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NATIONAL CONFERENCE ON CONSTRUCTION

OCTOBER 13 and 14 are the dates set for the meeting of the National Conference on Construction, which will be held in Washington. Delegates from fifty or more trade groups interested in construction will be invited to attend.

Many urgent matters now facing the construction industry will be dealt with. Economic construction will be the central topic for discussion. Elimination of wastes, better information and planning, and improved organization as a means to economic construction, will be reported on and recommendations made by the conference.

Consideration will be given to the activities of the Home Loan Banking System and the Reconstruction Finance Corporation, and the cooperation and aid the industry can render to these institutions in the present emergency.

The Committee on Arrangements for the meeting consists of Colonel Willard Chevalier, publishing director of Engineering News-Record, chairman; E. J. Russell, president of the American Institute of Architects; A. E. Horst, past president of the Associated General Contractors of America; Oscar Reum, president of the Contracting Plasterers International Association; Fenton B. Turck, Jr., vice-president of the American Radiator and Standard Sanitary Corporation.

FOREIGN STEEL

IMPORTED structural steel selling in coast cities, sometimes as much as twenty dollars a ton under the domestic price, is undermining the concerted efforts of the public to restore employment in the United States, according to the American Institute of Steel Construction.

The purchasing offices of some States now stipulate in their contracts that only American steel may be used in construction projects. The Reconstruction Finance Corporation as yet has not made a ruling on the subject, although it is believed quite possible that on all public work domestic material can be exclusively specified under the present law. It is charged, furthermore, that the bulk of the imported steel is being sold in violation of the tariff act prohibiting the dumping of products by foreign producers.

In order to define the position of the American steel constructors, the board of directors of the American Institute of Steel Construction has adopted the attached resolution:

Whereas, in our economic crisis it is incumbent upon industry that it prevent all possible unemployment, and

Whereas, the importation of steel takes work away from our miners, transportation employees, and mill workmen, and

Whereas, European steel is being shipped into the United States at prices less than cost of production, and

Whereas, European steel is sold to some of our customers as domestic steel, and

Whereas, such shipments and sales are unfair trade practices and tend to lower the price of the home products and thus lower the scale of living of our workmen,

NOW therefore be it resolved by the board of directors of the American Institute of Steel Construction that we reaffirm our loyalty to the steel mills of the United States and to the labor employed in the mining and transportation of the materials used in making steel, and that it is further

Resolved, that we condemn, as improper, foreign government subsidies, or any other devices that permit alien steel to be sold in the United States below a legitimate sales price, thereby producing unemployment and lowering the scale of living of American workmen, and it is further

Resolved, that we continue to support the American mills in their activities to prevent the dumping of foreign steel, and other necessary measures to remove the unfair competition from abroad which is causing unemployment here and disrupting the entire steel industry of the United States, and be it further

Resolved, that a copy of these resolutions be sent to each mill rolling structural steel and to the Foreign Steel Committee of the American Iron and Steel Institute.

CONVENTION OF THE
S. A. C. A.

IN accordance with Article II, Section b, of the By-Laws, the Secretary and Assistant Secretary hereby give official notice that the Fifth Annual Convention of The State Association of California Architects will be held at Del Monte Hotel, October 7 and 8, 1932, and that the opening business session will be held beginning at 9 o'clock Friday morning, October 7, and that the hour for balloting by District Advisors for members at large of the Executive Board is set for Saturday morning, October 8, at 11 o'clock.

Attention is directed to Article X of the Constitution which stipulates that notice of any contemplated repeal of and changes in the Constitution must be mailed to the members at least fifteen days prior to the date of the convention.

(Signed) A. M. Edelman,
Secretary.

AMERICAN SOCIETY FOR TESTING MATERIALS

A. S. T. M. Committee C-9 on Concrete and Concrete Aggregates has more than one hundred items listed in its docket of current activities. It is quite apparent that there is much work to be done in research and standardization in this field. Some of the more important items are outlined below.

The committee on strength tests has studies in progress on methods of capping, on loading beams, and a method of measuring cores drilled from a concrete structure. A suggested standard test method for permeability and the standardization of test methods for absorption are active projects of the subcommittee on permeability. The subgroup on aggregates has more than twenty items listed, including studies of soundness, light-weight types, etc. Standardization work involves tests to ascertain the amount of soft and rotten particles, specific gravity, alternate mortar test for sand, etc. The subcommittee on extraneous substances in concrete is working on the effect of mica in sands; effect of organic material and oil-bearing aggregates, and a standard color solution.

Several other subgroups of Committee C-9 have important problems before them. The subcommittee on admixtures is developing a method of measuring unit weight and the normal consistency of these materials. A standard method of test for determining volume changes in concrete is being worked up by the group covering elasticity and volume changes. The subcommittee on durability has gone forward, including the development of test methods for measuring durability and the method of making (Continued on page 6)
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freezing-and-thawing tests. A proposed method for this latter project was appended to the annual report of Committee C-9 presented at the recent A. S. T. M. annual meeting. Consideration is being given by a subgroup to proposed tentative specifications for ready-mixed concrete.

The following officers were newly elected at the recent meeting of the committee: Chairman, R. W. Crum, director, Highway Research Board, National Research Council; Vice-Chairman, Stanton Walker, director, Engineering and Research Division, National Sand and Gravel Association; Secretary, R. R. Litchiser, chief engineer, Bureau of Tests, Ohio State Highway Department.

A. S. T. M. Committee D-18 on Natural Building Stones has several important projects which will be actively advanced during the ensuing year. One of these is the completion of a uniform cubing procedure for building stone. A subgroup has been active in formulating uniform names and descriptions of finishes and will have these in form for publication as a tentative standard if approved by the society. A revision of definitions of terms applying specifically to natural building stones is in progress and the committee hopes to have these completed before 1933.

The study of accelerated weathering, thermal, and fatigue test procedures will be advanced and should result in suggested standard test methods.

At the recent meeting of this committee, the following officers were elected for the ensuing term of two years: Chairman, W. M. Greig, masonry engineer; Vice-Chairman, F. Y. Joannes, architect, Structural Service Department, American Institute of Architects; Secretary, H. S. Brightly (re-elected), secretary-director, Building Stone Association of Indiana, Inc.

FRANK HAVILAND QUINBY, 1868–1932

FRANK HAVILAND QUINBY, former chairman of the City Plan Committee of the Brooklyn Chamber of Commerce and architect of many of the summer estates of Bar Harbor, Me., Long Branch, N. J., and Tuxedo, N. Y., died at his home in Brooklyn, N. Y., on August 9.

Mr. Quinby was born at Armonk, Westchester County, N. Y. He was educated privately and at the Chappaqua Mountain Institute. In 1892 he established a general practice in New York.

Among the more important works to his credit is the Kings County Court House in Brooklyn. He designed the grandstand at the Havre de Grace Race Track in Maryland and at the old Brighton Track in New York.

Mr. Quinby was elected in 1886 a fellow of the American Institute of Architects. He served for two years as president of the New York State Association of Architects and president of the Brooklyn chapter of the A. I. A. He was a director of the Long Island Historical Society, the Association for Improving the Condition of the Poor, the Good-Will Industries, and the Brooklyn Chamber of Commerce.

From 1900 to 1907 Mr. Quinby was chairman of the board of directors of the Chappaqua Mountain Institute. At his death he was a trustee of the City Savings Bank, president of the Seventeenth Realty Corporation, and a member of the Kenmore Association of the State of Virginia.

HARRY ALLAN JACOBS, 1872–1932

HARRY ALLAN JACOBS, architect of New York City, died on August 22 in Mount Sinai Hospital, following an operation. Mr. Jacobs had been in ill health for a year and recently was brought down from his summer home at Lake Placid for the operation. He seemed to improve after it, but suffered an unexpected relapse.

Mr. Jacobs was born in New York and was graduated from the School of Mines at Columbia University in 1894. He then went to Paris and studied for five years at the Ecole des Beaux Arts. In 1897 he was awarded the Prix de Rome in architecture. He returned to New York in 1900 and began his architectural career.

Among the New York hotels that he designed are the Marseilles, the Sevilla, and the Elmsley. He also designed the Friars' Club House, the P. W. French & Co. Building, the Hardman-Peck Building, the Avedon Building, the Hebrew Sheltering Guardian Society Home at Pleasantville, N. Y., and the Norwood Country Club at Long Branch, N. J.

Mr. Jacobs designed the New York City homes of James J. Van Alen, R. Fulton Cutting, and Adolph Lewisohn (originally built for John W. Herbert). He also designed three houses built by Otto H. Kahn in East 86th Street and the country home of Lieutenant-Governor Herbert H. Lehman at Purchase, N. Y. Two of his best-known works are the homes of Adolph Zukor and Sam Katz, near Nyack, N. Y.

Mr. Jacobs was a fellow of the American Institute of Architects, a member of the Architectural League of New York, and of the Society of Beaux Arts Architects. He was a past president of the alumni of the American Academy in Rome.

EDWARD SCHRODER PRIOR, 1852–1932

EDWARD SCHRODER PRIOR, Professor of Fine Arts at Cambridge, and an architect, lecturer, and writer, died in London on August 21. Educated at Harrow and at Cambridge College, Cambridge, where he took a master's degree, Professor Prior studied under R. Norman Shaw, of the Royal Academy, and later became architect to Harrow School, Cambridge, and Winchester College. He was one of the founders of the Art Workers' Guild and was master of it in 1916. From 1902 to 1917 he was secretary of the London Arts and Crafts Exhibition Society, and its vice-president in 1918.

Professor Prior is credited with having made architecture a recognized course of study at Cambridge. He was the author of "A History of Gothic Art in England," "The Cathedral Builders in England," "The Medieval Figure-Sculpture of England," "The Sculpture of Alabaster Tables," and "Eight Chapters on English Medieval Art."

PERSONAL

William Neumann & Sons, architects, announce the removal of their offices to 587 Summit Avenue, Jersey City, N. J.

L. L. Brasfield, architect, has opened an office at 202 Kidder Building, Meridian, Miss., for the practice of architecture, and would like to receive manufacturers' catalogues and samples.

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A collection of sixty photographs
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NEWARK
NEW JERSEY
La Iglesia, Monterey, Mexico
From the drawing in lithographic crayon
(The reproduction is at half size)
by E. M. Schiwetz
Today's Craftsmanship in Tile

By Eugene Clute

URIOUSLY enough, an art of royal antecedents, that of tile-making, having adorned the palace of an Egyptian Pharaoh thirteen centuries before the Christian Era and having played a noble part in the architecture of temples, mosques, and palaces down through the ages, came to be regarded, in our country during the past fifty years, almost exclusively as a means merely of achieving white tile cleanliness. And this attitude was shared by architects who should have known better through acquaintance with the beautiful tile work of Persia and the old Spanish and Italian faience.

Now, however, with the encouragement of architects who appreciate the possibilities of the material, the tile industry in this country is shaking off its recent bathroom traditions and getting rid of its mechanical-perfection complex.

Once more, tile is taking its rightful place in the architecture of the finest buildings. Through the manipulation of clay, glazes, and fire, effects of great beauty are being produced by American craftsmen in this field. Excellent use of these products is being made by architects and fine tiles are also being brought from the European factories, notably from those of Spain and Holland.

One of the most interesting developments has been the production of a new type of floor tile that is rich in effect, with the soft rose tint of old charcoal-burned tile, but capable of withstanding the hardest usage. The first tiles of this kind were made recently for the floors of the principal rooms of the new West Side Y. M. C. A. on 63d Street, New York City, at the instance of the architect of the building, Dwight James Baum, and under his direction. They are of clay
Dado and wall panel in one of the swimming-pools of the West Side Y. M. C. A., the tile of which was made from Dwight James Baum's designs by Lafitte, of Seville
Pompeian swimming-pool in the West Side Y. M. C. A., where Mr. Baum has worked out, in collaboration with the Cambridge-Wheatley Company, a scheme in cloisonné tiles of red, black, yellow, and blue of special composition, hard-burned and un­glazed. The color variation ranges from deep tan through rich browns to a very dark brown, almost black, and always there is the undertone of soft old rose. They are filled with raw linseed oil, which is absorbed and hardens in the pores; then they are waxed. Usually they are employed with inserts of smaller semi-glazed tiles in plain colors.

These floor tiles represent only a small part of the interesting tile work in this particular building. When the question of interior treatment came up it was decided to use plaster and tile, following early Italian precedent in the use of tile floors, tile bases, and tile about the window and door openings. This method of treatment characterizes the principal rooms.

Of special interest, as examples of the use of tile in this building, are the two swimming-pools, the one Pompeian in treatment and the other Hispano-Moresque; and the cafeteria, which is Spanish. Details of these are here illustrated.

Another notable example of the use of tile is the residence of Anthony Campagna, at Riverdale, N. Y., of which Dwight James Baum is also the architect. This house is in the manner

A basement stairway in the West Side Y. M. C. A. Dwight James Baum, architect; tiles by the Cambridge-Wheatley Company; installation craftsmanship by William H. Jackson Company
of an Italian villa of the fifteenth century, and it embraces a private theatre which is surrounded by vaulted passages paved with tile. A tile-paved grotto leads from the theatre to the gardens, and upon the top of the orangery is a pavement of tiles. In a connecting building is a glass-enclosed swimming-pool.

Throughout the house the bathrooms are in tile of soft coloring with plain fixtures in colors to match. One of the principal bathrooms is especially fine; the dado is in pale lavender tile and the walls above it have painted decorations with motives from under-sea life—the coral, sea anemone, and the like, all in soft shades of pink and lavender and green that harmonize with the lavender tile. The decoration of this bathroom represents a type of treatment that is especially good, namely wall decoration, in some other material used above a tiled lower wall. This gives the requisite life and interest to the room, while retaining the advantages of tile where it is best fitted to serve. In less costly residences and in modest homes and apartments, a glazed wall paper in one of the excellent designs that can now be had will serve admirably upon the upper wall; not necessarily in an under-sea design and not in a tile pattern, of course.

There have always been some architects who have known the value of tile and how to use it; therefore, there are isolated examples to be found in the work of the past decades that are excellent. Among them is the series of panels with pictorial representations of child-life in the entrance to the Heckscher Foundation on Fifth Avenue at 105th Street, New York City. These are of the opus sectile type, that is, the sections of tile are so shaped that the joints follow the outlines of the design in most instances and do not break up the design.

Still older, by perhaps a score of years, are the admirable patterned floors of marble and tile in the Cathedral of St. John the Divine, portions of which are shown by the accompanying photographs. Marble and tile combine especially well where great beauty and richness are required, and such treatments as these lend to buildings of monumental scale the richness and warmth they often require, serving with suitable dignity
in the same way that a rich oriental carpet serves in a living-room.

The use of tile in ecclesiastical architecture includes representations of subjects of religious significance which can be made to special design. Of such character is the remarkable series of the fourteen Stations of the Cross, produced at the Royal Delft Works in Holland. These Stations have the permanence, richness of coloring, and architectural character of fine ceramics, with the delicacy and accuracy of detail of oil paintings.

In passing, it is interesting to note the renewed development of ceramic art at Delft as a result of the efforts of the late Joost Thooft, a graduate of the Technical University of Delft, assisted by Adolf LeComte, professor of decorative design at that institution, and later through the work of M. Labouchere, who was to become head of the organization. At the beginning of the present century M. Mauser, the managing director, introduced and made commercially possible for wall tiles the wonderful crystallized glazes of rich and beautiful coloring for which Royal Delft is now known.

As the methods of production largely control the design and the texture, and determine the decorative effect in tile, it may not be amiss to outline these processes very briefly here. As a rule, the smooth, perfectly regular tiles are "dust pressed"; that is, they are formed from clay in a dry state which is placed in steel moulds and consolidated under great pressure. The resulting "bisque" or "biscuit," as the body of the tile is called, is then placed upon a belt-conveyor, face downward, and passes over rollers that apply the glazing substance. (Sometimes glaze is sprayed on.) The tiles are then fired and sorted for size, imperfect tiles being rejected.

Cloisonné tiles are those which have a pattern of depressions in the surface. The ridges or walls between these depressions prevent the different colored glazes from flowing together while in a fused state. Cloisonné tiles are "dust-pressed" as a rule. Another type is the "wet-pressed" "plastic" or faience tile. Tiles of this type are formed of moist or wet clay in a plastic
Tile and marble combined in the chancel floor of the Cathedral of St. John the Divine, New York City.

One of a series of the fourteen Stations of the Cross. The panels are twenty-seven inches high, and were made at the Royal Delft Works in Holland from the designs of L. Serf.

state, which is either pressed into a steel mould or into a plaster mould; this type includes the hand-made tiles. They are glazed by dipping each one separately by hand in a bowl of glazing substance. The glaze is then allowed to dry and as it dries it cracks, like the surface of a muddy road in the sunshine. They are then fired in a kiln. Usually the firing causes the cracks to disappear, but often the traces of them are retained for their decorative effect through control in the firing. Such irregular lines in the glaze are known as "water marks." By simply setting the tile in the kiln so that it slants a little to one side or one corner, the molten glaze may be caused to flow to the lower portion, which will have a deeper color. By interrupting the firing at the right moment and by other manipulation, various beautiful irregularities of coloring and texture can be produced. Many of the effects are due, however, to the compositions of the glaze. For instance, crystallized effects are produced by glazes that contain substances which crystallize quickly while the glaze is in a molten state. The colors are produced by substances that seldom give to the layman any idea of the beautiful colors they will assume under the action of fire. It is a fascinating, colorful art-craft, tile-making.
Recent Buildings at Princeton University
CHARLES Z. KLAUDER, ARCHITECT

1903 Dormitory, from the east
Photographs by Richard Averill Smith
Within the court of 1903
Dormitory, from the west
The H. B. Fine Hall of Mathematics, from the west
Detail of main entrance, H. B. Fine Hall of Mathematics
Detail of south side of H. B. Fine Hall of Mathematics, showing one of the re-entrant bays
Walker Dormitory, from the South. Dormitory adjoins it just beyond the steps at the extreme left.
One wing of the Walker Dormitory, from the west
Dickinson Hall, from the north. At the top of the steps to the right the wall with its two arches joins Dickinson to the Chapel. This wall was designed by Cram & Ferguson.
A vista of Dickinson through the wall connecting Mr. Klauder's work with the Chapel. This wall is the work of Cram & Ferguson.
Lockhart Hall Dormitory, from the northeast

ARCHITECTURE

LOCKHART HALL
DORMITORY

First Floor Plan
The passage through Lockhart Hall, as seen from the southwest.
A Series of Working Drawings by Jack G. Stewart

Scale: 1" = 1'-0''
Detail of mausoleum in the New Military Cemetery of Riga. Developed by the Republic of Latvia with plans and supervision by Herr Zaile, sculptor.

The new United States Courthouse for the City of New York, which Cass Gilbert has designed for a site near the Municipal Building.

The baby incubator station designed for the Chicago Century of Progress exposition by Schmidt, Garden & Erikson, architects.

Charles Keck's new bronze of Lincoln, presented to Wabash, Ind., by the late Alexander New.

The new Bryan Memorial Town Hall at Washington, Conn. Cameron Clark, architect.


Architectural News
in Photographs

One of four murals, each symbolizing one of the seasons, painted by M. Guillonnet for the Wanamaker Men's Store in Philadelphia.

A glimpse of the Washington, D. C., Cathedral in the building—Frohman, Robb & Little, architects—as caught from the Bishop's garden.

A water reservoir tower for Washburn Park, Minneapolis, Minn. Harry W. Jones, architect.


Proposed Edgewater co-operative housing for Chicago—eighteen two-story garden homes in the group. Albert D. Levy, architect.

The A. T. and T. Company's Long Distance Building on Sixth Avenue, New York City—an old building enlarged. Voorhees, Gmelin & Walker, architects.

Most discussions of color in its practical use lean upon the basic discovery by Sir Isaac Newton that white light may be separated into its constituent elements by being passed through a prism. The practical difficulty is that color in light and color in pigment form are widely different and should be clearly distinguished. The author's practical working hypothesis is based upon a pigmentary standard—and every one of the twelve primary pigments is available in a tube. The book simplifies amazingly the possibility of using color intelligently and with assurance.


Here are the first fruits in permanent record form of the President's Conference on Home Building and Home Ownership held in Washington last December. Every one present at that conference must have been amazed at the fund of information brought together as a result of the various committees' efforts. That fund of information is now partly in printed form, other volumes being still in preparation. The volumes now available and in preparation, all edited by John M. Gries and James Ford, form a record of experiences and deductions upon which our future domestic building must necessarily be based. President Hoover has said: "The next great lift in elevating the living conditions of the American family must come from a concerted and nationwide movement to provide new and better homes." Here are the documents forming the programme for this movement.


A biography of the man who, unable to study art as he wished, became a builder's helper, then an architectural draftsman, and finally a power in world politics.

THE DRAMA OF BUILDING: III

A SERIES OF PHOTOGRAPHIC STUDIES BY JEANNETTE GRIFFITH WHICH MAY HELP US TO APPRECIATE THE STIRRING MAGNIFICENCE OF OUR OWN CONTRIBUTION TO THE HISTORY OF BUILDING

Jeannette Griffith

Forms of Steel for Walls of Concrete
The Stream of Concrete

Jeannette Griffith
Removal of the Forms

Jeannette Griffith
SURFACING THE CONCRETE WALL FOR ITS FINISH

Jeannette Griffith
The house is built on the top of Lookout Mountain, overlooking Los Angeles, Beverly Hills, and the Pacific Ocean.

House of Edward A. Bailey, Los Angeles, Calif.
Roy Seldon Price, Architect
The house as seen from the public road. The garage is at the right and the arched entrance to the laundry at left centre.

Photograph by Miles Burme

The entrance gate to the garden as seen from the road. At left, the stairs lead to a garage balcony.

Photograph by Albert E. Carwood

House of Edward A. Bailey, Los Angeles, Calif.
Roy Seldon Price, Architect
Main entrance from the garden. At the left may be seen, through the doors, the large living-room windows, commanding the view.

The garage closes one end of the garden, helping to shelter it from the sea wind and the public road.
The fireplace end of the living-room, as seen from the upper level of the dining-room

House of Edward A. Bailey, Los Angeles, Calif.
Roy Seldon Price, Architect
The south terrace and main entrance

House of Randolph P. Compton, Scarsdale, N. Y.
Electus D. Litchfield, architect
Ruth Dean, landscape architect
The house from the entrance driveway. The owner's desires were to have a house which would seem native to Westchester County, with the feeling of having been there for many years.

House of Randolph P. Compton, Scarsdale, N. Y. Electus D. Litchfield, Architect
Kitchen wing and garage. In his combination of whitewashed stone, shingles, and clapboards Mr. Litchfield has secured the character of early construction to which additions have been made from time to time.

House of Randolph P. Compton, Scarsdale, N.Y. Electus D. Litchfield, Architect

Second-floor plan

Attic plan

"Architecture"
End of north wing, with children’s sleeping-porch

House of Randolph P. Compton, Scarsdale, N. Y.

Electus D. Litchfield, Architect
The hall. Here the old block paper is printed in apricot shades, the woodwork a natural-finish pine.

House of Randolph P. Compton, Scarsdale, N. Y.

Electus D. Litchfield, Architect
In the living-room the wall paper has green foliage and orange flowers on a blue ground. Woodwork is natural-finish pine.


Children's dining-room and breakfast room. The floor is of flagging, the trim and walls blue. The window shelves are for a collection of antique glass.
Some Pitfalls in Supervision

By W. F. Bartels

HEN a building has been completed, it supposedly is protected against any entry of the elements. The most vulnerable lines of defense are under the sills and around window and door frames. And it is here that the thin light line of calking fails or succeeds in playing the role of heroic resistance.

Expert opinion lays the cause of over 80 per cent of air leakage to frames. Aside from this heat loss there is excusable exasperation when a driving rain turns the plaster surrounding the window or door into an unending series of batik designs. Where beads of water appear at the window head to drop and splash on costly draperies or floor, even a calloused superintendent will swear that never again will he overlook the importance of a first-class job of calking.

Calking compounds are generally made of a mineral base plus different oils in varying proportions. Asbestos fibre is often included. The particular usage and the means of application together determine the ingredients and their relative proportion.

Among other characteristics the compound must be elastic. It must develop an outer skin capable of taking paint without destroying the color of the latter. It must adhere perfectly under both heat and cold. It must not crack or cease adhering to any surface, although one may be of stone and the adjoining one steel. Neither must it crack or pull loose under vibration. And withal the material beneath the surface must remain plastic.

If time permits, it is a good idea to expose to the weather the proposed samples on the same kinds of material and under similar conditions which will be met later, in order to observe the effects of the elements on them. Any detachable portions of the window frame, such as staff beads (unless they are an integral part of the frame) should be removed so that the calking material can be forced between the frame and the abutting wall material. If stone or marble be used next to the frame it would be worth while to find out if the particular calking material employed will stain them. Often it will be advisable to coat the adjoining surface with a colorless filler if it is found that the calking material will stain it.

Many of the metal windows of today have a small strip or fin which is supposed to fit against the wall and form a backing for the calking. In actual practice this fin often does not entirely perform its supposed function. In such cases the superintendent should see to it that the hollow space is tightly rammed with oakum.

Before applying the calking compound the joints should be well raked out; if there are any gaping holes these should be pointed up. Then if the joints are more than \( \frac{3}{4}'' \) wide and \( \frac{3}{4}'' \) deep, it is advisable to fill them first with a good grade of oakum solidly tamped. The oakum should be at least a half-inch back from the surface in order to allow space for the calking compound. The latter should be applied under pressure sufficient to force it tightly back against the oakum or the masonry. Often in their hurry to complete the job the workmen will pass the calking gun over the joint so quickly that only a thin coat is formed on the surface, leaving an air pocket behind. It is only natural that this negligible amount of calking will dry and pull away from the surfaces, thus leaving the joint behind exposed. After the calking is finished it should be neatly pointed up by employing a small tool dipped in water to prevent adhesion to the compound. This smoothing over also has the advantage of bringing to the surface some of the oil in the material, thus closing many of the minute pores.
The grading of glass, like that of lumber, is done according to the best judgment of the graders. There are, of course, certain rules by which to be governed, which will be discussed, but what should be appreciated at the outset is that there is no definite line of demarcation between various classifications. For instance, blisters (small oval bubbles) would not be tolerated in the centre of an "A" quality piece of glass, while they might be overlooked if occurring along the edge. The superintendent should be on the most familiar terms with the rules for grading glass, and then see that the material installed is what the owner is paying for. It is likely to make any owner decide that Prohibition days are over when, on looking through his windows for the first time, he sees his garden and his neighbors' houses wobbling in all directions.

A superintendent tells a story of a house he built in California. The house stood at the head of a turn in the electric railroad. No sooner had the owner moved in than the superintendent was summoned to the house. When he arrived the owner upbraided him for the poor glass. The superintendent tried to appease the owner, and had not entirely succeeded when they entered the living-room, which was on the axis of the tracks of the electric railroad. At that moment a train was coming up the track, and instead of rounding the turn as it should have, it appeared to head straight for the house. The superintendent quickly moved out of the train's apparent derailed path—not, however, without a comment on the sudden move by the owner. Needless to say, new glass was immediately furnished that owner, and the superintendent was forever after on the lookout for curved glass.

Good glass is an asset. Its sparkle and brilliance is noticeable to the layman, although his knowledge of its classification may be nil. Of course, heavier glass costs more than thin grades, but probably effects a saving toward the additional cost by the economy in heat, and fewer breakages from minor bumps. Then too, a thicker glass, by the nature of its manufacture, gives a greater degree of clearness and fewer distortions, not to overlook infinitely more "standing" to the job. A first-class glazing job costs such a slight amount more than an ordinary one that it would seem obvious that inferior material does not pay; yet unfortunately this often is not appreciated. Too often when a zealous salesman submits a small sample of a lower grade of glass, it is substituted without the architect's realizing that the sample is small and flawless, and probably does not represent the larger sheets with their numerous blemishes. And the superintendent is invited to laugh off one more potential headache.

It should be realized that not all parts of a sheet of glass will have the same degree of perfection. To demand that edges have the same clear uniformity as the centre would be asking too much. Then, too, tilting almost any glass at a sharp angle with the eye will disclose the presence of waves. It is evident that without considerable experience a superintendent might overlook certain flaws, while others might be severely condemned. To provide an equitable method of testing, the U. S. Bureau of Standards says: "The glass should be examined when placed in a position similar to that of a glazed light, with the observer's eye on a level with the centre of the sheet and looking through the glass from a distance of about thirty-six inches, into the light and without any sun and without any close background."

Plate window glass comes in two grades: "second silvering" and "glazing quality." It should be appreciated that the larger the glass the more flaws there are likely to be in it, hence size is a governing factor in the grading. Specifications covering the allowable defects in each size may be obtained from the U. S. Bureau of Standards, Bulletin 164. However, the glass of reputable manufacturers will be found to be well within the limitations imposed on them, and all grades will have their classifications noted on small labels pasted on the glass.

Plate glass thickness runs from $\frac{1}{8}''$ to $\frac{1}{4}''$, although the standard generally thought of when plate glass is mentioned is $\frac{3}{4}''$.

Regular window glass is supplied in two grades, "A" and "B," in which either single or double strength may be obtained. Inferior grades, such as fourth quality in both, and "C" in single, should not be allowed on the job by the superintendent. A glass especially free of defects and ranked above the others is known as "AA." This is not generally used commercially except for very special installations. The weights and thicknesses of these glasses may be obtained from the U. S. Bureau of Standards Bulletin.

(To be continued)
IT is curious how often one has to convict the architect of a lack of thought with regard to his steel casements. In the group windows so widely used today, the effect from without is liable to resemble the proverbial hole in a blanket if the designer does not watch his color. A contrast with the dark void is absolutely essential if the mullions and muntins are to do any service whatever in articulation and scale.

WE in America seem to prefer the huddle form of café and dance hall plan with a square or circular dance floor in the centre. A different solution is suggested by the Drink and Promenade Hall at Bad Tolz, which Baukunst und Stadtebau shows as the work of Moll & Von der Velden, architects. The promenade hall is long and narrow, individual tables for two being placed in each bay with a scale relationship which is particularly effective. The base and window sash are very dark, the walls and ceilings light.

DER BAUMEISTER, of Munich, reports a new binder invented in Germany which has been used with very good results in cementing glass to wall or floor surfaces. Glass has obvious advantages in its hardness and resistance to acids, alkalies, weather, and hair cracks. Putties, screws, frames, and the like for holding it in place are not always satisfactory, and are expensive. Cement mortar, unfortunately, did not give a satisfactory result, due to the different coefficients of expansion. The new binder is known as Richtrol. It is merely mixed with water, and applied to the back of the glass, after which the slab is set in cement in the same manner as tile. Richtrol can be colored by means of mineral color.

IN the marshy region of the Bresse, north of Lyons, in France, it is not uncommon to find such walls as this one. What stone is found in the section is used for the enclosures, the domestic architecture being of brick, wood, and plaster. The herring-bone effect obtained with
these rolled pebbles is, so far as we know, local. The irregularity of the intervening stone courses, and the partial gradation in the sizes of the pebbles used, are suggestions worth noting.

Once upon a time there lived an architect whose imagination was not stirred by the idea of the hanging gardens of Babylon."

Any tale starting out like that would make for dubious reading. For from the embryonic student days onward every architect always sketches foliage on every terrace, even though he has half a suspicion that it won't flourish particularly well. But the idea thrives, and keeps appearing whenever a vulnerable elevation presents itself.

So what would any architect do on leaving those two famous cafés at the intersection of the Boulevards Montparnasse and Raspail and within two blocks see this apartment house on the Rue Vavin, but hie himself back to the cats once again and drink to the happy fulfillment of Babylon's hanging gardens! For here they are, rounding out at least six years with the flowers still growing, the white glazed tiles still glistening, and the occasional blue inserts still sparkling! We do not know whether, or if ever, the concierge dry-cleans or wet-cleans the tile. Nor whether owner or tenant tends the gardens. But we do know that every time we go back to Paris the spotless tile and the flourishing greenery make us turn the corner and have a Benedictine or two on this very old idea done in a very new way.

Many the time that a balcony has inspired a Romeo but seldom if ever has an ash-hoist inspired an architect. Yet behold this wonder accomplished in fact at 137bis, Boulevard Raspail, Paris. There was to be a balcony where the mesdames could discuss the made­moiselles, and where the mademoiselles could titter at the passing messieurs. Also, there was to be an Americanized ash-hoist which would enable the concierge to be as elegant as the passing messieurs. The architect, being a democratic fellow with a Gallic sense of humor, made the designs of balcony and ash-hoist alike. Almost alike, to be sure, for one must not offend. The balcony, he is cast iron painted black, and the hoist cover, he is pierced sheet iron painted gray. Eh, voila, there is unity, harmony, and fraternity—not to mention the saving in cost of designing!
Monday, July 25.—The National Association of Real Estate Boards says that a building boom is about ready to be checked off.

"Even under present pinched conditions of family income and consequent doubling up of families, 10 per cent of 356 cities surveyed in the United States and Canada report a shortage in homes.

"Seventy-six per cent of the cities reported a normal balance of supply and demand in private family homes, and only 14 per cent have an oversupply. Six per cent have a shortage of apartments and 66 per cent a balanced condition."

A. S. Douglass, who is chairman of the Detroit Building Congress Research Committee, finds that 44 per cent of the single houses in Detroit are more than seventeen years old, and 48 per cent of the two-family flats are of like age. Obviously the house built seventeen years ago is now decidedly below par in its equipment unless an unusual effort has been maintained constantly to keep it up to date. Unquestionably there is a huge potential market awaiting the first sign of re-established confidence to open it up.

Tuesday, July 26.—Arthur Holden keeps hammering away at the injustice and inequality of our methods of taxing land. A skyscraper goes up, and the city opens it up.

"Sign of re-established confidence to keep equipment unless an unusual effort has been maintained constantly to keep it up to date. Unquestionably there is the possibility of a market only on this particular piece of land, but on surrounding parcels, thus forcing the unnatural development to the limits of allowed density."

To which Lee Lawrie laconically replies: "Somebody is always trying to bait a painter, illustrator, or sculptor for taking undue liberties with his subject. Lee Lawrie put a beard on the Prophet Ezekiel for the Nebraska State Capitol. Some one in Lincoln, Neb., objects, quoting chapter and verse to show that Ezekiel was beardless: "And thou, son of man, take thee a sharp knife, take thee a barber's razor," reads the Scripture, "and cause it to pass upon thine head and upon thy beard." The Prophet Ezekiel, therefore, must have been beardless. To which Lee Lawrie laconically remarks: "Well it would appear that Ezekiel must have had a beard if he was ever to cut it off."

Tuesday, August 2.—Professor Milton S. Osborne, of the University of Manitoba, was in today and I was delighted to hear that his graduating students, in the preparation of their theses for degrees, make full working drawings of the buildings they design. So far as I know there are only two architectural schools that do this—The University of Manitoba and the University of Minnesota— the others preferring to allow the student to walk out into the practice of architecture still treading the tenuous clouds of his own fancies, and without much of an idea of what a working drawing looks like.

Wednesday, August 3.—Lunched with Harold Buttenheim, editor of The American City, and Benjamin C. Marsh, secretary of the People's Lobby, of Washington, discussing the difficulties that we face in carrying out the provisions of the new Emergency Relief and Construction Act of 1932. The Act has great possibilities in stimulating building and particularly for enabling the accomplishment of some real improvement in large-scale housing. The great stumbling-block is the money to be paid for the land. Of course, the more obvious speculative profits on the land are avoided through the requirement of appraisal by the proposed State Commission of Housing and Planning, which commission, it is proposed to confer the power of eminent domain. Even with these safeguards, however, the goal of really low-cost housing will not be achieved without some radical revision of our conception of what land for this purpose should be made to pay as a return to its owner.

Friday, August 5.—Out most of the day photographing examples of mar­ques. Here is an architectural feature that, while appearing on some of the most recent work, seems to be giving way to some type of awning which can be erected or taken down quickly. As the marquee grew in its extent of projection, from a shallow shelter of glass and iron to a heavy projecting element covering the whole width of the sidewalk, it became a difficult element to design. Where the form still persists, it is being made very much more slender in its lines and lightness. Provision against damage to the glass by objects falling from the upper stories remains a difficult thing to achieve.

Saturday, August 6.—Austin Purves, Jr., who is directing the teaching of art in Cooper Union, is eliminating from the first-year general course the teaching of the technique of drawing. He is trying the experiment of allowing the students to find their own technical expression in their first year of art training. The scheme has not been attempted elsewhere except possibly in the art schools of Vienna.

Monday, August 8.—One meets more and more people these days who are doing sufficient thinking to realize that the way out of our economic morass lies somewhere between the widely separated paths of continued construction of budgets on the one hand and a dole of artificial money on the other. Willard Chevalier, vice-president of the American Road Builders Association, points out that our bill for all types of construction in this country amounted in 1926 to approximately nine billion dollars. At the beginning of the boom it rose to approximately ten billion dollars. In 1930 it fell to eight billion, and in 1931 to six billion. In recent normal years the average for public works has been three billion dollars. This, of course, includes State, county, and municipal works. Federal work never accounted for a very large part of the three billion, nor can it be expected to fill the whole gap now. Expansion of municipal, county, and State public works is necessary to touch off a resumption of the normal private building movement.

Wednesday, August 10.—Met Henry R. Shepley at the New York Hospital-
Tuesday, August 16.—I see that they have been digging up some slate tombs at Grenoble dating from about 700 B.C. The graves were those of the Ligitres, people well over six feet in height, who were clever enough builders to construct practically unaided a tomb—a really a grave that was slate lined, the joints being tightly cemented. It is interesting evidence as to how long slate will last under ground.

Wednesday, August 17.—Lunched with Egerton Swartwout and was particularly interested in some of his difficulties in having properly executed by French workmen the battle monument at Mont Sec to commemorate the work of American forces in the St. Mihiel region. In spite of unusual care in detailing, using, of course, the metric system, the French workmen persisted in doing things in the way to which they were accustomed. One thing that rather startled me on a trip of inspection we found the stonemasons cutting his wreaths upside down. They insisted that the proper way for a wreath to be shown is with the loose ends at the bottom, scale drawings to the contrary notwithstanding.

Friday, August 19.—Through the generosity of Thomas Cochran, the Arc de Triomphe de Carroussel, in the Tuileries Garden, has been restored at a cost of approximately one million francs. The quadriga, which came originally from the Sun Temple at Corinth, was placed on the Arc in 1808. When Paris was invaded by Napoleon in 1815 after Waterloo, the quadriga was removed to Austria, and then to St. Mark's, Venice, where it now stands. Baron Bosio designed the replacement group in 1820 at the direction of Louis Philippe, and it was on this piece particularly that most of the restoration work was needed.

Saturday, August 20.—I hear that Frank Lloyd Wright is establishing an architectural school near his home, which will be called Taliesin Fellowship. I wish I were young enough to attend it, for Wright is an inspiring teacher. The story is that the students will first make a study of materials. They will quarry stone, Hew timber, investigate the making of steel and glass. The teaching of design—or, let us put it, the acquisition of a feeling for design, will be accompanied by a growing familiarity with sculpture, painting, music. In the evening the students will meet writers, musicians, scientists, and other artists who will visit the school. A group of seventy will enter upon this delightful sort of education when the school opens in October, and they will be called apprentices, not students. Each apprentice will be required to do three hours work daily on the grounds or on the farm. With Mr. Wright will be included three technical advisors trained in industry, three resident associates—a sculptor, a painter, and a musician—and a group of seven senior apprentices.

Monday, August 22.—Howard Scott and his group of engineers, known as Technocracy, have been doing their best to stem the tide of a false boom which they feel is being stimulated by an attitude of Couesism on the part of most of us, including government bureaus. Technocracy's survey shows that with the exception of one or two seasonal gains such as in textiles, boots and shoes, and coal, there has been no reversal of any downward trend curve of any industry. They point out abundant evidence of the fact that has been mentioned before in thesecolumns—that it is taking the time and energy of fewer and fewer men to produce more and more staple products. What Scott and his group are trying to do is to warn us as a nation that this trend cannot continue without some radical changes in thinking and in the organization of our social and industrial activities.

Wednesday, August 24.—I see that at the Princeton University Chapel the last of five stained glass windows by Charles J. Connick, Professor Albert M. Friend, of the Department of Art and Archaeology, at Princeton, collaborated with Mr. Connick in the selection of the window subjects, which represent Christian epics: Dante's "Divine Comedy," Milton's "Paradise Lost," Bunyan's "Pilgrim's Progress," the four Gospels of the New Testament, and Mallory's "Morte d'Arthur."

Monday, August 15.—News comes of the discovery by chicle hunters of a new Mayan city on the Yucatan peninsula. It has been called Calakmul, and floured from 364 to 531. Its two largest pyramids are one hundred fifty feet high, and it is said by the Carnegie Institute to have monuments of a higher degree of culture than any other Mayan city ever found. The people erected a dated monument every five years.

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Tuesday, August 23.—Attended the funeral of Harry Allen Jacobs in the chapel of Temple Emanuel-El, which was well filled with a group in which his professional brethren predominated. He was a man with a curious mixture of shy diffidence and an innate charm which made friends for him almost in spite of himself.

Walked down Fifth Avenue with Robert D. Kohn, talking of the marvellous opportunity presented to the profession by the recent Act providing this enormous credit for housing. Judging from brief inductions, the profession as a wholemust now to have awakened to the possibilities that lie within our grasp. The problem of slum clearance, replacing obsolete tenements by modern shelter that will be built not as an architectural monument to some one, but as a practical solution of a great need, remains to be solved. We cannot sit in our offices and await industrial clients. If we do not go out and tackle this job, some one else will take it out of our hands, and that would mean that the profession of architecture has been relegated to a lower place in the nation's building efforts. The main difficulty seems to be to bring about a realization in the profession that this particular job is much more than a problem of plan, materials, prefabrication, large-scale operation, and similar activities traditionally accepted as part of the architect's function; there are other factors involved, factors with which we as a profession are largely unfamiliar: land values, the cost of capital,
public utilities, roads, marketing methods and costs, the choice between housing that is for rent and housing that is for sale, the necessity for bridging the gap between what accommodation can be furnished for a given rental as compared with what people insist upon having for that rental. Here are problems long considered outside the realm of architecture, but they are inherent in the job that we are facing at this moment.

**ARCHITECTURE**

**NOTICE TO STUDENTS AND CORRESPONDENTS**

(Reprinted from The Bulletin of the Beaux-Arts Institute of Design, May, 1922)

It would seem to be wise at this time to bring to the attention of the students, particularly in the work of the Beaux-Arts Institute of Design, and their instructors, as well, a growing feeling of conviction on the part of the Juries that the standard of design, as evidenced by the current exhibition, leaves much to be desired.

We are no doubt in a period of experiment and investigation. The men writing the programmes endeavor to make their problems interesting and stimulating. The Juries, finally, do their utmost to be sympathetic, patient and understanding. What lies between is the essential tendency to present so-called modern architecture, by which we mean a rational interpretation of new problems, and the plans themselves that are laid down in the programmes endeavor to make the particular problem. Ultimately, the student will discover that these homely principles will assist him in actual practice.

The Jury discovers problems that show, only too clearly, a failure to grasp the essentials of the plan; its simple, direct, and honest in the expression of the particular problem. Ultimately, the student will discover that these homely principles will assist him in actual practice.

The house professions to be built of rough-hewn beams, as if straight, machined-cut beams were not obtainable, and as if we had never learned any better method of construction. The beams profess to be held together by wooden pegs which project an inch or so from the beam construction. And why all this elaborate dishonesty, this extravagant forgery? So that the house might be 'picturesque,' so that it might be 'quaint,' so that its occupants might play at living in the fifteenth century. All they would need to make the masquerade complete would be fifteenth-century costumes.

"But inside—once they have got past the façade, the "peasant" open fireplace with its great hood, the swinging crane for the kettle, the random-width oak-plank floor, the alleged French provincial type furniture—inside, the inhabitants can begin to play furiously at living in the twentieth century. The kitchen has an electric stove, with electric clocks to regulate it automatically; it has an electric ice chest, electric fans, electric toasters and waffle-irons, an electric mixer, a built-in electric dish-washing machine. And as you approach the kitchen door it swings open for you, automatically. In the rest of the house are, of course, not only electric lights, telephone, and radio, but air-cooling and conditioning units."

**Architectural Education**

**REPRINTING TWO STATEMENTS THAT HAVE CREATED MUCH DISCUSSION**

"If our age had never learned how to 'hand-riven,' of all shapes and sizes, as the shingles on the roof are, the architect apparently would have preferred a thatch roof, as historically more correct, but these shingles, we are told, give the same 'delightful effect.'"

They are laid in crooked lines, higgledy-piggledy, as if carpentry had not yet learned to lay shingles in straight lines.

The house professes to be built of rough-hewn beams, as if straight, machine-cut beams were not obtainable, and as if we had never learned any better method of construction. The beams profess to be held together by wooden pegs which project an inch or so from the beam construction. And why all this elaborate dishonesty, this extravagant forgery? So that the house might be 'picturesque,' so that it might be 'quaint,' so that its occupants might play at living in the fifteenth century. All they would need to make the masquerade complete would be fifteenth-century costumes.

"But inside—once they have got past the façade, the 'peasant' open fireplace with its great hood, the swinging crane for the kettle, the random-width oak-plank floor, the alleged 'French provincial type' furniture—inside, the inhabitants can begin to play furiously at living in the twentieth century."

The kitchen has an electric stove, with electric clocks to regulate it automatically; it has an electric ice chest, electric fans, electric toasters and waffle-irons, an electric mixer, a built-in electric dish-washing machine. And as you approach the kitchen door it swings open for you, automatically. In the rest of the house are, of course, not only electric lights, telephone, and radio, but air-cooling and conditioning units."
of classic architecture is entirely discarded and that arrangements of flat surfaces, rhomboids, rectangles, or what have you, brilliantly rendered in charcoal, may mislead the Jury into thinking that the student is producing architecture. I am not attempting to attack or protect modern architecture. It is quite sufficiently vigorous to take care of itself. What does seem to be vicious is the realization that the student, in ignoring the fine compositions, the understanding of great designers throughout history of materials, the meaning of stone and metal, plaster and wood, decides calmly that by the mere discarding of all conventions he can produce something of value. It would be unfortunate indeed if those men whose education and training have given them some insight into the inspiring quality of the masters of the past, did not warn the students that they are on dangerous ground. To have the programmes demand classic architecture is possible; there would be a question of logic and reason in that. To permit the students, however, to continue the absurd versions of so-called modern work in the way they now insist is neither to their interest nor will the Juries be honest in assuming that a persistence of this attitude will lead the student to good architecture.

One's sympathy for modern design is shocked by the lack of serious realization of the fundamentals of good design and there is no style label to be affixed here. The façades of the armory problem, in particular, in spite of the few excellent proposals, precipitated this reaction, and unless more attention is given to composition of the buildings, irrespective of their simplicity, steps must be taken to protect the student against what seems to be a vicious practice.

ELY JACQUES KAHN,
Director, Department of Architecture.

TO THE STUDENTS OF THE BEAUX-ARTS INSTITUTE OF DESIGN, ALL DEPARTMENTS

A NOTICE to you, taking my name in vain together with two other modern architects whom I respect, has been sent to me (Notice to Students and Correspondents, Architectural Department, School Year 1931-32, April 20, 1932).

If this circular is proper evidence of the quality of inspiration to which you are subject it may be time for you to help yourselves.

Reading between the lines of the lively circular which contains a threat, evidently the Beaux Arts here, as in Paris, realizes that neither the old practices nor the old doctrines can be made to apply longer, except by force. The Beaux Arts, so it would seem, is ready to speak the language of the new thought in architecture. The circular bears witness. But why must the Beaux Arts leadership deny or betray modern architects before it can "come over" to modern architecture as gracefully as it thinks becoming to its dignity—or, say, that it won't come over at all and the students will be "pushed back to classicism"?

And you are unreasonably informed as to what modern architecture is. You are told that it is not going to become a style based upon Gropius, Wright, or Corbusier. It is true that much that passes for modern architecture is not organic because it is already contaminated by Beaux Arts standards of eclecticism. To the unfortunate young architects a ready so contaminated, I am a friendly enemy.

But architecture is "modern" and has a future only because these modern architects, from whom, I am sorry to say, the circular in question derives only language, are what they are and because they have done what they have done in the way they have done it. It is because of their work that the Beaux Arts is now ready to modify its programmes or "push" all of you back. But, I assure you, the programme in practice to the modern architects against whom you are officially warned will be the principles you will be moved by and that you, too, will master if you do not betray your country as the "Beaux Arts" has betrayed Youth everywhere since the institution was born and will betray you if it can.

Unfortunately the Beaux Arts is important just because Beaux Arts training in architecture has been all the academic training Young America has had any chance to get.

But today there is no man able to think for himself who believes such training, or any training like it, can aid any young man to grow up in any circumstances as a creative architect. The very principles of an organic architecture which the Beaux Arts "views with alarm" and from which such new language as it tries to use—"the meaning of materials," etc.—is derived would blow their method and their practice away forever were they or their students able, really, to grasp the real meaning of that language.

When "in all history," for instance, has "the meaning of materials" or anything else other than "fine composition" been found in academic circles until some of these men "whose work"—you are officially told—"modern architecture is not going to resemble" came along?

The simplest knowledge of simples, the "meaning of materials" in particular, would utterly destroy the Beaux Arts establishment. It has already gone far toward doing so because utter ignorance, in practice, of the nature of materials, modern methods, and modern architects is a sublime Beaux Arts characteristic.

"Composition" was the shrine of all Beaux Arts training. And it was such "understanding" as this working upon outmoded traditions that produced the "great designers" to whom the circular refers.

Composition is dead. The silhouette of masonry mass over steel lives only as a feudal hangover. But, for you, creation still lives as the magna charta of your liberties in the "modern architecture," you are told your work should not resemble.

It is not only natural enough but it is inevitable that hypocrisy should attempt to flower as the result of the system of eclectic imitation not fostered but featured by the institution known as the "Beaux Arts" and no fruit be the result.

Nor, perhaps, should fault be found with any ostrich for sticking its head in the sand. No ostrich is a lion. But where, I ask you, are you going to learn the truth that—quoting the circular again—"good proportion, intelligent mass," "consideration of the language of the new thought in architecture an opportunity to learn the truth that—"opposing the Beaux Arts" views with alarm," etc.—is derived would blow their method and their practice away forever were they or their students able, really, to grasp the real meaning of that language.

If the Beaux Arts has already established a lively tradition and has good reasons to know that youth everywhere is hungry for reality and is everywhere rocking an old boat no longer seaworthy. Even in the dock for repairs that old boat can no longer be made safe for youth.

Nothing modern architecture has to give the student can reach him by way of the eclecticism that captains and sailors that old craft.

However reformed, the "Beaux Arts" cannot forget and can never learn.

FRANK LLOYD WRIGHT
Taliesin, Spring Green, Wisconsin.
ALTHOUGH the architect himself is neither a purchaser nor a consumer, he is a trustee whose decisions govern not only the expenditure of others' funds but the safeguarding, as far as humanly possible, of others' future interests. It isn't enough that the architect erect a beautiful building economically. His decisions influence also the economical operation of the building and the adequate protection of it from destructive forces. The responsibility is great—and the responsibility does not end when the keys are turned over. Five, or even ten years after, the architect may be faced with the responsibility for the failure of materials or systems.

Naturally, the architect, realizing this, trains himself to be cautious, hesitant, and exacting. It is not surprising that the interest of the architect today is centred on those things which assure him of the reliability of the materials, equipment, and systems he specifies. He knows that the responsibility for the failure of any part of his building—even after many years have elapsed—is laid at his feet. A specified system that fails is like a mole that tempts tanks, steam for water supply. There are a score of situations that can prevent the proper operation of the best sprinkler system ever specified.

Many architects realize these dangers but few fully appreciate that there are very efficient safeguards against them. Every system of protection, upon which lives and property depend, should wherever possible be supervised by an independent and impartial organization which specializes in such work. A simple illustration of the value of outside (central station) supervision of sprinkler systems is the small blaze that, in itself, does little damage because a sprinkler head opens up and quickly puts it out. Every one has gone home...the sprinkler head is still open, pouring thirty gallons of water a minute into the building. An electrically supervised system, however, would flash a signal to the central station of the protection company and immediate steps would be taken to shut off the water and avoid further damage.

In the case of exposed water tanks, gate valves, pressure tanks, steam supply, air supply, etc., electrical devices installed on these vital parts of the sprinkler system flash warning signals that demand immediate action, but there are many cases where a central station is protecting property fifty miles away.

There are many central station electrical protection services that architects may make use of to safeguard their clients' buildings. In addition to the supervision of automatic sprinklers and their water supply, there is night watchman supervisory service. This system not only keeps the watchman alert throughout the night by requiring him to signal the central station at periodic intervals, but it is a protection to the watchman himself. Unless he signals the central station within a definite time allowance, the protection company despatches a guard to personally investigate his delinquency. There are thousands of cases every month where watchmen, for one reason or another, have been unable to perform their duties. The reasons run all the way from accident, death, holdup, and drunkenness to peaceful slumber. When a watchman is supervised by a central station system, his activities are under observation constantly. Should he be held up by burglars and forced to make his usual rounds at the point of a gun, he can signal for help without endangering his life. If the usual signal fails to register at the central station, an immediate investigation is made by the protection company. Local police assist when necessary.

The advantages and economy of such protection systems affect the plans of the architect. Probably not so much his blueprints as his diagnosis of his client's need for adequate and perpetual property protection. When a building is destroyed or put out of commission—
because it lacked adequate protection facilities, the architect cannot escape the backlash.

There are also hosts of industrial applications for central station supervisory services—for instance, the supervision of industrial and residential oil-burners. Stack temperatures are checked by simple electrical devices. A certain drop in temperature sends notice that the burner has failed to function. An overflow of oil is just as easily and conveniently registered in the central station. Such signals are treated in a predetermined manner and such action taken as the case warrants. In most cases, a watchman or engineer has to be notified or a guard sent to the premises.

An interesting application of A. D. T. Central Station Service is the checking of room temperatures—day and night—in the plant of a New Jersey manufacturer of combustible materials. In case a certain dangerous temperature is reached, an automatic fire alarm is sounded as well as the usual central station alarm. Vat temperatures in many factories are being checked continuously by central stations, probably miles away. New applications are being made of this service almost daily.

A central station protective system can be adapted to almost any kind of building, old or new, and is an automatic fire alarm that actually feels fire and flashes an alarm to the central station and the nearest fire department without waste of time, without excitement or inaction.

Architects should forever keep in mind the fact that fire takes an appalling yearly toll of American resources—equal to twice the cost of the Panama Canal. The installation of automatic sprinklers properly supervised, automatic fire detection systems, and the insistence that watchmen be both capable and constantly supervised by an impartial central station system, will not only lessen the fire hazard but will lessen the responsibility of architects when fire does strike.

The central station idea is growing rapidly. It is being used to prevent loss of life and destruction of property by fire, accidents, theft, man failure, material failure, and the class of happenings known as "acts of God." If the safeguarding of premises is of sufficient importance to warrant the installation of expensive protective apparatus and the services of watchmen, the proportionately small extra cost for outside maintenance and supervision is a logical consideration. A staff mechanic may think that he is maintaining the automatic sprinkler system or the fire-alarm system in good order, but all mechanical and electrical devices, they must be supervised constantly to insure dependability. During the year 1931, A. D. T. central stations responded to 91,150 alarms indicating that sprinkler systems were temporarily disabled and rendered partially or totally useless in case of fire. When electrical devices connect the five or more vital functional parts of a sprinkler system to a central station, nothing can happen without immediate steps being taken to correct the faulty conditions.

In the case of watchmen, there is always the incentive for mutual accommodation and collusion. There is a constant—and innocent—contact among friends within every organization. These relations of intimacy lead to mutual help and shifting of duties. In case of trouble, watchmen and others protect each other against the consequences of their individual delinquencies and failures.

Central station supervision of protective apparatus and watchmen provides an impartial and unrelenting check on the whole protective scheme. It is the sole business of a central station organization to protect property through specialized supervision and maintenance services. Impartial operators and trained forces of guards stand ready for emergencies twenty-four hours every day. Central station supervisory service insures property safety. Certainly it is a tool of which the architect can make good use.
Subjects of Previous Portfolios Are Listed at Left

Forthcoming Portfolios will be devoted to the following subjects: French Stonework (November), Over-mantel Treatments (December), Bank Screens (January), Interior Doors (February), Metal Stair Railings (March), and Verandas (April). Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.
Old pine. Richard H. Dana, Jr.

Oak. Leinart Palmé

Knotty pine. Philip L. Small, Inc.

Redwood. Clarence S. Stein
Old English oak, sandblasted. Fruit & Brown

Pine. Frank J. Forster

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ETERNIT TIMBERTEX

It is the name of the newest addition to the line of the Eternit Asbestos Cement Shingles, Ruberoid Company. It is a companion shingle to Eternit Gothic. It is a tapered asbestos shingle textured like natural wood yet said to be ageless and fireproof. Five rich, time-mellowed "wood colors" are offered. Beauty, individuality, durability, safety, and economy are the characteristics of this shingle. Architect's folder in full color, specifications, and samples will be forwarded on request.

HANDMADE GLASS

An intensely interesting reprint from Commercial Art and Industry, August, 1932, entitled "Design in Relation to the Problem," makes possible the gleaning of some ideas on the art of glass blowing. It comes with the compliments of James Powell & Sons (Whitefriars), Ltd., of London. Both the exposition and photographs are full of interest. Copies may be obtained on request to their United States distributor, Mr. Paul Buck, of 665 Fifth Avenue, New York City. James Powell & Sons have executed some of the stunning windows that have recently been installed in St. Thomas's Church, Fifth Avenue, New York.

WALLS OF STEEL

Comment in John W. Love's column in the Cleveland Press on metal partition work recently done in the plant of the Mills Co., of Cleveland, indicates that the late depression has borne an improvement in their metal partitions. They have taken the metal partition apart and put it together again along entirely new lines, assembling with mortise and tenon instead of with bolts and screws and electric welds. The storage space for the average inventory is cut down to a tenth. Don't write your partition specifications without further looking into the new Mills Metal Partitions.

SEAMLOC CARPET

Seamloc Carpet, L. C. Chase Co., Inc., 295 Fifth Avenue, New York City, opens up a new era in floor treatment. The new Seamloc material solves the problem of directional lines and office divisions. It permits the practical use of special patterns and color combinations.

AN INSIDE STORY

The "Inside Story of Bank Protection" is the title of a convincing publication of the American District Telegraph Co., 155 Sixth Avenue, New York City. Architects will find this story of interest. Specifications are not included, but will be supplied upon request.

FOTO-SWITCH

This new low-cost photo-electric relay is announced by G-M Laboratories, Inc., of 1735 Belmont Avenue, Chicago. With the Foto-Switch, any sort of electrical device can be controlled through the medium of the light beam. It is also suitable for automatically turning on and off artificial lights when the natural daylight drops below or rises above a predetermined level. It can be used for operating doors in restaurants, warehouses, or wherever it is desirable to automatically control the opening of a door by the interruption of the light beam.

ANDERSEN CASEMENT WINDOW

The Andersen Frame Corporation, of Bayport, Minn., offers a new casement which they state meets every modern window requirement. It is said to combine the weather-tight advantage of weather-stripped wood construction with the modern narrow-line beauty of metal. The complete unit includes frame, sash, weather strips, inside aluminum screens, hardware, and removable double glazing. Literature on request.

IDEAL HEATING

The American Radiator Company pictures in its recent brochure the possibility of finding in the complete line of American Radiator products the precise equipment to suit every heating requirement—burning hard or soft coal, coke, oil, or gas. A special catalogue recognizes the desire of the public for concealed radiation and submits new developments with accompanying data on Arco Radiator Enclosures. The data is of a technical nature readily usable in your specifications.

TEMPERATURE CONTROL

The Barber-Colman Company, of Rockford, Ill., in its latest catalogue deals with an electric system of temperature control desirable for use in conjunction with present and future heating, ventilating, and air-conditioning equipment. A special section is devoted to installation views and dimensions of units. The catalogue is well diagrammed and indexed for practical usage.

STAINLESS WELDED TUBE

The Carpenter Steel Co., of Reading, Pa., has just published a bulletin on welded-stainless tubing. You will find the information of value, considering the many uses for stainless tubing in the construction industry.

(Continued on page 11)
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