of the lower portions, all as part of the landscape project which was to be undertaken as soon as enough lots had been sold; then, believe it or not, Harry was persuaded by this careful custodian of Keystone funds to take over another certified check for \$7500 for the twenty-five lots in the rear of those first sold. These were priced fifty per cent higher than the others but would enable the owners to front their beautiful "Spinage" homes on the little lake or swimming pool or whatnot, and build their garages on the street facing the dump, for the removal of which latter, Harry exhibited the customary petition to the City Council.

Now, neither of us owned this second bloc of twenty-five, but, on the plea of making sure that no one had

The truly MODERN EXTERIOR expressed in Modern VITROLITE



Mid-Continent Petroleum Corp. Service Station No. 1, Sapulpa, Okla., Donald McCormick, Arch't., Tulsa, Okla.

WHAT is more modern or more characteristic of this age than the filling station! With this thought in mind, Architect McCormick has taken a big step forward. Using modern materials—Vitrolite and Aluminum—he has made a filling station that is modern and looks modern. It actually harmonizes with the automobile it serves. This is an epochal development. A great, modern institution, the Mid-Continent Petroleum Corporation, serving modern needs has faced this problem honestly and the result speaks for itself.

Black and ivory Vitrolite forms most of the facing, but in the signs made of separate pieces of Vitrolite, additional colors are used.

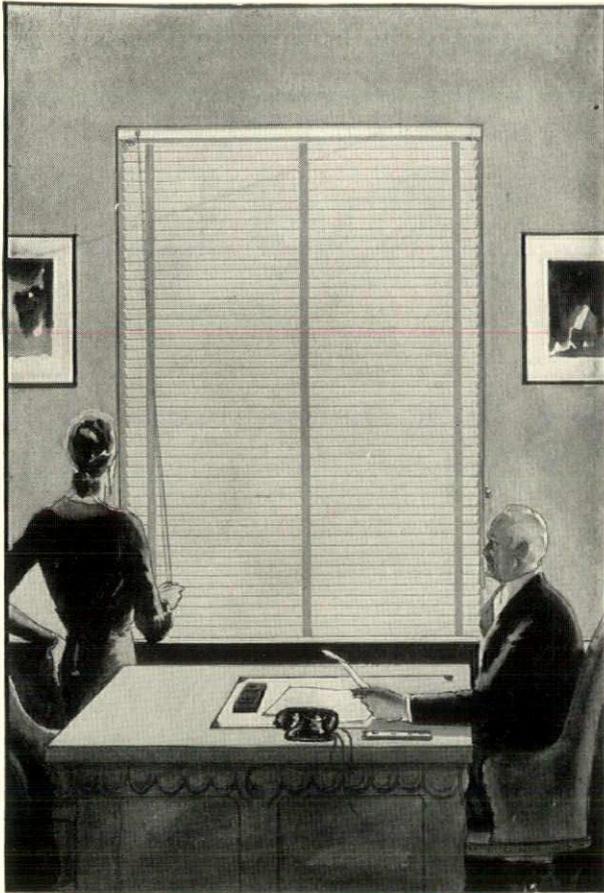
Architects all over the country are turning to Vitrolite for the modern exterior. Whether for a store front, a modern home, or the entire facing of the highest skyscraper, Vitrolite is entirely practical and appropriate thru the development of new construction methods.

For further information, call on the Vitrolite representative in your city or write to us directly at the address given below.

VITROLITE
"BETTER THAN MARBLE"

THE VITROLITE COMPANY

120 S. LA SALLE ST., Room 1105, CHICAGO, ILL., Factory: PARKERSBURG, W. VA.
REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. AND CANADA



Victoria Venetian Blinds are serviceable the year 'round — winter as well as summer

Your **CLIENTS**
will appreciate
VENETIAN BLINDS

THESSE beautifully designed blinds answer the purpose of both shades and awnings—only better. They diffuse the sunlight and scatter it to the farthest corners of the room . . . giving light minus glare and fresh air minus drafts.

Harmonizing, too, with the most attractive surroundings, Victoria Venetians actually add to the beauty of the interior and exterior. And they eliminate the fire hazard of awnings.

Used nation-wide in thousands of prominent office buildings, banks, hospitals, schools, apartment buildings and the better residences.

See Sweet's for detailed specifications.

THE BOSTWICK-GOODELL CO.



Blinds since 1894

Norwalk, Ohio

Representatives in Principal Cities

**VICTORIA
VENETIANS**

The Better Blinds

beaten them to it, Harry telephoned the receiver of the original subdividers for a quotation, and later sold him the binders for \$2500 cash. That's the kind of salesman Harry was.

Late that same afternoon, we were in our new sedan, headed north, dodging cows, calves, buses, realtors, tourists, material trucks and other obstructions on Florida's old nine-foot paving strips. We were so fed up on the state we had done our share to wreck that even Chicago in winter looked attractive to us.

Yesterday and Today in Mexican Architecture

(Continued from page 54)

situated in the bed of an ancient lake, is not of a nature to bear heavy, concentrated loads. A fine regard for the fitness of things and for beauty is shown, however, for "modernistic" buildings are not erected in the midst of fine old buildings. For instance, the building of a railroad station of inharmonious modern design in a picturesque old town is not generally accepted.

The Sixteenth, Seventeenth and Eighteenth century work of Mexico is very rich in decoration, which, though largely of Spanish derivation, has always a distinct character and beauty of its own. This fine architecture is but little known outside of Mexico, the most published buildings being, perhaps, the least representative.

An extensive program of art training is being carried out with excellent results among the younger pupils of the public schools as well as in the Department of Fine Arts and in the School of Sculpture.

In regard to architectural training, we employ methods, very similar to those used in other countries, through a five year university course, combining in each year education in building construction and in architectural design. We bring our students into direct contact with the old architectural forms, from which they make sketches and measured drawings, and we endeavor to give our students a particularly thorough understanding of modern practical requirements.

The kind of buildings that are being erected are entirely different from what they were in former times. Instead of the church and the mansion, the work is now largely the building of moderate cost houses, public schools, office buildings, department stores, moving picture theatres, just as in the United States. More attention is being paid to the proper housing and social relations of the masses. But there are no apartment houses, although there are a few two, three, and four family houses.

As regards the future development of architecture in Mexico, there will always be in our architecture, I believe, the great underlying motive of tradition in new manifestations. Our towns and villages are developing with the new progressiveness and the new needs that are constantly arising and must be met with new methods and new forms. A town-planning department has been created under the Ministry of Public Works, in which architects and engineers collaborate. This department assists in the solution of problems submitted from the different States of Mexico, coordinating the public improvements in a consistent national development.

Recollections of a Very Pleasant Trip

(Continued from page 23)

important reason for holding a convention. The producers were there in good form and continued to maintain their reputation as good producers in more ways than one. Scott Button, representing the General Electric Company, is still demonstrating to Max Furbringer and others that he is a connoisseur of ham and eggs. May he continue to hold this position of esteem he now enjoys more firmly than ever. And if architects could talk as well as Bennett Chapple, of the American Rolling Mills, they would never have to worry about "selling" a client. Mr. Chapple, by the way, is "The Iron Master" who broadcasts so effectively over the radio.

JUST as all things must end—the pleasant ones all too soon—so did the convention and our not-soon-to-be-forgotten stay in San Antonio. We pushed on over the desert and through the now fertile, thanks to irrigation, North El Paso Valley, to that unique "city of the pass of the north"—El Paso. There is a firm of architects there, Trost & Trost, which should be Trost, Trost and Trost since it is manned by two brothers who are twins and an older brother who is now in his seventy-first year. Texas air must be good, for the brothers are all hale and hearty.

A beautiful scenic road winds up the mountain at El Paso, from which one obtains a view that is worth looking at; and then, of course, there is Juarez just across the Rio Grande and the Mexican border. There is much to be done in Juarez and many places in which to do them—a visit to the bull ring, the Mexican market, the old jail, the mission, the gambling hall, and, needless to say, the bars, perhaps moved over from the United States several years ago. The Customs men do their duty at the border but are most polite and courteous about it all. But don't try to deceive them. They have an uncanny sixth sense.

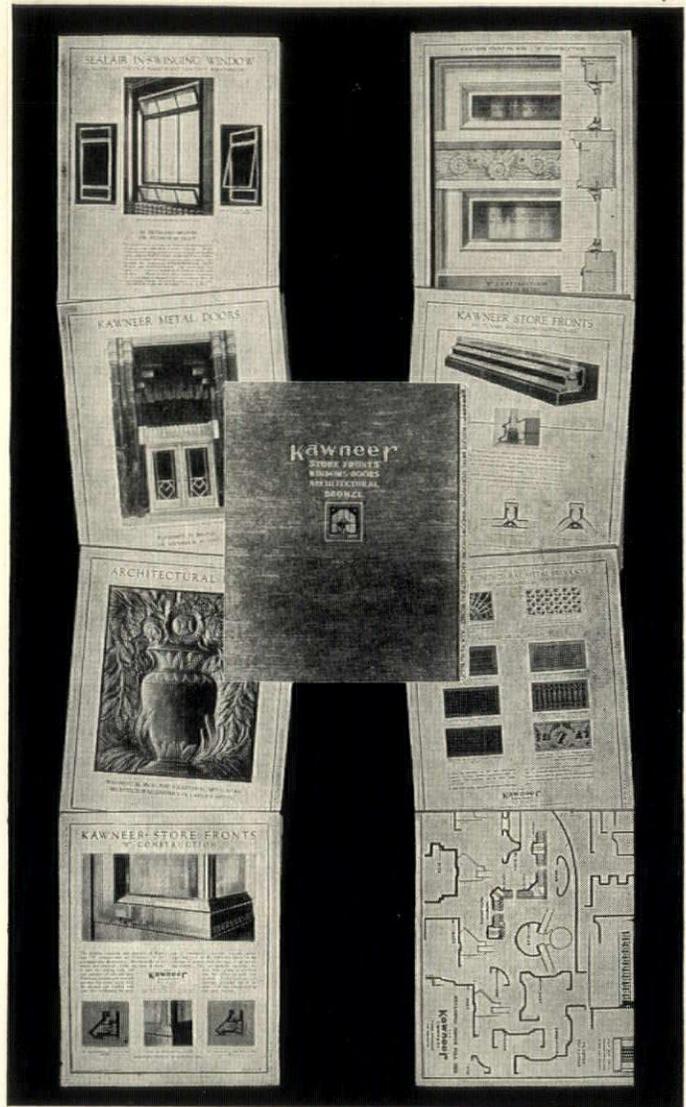
AT some place near the border, a colored boy in a waiter's garb passed down the street with a tray full of dishes balanced on one hand. A dish slipped off, another crashed to the ground, and then in evident disgust the boy deliberately threw the entire trayful into the street. Mexican corner loungers looked on stoically, as though it was the boy's own business what he did with the dishes, anyway.

A traveler might well take a lesson in preparedness from George Mason, of Detroit. Mr. Mason carries, as regular equipment, a small kit of tools, ball of string, flash light, folding rule, and other items too numerous to enumerate that contribute to traveling in comfort and independent of others.

San Diego impresses one as a good clean cut American city, well located and interesting in many ways. William Templeton Johnson has replaced one of the exposition buildings with a permanent building and his Presido Museum is well worth the trouble to see before leaving for the North, Agua Caliente or Tia Juana. Few architects have a more interesting office with a garden on a setback terrace than Requa and Jackson.

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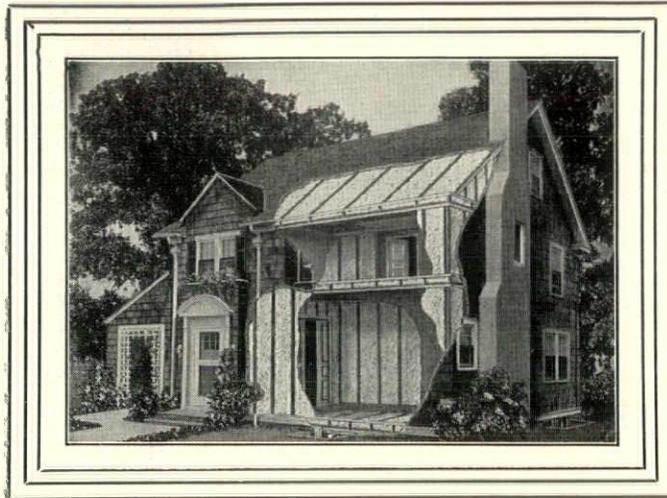
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It is easy to see how they have been able to build up an esprit de corps in the office.

THERE is plenty of good architectural talent in Los Angeles and its environs. Architects there appear to have unusual opportunities and make the most of them. Recent honors given several of them in the field of domestic architecture attests to this. They are an active lot, too, as witness the accomplishments of the Architects' League of Hollywood and the California State Association. Architectural control could have done much to improve certain obvious errors in the relationship of buildings in that rapidly growing city. Many fine buildings have been crowded together and designed without regard for their earlier neighbors. This has been a great mistake, for now they clash, do not contribute to the success as a whole, and without some park area about them are not given the chance they deserve. This is particularly evident in the vicinity of the Library designed by Goodhue, and in the civic center dominated by the City Hall. The City Hall is the one building in the city which has been permitted to exceed one hundred fifty feet in height.

The proponents of low height limits and decentralization should go to Los Angeles and be compelled to see as many architects as possible within a very limited time. They might change all their arguments.

Don't let anyone tell you it never rains in Los Angeles. They even staged a small earthquake for my benefit.

Jesse Stanton is a good architect who is directing his talents toward developing new ideas in terra cotta and tile on the West Coast. He is right in the middle of it working in a terra cotta plant and may get some place with his idea of more color in our buildings. The house that Frank Lloyd Wright designed for Mrs. Millard, in a natural setting that most people might pass up as impossible, is decidedly interesting and worth seeing as well as Mrs. Millard's fine collection of antiques. To appreciative friends, she may have a cup of tea brewed to the second served in her museum, the "Doll's House." Lloyd Wright, Frank Lloyd Wright's son, has built a small road side market of steel sash and corrugated iron that is apparently inexpensive and that does have character and opens one's eyes to the possibilities of that humble material—corrugated iron. Morgan, Walls and Clements are designing a mammoth hotel for Portland, Oregon. Portland needs a good hotel!

WHEN you go to Santa Barbara, don't let Russell Ray hear you call 'em hills. He insists that they are mountains four thousand feet high. And they are, too. But quantity and distance are deceiving. Santa Barbara has much to commend it as a place in which to live and work. It possesses a quiet harmonious character that is unity. And it has plenty of climate, so much so that you can just make your own selection at any season of the year.

Speaking of Santa Barbara reminds us of the Englishman who was impressed by the fact that Spanish names are not pronounced as they are spelled. In explaining this to his friends back home, he used San Jose as an example. "Now," he said, "they do not pronounce this at all the way one might think. They pronounce it San Luis Obispo!"

(Continued on page 102)

time

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The most eastern city in the West is probably San Francisco. It has a distinct metropolitan atmosphere and a setting all its own. The architects in San Francisco are taking the lead in organizing a Building Congress there. The Chamber of Commerce is also behind the movement and it has every indication of being an undertaking with the same degree of success as elsewhere. Timothy Pflueger, of Miller and Pflueger, is an energetic young "modernist" who is really thinking and actually trying things. Something splendid is going to come out of all his trying. The Stock Exchange Building has already done so. A glimpse of the Luncheon Club in the Stock Exchange should not be missed. It is a sane piece of different design that took more care and thought than the average building can be given in these speedy days. There's an idea in the way galvanized iron has been used in conjunction with the ceiling light in the main room of the 'Change. There's another in its use to form the ceiling of the Bal Tabrin, also designed by Pflueger.

BERNARD R. MAYBECK designed a classic gem for the San Francisco Exposition held in 1915. It was fine enough to be retained as a park building. Built of lath and plaster over a wood frame, it gradually fell into disrepair. The plaster is now being replaced. This building is classic at its best in this country, executed with a fine feeling that put something else into it beside a cornice and columns. The city could do no finer thing than to tear down the temporary structure and rebuild

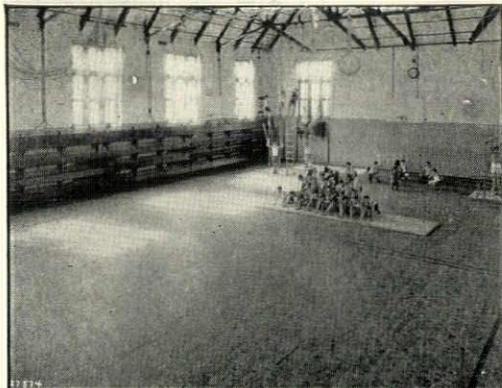
it in permanent materials, as an architectural asset worth preserving.

THERE used to be a firm in Sacramento, Dean and Dean—now it is Charles Dean. His brother gave up the practice of architecture to become the city manager of Sacramento. Dean apparently has a tactful way of handling clients and his use of china marking pencils and gasoline for making sketches is a new idea that we may tell you about some other time. One of his most recent jobs is the Sutter Club, which is cheerful and colorful. Dean has a theory that comes pretty close to being right—he says that it's what you leave off that counts in design.

To go from Sacramento to Portland you must take a local train to Davis. On the smoking car there was an elderly man, quite tipsy, who evidently in his hurry to make the train had put his vest on *upside down*. After many vain attempts to locate his ticket in his trousers and coat pockets, and even to locate his vest pockets, he finally gave up in despair and held out a handful of small change to the conductor to select enough to pay his fare. The attention of the conductor was called to this most unusual situation and he proceeded to help the unfortunate put his clothes on straight. Off came the coat and then the vest and apparently not exactly aware of what it was all about, the passenger's arms slipped through his suspenders—to the chagrin of the conductor. But ultimately, the suspenders went back in place, the vest went on *right side up* and then



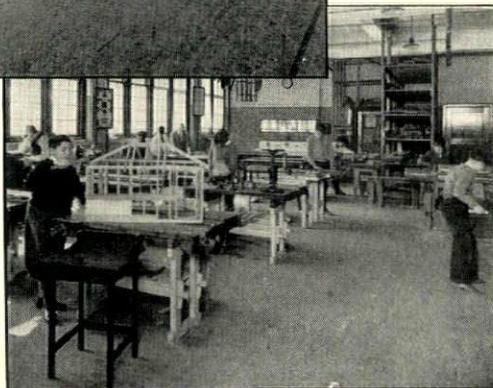
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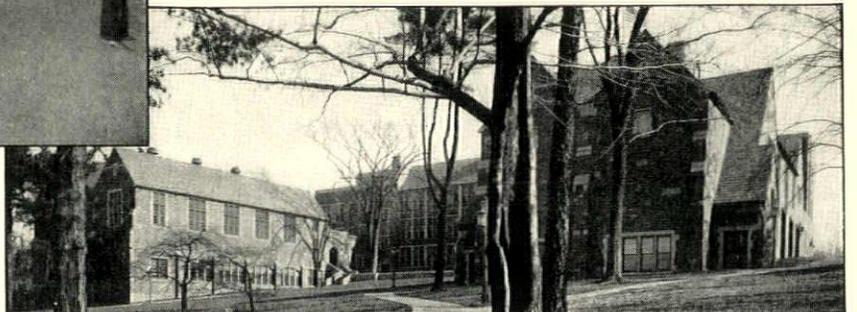
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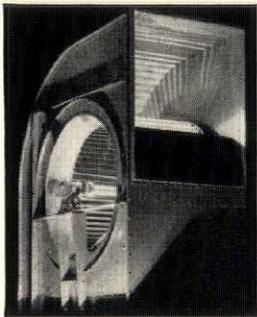
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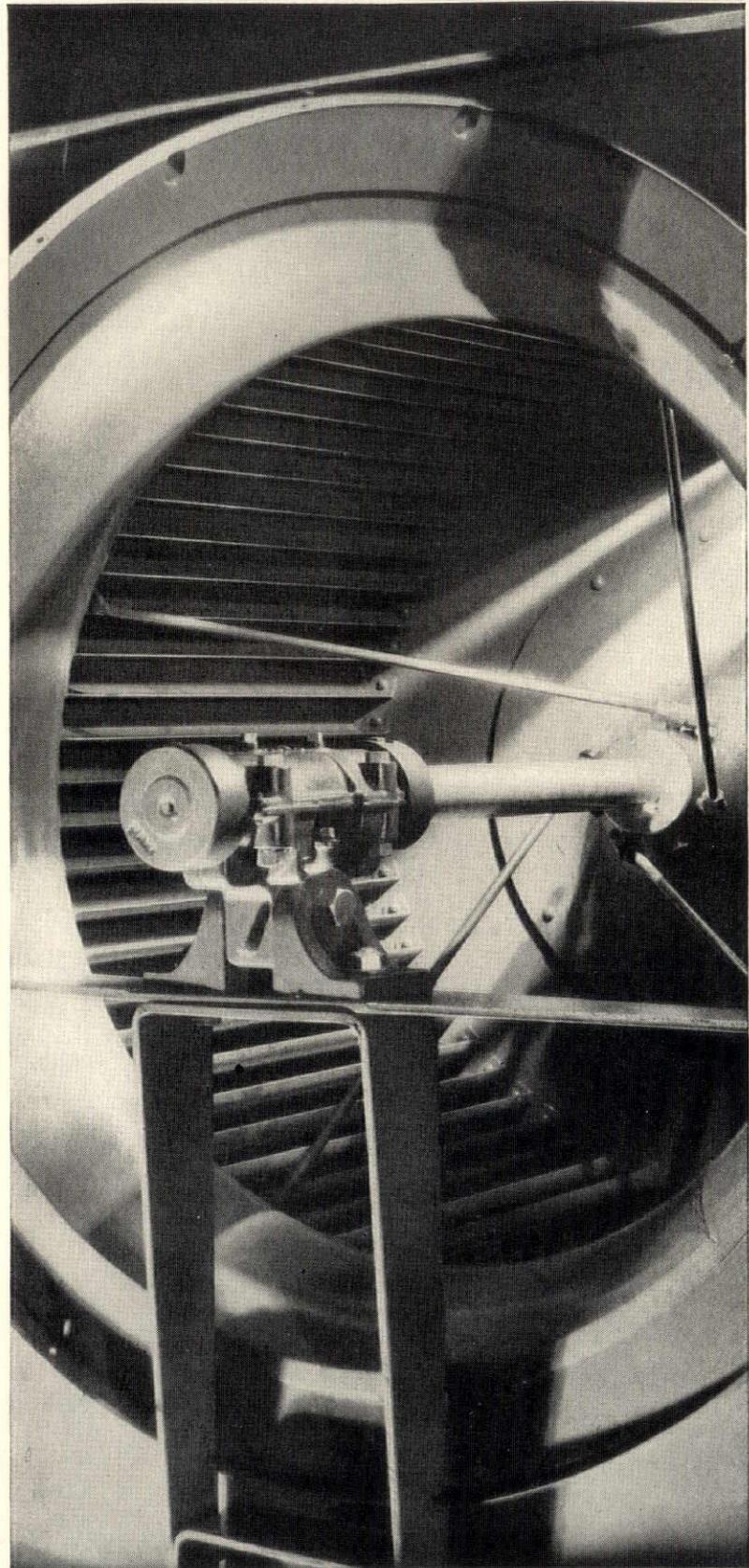
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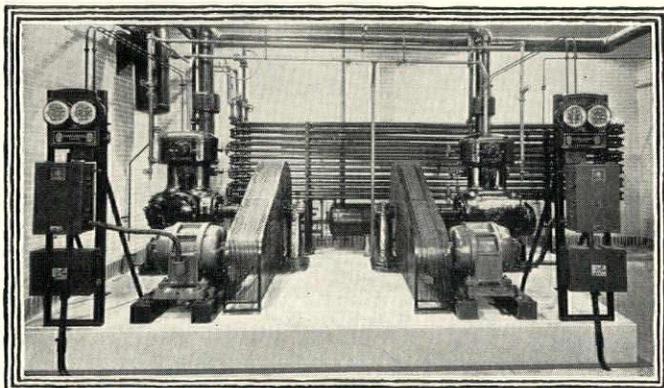
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the coat. The passenger reached in his vest pocket and produced his ticket to Davis!

They have better architects in Portland than they have hotels. Not that the hotels are too bad, but merely that they have located them on the noisiest corners in town. Portland may be justly proud of its roses. In this one thing alone it can take its place with any city on the Pacific Coast. Harold Doty, president of the local A. I. A. chapter, thinks that architectural clinics should be established. This sounds like a good idea. Worth trying at least—perhaps Mr. Doty will tell us more about it one of these days. To visit Portland and not drive out the new Columbia River highway under the guidance of Senator Bailey would be a great mistake. It is one of the scenic treats to be found in this great country of ours.

The approach by train to Tacoma, Washington, well-nigh takes one's breath away as you come upon the edge of Puget Sound with the snow crowned Olympics in the distance. Tacoma is well located with good water and rail transportation facilities. When the haze lifts, you can see Mount Tacoma—in Seattle they insist that it is Mount Rainier—but anyway, what matters the name; the mountain is one of nature's beauties, a grand, inspiring sight to see as it looms up snow-capped in the distance.

ARCHITECTS in Tacoma have formed an architects' association to handle local public works. It seems to have worked out well there—when there has been any public work to do. Just at present the association is not very busy. The Washington State Chapter of the Institute has an idea that other chapters might well consider—the wives of the members have an organization, too.

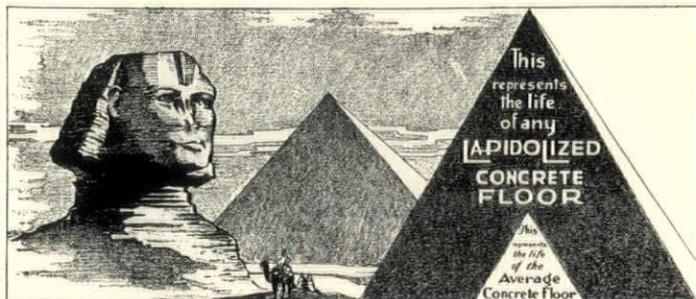
In Seattle, as in Los Angeles, San Francisco, Tacoma and elsewhere in the West, the architects would like to see the Government out of the architectural business. They are interesting other organizations in the idea of presenting THE AMERICAN ARCHITECT'S petition to the authorities in Washington. Two things about this that were expressed in the West—the petition should be made broad enough to take the business of architecture out of all departments of the Government and the designing architect should also be retained to supervise the construction.

Thomas, Grainger & Thomas, of Seattle, have recently completed the Harbor View Hospital. This is a fine building, excellent in mass and the whole handled in a sympathetic understanding of the practical and esthetic aspects of the problem. Harlan Thomas of this same firm is head of the school of architecture of the University of Washington. He is doing a great job with his "boys and girls," since he not only knows his job but has the personality that inspires one to do his best—and he understands youth.

Many architects like the sea and enjoy having a boat, but few have risen to the prominence of being Commodore of a Yacht Club and are accomplished navigators possessing a hundred foot boat. John Graham of Seattle has done all this and he likes to take his friends out cruising on Puget Sound. The "Blue Peter" is a real boat, perfectly equipped, and John Graham is a royal host. He gave me a photograph of the yacht but, as might be expected of an editor, this has been mislaid,

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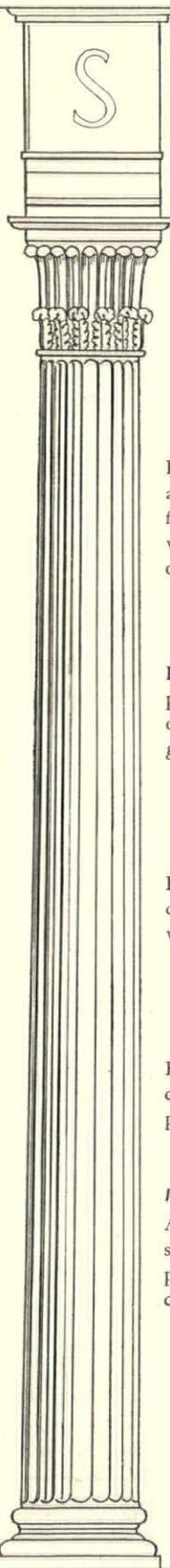
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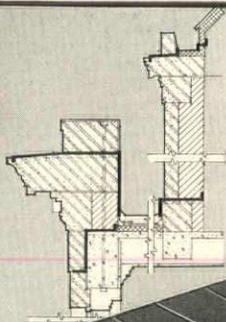
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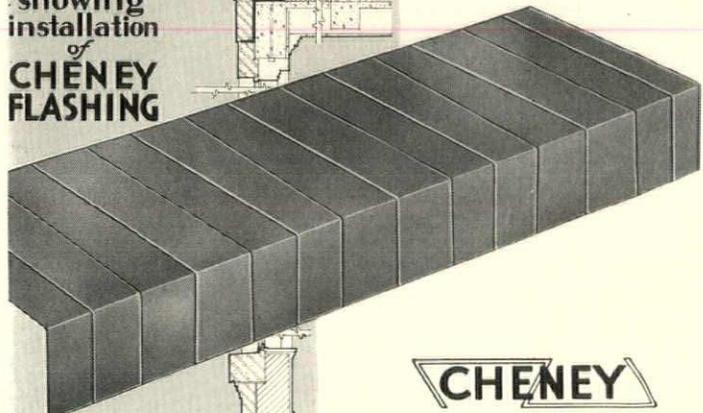
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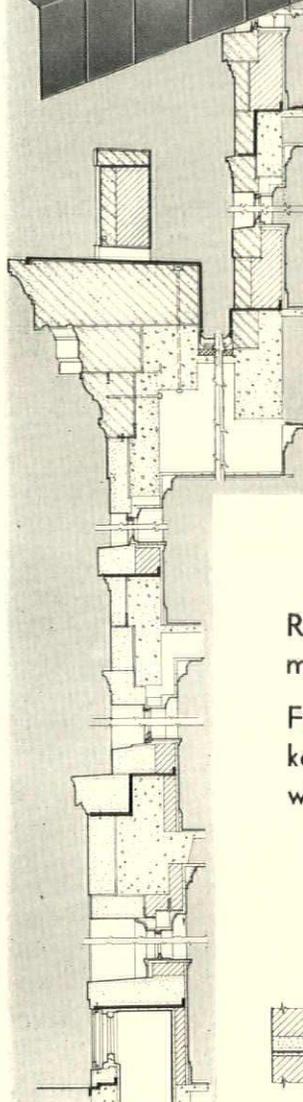


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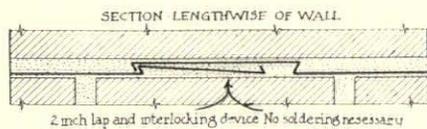
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otherwise it would make a most decorative illustration to accompany this story.

Bebb & Gould and John Graham have associated to act as architects of the new U. S. Marine Hospital to be built in Seattle, on a site that will nicely complement the Harbor View Hospital. Every Institute Chapter should have a Joshua Vogel to keep things going on time.

The Canadian Pacific operates a number of well appointed steamers between Seattle and Vancouver, and the trip up the Sound should be made, at least one way, by daylight. It is restful and an ever-changing panorama that most of us cannot see every day. Victoria, B. C., is probably the most English city on the North American continent. Vancouver, aside from its magnificent harbor and mountains, is much like other cities of equal size in Canada or the United States. Its architects are alive to their opportunities and it is of interest to find that their problems of practice are the same as those existing in the United States and particularly this matter of educating the public on what architects do and why. British Columbia has a tight registration law that might well be studied by some of our states. S. M. Eveleigh, of Vancouver, can tell you all about it if you are interested.

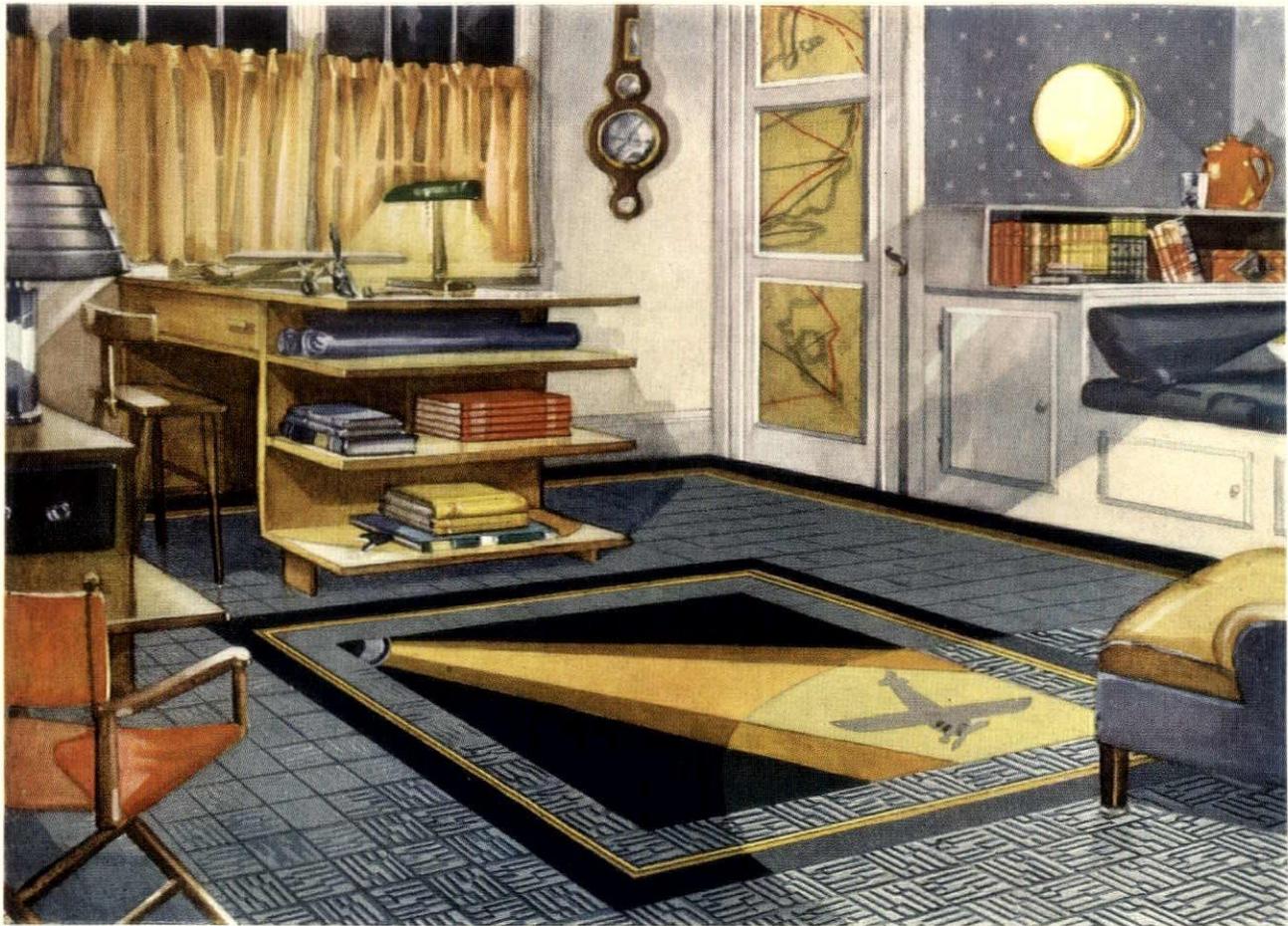
JOHN McCARTER, of the firm of McCarter and Nairne, Vancouver, summed up today's problem of the architect tersely and to the point by the statement that building today is a matter of obtaining the least building for the least money for the maximum return.

Salt Lake City and Denver both enjoy a similar location in a plateau practically surrounded by canyons and mountains. The older buildings of the army post, Fort Douglas, near Salt Lake City, are interesting because of their simplicity and the pleasing soft color of their masonry walls. Time has dealt gently with the warm rich tone of the sandstone of which they are built. The Utah Copper Company is gradually removing one or two mountains near Salt Lake City. It is all being done by means of men, steam shovels, dynamite, and an electric railroad. And what a magnificent sight it is! There are so many mountains out there that one or two more or less will not be missed.

Denver has all the characteristics of a big city that is enjoying a normal, healthy growth. Architects there are active in fostering the Architects Small House Service Bureau as an altruistic movement to improve small house architecture of the community. And they seem to be getting results.

A hurry call to come home cut short by a few days a trip already quite long, nearly two months, and we took the first train out of Denver for Kansas City to make connection with an airplane, intending to make New York in one day. Travel by air is becoming safer and the planes do make good time. If the world below seems to pass all too slowly, be not concerned, for before you know it you are at St. Louis, Indianapolis, Columbus and McKeesport in turn. The pilots are cautious and, if the weather is doubtful, they do not take a chance on flying over the Pennsylvania mountains. For which consideration we are just as well satisfied.

A PRODUCERS' Council Club has been formed in St. Louis. It is expected that a similar organization will shortly be formed in Detroit.



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nary boy accidents, even spilled ink, will not harm the easy-to-clean floor. And for the architect there's the pleasure that comes of solving an old problem in a new way. With the added thought that quite possibly his design for this one room helped sell the plans for the entire house.

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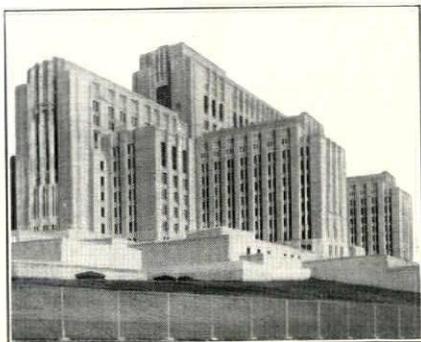
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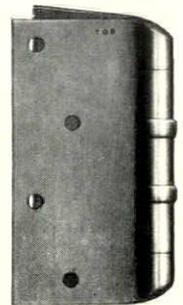
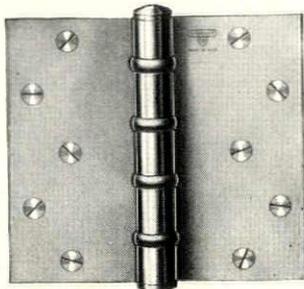
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its Directors

Stanley Ball Bearing Butts Are Used

THE comfort of the patient is the main objective in modern hospital construction — every detail is designed with that in view. Consequently, all moving equipment must operate quietly.

Most hospital doors swing on Stanley Ball Bearing Butts. In specifying Stanley Butts for the outstanding hospitals shown here the architects have assured silent, trouble-free operation of doors for the lives of the buildings.

THE STANLEY WORKS
New Britain, Conn.



STANLEY BALL BEARING BUTTS



THE MODERNISTIC MOVEMENT

BOTH the exterior and interior of the Moore Store, San Francisco, are modern in treatment. The interior vestibule, which is illustrated on this page, is distinctly modernistic. It was finished in Black and Gold. Yule Colorado marble was used for the exterior. The architect of the building was Albert F. Roller, with Bliss & Fairweather as associate architects.

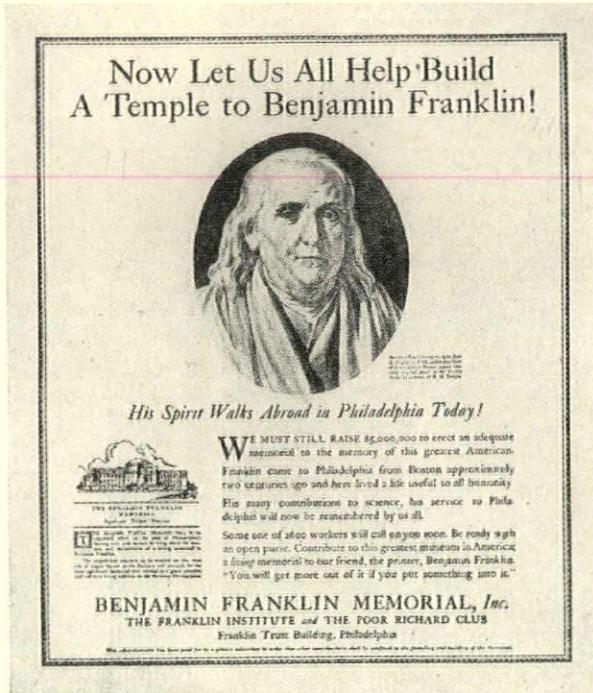
VERMONT MARBLE COMPANY
PROCTOR, VERMONT

*Branches in the larger cities
See Sweet's Catalog for Specifications and Other Data*

VERMONT MARBLE

BOOKS

(Continued from page 68)



Advertisement used in the Benjamin Franklin Memorial Campaign in Philadelphia. From "Advertising"

ADVERTISING; ITS ECONOMICS, PHILOSOPHY AND TECHNIQUE

By Herbert W. Hess, Ph.D. Published by J. B. Lippincott Company, Philadelphia. Illustrated; indexed; 516 pages; size 6 x 8 1/2; price \$5.00.

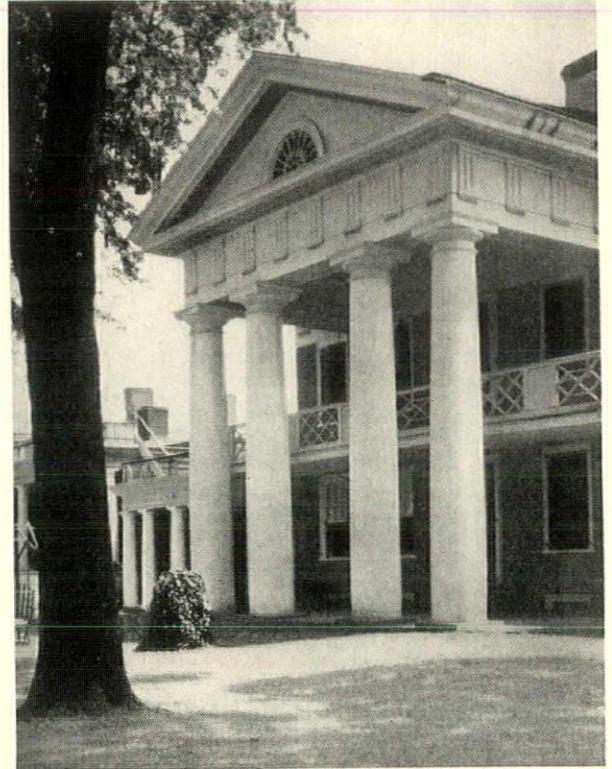
ONCE advertising was regarded as a sort of illegitimate stepchild. As time went on, the great mass of business men came to realize its power but readily expressed the thought, "Well, my business is different." Now the great majority of business men have come to realize that advertising is the great influencer of minds in the mass, that its principles are universally fundamental, and that anything that can be sold can be advertised.

Many of those in the architectural profession with vision have unconsciously come to realize the great part that advertising is bound to play in the future of the profession; many realize that right now it has influenced the profession to its detriment through the advertising of stock plans and other services not in the best interests of the public. These men are urging that the profession take steps to interpret to the public just what the architectural profession is and how it can serve the public.

As a consequence, books on advertising may well be expected to invade the architect's library, for it is only by a knowledge of what it is all about that he can expect to understand what advertising can do for his profession, and how to accomplish his end.

Mr. Hess' book is an interesting discussion of the subject. He is professor of merchandising and head of

the merchandising department, including courses in advertising and salesmanship, of Wharton School of Finance and Commerce, University of Pennsylvania. The book is well written and will give its readers a clear idea of the fundamentals of advertising and its technique.



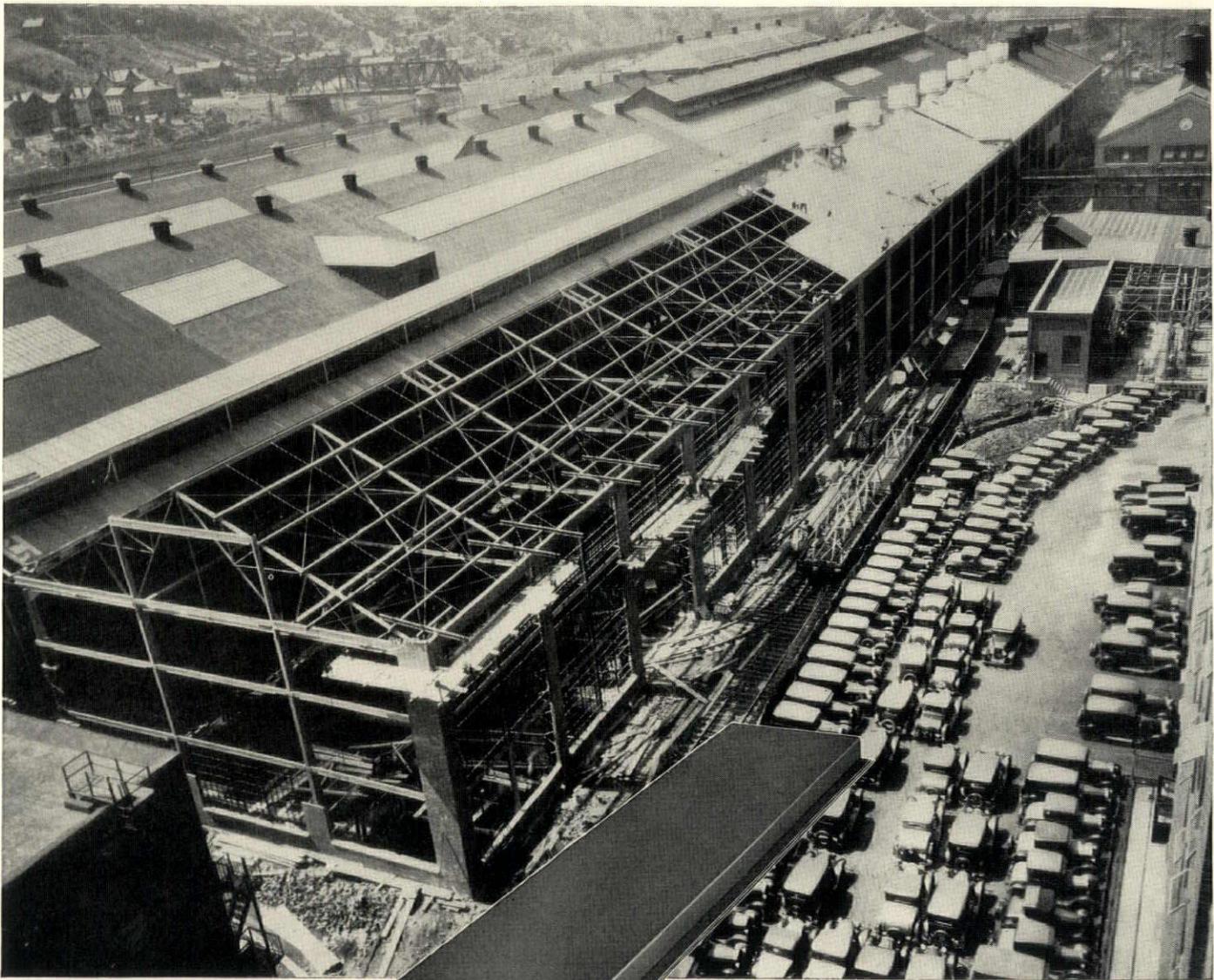
Detail, University of Virginia. From "Thomas Jefferson: Architect and Builder"

THOMAS JEFFERSON, ARCHITECT AND BUILDER

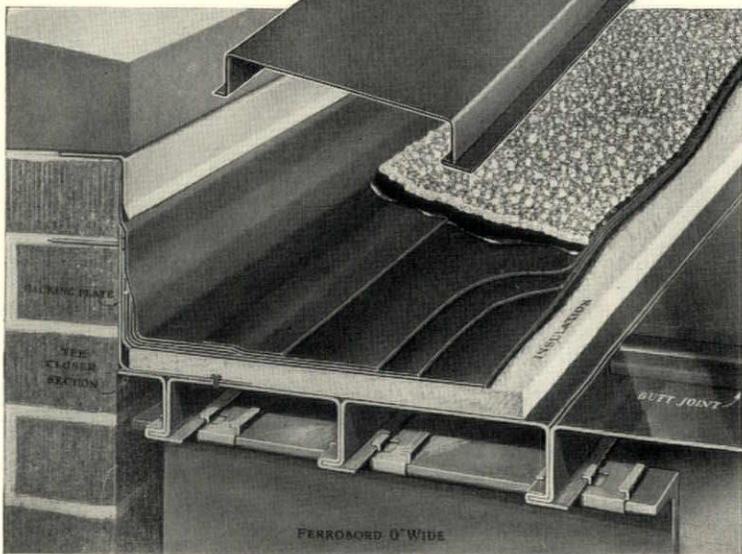
By I. T. Frary. Published by Garrett & Massie, Inc., Richmond, Va. Illustrated; 139 pages; indexed; size 9 1/4 x 12 1/4; price \$7.50.

THOMAS JEFFERSON is best known to the world as author of the Declaration of Independence, the Statute of Virginia for Religious Freedom, and as third President of the United States. His fame rests almost as solidly on his leadership of the movement that created a new architectural style—the Classic Revival—a movement that dotted America with houses, churches and public buildings of the classic form and detail of the Greeks and Romans." So starts this book, stated to be the first published covering Jefferson's complete work as an architect.

The book is divided into three parts covering Monticello, Jefferson's public buildings, and Jefferson's residential work. Added interest is lent by the presentation of some of Jefferson's architectural drawings. The book is well illustrated and the text preparatory to each of the three sections into which the book is divided is interesting as giving an historical picture of Jefferson the architect.



Westinghouse Electric Manufacturing Co. Tank House—East Pittsburgh.



Economical, Light-Weight, Fireproof Roofdecks

For new roofs or replacements Truscon Steeldecks offer all the advantages of fire-proofness, rigidity and economy. Their light weight saves on structural supports. Their erection is simple and rapid. They can be insulated to any degree to prevent heat loss and condensation. Whatever purlin spacings and roof loadings are specified, one of the three types of Truscon Steeldeck roofs, Ferrodeck, I-Plates or Ferrobord, will exactly meet the requirements.

Write for catalogs and prices.

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO

Warehouses and Offices in Principal Cities
Truscon Steel Company of Canada, Limited, Walkerville, Ont.

TRUSCON STEELDECKS

INSULATED AND WATERPROOFED

NEW CATALOGS

Covering What Manufacturers Have to Say About
the Advantages and Uses of Their Products

VAULT PROTECTION

157 . . . Booklet illustrating and describing the Bankers Electric Vault alarm system of the Bankers Electric Protective Association, 60 State Street, Boston.

ARCHITECTURAL AND ORNAMENTAL MONEL METAL

158 . . . General Information for the fabricator about monel metal, published by the International Nickel Co., 67 Wall Street, New York. Explains standard forms, properties and finishes, hand forging, castings, and similar data.

MODERN BATHROOMS FOR OLD

159 . . . Booklet illustrated in colors, by Sarah Stevens, an authority on bathroom decoration, and issued by the C. F. Church Manufacturing Company. Describes seats made by this company, gives prices, and illustrates bathrooms.

BENNETT BONDED FIREPLACES

160 . . . Illustrated booklet describing built-in fireplace units which turn the ordinary fireplace into a more efficient heating apparatus. Contains sketches showing architectural effects possible, pictures of typical installations, and manner of operation. Issued by the Bennett Fireplace Corporation, Norwich, N. Y.

LIME MORTAR

161 . . . "Lime Mortar: Its Relation to Water-Tight Masonry" is the title of an instructive booklet published by the National Lime Association, Washington, D. C. Discusses the various properties of mortar and other factors influencing the quality of unit masonry, comparative cost of masonry mortars, and mortar recommendations. Contains tables of test data. Illustrated.

INSULATING BOARD

162 . . . Illustrated folder of the Johns-Manville Co, New York, describing this company's insulating board and containing drawings showing how it is used for various parts of the building. Also specifications. A. I. A. file 37 a 1.

SALEM ROOFS

163 . . . Folder illustrating and describing the new Salem Roofs made of asbestos fibre and Portland cement to simulate the aged hand-hewn wood shingle roofs of early New England. Issued by the Johns-Manville Co., New York.

TODHUNTER LAMPS

164 . . . Booklet illustrating and describing wrought iron and brass candlesticks; and table, floor, and bridge lamps made by Todhunter, 119 East 57th Street, New York.

HUMIDITY AND AIR CONDITIONING SYSTEM

165 . . . Architect's Handbook, published by the Doherty-Brehm Company, 333 North Michigan Ave., Chicago, illustrating and describing "custom-engineered" humidity and air conditioning systems for homes built and buildings of average size and larger. A. I. A. file 30 f 1.

KLEISTONE RUBBER TILE FLOORS

166 . . . Illustrated folder of the Kleistone Rubber Company, Inc., Warren, R. I., describing and giving specification for the laying of this company's rubber tile flooring. A. I. A. file 23 c.

HOW TO DEADEN MACHINE VIBRATIONS AND NOISE

167 . . . Bulletin published by L. Mundet & Son, 461 Eighth Avenue, New

York, illustrating and describing how machinery may be isolated by means of natural cork so that noise and vibrations are eliminated.

NEW AMERICAN ELEVATING GARAGE DOOR

168 . . . Booklet illustrating and describing a new type of door for private garages which is hinged horizontally at about two-thirds of its height and swings up accordion-like against the garage roof. Gravity operated and made of chemically treated wood. The American Sash & Door Co., 16th and Bellefontaine Streets, Kansas City, Mo.

WESTINGHOUSE AIRPORT FLOODLIGHTING

169 . . . Catalog 218 FA of the Westinghouse Electric & Manufacturing Company, Cleveland, Ohio, illustrating and describing the various types of airport lighting apparatus made by this company. Gives layout of a typical landing field and lamps to use at various places. A. I. A. file 31 f 26.

POCKET COMPANION, CARNEGIE STEEL COMPANY

170 . . . Information and tables for engineers and designers and other data pertaining to structural steel. Issued by the Carnegie Steel Company, Pittsburgh, Chicago, Ill. A. I. A. file 13-b-1.

GAS CONVERSION BURNER

171 . . . Booklet by N. T. Branche, Househeating Development Engineer of the Surface Combustion Corporation, Toledo, Ohio. Discusses gas conversion burners in general.

KAWNEER CATALOG "N"

172 . . . Issued by the Kawneer Company, Niles, Mich., describing and illustrating the store fronts, windows, doors, and architectural bronze made by this company. In loose leaf form. A. I. A. file 26-b-1.

CUTTING CONSTRUCTION COSTS

173 . . . Report prepared by the Special Risk and Engineering Department of the Hartford Accident and Indemnity Company, Hartford, Conn., and intended to help control accidents as a time and cost saving measure.

NEW ALUMINUM ALLOY

174 . . . Folder of the Apex Smelting Company, 2554 Fillmore Street, Chicago, describing "Perm-A-Brite," a new aluminum alloy.

July, 1931

● AMERICAN ARCHITECT

57th Street at Eighth Avenue, New York City

Please see that I receive the following catalogs reviewed on this page:

Numbers

Name

Address

Occupation

**Chromium finish beautifies
the exposed parts
of this MUELLER Built-in Shower**

While chromium finish may not be "new" to you, remember that it is distinctly new to a great many home owners. To them it has a tremendous appeal. Hence this fine MUELLER Built-in Shower with its many attractive features will be even more desirable to your trade because of its long-lived, gleaming chromium finish.

For further information on this or kindred MUELLER products, please write to the MUELLER Company and it will be sent promptly.

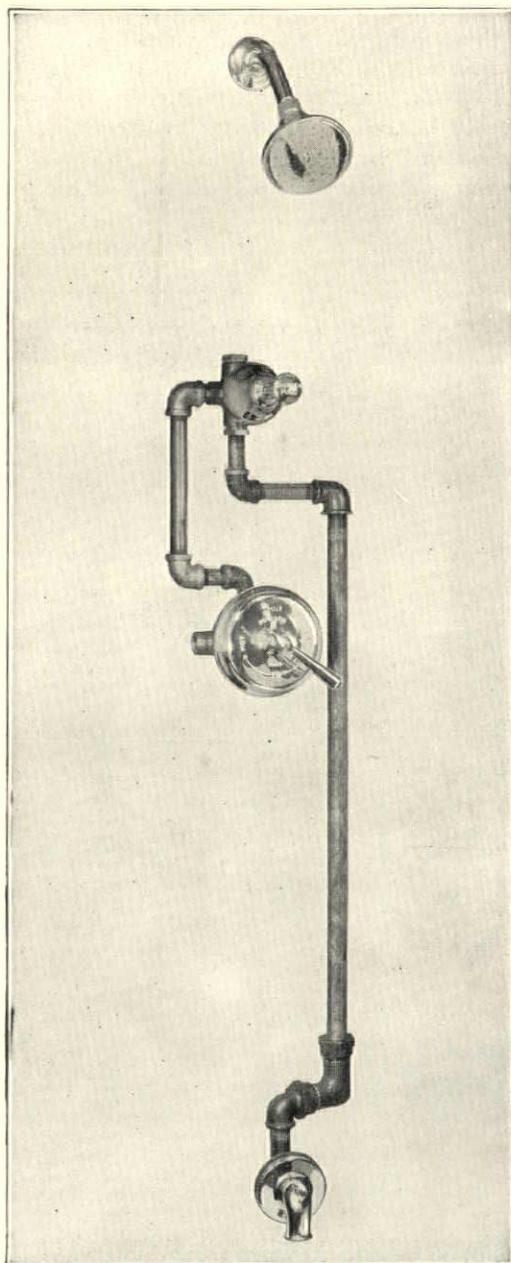
MUELLER CO. (Established 1857) *Factory:* Decatur, Illinois. *Branches:* New York, 135th St. & Walnut Ave., Bronx, Telephone Ludlow 8629-30-3; Dallas, Atlanta, Los Angeles, Chicago. Canadian *Factory:* MUELLER, Limited, Sarnia.

H-5050

H-5050 MUELLER All metal built-in shower fitting with mixing valve and automatic diverter for diverting water from foot tester to shower head. Bent arm discharge pipe with cast metal wall flange, 4" cast metal shower head with adjustable ball joint.

Size, Inches . . . ½" only.

Finish: All exposed metal parts chromium plate.



MUELLER

Trade-mark Reg. U. S. Pat. Office

Shall We Give Him This or This?

(Continued from page 47)

beyond their control as individuals. First, the purchasers secured a highly protected investment, due to wise restrictions and a uniformly high-class development. Restrictions are possible only where there is unified ownership. The latter, also, rules out the juxtaposition of some pennyshaver's ready-cut-from-the-catalogue abortion alongside of a well designed, costly achievement in domestic design.

Second, he is armed with undivided responsibility protecting him as to the quality and permanence of the construction. He is not ricocheted from architect to builder and from builder to architect; whether design, specification or construction be at fault, the same people are responsible and redress promptly available.

Certain economies are also possible. Quantity buying permits savings. Of course, to what extent these economies find their way into the pockets of owners rather than the "realtors" is a moot question.

If this sounds like a brief for the real estate people rather than a remedy for architecture as a profession, it is merely because facts must be squarely faced before remedies can be applied. For a practical profession, architecture perhaps leads the world in the gentle art of self-kidding.

My contention is, that when you have sold architecture

to "the man in the street," you have not gone to the root of the difficulty.

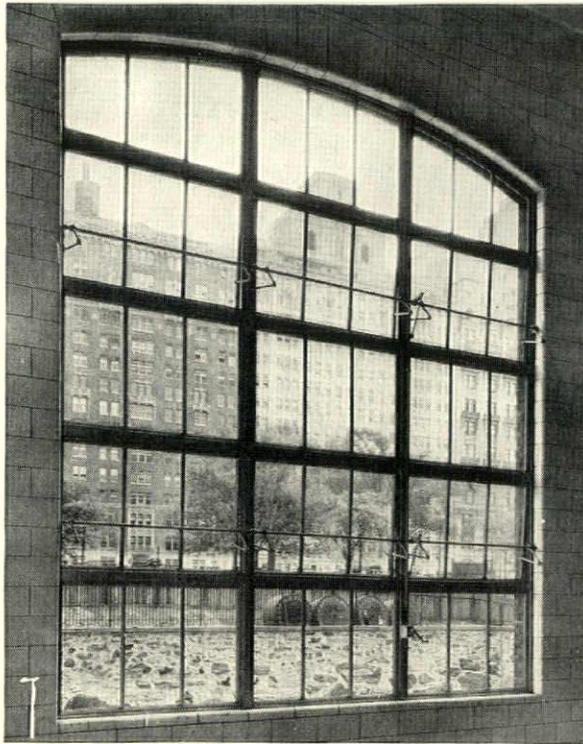
The weakness of the "selling architecture" movement lies in the certainty that the prospective home builder will be hypnotized by the high power salesman of the realty concern thusly:

"Why, we have a first-class architect in our own organization. You get the benefit of the best architectural service plus our financial responsibility, purchasing power and organization."

Whereupon the "man in the street" promptly dismisses the thought of employing an architect, while at the same time he is thoroughly "sold" on architecture!

If consideration of some of the difficulties facing architects appears pessimistic, let me reiterate, it is through no lack of sympathy with the various movements to ameliorate their condition. It is because my interest in a profession to which I have given the labors of more than a quarter of a century is such that I dislike to see hopes held out for the betterment of conditions, predicated upon measures which, in my opinion, do not touch bottom.

It is, however, without the least idea of finality that certain observations follow, intended to suggest possible means by which, through a course of years, architects



American Museum of Natural History Power House, 77th Street and Columbus Avenue, New York City. Trowbridge & Livingston, Architects. Steel Windows by Campbell Metal Window Co.

Modern Screw Thread Equipment for Group Sash Control

IN this new power house, groups of six heavy, top-hung ventilators are operated as a unit.

The entire equipment is placed on the sash and frame of the window, with the control box on one of the mullions, within easy reach from the floor.

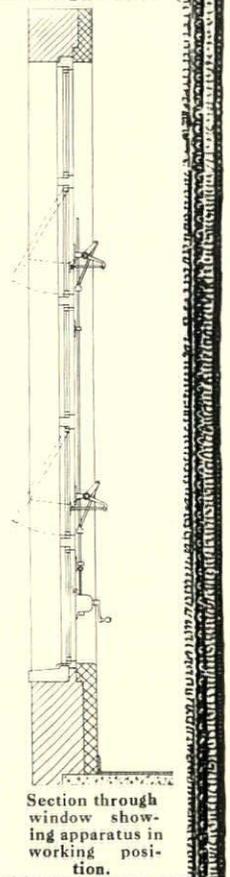
The tile wall is clear and there is no objectionable projection of apparatus beyond the wall surfaces.

This desirable condition was obtained by the provision of three inch mullions, and the specifying of Lord & Burnham Screw Thread Apparatus.

Lord & Burnham Co.

SASH OPERATING DIVISION
Graybar Building, New York City

Representatives in principal cities of the United States and Canada



Section through window showing apparatus in working position.

ANOTHER MODERN BUILDING

WHERE NOISE
IS SUBDUED

with
**INSULITE
ACOUSTILE**

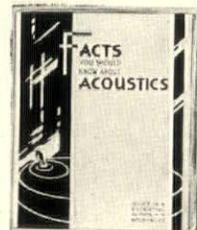
HERE'S an experiment in sound control made by a great public service corporation that will be of interest to every architect. When the new Northern States Power Company building in Saint Paul, Minnesota, was under construction, the ceilings of the offices on the ground floor were treated with Insulite Acoustile. The results were carefully noted by architects and engineers. The improved acoustical conditions on this floor were so marked and the appearance of the rooms so pleasing, that the owners decided to apply Acoustile on all the ceilings throughout this entire six story building.

Wherever it is desirable to control excess sound energy, —in offices, schools, churches, theatres, etc., Insulite Acoustile will do the job better because it has a more uniform sound absorption efficiency throughout the entire frequency range than any other material.

Insulite Acoustile is a durable and permanent acoustical correction material. Of attractive appearance in its natural form, Acoustile can be beautifully decorated to harmonize with any desired color scheme. The high, non-glaring, light reflection of Acoustile assures a room pleasing to the eye as well as restful to the ear.

The rigid, tile-like units of Insulite Acoustile are easy to handle and can be quickly applied to the walls and ceilings of new or old buildings.

May we send you a copy of our new book—"Facts you Should Know About Acoustics" and the Insulite A.I.A. File of Specifications and Details—there is no charge or obligation on your part.



SEND FOR THIS
FREE BOOK

*It gives the facts
you should know
about Acoustics*

The new Northern States Power Co. Building, St. Paul, Minn., Architects: Ellerbe & Co., St. Paul, Minn. Insulite Acoustile Contractors: Hauenstein & Burmeister, Minneapolis, Minn.



THE INSULITE CO.

1200 Builders Exchange, Dept. 23G
Minneapolis, Minnesota

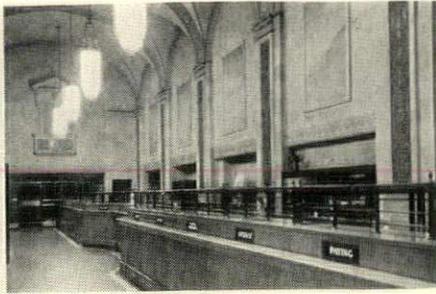
OFFICES IN ALL PRINCIPAL CITIES

INSULITE ACOUSTILE

TECHNICAL CO-OPERATION

BOULEVARD BRANCH
OF THE HUDSON CITY
SAVINGS BANK
Jersey City, N. J.

ARCHITECTS:
WILLIAM NEUMANN
& SONS
Jersey City, N. J.



In the Boulevard Branch of the Hudson City Savings Bank at Jersey City, N. J., the co-operation of the local electric service company with the architects resulted in an electrical installation that assures the bank against electrical obsolescence.

For information about trends in lighting standards and about adequate wiring, call on the lighting bureau of your local electric service company, or write direct.

NATIONAL ELECTRIC LIGHT ASSOCIATION
420 LEXINGTON AVENUE . . . NEW YORK, NEW YORK



Which home owner is better satisfied?

YOUR greatest asset as an architect is satisfaction among your clients — the solution of the waste disposal problem is an important step in assuring satisfaction.

The Kernerator solves forever the problem of disposing of garbage, rubbish, newspapers, magazines, sweepings, tin cans, bottles, etc. To the housewife, the hopper door in the kitchen is a symbol of complete convenience.

Kernerator has become the accepted standard of incineration in the architectural profession. It is guaranteed by a financially responsible manufacturer. It is serviced through a nation-wide organization. See our catalog in Sweet's or write for A. I. A. folder.

KERNER INCINERATOR COMPANY
354 N. Richards St. Offices in over 150 cities Milwaukee

KERNERATOR
INCINERATION

FOR NEW AND EXISTING BUILDINGS

With GAS
or OIL for
HEATING
— what will
you do with
WASTE and
RUBBISH

© 1930 K. I. Co.

as a class may gain a position of financial stability and power. All of these suggestions are not original, some are obvious. It may be beneficial to summarize them as a basis for discussion and possible action.

First, I would like to see definitely and officially abandoned for a period of ten years at least, all talk and even thought of architecture as an "art" with a "business side." Instead I would have it shouted from the rooftops until a marble caryatid could hear, that architecture is a *business* first, last and all the time, with an *artistic side* which is nearly always *aside*.

RECENTLY an enthusiastic friend hypnotized me by actually agreeing to employ me to plan and supervise a large apartment house. I was pleased, gratified, flattered. But he casually remarked that while he would want me to look after the entire construction project, he would not ask me to have a hand in the owning company he was forming for "I know that architects are never very good business men." Having heard this before, I was not insulted. One's hide grows thick with much wear. I have thought long and hard on that strange paradox—the willingness of people to entrust the expenditure of large sums of money to an architect, and after the successful completion of a difficult and legitimate building enterprise, recommend the architect as talented and capable, at the same time holding the conviction that architects are not good business men!

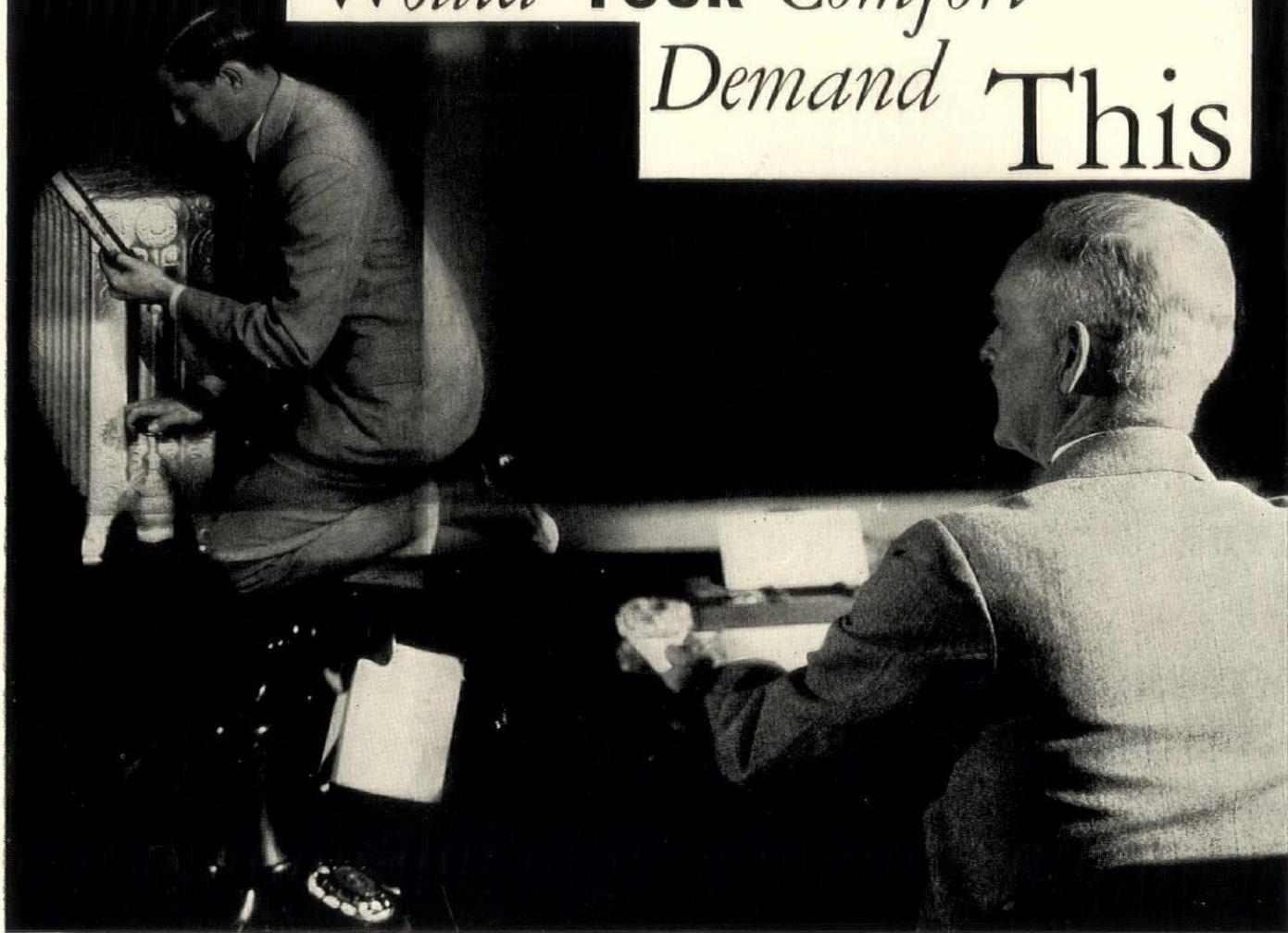
There must be a reason for this paradox. It lies, I think, partly in the fact that architecture is cursed with a few prominent dilettantes who talk of the glories of Greek Art to the tune of tinkling teaspoons and assorted bonbons. The real reason, however, is the crude truth that architects as a class are shabby-genteel; this age classifies a man as a business man in proportion to the size of his bank balance. Any merchant in America, with little education, with no knowledge of history, literature or physics, to say nothing of the arts, can command a hearing anywhere provided he has sufficient goods laid up on earth. An architect, learned in a highly technical profession, with a background of general history equaled by few outside of college professors, with a fair knowledge of chemistry, possessing a speaking acquaintance with all the arts and a specialized knowledge of engineering and construction, is classified as "no business man"!

Obviously, to increase his standing in the community, the architect must succeed financially. He must, therefore, abandon antiquated professionalism, which has become, in fact, a hollow and even a hypocritical sham. He must adapt himself to modern conditions. He has labored and slaved to give an unappreciative public "art," "beauty," "order," "tradition," and more, he has endeavored to conduct business for his client in a way that would save the client money, even though this client never appreciated or knew about the economies affected.

The average client today does not want primarily to save money. He wants service. He wants to be relieved of detail. He can make money faster by attending to his own business, than he can by being bothered about a lot of details, he doesn't understand, so that the architect can save him money.

Nearly everyone will admit that bankers are usually good business men. One of them, who jeopardizes his otherwise good reputation by occasionally lending me

Would **YOUR** Comfort
Demand This



SPECIFY WITH CONFIDENCE

You probably would be more comfortable in your office, if you paid someone to keep an eye on the thermometer and a hand on the radiator valve. But, of course, you wouldn't do it. The New Sylphon Radiator Valve is the automatic hand, thermostatically controlled, which holds the temperature of your office to suit your individual idea of maximum comfort.

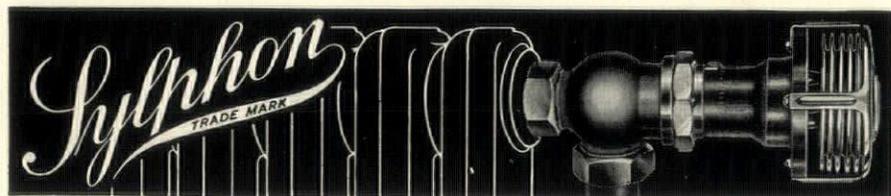
It is never too hot, never too cold with Sylphon. Your office will be as comfortable at 4:00 P.M. as it was at

10:00 A.M. If 65° is *your* temperature you can have it—or 69°, or 73°—whatever *you* require to be comfortable and work efficiently. By smoothing out the peaks and valleys of temperatures, Sylphon saves steam and reduces heating costs.

Try Sylphon—and be comfortable. Installation is easy and inexpensive. No mechanical accessories to get out of order. Owners and managers of factories, hotels, apartments, and office buildings, should know about this individual automatic radiator control.

The Sylphon Automatic Radiator Valve is a combination packless valve and thermostatic control. These instruments have fully justified the recommendations of the architects and engineers who specified them. Once set at the desired marking they turn the steam "on" or "off" and hold individual room temperatures at exactly the desired points, making for personal comfort and health *and to a remarkable extent minimizing fuel waste.*

Positive in action, easily installed, inexpensive and without electrical or mechanical accessories, sturdily constructed to function accurately over a long period of years. Actuated by the dependable Sylphon Thermostat they respond to slightest air temperature changes. Ask for fully descriptive Bulletin No. NJ 250.



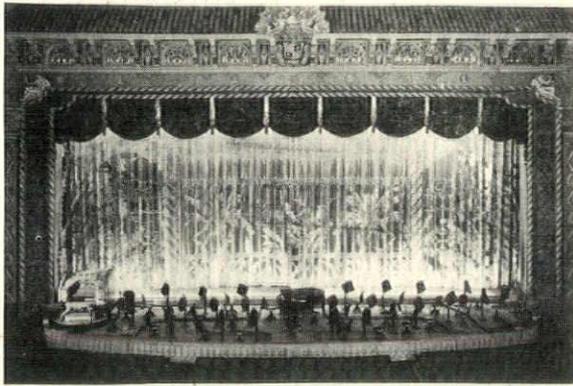
automatic
RADIATOR VALVE

FOR JULY 1931

FULTON SYLPHON Co.
KNOXVILLE, TENN., U.S.A.

European Representatives, Crosby Valve and Eng. Co., Ltd., 41-2 Foley St., London, W. 1., Eng.; Canadian Representatives, Darling Bros., Ltd., 140 Prince St., Montreal, Que., Can.

REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. A.



Specifications for this theatre read
**"STAGE EQUIPMENT
 by PETER CLARK"**

ALL stage equipment in the Warner Theatre at Atlantic City, pictured above, was designed and manufactured by Peter Clark, Inc. When the architects specified Peter Clark equipment here, they did so because they knew they were selecting the best.

Peter Clark stage equipment is used in leading theatres from coast to coast. For 25 years it has set the standard of excellence.

Let us cooperate with you in suggesting and designing equipment best suited for each job.

PETER CLARK, INC.

Stage Equipment Specialists for Over 25 Years

544 West 30th Street

New York City

**DUNHAM
 CONCEALED
 RADIATORS**

*an
 important development
 enhancing
 the values of*

**Dunham
 Differential Heating**

Write for Bulletin No. 500

C. A. DUNHAM CO.

450 E. Ohio Street

Chicago, Illinois

2781

money, gave me in a nutshell the viewpoint of bankers and other business men toward architects.

He said, "I am kept busy from morning to night with the business of the bank. So are my associates. Our time is more valuable and profitable when spent with our business than in studying the details of plans, messing around with bids and bidders and arguing back and forth between architect and the builder. We had rather give the job to some reputable, experienced concern who will take the entire responsibility off our hands and hand us our building ready to move in."

Here again old time professionalism is dumped ruthlessly aside, the practicing architect ruled out, and a combination of architect and builder carries off the plum. And oh! what a price he gets! The sickest feeling I have ever had in my life, not barring *mal de mer*, was when one of these modern hybrid architect-builders walked off with a fine bank job at a price, for the identical type of structure I had proposed, of 40% to 60% higher than I would have secured for it. Don't think for a minute *those boys* are not called good business men. Nothing else but! And the bankers who dance to the tune seem to enjoy paying the piper!

THEREFORE, if you are not stuck fast forever in the rut of traditionalism, consider forming at once an all 'round construction organization. Be prepared to handle the whole job, from building permit to tontine shades and chenille curtains. Forget art and remember service. Don't talk percentages of cost—talk quality, purchasing facilities and organization. Make a round price for the whole job. And be sure the price is big enough. Include every convenience for the owner and charge him roundly with every expense you can think of. If possible, charge him so much your conscience will not let you sleep at night. Then when the job is done, hand him back a neat check for a small part of your profit as "savings" and you will live in his memory ever after. He will also call you a first-class "business man" because some banker will tip him off that you are a "very substantial fellow"—you won't be able to stay poor after a few jobs like that!

My next suggestion is that architects return the attack of the "realtors" and enter the development field. My own observation is that architects are particularly well fitted to do this. They have imagination and an appreciation of the best methods of laying out property to produce attractive and livable sites. They are skilled in the technique of building, where most of the money is spent. They know how to present their work pictorially. They have the education necessary to conduct a promotion enterprise. They need to acquire knowledge of the technique of sales contracts and realty deals. This can readily be done by men with their training, in a short space of time. Sometimes it will be advisable to have an experienced "realtor" in the firm.

Another neglected field for architects is the corporate entity. Of course, there is little value in incorporating merely for the sake of changing the form of partnership. The object of incorporating would be: (a) a skeleton around which would be built a construction organization capable of handling all phases of a building; design, construction, equipment. (b) An organization for the development of sub-divisions, with architects as the master minds. (c) Organization for the promotion

NOT the EASIEST way

**200 MORE SWEEPERS
APPOINTED AT \$1860**



These Two Men **GET** the

ACCORDING to *The Chief*, the leading civil service newspaper, two hundred sweepers were recently appointed in New York City's employ at \$1860 a year. On the same page, but in smaller type, appears the information that "number fifteen" on the Pharmacist list was also appointed—at the sum of \$1860 a year. That's what the city government thinks of our ability in terms of dollars and cents, which, after all, is the only way one may show his appreciation of the value of one's services. So you see, we are on a par with street cleaners!

In the same paper is a list of other positions which one may obtain in the government's employ. Here are some, with the salaries they are entitled to:

Patrolman (to start)	\$2,000
Fire Alarm Telegraph Operator	1,000
Supreme Court Attendant	1,000
Motor Vehicle Inspector	2,100
Assistant Motor Vehicle Inspector	2,400
Process Server	2,000
Civil Service Investigator	2,400
Inspector of Construction	2,400
Accountant	\$2,400 to 3,000

American Druggist

38



Ten Pharmacists
Only 10 were able to pass the exam for Pharmacist July 25-26, 1931. The average score was 70%. The Pharmacist list was held open 1931 and 1932 without appointment.

SAME PAY...

These are only a few positions, to give a general idea of the situation which exists. A short course of study at one of the many institutions which prepare one for examinations in any of the above positions is sufficient to enable a person of average intelligence to pass the examination with a creditable rating. Compare this with the requirements necessary simply to qualify to take the Pharmacist Civil Service Examination: High school graduate, three years' college, four years' experience, and a state board license. This is not intended to belittle the ability of any of the employees holding the (Continued on page 70)

A Shameful Condition that Exists Under the Civil Service in New York

By
NICHOLAS CALIFANO
Pharmacist, Long Island City, N. Y.

May 1931

39

Only when a business magazine's EDITORIAL pages can compete with ADVERTISING pages on the basis of (1) layout, (2) illustration, (3) typography, do subscribers turn into readers. Only then do advertisers get orders for goods, instead of credit for sup-

porting an industry. Above is a spread from American Druggist. This is our idea of the way such a story should be presented.

Our readers like it . . . so do advertisers. It's typical of the way business magazines are edited in this shop.

Hearst Business Magazines

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The American Architect receives many requests for information, covering everything from men who seek positions and architects who require men or want back copies of a magazine. To make this service as useful as possible, such requests will be published without charge. Address your reply to The American Architect Want No. () and enclose in a separate envelope. It will be readdressed and forwarded.

Types of subjects eligible for listing are: Architects seeking designers, draftsmen, engineers, specification writers or other assistants—men seeking positions—partner wanted—practice for sale—architects draftsmen and students who have books for sale or exchange, or who want back issues of a magazine—firms seeking a man with architectural training—architects who wish commercial connections, etc.

and sale of legitimate investment enterprises, such as apartment houses, hotels, office buildings, etc. In every one of these activities a skilled architect is absolutely necessary to success. Usually the architect contributes the principle proportion of brains invested in the enterprise. Yet—he usually gets the short end of it in fees.

It will be seen at once that with each of these organizations an estimating department becomes a *sine qua non*. That pusillanimous junk, to wit: "The architect will secure, if desired, preliminary bids on the cost of construction, and will endeavor to keep the actual cost as nearly as possible to the estimated cost," or, "But such preliminary estimates are not guaranteed," should be relegated to the limbo of an impotent past. People do not want good guesses, which often prove poor ones. They do not want to pay for expensive plans which they may never be able to use because of the enormous gap between presumed and actual cost. Architects are pre-eminently equipped to develop estimating departments. By so doing they can secure a vast amount of business, which now goes to speculative builders, for the reason that the latter will make up an estimate without putting the prospect to any large preliminary expense, and most architects will not, that is, they will not make the only estimate worth having, a guaranteed one.

Finally, architects should abandon the cult idea for the profession, and recognize that construction, and the manufacture of materials are not only just as important

but just as respectable as design and engineering. The holding up of the hands in horror at the thought of admitting salesmen to the same ethical and fraternal status as "professional" men is sheer hypocrisy, for the reason that every architect knows that unless he becomes a first-class salesman he is destined to be a thorough-going "flop." Believe it or not, we all have something to sell, and we architects are just as anxious about selling it as any drummer on wheels.

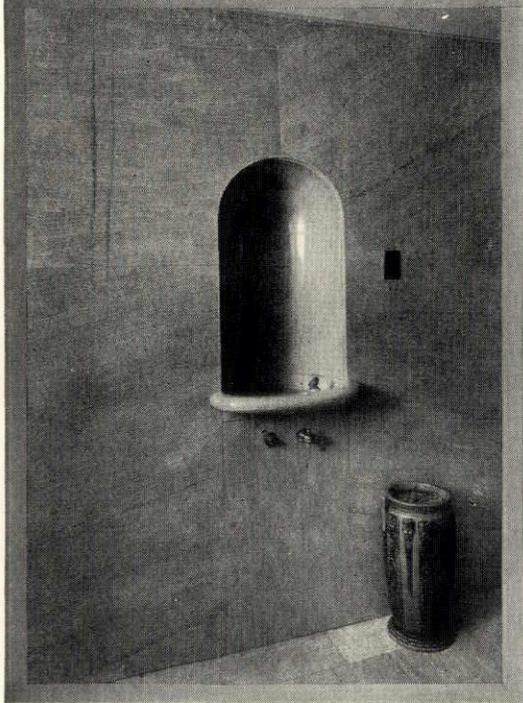
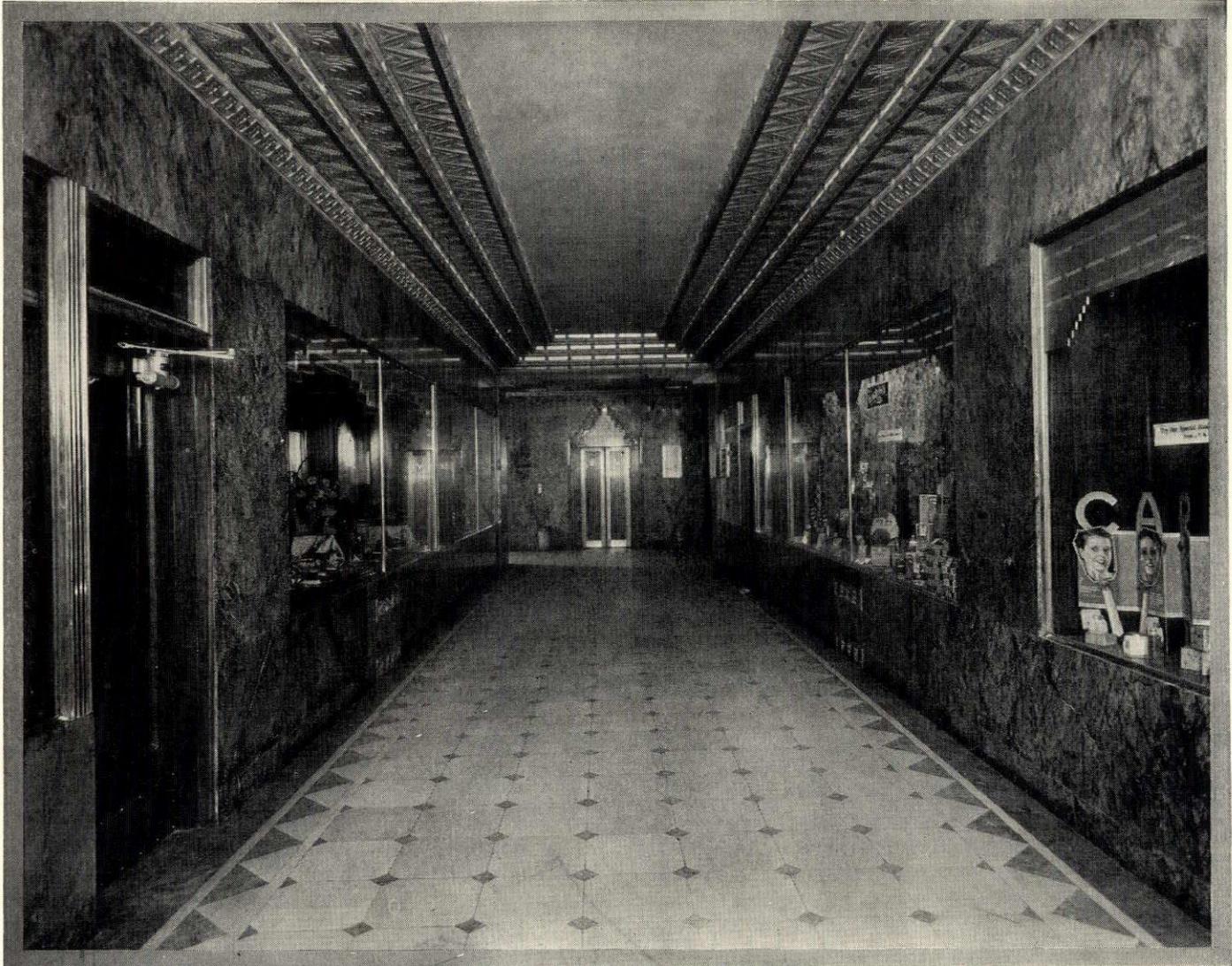
I believe the material men, the Producers Council, for instance, would welcome a radical about face among architects. I am sure they would like to see all building handled by architects, instead of by others. Producers are the only people as a class, connected with the building industry, who are making any money. They have brought this situation about by cooperation, by practical and ethical trade agreements, by striving to give the public better goods at lower prices. Architects, on the other hand, are not only individualistic but divided among themselves.

THE medical profession stands vastly higher in public esteem than the architectural, irrespective of numbers. So also does the legal profession. Perhaps one reason may be found in the methods followed by the three professions in organizing.

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(Continued on page 122)

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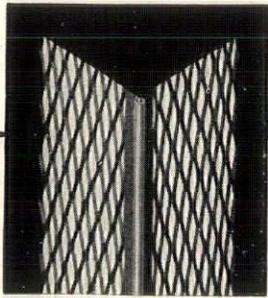
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To become a member of the leading architectural organization is a tedious and indefensible process. Every applicant, instead of being presumed reputable until formally and convincingly proved otherwise, is regarded with suspicion. Members who have already "joined" are invited to send secret missives, under guarantee that there will be no comeback, in which they can unload any spleen, jealousy or dislike they happen to harbor against the applicant. If some disagreeable practitioner chooses to do this, the applicant, however reputable, is frequently ruled out. As a consequence of this policy the profession is not united, and the majority of architects are not members of any architectural society. While such membership is of no particular importance to the present discussion, the lack of unity is illustrative of the demoralization of the profession.

In the *American Contractor* the writer recently set forth the idea that architects, material men and operative builders should form a national organization. The editor of that journal, who is in a position to know the building game about as accurately as anyone, favors the plan. Certainly the cooperation of the Producers, with their annual expenditure of hundreds of millions of dollars, their enormous advertising facilities and budgets, their vast army of salesmen, is a factor to be considered in any movement designed, not to sell architecture, but establish architects as key men in the entire building field. For one, I am convinced the remedy lies primarily with the architects themselves.

Why We Made It Gothic

(Continued from page 27)

time, commercial architecture is leading ecclesiastical architecture in experimentation and in groping for new means of expression, but are we willing to go for our church inspiration to examples such as the Daily News, Empire State or Chrysler Buildings over which the "I do likes" and the "I don't likes" find much to argue about? In designing a church of the importance of the Riverside Church, would it be fair to the clients to produce a building that would create violent likes and dislikes and give rise to the criticism that it was a grand advertising scheme, or is it better to give them a building that will bring forth objection only from the extreme "modernist"?

The average office building in New York is obsolete after twenty-five years; in the construction and selection of materials the Riverside Church was built to last over one hundred years. Would it be desirable to erect such a building in a style, the trend of which is still undetermined and which may, in a comparatively few years, be considered as fantastic as the Rococo? In what public building of similar purpose has that chance been taken? One might reply, "No architect gets the chance, for what owner or group of individuals will assume the responsibility of allowing the architect to do it?" I am, of course, referring only to buildings of a public character. It must be admitted, although doubtless against their will by many architects, that they are encouraged by commercial organizations in the design of spectacular and bizarre buildings for the benefit of the publicity inspired thereby. Mr. Taylor has criticized the Riverside Church pretty thoroughly; will he not describe for



—look down this stairway—

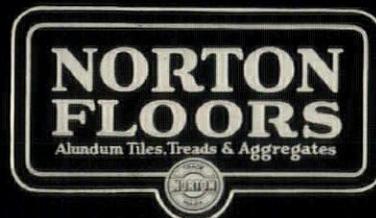
Treads of terrazzo—scores of them

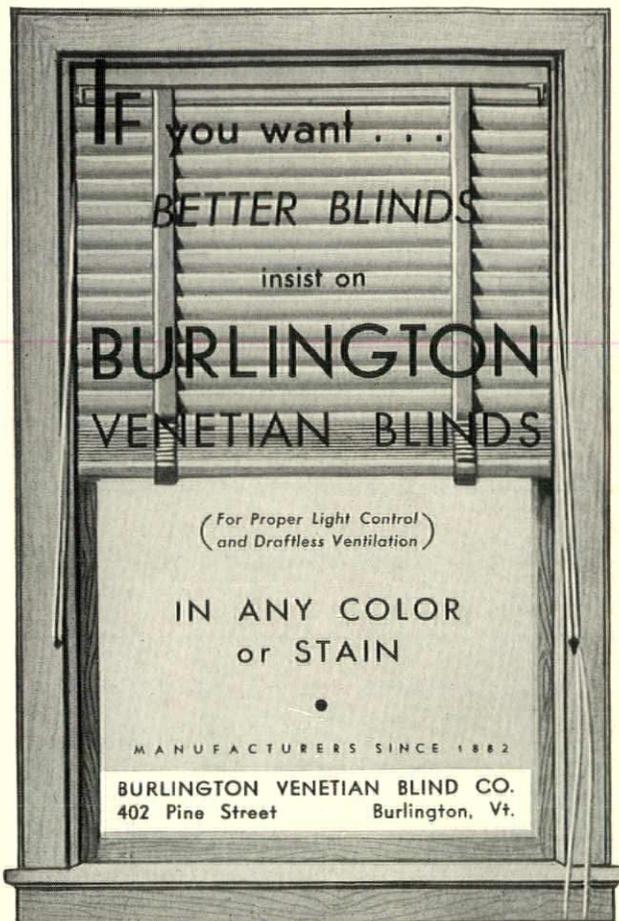
—but they're Norton Terrazzo, terrazzo with Alundum Aggregate added—permanently non-slip terrazzo—durable—safe for customers to walk on..

The large chain stores today seek maximum safety. Note this stairway of a large metropolitan chain store—Alundum Aggregate in terrazzo, a "Norton Floors" product. Two entire floors of non-slip Alundum Terrazzo, also.

The engineers of the same organization also make extensive use of Alundum Stair Tile for treads, Alundum Floor Tile and Alundum Ceramic Mosaics for entrance vestibules, and Alundum Mosaics around lunch counters and soda bars.

NORTON COMPANY, WORCESTER, MASS.





us now or cite some examples of the style which he thinks would be so much more suitable for this building?

But to return to the subject, let us follow Mr. Taylor's example, take a clean sheet of paper and consider the general requirements of the Riverside Church. They are: First, to provide suitably arranged space for religious education and for social, recreational and administrative purposes. Much of this is tower space considered the most desirable and bringing the highest rental in a commercial building. Second, to support a carillon of seventy-two bells at a correct height. The manufacturers of the carillon have accepted the tower with the comment that no better conditions have ever been provided for such an installation. Third, to provide seating space with proper audition and sight lines for twenty-five hundred people congregated for religious worship. That this has been satisfactorily accomplished is unchallenged.

WE next come to the question of the use of structural steel. In the medieval Gothic cathedral the piers and large masonry supports were built of dressed stone enclosing an inner core of baser material, rough masonry, rubble, bricks, cement, etc. Academically, is there such a difference in substituting steel for the composite mass of inferior masonry with which the piers were filled in the old days? Steel is certainly preferable, and furthermore its strength is so much greater than the amount necessary to carry the loads is so small in area that hundreds of square feet of space are released to provide usable rooms.

If structural steel had been available, can we doubt but that the ancients would have used it when suitable, especially for their roof framing, in place of the timber requiring frequent replacement and subject to the ravages of fire? Is it not likely that they would have used steel for the cores of piers rather than various assortments of broken stone?

That the builders of the original Gothic cathedrals knew their stresses and materials so well is not so certain as Mr. Taylor would have us believe. During the World War many buttresses and other supports were shot away from the Cathedral at Rheims without causing the collapse of the building. Does this indicate that each piece of masonry was important in the structural design?

Is not the thought worth considering, that if the Riverside Church had been constructed of masonry in the medieval manner, it might well have taken at least three times as long to build, thus delaying for those years the full achievement of the tremendous religious and social work so ably directed by a pastor of advanced thought and ability?

It is not impossible that the answers to these questions will indicate that a future historian, writing of our present period, may say, "Here were some humans, still practicing a two-thousand-year-old religion, who built a church in a style of acknowledged beauty and in full harmony with their traditions, yet they took full advantage of the modern development of science, engineering skill and materials to create a building of endurance exceeding the average of their time, completely equipped and adapted to the requirements of their period of civilization."



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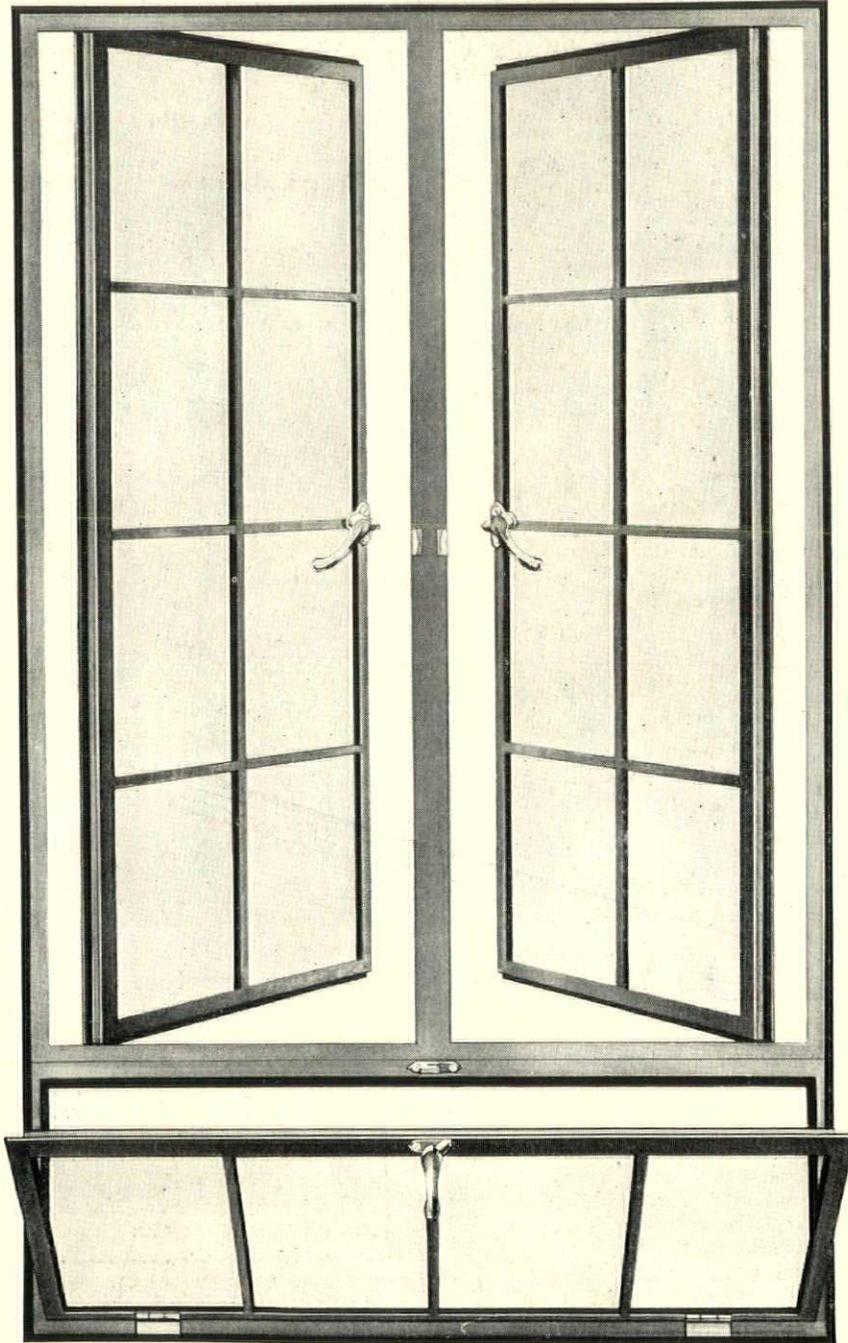
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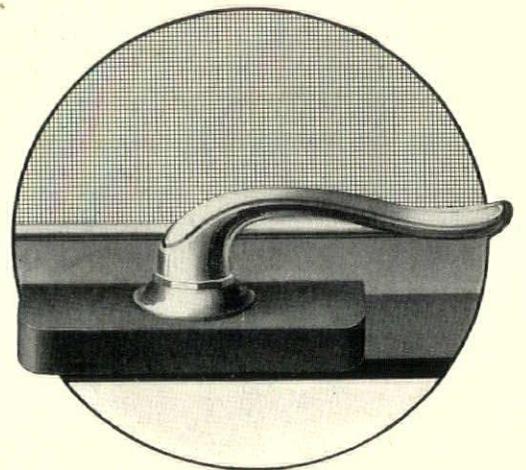
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