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ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY INDIANAPOLIS, IND.

By THOMAS HIBBEN

Just one year ago, in the January 5th, 1928, issue, there was published in THE AMERICAN ARCHITECT an article by Thomas Hibben entitled "Analysis of Design." This article described the method of study of an architectural problem as developed and practiced by him, and was illustrated by sketches which Mr. Hibben made in the development of the design for the Arthur Jordan Building. Butler University, Indianapolis, Ind. This building is now completed and is illustrated here by photographs and floor plans. The reader will find it interesting, we think, to compare the preliminary studies, shown in the January 5th issue of last year, with the photographs of the completed structure, as illustrated herewith.—THE EDITORS. THE completion of the Arthur Jordan Building marks the first stage in the new development of this University, a development which contemplates the building of the entire group on the basis of a definite program. This program has been so organized as not only to provide for the immediate needs of the University, but also to take into consideration its most complete future expansion.

The general scheme is such that expansion takes place without loss of efficiency, and is based on a series of intercommunicating quadrangles opening out from a central axis. This provides the maximum light and air, together with a continuous circulation within the building—a factor required by the climate of the locality—and is accomplished



ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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THE AMERICAN ARCHITECT





Photo by Gillies

SCIENCE UNIT LECTURE ROOM ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS



CARVED STONE DETAIL

January 5, 1929

ENTRANCE DETAIL



ENTRANCE DETAIL ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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SOUTHERN ELEVATION, ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

by making the stair towers the connecting element between units.

The units are developed entirely on the basis of their function: class rooms, lecture rooms, laboratories, administrative offices, circulation, etc. The form resulting from the functional requirements is evolved by the most simple and direct use of materials. These materials have been selected on the basis of economic, climatic, color and texture fac-

tors and their manipulation is entirely controlled by their sound structural use. The exterior walls are bearing masonry walls of rough variegated pink granite, trimmed, where exact surface is required, with limestone. The interior supports, floors and roofs are of reinforced concrete.

The basis of design is the expression of the structure in materials: the form of this expression is necessarily in the vocabulary of the designer and



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NORTH ELEVATION, ARTHUR JORDAN BUILDING, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

represents neither an attempt to be 'modern' for the sake of being different, nor does it seek justification by the sterile imitation of traditional forms. As I outlined in the earlier article, the intention has been to use each material in accord with its natural function so that the design should result, not from an arbitrary ideal based on imaginary aesthetic values, but that the design should be the product of the function of the elements of the building

represents neither an attempt to be "modern" for executed in the terms of the materials, handled the sake of being different, nor does it seek justificaentirely on the basis of their sound structural use.

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A building executed on this basis avoids the excessive cost factors of superficial and meaningless embellishment and the sacrifice of function to an imaginary requirement of symmetry, with the result that although constructed on a comparatively low cost basis it has been carried through without compromise in the integrity of structure and design.



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Photo by Gillics SOUTH ENTRANCE DETAIL, WEST UNIT, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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WEST TOWER, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS



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ENTRANCE, WEST TOWER, BUTLER UNIVERSITY, INDIANAPOLIS. IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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REAR OF SCIENCE UNIT, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS



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ADMINISTRATIVE OFFICES, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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WEST TOWER, BUTLER UNIVERSITY, INDIANAPOLIS, IND. ROBERT FROST DAGGETT AND THOMAS HIBBEN, ASSOCIATED ARCHITECTS

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WE seem to have started something. In the December 5th issue of THE AMERICAN ARCHITECT we had an editorial entitled: Do materials influence design? In the editorial we expressed our own ideas on the subject and asked our readers, in closing, this question: Do you think materials influence design or not? We hoped to get some replies from our readers and we have. Two of those we have received are published herewith. Have you any comments to make on the subject?

> Carnegie Institute of Technology Pittsburgh, Pa., December 15, 1928

The Editors The American Architect

Yes, it is evident that the design of a building and its details should be influenced by the nature of the materials employed. Stone, marble, brick and wood have been used for centuries in a rational manner by architects who have obtained, by the use of these materials, effects that one would expect of them. The Pyramids, the Parthenon, Hindu temples and Roman and Gothic churches, or any building in wood or in steel and reinforced concrete, would not have the same aspect if the materials employed had been used in reverse order. I can hardly conceive the Parthenon in brick, the Pyramids in wood, or any Roman or Gothic details cut out of reinforced concrete. It is true that if the Greeks had known reinforced concrete, the said Parthenon would not have been conceived as it was, and those great architects would not have left us so perfect a building. At the present time, the architect who has been commissioned to design a similar type of building in brick or in wood, for example, has the opportunity of using steel and reinforced concrete. What does he do? Pressed by time and seeking economy, having small confidence in modern materials, but having at his disposal a mass of ancient motifs, he copies or adapts. Instead of progressing, he retreats. He employs in the exterior design some motifs originally used in an interior; he places at a height of three hundred feet a detail that was originally conceived to be placed at a height of sixty feet; he exposes to the weather some material whose color or physical properties are not permanent, or he executes in bronze some design which should be produced in stone. In a word, he does not suggest in the lines or in the mass of the design the material which he employs. It is still more serious when he leads others to think that it is possible to utilize the design of the Baths of Caracalla for the waiting room of a railroad station, of which the fabric is in steel. New times, new materials and new methods of using them, bring about a new style. It seems to me that instead of living in the past or instead of copying the antique (which we ought, though, to know) which was evolved under the guidance and by the hand of those who were not confronted with our modern needs and did not know of our new methods of construction, it would be preferable for the present-day architect to seek a means of employing that which science and industry have given us. The exterior aspect of our building would immediately change and would remain, perhaps, as it had been conceived. Therefore, let not the architect oppose the attempts of the younger men nor worry about what the Greeks or the Goths would think of us if they were to come back to earth. If we cannot hope that one day a new style, with new and appropriate forms and details, shall be developed, even as the styles were developed in the great epochs of architectural history, then we shall be condemned to live in buildings that shall be modern in the interior, but grotesque in their exterior design, because of the lack of meaning.

> CAMILLE GRAPIN, Professor of Architecture.

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Lolumbia University in the City of New York School of Architecture

December 15, 1928

The American Architect

The Editors

My attention was called to your editorial on "Do Materials Influence Design?"

I was surprised to note that you felt disturbed because so high a member of the architectural profession thought they should not, when you had for so many years held to the belief that this was one of the cardinal rules of good architecture.

But, really, this architect is to be congratulated on having the boldness to openly announce a fact which most of his contemporaries practice but will not admit. How many architects, today, have a strong enough sense of the properties of materials to let it influence in any way their designs? How many can leave the routine of office, the seeking out of new clients, the sketching and painting of patterns, to become familiar with the materials with which their designs are constructed?

Blissfully ignorant of those subtle qualities of stone, terracotta, brick, concrete, glass, wrought-iron, bronze and wood. which even few craftsmen who work in these materials can feel, how can we expect the average architect to modify his creations to the peculiar materials? What does he know about the difference between cast-iron, cast-stone, real stone and terra-cotta? Does he not get a number of different bids for his building, one for its execution in cast-stone, another in terra-cotta and another in real stone? Is he not told by the manufacturers of cast-stone that they can do his design with the same effect as stone, but cheaper? Do not the manufacturers of terra-cotta bring around samples to show him how exactly they can reproduce the appearance of limestone or granite? And don't forget that not so many years ago the representatives from the iron foundry used to join in the competitions and would show how they could build a stone front of cast-iron, covered with paint and sprinkled with sand.

Can you blame the architect, if he believes that design has no relationship to materials when every manufacturer tells him he can execute it in his particular material? Poor fellow, do not ask him to know more than the specialists.

Says the architect, "I designed this delicate ornament to be carved in white marble."

"Oh, don't worry about that," says the salesman from the granite quarries, "look at this rose, carved from granite. Could anything be more delicate? Why, don't you know that we have machines now that permit our stone cutters to execute designs like yours in granite as easily as though the stuff were cheese? And besides, think of the greater durability of granite."

Then a few hours later, the same architect hears the sales representative from the terra-cotta company. "Now my friend," says he, "that design of yours can best be done in terra-cotta. Just visualize how beautiful that ornament would be in color. Besides every rain would wash it off. and it wouldn't stay dirty like stone. What? You wanted sharp, crisp edges on the ornament and think that you can get this only in marble? Say, we have a modeller in the shop who used to be a stone-cutter, and there ain't nothin' he can't do."

Thus, little by little, artistic Mr. Architect learns that design has nothing to do with materials. It fortifies his belief which he formed in school that Design is one thing, and that construction and materials are a nuisance.

Nevertheless, there are a few architects who are curious enough to visit the places where materials are moulded, carved and shaped into forms, and have talked these matters over with the workmen. Here they learn of an undercurrent of disgust for the members of the architectural profession.

Remarks like this, they hear, "Do you think we use the drawings made by that fool architect? Not on your life! He thinks he knows everything, and when we submit the shop drawings to him for approval, do you think he would let them go unchanged? No. He fusses them up and insist on changing this curve or that, just to show off. All the time he knows damn well our shop drawings are a heap sight more suitable to the material than his own details. But why in hell don't these architects admit they don't know anything and give us a chance to do something that's real. Now there's B——, he comes around regular to see how things are gettin' along. He never tries to force a design down our throats, but admits his drawings are only suggestions for us to elaborate on. He's got more feelin' for the guts of this material than some of the fellows what's been workin' in it for years, yet he's always open to suggestions. He doesn't take his drawings too serious like, but seems to be more interested in how the building's goin' to look."

I am afraid, Mr. Editor, there is an increasing number of young men in the profession who are like the architect thus described by this workman. They believe that materials have different kinds of "guts" and they are not swallowing the bunk of salesmen nor following in the footsteps of those architects who think their work is done when they have shaken a clever brush, full of artistic drippings.

Sincerely,

H. VANDERVOORT WALSH.

Mr. Walsh may be a little too harsh. Recognizing the tendency of the modern salesman to talk the architect into an order, we prefer to think that the average architect, at least, is not so easily converted by the salesman's conversation. Perhaps, as Mr. Walsh suggests, few architects find the time to leave their offices to become familiar with the materials with which their designs are constructed. The few that do, though, we know are so well repaid for the time consumed that we heartily recommend others to take a similar course.



Photo by Van Anda

THE OLD HERALD BUILDING, NEW YORK, CONSIDERED BY MANY AS ONE OF THE MASTERPIECES OF STANFORD WHITE, HAS SUCCUMBED TO THE MARCH OF PROGRESS. A PORTION OF THE OLD BUILDING, HOWEVER, IS TO REMAIN FOR OCCUPANCY BY ITS PRESENT TENANTS. THE PHOTOGRAPH SHOWS THE STRUCTURE IN ITS PRESENT CONDITION, TORN IN HALF. THE TENANTS OF THE PORTION WHICH IS NOT TO BE DISTURBED HAVE DRESSED UP THE BARE STRUC-TURAL WALLS WITH ADVERTISEMENTS WHICH PRESENT AN UNUSUAL APPEAL. IT IS WELL FOR US OCCASIONALLY TO SEE THE HUMOR OF SUCH SAD OCCURRENCES AS THE PASSING OF A BUILDING WHICH HAS FOR SO LONG BEEN A LAND-MARK IN THE HISTORY OF OLD NEW YORK

THE AMERICAN ARCHITECT



AWARD OF DESIGN FOR TOMB OF UNKNOWN SOLDIER

LORIMER RICH, Architect, THOMAS HUDSON JONES, Sculptor

O N December 10, 1928, the Secretary of War announced that the design and model for the completion of the tomb of the Unknown Soldier in the Arlington National Cemetery, submitted by Lorimer Rich, architect, and Thomas Hudson Jones, F.A.A.R., sculptor, had been approved and accepted. Seventy-three designs were submitted in the first competition. Five collaborators were se-

lected to enter final designs. The jury of award consisted of Charles A. Coolidge, F.A.I.A., D. H. Burnham, F.A.I.A., Paul P. Cret, F.A.I.A., representing the American Institute of Architects: Colonel Hanford MacNider, representing the American Legion: Mrs. William D. Rock, representing the Gold Star mothers. Victor Mindeleff, F.A.I.A., acted as architectural advisor.

The decision of the jury in selecting the design of Messrs. Rich and Jones as the most suitable was concurred in by the Arlington National Cemetery Commission, the American Battle Monuments Commission, the Fine Arts Commission and approved by the Secretary of War. The action in connection with the completion of the tomb of the Unknown Soldier was taken in conformity with directions of Congress, which provided for a competition among citizens of the United States for a design to complete the



MODEL OF SCULPTURED END INSCRIPTION ON OPPOSITE END

memorial. In connection with the final designs selected, it is interesting to note that it has departed very little from the design submitted in the elimination competition.

While the competition was intended to give consideration only to the memorial, it is understood that the suggestion, incorporated in the five final designs, for a more suitable and monumental approach to the memorial than that now existing, is receiving favorable consideration. The jury recommended that suitable measures be taken to in-

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APPROACH TO TOMB OF UNKNOWN SOLDIER, WASHINGTON, D. C. FROM A DRAWING BY SCHELL LEWIS



corporate the changes in the approach through further study, and that the required appropriation be secured to permit its execution.

The jury considered that the accepted design: had maintained the scale and character of the amphitheater; contained austerity and restraint without recalling similar monuments erected in other countries; provided a satisfactory solution of approach to the tomb; and provided a single space for a short and forceful inscription.

The competitors selected from the preliminary competition were Schweinfurth, Ripley and Le Boutillier; H. Sternfeld, B. Riaboff and G. Cecere; Egerton Swarthout and J. E. Fraser; H. Peaslee, C. Mose and C. Eliot 2d; I. Rich and T. H. Jones.





INTERIOR ARCHITECTURE

NINETEEN TWENTY-EIGHT CONTRIBUTES TO A MODERN AMERICAN STYLE



UNTIL a few years ago, one would seem to have been justified in making the assertion that American architects, as a whole, were sadly lacking in creative ability. Architecturally, we seemed content to be a country that followed rather than one that led. We diligently studied the works



MODERN TABLE LAMP (Courtesy Kanne & Bessant)

so closely woven around tradition, than in these United States, where traditions had not yet had time to be established and precedents had not yet been formed. And so we went on for generations, it seems, until a few years ago we were awakened to the fact that the more progressive European

of masterdesigners of long ago, and adapted their ideas to the solution of our present-day problems. For many years the architects of Europe followed a similar course, although an architecture based on historic period ideas was, without doubt, a more logical development in European countries where they were

countries were in the midst of an artistic revolution. They were actually developing a new, a modern, style which interpreted, so they said, modern characteristics and expressed modern ideas. Could we, a country which was setting the pace for the world in so many lines of endeavor, afford to continue to

be a follower in the world of art? The answer is plainly written in what has been a c c o mplished during the last two or three years to develop our own style of architectural and decorative design.

To be sure, the urge to create has been more emphatic in some than in others; it has been more pro-



MODERN WALL BRACKET (Courtesy Kanne & Bessant)

nounced in some parts of the country than in others. There are those among us who are so wedded to tradition and precedent that they even consider the breaking away from old established ideas as sacrilegious. On the other hand, we find those who insist upon going to extremes. What we must



AN INTERESTING PLAY OF HORIZONTAL AND VERTICAL LINES IN THE DESIGN OF A MODERN WALL COVERING

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DETAILS IN MODERN APARTMENTS DESIGNED BY LUCIAN BERNHARD OF CONTEMPORA, INC.



CORNER IN CHILD'S ROOM. DESIGNED BY LUCIAN BERNHARD OF CONTEMPORA, INC.

always remember, if we are to succeed eventually in evolving a distinctive American style, is to remain sane: we are not attempting to create a style merely for the sake of doing something different, but we are confronted with a serious problem and we should give it serious thought and consideration. age which lend themselves to architectural expression, we find certain diversified ideas. Some call this age dynamic, staccato, and claim that their creations interpret these qualities. Others strive to give expression in straight lines and sharp angles to the nervous tension under which we live today.

In attempting to discover characteristics of this

The difficulty with which we are confronted in



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Photo by Gillies

MODERN METAL GATES, HOTEL LINCOLN, NEW YORK DESIGNED AND EXECUTED BY RENNER & MARAS

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Photo by Peyser & Patzia SHOW ROOM OF THE TRENTON POTTERIES COMPANY, NEW YORK VOORHEES, GMELIN & WALKER, ARCHITECTS; MACK, JENNY & TYLER, DECORATORS

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THE AMERICAN ARCHITECT



SOLARIUM LOUNGE, TAVERN CLUB, CHICAGO, ILL. WINOLD REISS, INTERIOR ARCHITECT

attaining general public approval of our modern efforts rests in the fact that, in these days of specialization and quantity production, there is likely to be a wide variance of opinion as to what constitutes modern expression. A harmonious interior, for example, can only be obtained when one can purchase a floor covering, furniture and drapery materials, to say nothing of the many other acces-



sories which enter into the design of a room, which in their design bear a definite relation to each other. For this very reason, it will be far more satisfactory for all if the development of a modern style is left solely in the hands of the architect. After all, the designs in which manufacturers produce their products are dependent on architecture. The designers employed by manufacturers must get inspiration from the architects.

As we continue, then, to make use of our creative ability, let us not work as one man, but rather consider what the other fellow is doing, that our own design may fit into the picture properly and help to make a harmonious whole. Nineteen twenty-eight

contributed nobly to the evolution process; how nineteen twenty - nine will respond, only the future can tell. We feel safe in predicting that much will be accomplished to the end that a distinctive American style of architectural and decorative design will eventually be evolved.



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OFFICES OF FORD, BACON & DAVIS, NEW YORK EUGENE SCHOEN, INC., ARCHITECTS AND DECORATORS



Photos by Offner



OFFICES OF FORD, BACON & DAVIS, NEW YORK-EUGENE SCHOEN, INC., ARCHITECTS AND DECORATORS -1 Photo by Offner



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ABOVE, MAIN LOBBY, AND BELOW, VESTIBULE, DRYDEN HOTEL, NEW YORK HENRY IVES COBB, ARCHITECT; INTERIORS DESIGNED BY HOWARD B. BURTON, ARCHITECT

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LOGGIA, DRYDEN HOTEL, NEW YORK HENRY IVES COBB, ARCHITECT; INTERIORS DESIGNED BY HOWARD B. BURTON, ARCHITECT

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DETAIL, PRESIDENT'S ROOM, AMOS PARRISH & COMPANY, NEW YORK LESCAZE, ARCHITECT



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PRESBYTERIAN CHURCH, GLENS FALLS, N. Y.

CRAM & FERGUSON, Architects



Photo by Paul J. Weber

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ESBYTERIAN CHURCH, GLENS FALL CRAM & FERGUSON, ARCHITECTS

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DETAIL OF CHANCEL PRESBYTERIAN CHURCH, GLENS FALLS, N. Y. CRAM & FERGUSON, ARCHITECTS



MAIN ENTRANCE DETAIL PRESBYTERIAN CHURCH, GLENS FALLS, N. Y. CRAM & FERGUSON, ARCHITECTS

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ENGINEERING AND CONSTRUCTION

THE RECONSTRUCTION OF HIGH BRIDGE, NEW YORK

CITY OF NEW YORK DEPARTMENT OF PLANT AND STRUCTURES

F all the picturesque structures in the United States, few have been of greater inspiration to artists as a subject for etching, painting or sketching than what has been familiarly known as "High Bridge," New York. The fact that this was the first aqueduct to be built in the United States, is of historic interest. Aqueduct Bridge, as it is more accurately called, was erected during the years between 1839 and 1848. It was originally designed to carry two thirty-six inch cast iron water pipes over the Harlem River. To serve increased water demands a third wrought iron pipe ninety and onehalf inches in diameter was installed in 1860-61. The addition of this pipe made it necessary to increase the height of the parapet, and to construct a new foot walk, which was completed in 1863. The range of simple granite arches supporting a comparatively thin parapet had an air of grandeur that made it recognized as a work of art.

The bridge as originally built consisted of fifteen semi-circular arches having a clearance of one hundred feet above high water. Four piers of the bridge were located in the Harlem River. The United States War Department considered these piers a menace to navigation and recommended their removal. On September 28, 1923, the Board of Estimate and Apportionment of New York City adopted a resolution providing for the reconstruction of the aqueduct by the Department of Plant and Structures. Accordingly plans were prepared for the removal of the four existing masonry piers and five masonry arches and their replacement by a steel arch. This work was begun in 1926 and the reconstruction was completed in 1928. The proposal to alter the bridge was strenuously opposed by those interested in art, architecture, engineering and scenic preservation, who viewed the structure as one of our few remaining historic monuments of rare interest. Many schemes were advanced for preserving the picturesque character of the old bridge. The steel arch as designed and built was ultimately approved by the Art Commission of New York City.

A study of the old bridge showed that the different series of arches were intended to stand independently of the others. Between the end pillars of each series the arches rested on tall slender shafts at which the equal and opposite "pushes" of the spans were neutralized. The rocky ledges of the section in which the bridge was built dip toward the middle of the river. Rock was not found by the builders on which to make a bed for the pier between the long series of arches on the Bronx side and the river series. The river series had to be broken into two sections, and again rock was not found at the junction of the two. And so the mainstays of this handsome range of arches were founded on mud. The easterly river pier is on rock. On the west bank the pier between the river range and the land arch is also on rock. All piers between these are on piles. The only practical solution that could be found to remove the obstruction to navigation, permit the aqueduct to function, and preserve as much of the original bridge as possible, proved to be a steel arch. In the design of this arch, its supporting piers and superstructure, a fine feeling has been exhibited for the original structure, the character of which insofar as possible has been preserved.

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OPENING AQUEDUCT TRENCH AT TOP OF OLD BRIDGE. ROOF ARCH RESTED ON CAST IRON BUTTRESSES HELD BY TIE RODS

The reconstruction of this bridge was in some ways a bold engineering feat, particularly since the bridge was originally so designed that certain groups of arches depended upon others for their support. The piers which were to act as buttresses for the steel arch had to be enlarged to care for increased loads. At the same time it was essential that they be of sufficient strength to resist the thrusts of adjacent end arches when the center arches were removed. To reinforce these piers with stone removed from the piers and arches introduced an intricate engineering problem; and it was decided to use new stone for this work, but like that used in the old work in size and kind, so that after it has weathered the marked difference between the old and new will not be apparent, as at present.

The procedure in carrying out the work was first to enlarge the old piers and so provide skewbacks for the new span, second to remove the old



AQUEDUCT TRENCH SHOWING 90 ½ INCH DIAMETER PIPE, CAPACITY 90 MILLION GALLONS PER DAY. DOUBLE WALLS USED TO INSULATE PIPES

arches and piers and third to construct the new span. In removing the existing arches, it was highly important that they be taken down at even stages to prevent overloading or a difference in thrust in any one arch, and to preserve equilibrium.

The wrought iron water supply pipe was removed in sections during demolition. After the steel arch was in place, the same pipe was replaced and water service restored.

The new span provides a clear height of one hundred feet at the center of the span above mean high water in the river. The span of the steel arch is about three hundred fifty feet between the gate houses at either end.

The accompanying illustrations indicate various stages in the demolition of the central portion of Aqueduct Bridge, the manner in which the old bridge was originally constructed, and various steps in the erection of the new steel arch over the river.



SKEWBACK ON OLD PIER TO RECEIVE STEEL ARCH. MASONRY IS SAME TYPE AS OLD



RIVERWARD PIERS WERE REINFORCED TO FORM COM-POUND PIERS BEFORE REMOVING RIVER ARCHES

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AQUEDUCT PIPE AS CARRIED WITHIN TRENCH. NOTE FLOOD DRAINAGE NICHE AT RIGHT AND LEDGE MARKING PARAPET AS INCREASED IN HEIGHT IN 1861



PARAPET WALL OF 1861 REMOVED AND PARAPET OF 1848 BROKEN AWAY. MASONRY WAS ASHLAR GRANITE BACKED UP WITH ASHLAR RUBBLE LAID IN NATURAL CEMENT



WEIGHT OF AQUEDUCT WAS DISTRIBUTED TO ARCHES BY A SERIES OF LONGITUDINAL WALLS. NOTE INSULAT-ING WALLS AND CONSTRUCTION OF TRENCH ROOF. CONCRETE DIAPHRAGM INSTALLED TO SECURE RIGIDITY DURING RECONSTRUCTION



RING COURSES OF CUT GRANITE VOUSSOIR ARCH BAR-RELS WERE REMOVED BY PROGRESSIVE REDUCTION IN WIDTH TO KEEP THEM SELF-SUSTAINING UNTIL THE THRUSTS BECAME NEGLIGIBLE. TEMPORARY WOOD CENTERING USED AS A PRECAUTION

AQUEDUCT BRIDGE, NEW YORK

January 5, 1929



RECONSTRUCTION OF AQUEDUCT (HIGH) BRIDGE NEW YORK CITY DEPARTMENT OF PLANT AND STRUCTURES





RECONSTRUCTION OF AQUEDUCT (HIGH) BRIDGE NEW YORK CITY DEPARTMENT OF PLANT AND STRUCTURES

January 5, 1929



RIVER ARCH RECONSTRUCTED BY NEW YORK CITY DEPARTMENT OF PLANT AND STRUCTURES

XUM



AQUEDUCT (HIGH) BRIDGE, NEW YORK, N. Y. RIVER ARCH RECONSTRUCTED BY NEW YORK CITY DEPARTMENT OF PLANT AND STRUCTURES



STUDY IN MASS. AMERICAN EXCHANGE IRVING TRUST COMPANY BUILDING, NEW YORK VOORHEES, GMELIN & WALKER, ARCHITECTS

THE AMERICAN ARCHITECT Page 63 January 5, 1929 DETAIL OF BRONZE PANEL OVER ELEVATOR

GENERAL VIEW OF ELEVATOR LOBBY BUILDING AT 235 EAST 45TH STREET, NEW YORK—EMORY ROTH. ARCHITECT THE AMERICAN ARCHITECT HAS RECENTLY MOVED ITS OFFICES TO THIS BUILDING



BUILDING AT 235 EAST 45TH STREET, NEW YORK—EMORY ROTH, ARCHITECT THE NEW OFFICES OF THE AMERICAN ARCHITECT ARE LOCATED IN THIS BUILDING



SPECIFICATIONS

Address communications relative to specification writing and the use of the New York Building Congress Specifications to THE AMERICAN ARCHITECT. Answers prepared by H. R. Dowswell, of the office of Shreve & Lamb, Architects, New York, will be printed in the pages of this department.



IN this issue is presented the first of the New York Building Congress Standard Specifications which will be followed in succeeding issues by specifications for other trade divisions. As far as possible the divisions will be presented in construction sequence.

Inasmuch as the Congress Specifications depart from the heretofore accepted practice in specification writing, each specification will be discussed and its application in practice explained.

In addition to these explanations a limited amount of space will be available for answering inquiries regarding their use or discussing the theory and structure of specifications or the standards specified.

In the issue of December 20th it was stated that in presenting these standards, the New York Building Congress was not offering a theoretical specification. Each trade division has had the careful consideration of leading authorities in their group and has also been tested in actual practice.

Before discussing the two divisions which are published in this issue, Demolition and Excavating, it is desirable to point out just what is meant by a Standard Specification. The New York Building Congress Specification does not propose to standardize buildings nor does it in any way limit the architect in the choice of materials. The Specification merely describes in a clear and concise manner acceptable standards for materials and workmanship, and defines the responsibilities of the several trade groups in accordance with established practice in the metropolitan district.

Mention has previously been made that it is proposed to divide specifications into two parts, A and B. Part B has been standardized and is designed to cover all items of work which regularly occur in the construction of different types of buildings. Under the heading of "Scope," Paragraph 4, the specifications state, "These requirements however form a part of the contract only insofar as they describe items mentioned in Part A or as indicated on the drawings." In order to bring this feature more forcefully to the attention of bidders, it has been found desirable to preface Part A, which is written by each architect for each building, with the following explanatory note:

"The specification for this division of the work is written

in two (2) parts. Part A enumerates items of work included in this contract with references by numbers to paragraphs in Part B describing requirements regarding materials and workmanship.

Part B consists of numbered paragraphs describing standard requirements for all materials and workmanship entering into the work of this trade. Only those paragraphs enumerated by number in Part A apply to this work and form a part of this specification and contract.

The balance of Part A need consist of only a "Work Included" clause in which is enumerated actual items of work with references by number to the paragraphs in Part B which describe the work and the manner of execution. The following extract from a Part A specification for Excavating will demonstrate the use of the standards. If this method is followed the New York Building Congress Standard Specifications may be bound with Part A and issued as a complete specification for execution of the work.

WORK INCLUDED

- This division shall include the furnishing Work of all labor, materials and appliances required for the execution of all excavating work enumerated herein or indicated on the drawings issued for bidding, subject to the requirements specified under Part B, paragraphs Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 20, 21, 22, together with additional paragraphs listed under individual items.
- 2. The location and general extent of the work are as follows:
 - (a) All excavating of whatever nature to the lines and levels indicated on Drawings (insert drawing numbers) required for footings, walls, piers, pits, areas, sidewalks and curbs, floors on earth, machinery and boiler foundations, piping and conduit.
 - (b) Bracing and care of pipes and conduit. (See Part B, Paragraphs 15 and 16.)
 - (c) Pumping, during period of excavating and for two weeks after completion. (See Part B, Paragraphs 17 and 18.)
 - (d) Guard railings, watchmen and lights. (See Part B, Paragraph 19.)
 - (e) Back-filling. (See Part B. Paragraph 23.)
 - (f) Grading and removal of surplus material. (See Part B, Paragraphs 24, 25 and 26.)

In succeeding issues another method of using the Congress Specifications will be outlined. Page 66

THE AMERICAN ARCHITECT

A.I.A. DIVISION 1a.

STANDARD FORM OF THE NEW YORK BUILDING CONGRESS, EDITION OF 1929 COPYRIGHTED BY THE NEW YORK BUILDING CONGRESS

New York Building Congress Standard Specification for

DEMOLITION

PART B.

General Conditions:

1. GENERAL CONDITIONS OF THE CONTRACT Of the American Institute of Architects, General current edition, shall form a part of this division, together with the Special Conditions, to which this Contractor is referred.

Arbitration Clause.

Any dispute or claim arising out of or relating to this Contract, or for the breach Arbitration thereof, shall be settled by arbitration under the Bules of the Arbitration Court Clause thereof, shall be settled by arbitration under the Rules of the Arbitration Court of the New York Building Congress or the American Arbitration Association and judgment upon an award may be entered in the court having jurisdiction.

Scope.

- 3. The following requirements specify the required standards in regard to the execu- Scope tion of all work of demolition.
- These requirements, however, form a part of the Contract only insofar as they describe items mentioned in Part A or as indicated on the drawings.

Examination of Site.

- 5. Bidders upon work in this division, before submitting proposals, shall visit the Examination site and carefully examine the work to be demolished so as to familiarize them- of Site selves with existing conditions and satisfy themselves as to the nature and scope of the work and the difficulties that attend its execution.
- 6. The submission of a proposal will be construed as evidence that such an examination has been made and later claims for labor, equipment or materials required or for difficulties encountered, which could have been foreseen had such an examination been made, will not be recognized.

Protection.

- This Contractor, as a part of this Contract, shall provide and erect all planking, Protection 7. bridges, fences, bracing, shoring, sheet piling, lights and warning signs necessary for the protection of the streets, adjacent property and the public.
- 8. Trees, shrubs or other planting, either on the site, the streets, or adjacent property, shall be fully protected throughout demolition operations.
- At completion of the demolition all protection shall be left in place and main-9. tained until removal is authorized in writing by the Architect.

Demolition Operations.

- The work of demolition shall be executed in a careful and orderly manner, with Demolition 10. the least possible disturbance to the public and occupants of adjacent buildings.
- In general, masonry walls, whether of concrete, stone, brick, or terra cotta, shall be demolished in small sections. Structural steel or cast iron framing or loose members shall be individually removed and carefully lowered. Where necessary to avoid collapse of either walls or framing, shores, struts or bracing shall be installed.
- 12. Debris shall be sprinkled with water where necessary to prevent annoyance from dust and in all cases enclosed chutes shall be employed to convey debris from upper stories.
- 13. Materials (except those acceptable for re-use and reserved under Part A) will not be permitted to accumulate on the floors of the building, on the bridges, in the cellar, or on other parts of the premises, but must be promptly removed from the site.
- 14. The streets and sidewalks shall be kept reasonably clean during working hours and shall be thoroughly cleaned and swept at the end of each day,
- 15. All existing service piping, including sewers, water and gas lines and all electrical services shall be cut and capped at the property lines, unless otherwise specified under Part A, in conformity with the requirements of the local Public Utility Corporations. It shall be the duty of this Contractor, before cutting any of these services, to notify the proper officials, persons or corporations owning same, obtain instructions for carrying out this work, and take all precautionary measures they may deem necessary.

Operations

January 5, 1929

XUM

THE AMERICAN ARCHITECT

A.I.A. DIVISION 2.

STANDARD FORM OF THE NEW YORK BUILDING CONGRESS, EDITION OF 1929 COPYRIGHTED BY THE NEW YORK BUILDING CONGRESS

New York Building Congress Standard Specifications

EXCAVATING

PART B.

General Conditions.

1. GENERAL CONDITIONS OF THE CONTRACT of the American Institute of Archi-General tects, current edition, shall form a part of this Division, together with the Special Conditions Conditions, to which this Contractor is referred.

Arbitration Clause.

2. Any dispute or claim arising out of or relating to this contract, or for the breach Arbitration thereof, shall be settled by arbitration under the Rules of the Arbitration Court of Clause the New York Building Congress or the American Arbitration Association and judgment upon an award may be entered in the court having jurisdiction.

Scope.

- 3. The following requirements specify the required standards in regard to the exe- Scope. cution of all work of Excavation.
- 4. These requirements, however, form a part of the contract only insofar as they describe items mentioned in Part A of the specification or as indicated on the drawings.

Examination of Site.

- 5. Bidders upon work in this division, before submitting proposals, shall visit and Examination carefully examine the premises upon which the Building is to be erected, so as of Site to familiarize themselves with existing conditions, and difficulties that will attend the execution of the work.
- 6. The submission of a proposal will be construed as evidence that such an examination has been made and later claims for labor, equipment or materials required or for difficulties encountered, which could have been foreseen had such an examination been made, will not be recognized.

Unit Prices.

7. For purposes of estimate the sub-soil conditions shall be assumed as described Unit under Part A of this Division. This Contractor shall, however, submit with his Prices estimate unit prices for excavating, both earth and rock at the various levels. Boulders up to and including one-half $(\frac{1}{2})$ cubic yard shall be classed as earth excavation. These prices shall form the basis of adjustments to the Contract should sub-soil conditions be found to vary from those described under Part A.

Examination of Drawings

8. The drawings indicating the extent of the work included in this contract are Examination enumerated in Part A of this Division. This Contractor shall thoroughly familiar- of Drawings ize himself with the requirements of these drawings and make his work conform thereto. Any additions to or deductions from the work indicated on the Contract drawings or enumerated under Part A shall be adjusted on the basis of unit prices embodied in the Contract.

Equipment, etc.

9. This Contractor shall furnish, as a part of his Contract all shoring and bracing Equipment, timbers, runways, trucks and equipment of whatever kind necessary for the sat- etc. isfactory execution and speedy completion of the excavating work and the disposal of the excavated material.

Surveys.

10. A competent surveyor will be furnished under another Division to determine the Surveys lines to which this Contractor shall excavate and establish a datum from which the depths of all excavations shall be measured.

XUM

THE AMERICAN ARCHITECT

N. Y. Building Congress Standard Specifications-EXCAVATING-Continued.

Allowances for Sheath Piling, Waterproofing, Forms, Centers and Fills.

11. This Contractor shall make all required allowances for sheath piling, applica- Allowances for tion of forms, centers, and floor filling. All excavating required in respect to these shall be included in the Contract Price.

Levelling and Removal of Rock.

12. Where foundations are specified or shown to rest on rock, the rock surface Levelling and under all footing and walls shall be levelled to a clean and hard surface. Where the rock slopes, level steppings shall be formed.

Blasting.

13. Where blasting is necessary, it shall be done by experienced men and in strict ac- Blasting cordance with local ordinances. This Contractor shall furnish an ample supply of mats and logs and see that all blasts are properly covered before firing. The utmost care shall be taken in blasting, and every precaution taken to avoid excessive vibration or damage to walls or other portions of adjoining buildings.

Damage to Adjoining Structures.

This Contractor shall, as a part of his contract, fully protect the Owner against Damage to claims for damages to structures and property resulting from work executed under this division, for which he may be responsible under the law.

Bracing.

15. This Contractor shall do all shoring and bracing necessary to support adjoining Bracing streets or structures or retain earth banks and prevent caving in and displacement of adjacent soil, furnishing all necessary timbers, cribbing, planking or sheath piling for that purpose. All bracing shall be subject to the approval of the Architect and shall be removed from the site when so directed by him. Bracing shall in no case be placed in such a manner as to thrust against any portion of the building.

Care of Pipes and Conduit.

16. This Contractor shall support, shore up and protect all water, sewer, gas, electric Care of Pipes or other piping, telephone and telegraph wires and conduits that are encountered and Conduit in this work, and he shall immediately notify the proper officials, persons or corporations owning same and shall allow them, or their agents, entrance and opportunity to take such additional measures as they may deem necessary.

Pumping.

- 17. Where so specified under Part A., this Contractor shall provide and operate all Pumping pumps or other equipment necessary to drain and keep all excavations, pits, trenches and the entire subgrade area free of water under any and all circumstances and contingencies that may arise.
- 18. The period during which water shall be removed by this Contractor shall be as stated under Part A.

Guards, Watchmen and Lights.

19. This Contractor shall furnish, erect and maintain during the execution of work Guards, in this division, guards and railings of an approved type at all exposed bound- Watchmen and aries of the property. He shall also place and maintain warning signs and lights Lights and in addition employ night and day watchmen.

Excess Excavations.

20. Any part of the work excavated to a greater extent than shown on the contract Excess drawings, without the authorization of the Architect, will not be paid for as Excavations extra excavation. Such excavations, except as hereinafter noted shall be filled by this Contractor with stone concrete composed of 1 part Portland cement, 2 parts sand, and 4 parts broken stone. Where, in the opinion of the Architect, such excess excavations lies beyond the effective bearing area of walls or footings, compacted backfilling may be used.

and Fills

Removal of Rock

Adjoining Structures

January 5, 1929

THE AMERICAN ARCHITECT

N. Y. Building Congress Standard Specifications-EXCAVATING-Continued.

Added or Omitted Excavations.

- 21. Excavations for walls, piers and footings shall be carried to the levels shown on Added or drawings. Pier holes and trenches shall be left clear of loose or surplus material with bottoms approximately level and lower section true to sizes indicated. If the soil or rock at levels indicated is not of sufficient bearing capacity, the Architect may order the excavating carried to a level where satisfactory bearings are obtained. Any such excavating below the levels indicated on the contract drawings, done under orders of the Architect, shall be classed as additional work, not included in the Contract price, and the price for same shall be determined on the basis of unit prices agreed upon at the time of signing contract. Steppings in rock shall not be classed as additional work.
- 22. Should proper bearings be found at depths less than those specified or shown, the Architect may order the excavation to stop, and the Contractor shall allow a credit for excavating omitted, the amount of such credit being based upon unit prices agreed upon at the time of signing contract.

Back-Filling.

23. Execute all back-filling required with earth after installation of column founda- Back-Filling tions, piers and other foundations, footings, walls, pits and trenches to bring the earth to proper level and grade for subsequent work. All filling shall be well wet down and solidly tamped in layers to prevent settlement.

Grading.

- 24. All excavated materials lying above finished grade levels shown on drawings shall Grading be spread about the premises so that none of this material remains above finished grade levels.
- 25. Should the quantity of excavated material be insufficient, any additional filling that may be required to bring the grades about the building up to the desired levels will be executed under another contract, unless specifically stated under Part A to be furnished by the Contractor.
- Should the excavated material be in excess of that required for back-filling and 26. grading the surplus material shall be removed from the site as a part of this Contract, unless otherwise stated under Part A.

REVIEW OF A.I.A. STANDARD DOCUMENTS

BRIEF review of the Standard Documents of A the American Institute of Architects, compiled for the Committee on Contracts by William Stanley Parker, Past Secretary, has recently been published. It contains a historical account of the development of the documents, in cooperation with other national organizations related to the building industry, from 1888 when the Uniform Contract was first issued. The first edition of the Standard Documents, the result of an effort to draft a more complete set of general conditions and to standardize the other usually required forms, was issued in 1911. Further revision and clarification led to the second edition in 1915, the third in 1918, and the fourth in 1925. Since 1915, there has been practically no serious difficulty with misunderstanding of the clauses of the documents. Some minor doubts, however, have arisen. The review is devoted chiefly

to an attempt to clarify the points in question. The edition of the review is limited. Copies may be obtained for one dollar each from the Executive Secretary, The American Institute of Architects, The Octagon, 1741 New York Avenue N. W., Washington, D. C.

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PLUMBING FIXTURES COMMERCIAL STANDARD NOW IN EFFECT

SUFFICIENT number of manufacturers, dis-A tributors and users of Staple Porcelain (All-Clay) Plumbing Fixtures having submitted signed acceptances to the proposed commercial standard for this commodity, the Commercial Standards Group of the Bureau of Standards announce that the standard is now in effect. Before the Bureau of Standards will promulgate a proposed commercial standard it must be accepted by at least 65 per cent of the industry, by volume of annual production.

Omitted Excavations

DECISION IN PATENT CASE

"HE case of Crozier-Straub, Inc., against several other building-block concerns, after an unusually long hearing, has been decided by the Court of Appeals in favor of the plaintiff. The court holds definitely that the Straub patent is valid and that all of the defendants have infringed.

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RECENT PAPERS ON STEEL CONSTRUCTION

HE American Institute of Steel Construction. The American Institute of constructive papers: "Earthquake-Resistant Structures" by Wendell M. Butts, Civil Engineer, and "Endurance and Beauty in Steel Bridges" by Charles Evan Fowler, Consulting Engineer. The former is the result of a study of the weights and directions of stress in earthquakes, and includes information and charts of value to architects and engineers in regions subject to earthquakes. The latter contains many illustrations and detailed descriptions of various types of bridges in various countries, featuring the solution of structural problems in each.

THE BUCKEYE BLOWER COMPANY EXPANDS

THE Buckeye Blower Company of Columbus, Ohio, manufacturer of Heatovent, Thermovent and Thermofan, heating and ventilating units. announces that it has acquired an additional building and three acres of land, with the intention of erecting a large addition to the present manufacturing plant. The present plan is to increase the size of the plant nearly fifty per cent. Increased manufacturing facilities will, it is stated, result in better consumer service.

200

DRAFT'SMEN'S EMPLOYMENT SERVICE

TE have just received the announcement that the New Jersey Chapter of the Institute of Architects and the New Jersey Society of Architects maintain a Draftsmen's Employment Service. Architects and draftsmen who are interested may get information about this service by writing to Mr. Gilbert C. Higby, 207 Market Street. Newark, N. J.



DESIGN FOR & HOUSE IN RIDGEWOOD, N. J. P. F. WATKEYS, ARCHITECT

Genius reative by KANNE & BESSANT

~HE modern school of interior decoration has yet to produce its Adamses, Sheratons and Phyffes. But certainly the modern school is achieving a new standard of beauty which in time will produce great masters. Posterity will name these great masters, but contemporaries unite in acclaiming Kanné & Bessant. Pictured here are three reasons why.

KANNE & BESSANT, Inc. 460 West 34th Street, New York Catalog on Request



Represented by Mary Ryan in the new Lamp Show

January 14th to 25th at the Palmer House Chicago.

RYAN

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CIVIL SERVICE EXAMINATION FOR JUNIOR ENGINEER

Page 12

HE United States Civil Service Commission announces an open competitive examination for junior engineers qualified in structural steel and concrete. The examination, which is open to senior students as well as to experienced engineers, is to fill vacancies in various branches of the service throughout the United States. The duties of the position are to perform routine testing, inspection of engineering material, drawing up plans for minor projects, preparing specifications for engineering material or apparatus, performing field work, making computations, preparing maps, assisting in conduct of experimental research tests, compiling reports, and handling technical correspondence. The entrance salary is approximately \$2,000 a year. Higher-salaried positions are filled through promotion. Applications must be on file with the Civil Service Commission at Washington, D. C., not later than January 22, 1929. Competitors will be rated on general physics, mathematics, general engineering, and structural steel and concrete engineering. Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or custom house in any city.

200

COMPETITION FOR THE GRAND PRIX DE ROME

THE American Academy in Rome has announced its annual competitions for fellowships in architecture, landscape architecture, painting and sculpture. In architecture, the William Rutherford Mead Fellowship is to be awarded; in landscape architecture, the fellowship is provided by the Garden Club of America Fund; that in sculpture is supported by the Rhinehart Scholarship Fund of the Peabody Institute of Baltimore, Maryland.

The competitions are open to unmarried men not over thirty years of age who are citizens of the United States. In architecture, graduates of accredited schools will be required to have had architectural office experience of six months; and men who are not graduates of such schools may enter the competition if they have had at least four years of architectural office experience and are highly recommended by a Fellow of the American Institute of Architects.

The stipend of each fellowship is \$1,500 a year for three years, with allowances of \$500 for transportation to and from Rome and \$150 to \$300 for materials and incidental expenses. Residence and studio are provided at the Academy, and the total estimated value of each fellowship is about \$2,500 a year. The Grand Central Art Galleries of New York City will present free membership in the galleries to the painter and sculptor who win the Rome Prize and fulfill the obligations of the fellowship.

Entries for all competitions will be received until March first. Circulars of information and application blanks may be secured by addressing Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York City.

30

STEEDMAN MEMORIAL FELLOWSHIP COMPETITION

NNOUNCEMENT has been made of the A fourth competition for the James Harrison Steedman Memorial Fellowship in Architecture, under the supervision of the Faculty of the School of Architecture of Washington University. The successful competitor will receive fifteen hundred dollars to be used for traveling one year abroad. The time is to be spent in study, preferably in original research. Upon his return, the "Steedman Fellow" is required to present a thesis which, if satisfactory, will enable the Fellow to be considered by the Faculty for recommendation for the degree of Master of Architecture. The competition is open to graduates in architecture of recognized architectural schools of the United States, provided that they are American citizens of good moral character, and have had at least one year of practical work in the office of an architect practicing in St. Louis, Mo. Candidates must be between twenty-one and thirtyone years of age at the time of appointment to the fellowship. Applications properly filled and all requests for information must reach the Head of the School of Architecture of Washington University, St. Louis, Mo., not later than January 23, 1929. Any candidate who holds a degree not conferred by Washington University must submit with his application a transcript of the record of his scholastic work. Each application must bear the indorsement of three members of the American Institute of Architects, one at least of whom must be a resident of St. Louis. Candidates should note especially that the rules have been changed since the competition of last year.

200

COLUMBUS MEMORIAL LIGHTHOUSE COMPETITION

THE competition for the Pan American Memorial to Christopher Columbus, which was announced in our issue of October 5, 1928, has been changed slightly to make the work simpler and less expensive for the competitors. All of the drawings except the elevation, may be made at one half of the scale called for in the original program.


Construction Speed means building economy

WITH all the versatility of concrete as a building material, it requires time to gain sufficient strength to bear heavy loads. In many cases this means delays costing thousands of dollars while overhead goes on.

But now the Missouri Portland Cement Company offers the builders of America a new magic in speeding construction — Prestolith Velo Cement — which makes concrete you can use in 24 hours and practically eliminates one of the most costly forms of building delay.

Not the least remarkable feature of Prestolith Velo is its price. The Missouri Portland Cement Company is able to produce it at such a comparatively low price that the slight addition to the ordinary cement bill is negligible in comparison to the great saving in time which Prestolith Velo effects.

The introduction of Prestolith Velo to the building industry indicates an inherent capacity for engineering service which has had a vital part in the rather unusual growth of the Missouri Portland Cement Company.

It represents an absorbing interest in the improvement of construction methods and materials which has prompted the investment of ability and money in the most exhaustive and conclusive tests of Prestolith Velo in the laboratory and in actual work on a commercial scale over a period of five years.

And it represents the vision of complete usefulness which has caused, as a result of these tests, the building of a new \$2,000,000 plant at Prospect Hill, St. Louis, for the exclusive and adequate production of Prestolith Velo.

Write for our interesting booklet, "24-Hour Cement."



This is the emblem of the authorized dealer in Prestolich Velo and Red Ring Portland Cement. Through him, as the representative of the Missouri Portland Cement Company, is available the advice and engineering assistance of this entire organization.

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Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual



MEDICAL ARTS BUILDING, OAK PARK, ILL. ROY J. HOTCHKISS, ARCHITECT

SIMPLIFIED PRACTICE RECOMMENDATIONS

THE Bureau of Standards of the Department of Commerce has recently issued four "Simplified Practice Recommendations" of interest to practicing architects. Recommendation R80-28 for "Folding and Portable Wooden Chairs" standardizes six types of portable and three of folding chairs on which manufacturers may concentrate production. other types being regarded as special. "Roofing Ternes" recommendation R30-28 limits standard production to ternes of 8, 15, 20, 25, 30, 32, and 40 pounds. thickness not less than IC. Simplified Practice Recommendation R3-28 for "Metal Lath" includes standardization tables on three types of lath, and other statements of limitations. Recommendation R35-28 on "Steel Lockers" includes standardization tables for single, double and multiple tier lockers. At the front of each recommendation is a list of the individual manufacturers and the associations that have accepted these recommendations. Copies of these booklets can be obtained from the Superintendent of Documents. Government Printing Office, Washington, D. C., for five cents each.





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Terra Cotta offers greater possibility for creation of night display than any other building material.

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(On behalf of the Terra Cotta manufacturers throughout the United States)

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T. MACLAREN DEAD

WE have been informed of the sudden death of T. MacLaren, architect, of Colorado Springs, Colorado, on December 4, 1928, following a major operation.

200 PERSONALS

George L. Scheffler, architectural renderer, announces the removal of his office to 49 Stevens Avenue, Hempstead, N. Y.

30

Joseph E. Franczak, architect, announces the removal of his office to 1067 Broadway, Marine Trust Building, Buffalo, N. Y.

30

Grant M. Simon, architect, formerly of 249 South Juniper Street, announces the opening of his office at 1500 Walnut Street, Philadelphia, Pa.

20

Kenneth F. Jones announces the opening of an office for the practice of landscape architecture and town planning, at 910 Kahl Building, Davenport, Iowa.

30

Ray G. Arnhold, architect, announces the removal of his offices to 910 Staley Building, Wichita Falls, Texas. He requests that all communications be sent to the new address.

20

John P. Pedersen, architect, announces the opening of offices at $437\frac{1}{2}$ North Beverly Drive, Beverly Hills, Calif. He requests that manufacturers send him their catalogs, samples, and manuals.

300

Benjamin H. Whinston, architect, of 6 East 46th Street, New York City, announces the resumption of his professional and business activities after recuperating from his recent long and serious illness.

20

Earl Busch announces that he has opened an office for the practice of architecture at 528 Du Bois Boulevard, Congress Park, Ill. He requests that manufacturers send him their catalogs and samples.

30

Mr. H. Lawrence Coggins announces the opening of his office in the Gurly Building at Stamford, Conn., for the practice of architecture. He requests that manufacturers send him their catalogs and samples. Announcement has been made of the removal of the architectural offices of Fred C. Medicus-John H. Samuels, A.I.A., Limited, from 211 Chapel Place to 216 Mahoning Bank Building, Youngstown, Ohio.

30

A. Abramson, designer and builder, announces that he has opened offices at 9316 Oakland Avenue, Detroit, Michigan, for the practice of architecture and building. He requests that manufacturers send him their catalogs.

300

Robert W. Dickerson and Emery W. Rhoads announce the formation of a partnership for the practice of architecture under the name of Dickerson & Rhoads. Their offices are at 1001 Huron Road, Cleveland, Ohio.

30

D. H. Buckout, architect, announces that he has moved his office from 446 West Front Street, Perrysburg, Ohio, to 1549 Nicholas Building, Toledo, Ohio. He requests that manufacturers send him their catalogs and samples.

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Chas. H. Owen, formerly with Owen Construction Company, and Fred W. Clarke announce their association under the name of Owen and Clarke for the practice of architecture. Their office is at 4 St. Joseph Street, Mobile, Alabama.

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The Architectural Department of Home Smith and Company have opened their new offices in the Administration Building, Home Smith and Company, Lambton Mills Post Office, Ontario. They request that manufacturers send samples and catalogs.

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The Architects and Builders Exhibits, Inc., of No. One Niagara Square, Buffalo, N. Y., has opened in connection with its exhibit a reference catalog library for architects, and will welcome catalogs from all manufacturers who have not already sent theirs.

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William Alciphron Boring, F.A.I.A., Edward Lippincott Tilton, F.A.I.A., Ernest Greene, A.I.A., and Alfred Morton Githens announce the removal of their architectural offices from 141 E. 45th Street to the Graybar Building, 420 Lexington Avenue, New York City.

XUM

Facilities for modern Telephone convenience are now Built into the Home



Owners want telephone service available throughout the house planned in advance—for comfort, for convenience, for appearance

PEOPLE today want telephone convenience commensurate with their other comforts—telephones throughout the house, strategically located to save time and effort in placing or answering calls.

And they want this modern telephone convenience *planned in advance* . . . whether they are building new homes, or remodeling old ones.

When adequate provision for telephones is included in such plans, many of the facilities for wires and apparatus can be concealed. Conduits can be so laid as to make telephone outlets available in nearly every room, allowing telephone service within the home to be expanded or rearranged as desired.

Built-in locations for telephones and bell boxes quite frequently make an attractive decorative feature. Underground service entrances, intercommunicating telephone service from room to room, and other advanced features, are desired by many home-owners.

These and other facilities are described in two booklets prepared by the Bell System to aid architects and others in planning telephone convenience for homes and buildings. If you have not already received your copies, call the Business Office of your local Bell company and they will see that you are supplied immediately.

In addition they will be glad to arrange conferences between architects, engineers, builders and representatives of the telephone company to discuss specific projects in detail.



Specifications of most products advertised in THE AMERICAN ARCHITECT appear in the Specification Manual

DO YOU BELIEVE IN SIGNS?

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THE picture herewith illustrates the type of sign recommended by the Chapter to be placed on work under construction, of which Chapter members are the Architects. The preparation of a design for this purpose was left with the Publicity Committee at the May Chapter meeting, and the Committee obtained the assistance of William Aitken and Arch Torbitt, who originated the idea, Mr. Aitken being responsible for the design as finally



adopted. A sample sign, from which the above illustration was photographed, was submitted to the Chapter at the June meeting in Tacoma when the Chapter's approval was voted with the recommendation that the sign used by members conform to this design.

The size of the sign submitted, which was recommended for most purposes, was three and onehalf feet long by two feet high. The background is a light cream color, with border and lettering in dark chocolate, except for the "A. I. A." in the background, which is in gold outlined in blue, suggesting the colors in the Institute insignia. A sample sign can be seen at any time at the office of Mr. Vogel, the Chairman of the Publicity Committee, 322 L. C. Smith Building.

(From the Monthly Bulletin of the Washington State Chapter, A.I.A.)

PERSONALS

A. D. Thacker, A.R.I.B.A., architect, announces the removal of his office from 1100 Beaver Hall Hill to 1178 Phillips Place, Montreal, Quebec.

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Clarence W. Stuber, architect, announces the removal of his office from 1035 West Fifth Avenue, Gary, Ind., to 51 West 80th Street, Chicago, Ill.

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C. F. Springall announces the removal of his architectural offices to 50 Park Street, Malden, Massachusetts. He requests that manufacturers send their catalogs to him at this address.

PHILADELPHIA ART JURY REPORT

THE Seventeenth Annual Report of the Art Jury of Philadelphia has recently come to our desk. The charter of the city provides that no work of art become the property of the city unless approved by the Art Jury. The report for 1927, addressed to the Honourable Harry A. Mackey, Mayor of Philadelphia, and signed on behalf of the Art Jury by its president, John Frederick Lewis, consists largely of photographs and descriptions of buildings, bridges, mounments, etc., approved during that year. The group includes the main building of the Free Library, the Art Museum, the Rodin Museum, the Army and Navy monuments, the Henry Avenue Bridge over the Wissahickon, and other buildings.

SKYSCRAPER ART GALLERY PROJECTED BY ROERICH MUSEUM

THE first skyscraper art gallery in this country, or probably in the world, will be built by the Roerich Museum on the site of its present home at Riverside Drive and 103rd Street, New York City, according to a recent announcement. It will be twenty-four stories high and called the Master Building. In addition to the museum it will house Corona Mundi, international art center, and the Master Institute of United Arts. There will be large and small auditoriums, two art libraries and conference rooms. The greater part of the building will be devoted to studios and apartments.

"It is the aim to make this a historic building in America, where for the first time the skyscraper, which is the real American architectural expression and one native to the soil, will be utilized as a great art shrine." states the museum's announcement.

The Roerich Museum was founded in 1923 as a monument to the art of Nicholas Roerich, and now contains 750 of his paintings. Its art libraries, like the museum, will be open to the public.

The Master Institute of United Arts, founded in 1921 as a school uniting the teaching of all the arts, has classes in music, painting, sculpture, architecture, opera, ballet and drama, and lectures.

Corona Mundi has for its aim the widening of art appreciation, and will continue its exhibitions of the art of all nations.

In designing the 390 apartments, thought has been given to the "beauty of the inner structure" as well as to comfort. Most of them are one-roomand-bath size. The building will also contain a restaurant. There will be slight setbacks up to the fifteenth floor; from there upward there will be a series of terraces ending in a tower.

January 5, 1929

COME of our plans for the immediate future will be, we think, O interesting to our readers. The February 5th issue is to be devoted largely to apartment houses. The leading article was written by an architect who has had long experience in the planning and designing of apartment houses, and who is familiar with the problem which is presented to the architectural profession, from the legal side as well as from an economic standpoint. The article is entitled "Apartment House Architecture," by Roderick Seidenberg, and makes interesting reading to all who at one time or another have been confronted with the problem of designing apartment houses. 20 20 20 The February 20th issue is to be given over in its entirety to the presentation of the Fisher Building, Albert Kahn's most recently completed masterpiece in Detroit, Mich. This issue will be similar in many respects to other issues of THE AMERICAN ARCHITECT in which the architectural and engineering features of a single building have been fully described. These issues have been in effect reference numbers that presented the latest practice in the design and equipment of buildings of the type illustrated. In each case, one building of marked prominence has been selected by the editorial department. We believe our readers will find the Fisher Building of unusual interest. 20 20 20 The publication of the Standard Specifications of the New York Building Congress, begun in the January 5th issue, will be continued indefinitely until the entire series has been printed. We shall welcome the reaction of our readers to this innovation in the manner of conducting a specification department.

January 20, 1929

The Publishers



OLD SWEDES CHURCH, PHILADELPHIA, PA. (From the original drawing by Geo. C. Sponsler, Jr.)

THE AMERICAN ARCHITECT January 20, 1929