

The AMERICAN ARCHITECT

Founded 1876

VOLUME CXXXV

MARCH 5, 1929

NUMBER 2564

ARE WE LOSING OUR EARLY ENGLISH PRECEDENTS?

By MELVIN PRATT SPALDING, A. I. A.

THE growing tendency to destroy old landmarks, regardless of their value, not only to the community but to the world, is deplorable. This seems to be the case more with the English than with us at present. Our chief concern is the preservation of these old buildings in the cities. Possibly through our more systematized and better organized historical societies, we are taking greater interest in saving our Colonial work. Al-

though there is beginning to be felt among the English quite an agitation against the continued destruction and removal of their old buildings, this agitation is rather late in starting. It is to be hoped that it will rapidly take definite form through powerful channels and be instrumental in saving the best of the old work.

On extremely valuable land, the removal of an architectural chef d'oeuvre is inevitable. In fact, it



Illustrations by the Author

AN OLD HOUSE AT WINCHESTER

THIS IS SAID TO BE THE FOURTH OLDEST HOUSE EXISTING IN ENGLAND

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OLD SHOP AT FARNHAM, SURREY
NOTE THE MODERN ATROCITY NEXT DOOR

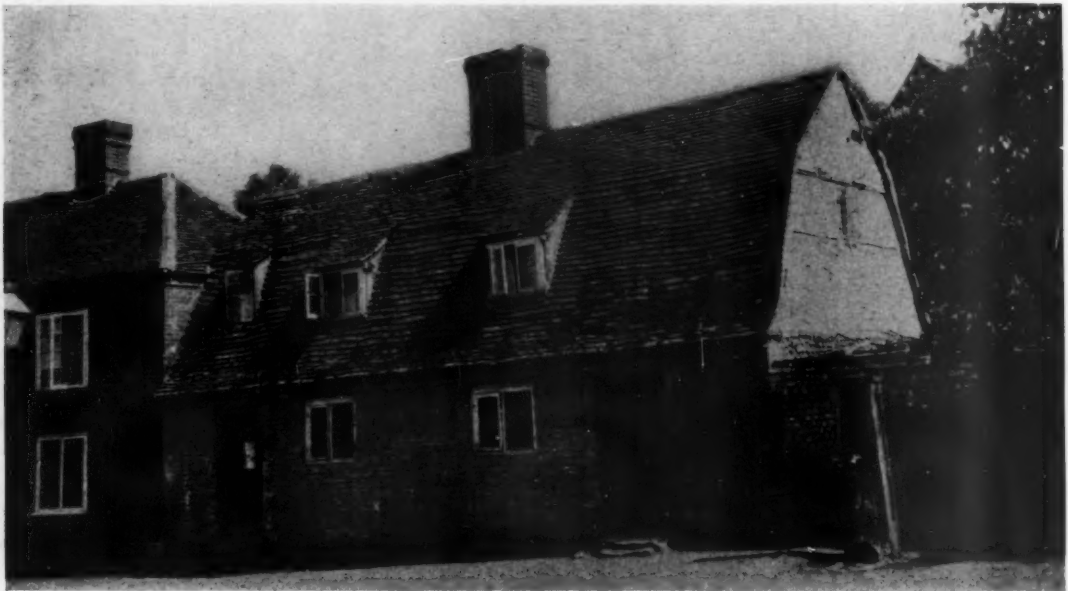
is unreasonable to expect differently, although here, oftentimes, it is entirely possible to relocate the building where its value is worthy of the cost and the agitation for its preservation is sufficiently great.

Due to the broad policy of our societies, and the increasing popular interest taken in them, most of

the best of the Colonial and early nineteenth century buildings in this country are assured of preservation. The vogue for the early American style in everything not only makes our old domestic work safe, but puts a premium on its purchase price. Fortunately, most of the best work is not remote, as it was located along the main highways, whose routes in almost every case are followed today.

The creation of a nationwide interest in their early work would perhaps be the solution in England, although this would not help in the preservation of the still numerous fine old buildings of the cities and towns as much as it would the preservation of the houses in the country, many of which are now being restored. English towns have not progressed as have ours, consequently the greater number of old buildings remain, and it is perhaps fortunate that they have lasted this long. In this era, commercial and economic factors against their preservation are curbed to a far greater extent by an increasingly broad aesthetic appreciation and interest in keeping the most deserving monuments of an age rich in architectural talent. Had English towns started their commercial growth in the last century, they would be as devoid of their old work as American towns are now.

In speaking of saving the old work, it is intended to refer more to the lesser buildings and smaller towns, as there is already established a strong feeling toward preserving the well known and finer examples of the earlier centuries. In the meantime,



AN OLD HOUSE IN LAVENHAM, SUFFOLK
NOTE THE SMALL STONE LAID IN COURSES, WHICH GIVES AN INTERESTING WALL TEXTURE

unless this agitation is pushed, some of the fine old towns fairly near London, like Godalming and Shere in Surrey, will lose their character, and the charm of the English village of that era will be entirely lost to posterity. Of course, Stratford-on-Avon has been fairly well taken care of, due to its historic associations. The colleges and eleemosynary buildings are all fairly sure of a long life, the latter most probably because of lack of funds to build anew. This type of old building is generally very commendably done, and it would be unfortunate indeed were we ever to lose the charming old Leicester Hospital for old soldiers at Warwick, the St. Cross Hospital at Winchester, or the Almshouse at Godalming.

Godalming in Surrey and Lavenham in Suffolk rather correspond to Deerfield, Massachusetts, in that they are examples of the very few towns now existing that have retained their original character, very little tarnished by modern inroads of commerce. It is to be hoped that Godalming and Lavenham will have as much assurance of preservation as have Deerfield and Stratford-on-Avon. In all our recent progress in architecture and town planning, we have not created so delightful a suburban town as Godalming, nor a country town whose buildings show the character of Lavenham. Yet, with towns like these for inspiration, monotonous model villages are created in England, hardly "a stone's throw away" from them. Letchworth Model Village in Herts has a few new buildings

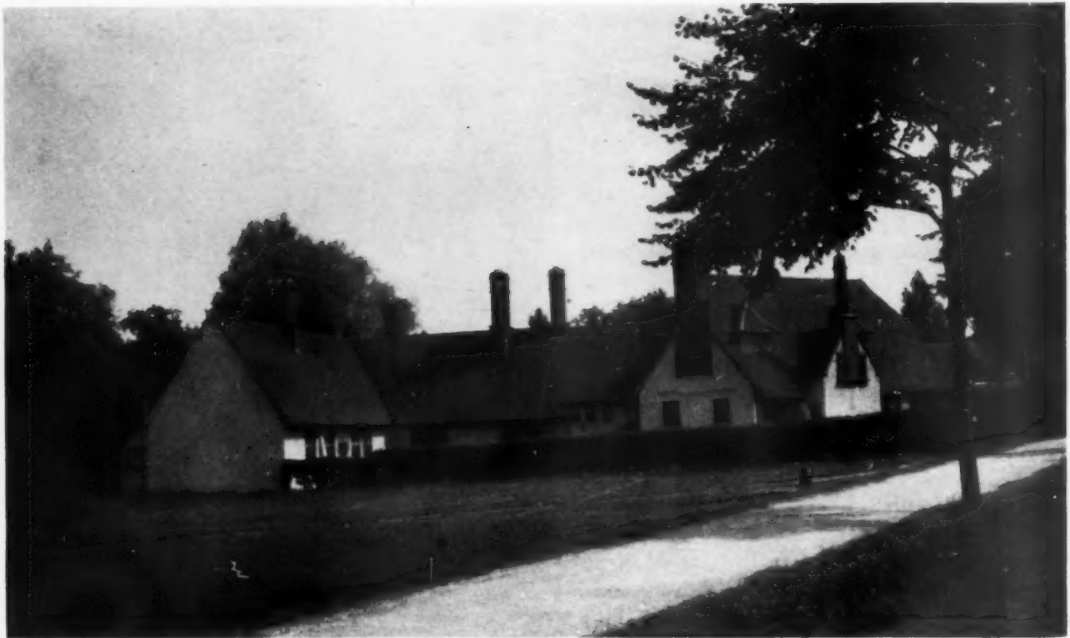


THE GUILD HALL, LAVENHAM, SUFFOLK
OLD ENGLISH ARCHITECTURE AT ITS BEST

of character, like the Girls' Club and a few single and double houses. The natural location and character as a whole, however, make it a long step backwards from these old towns that are allowed to lose their character so rapidly. The original portion of Forest Hills, in Long Island, more



IN THIS EXAMPLE OF BAD RESTORATION AT HITCHIN, HERTS, THE OLD TIMBERS AND BAY ARE PAINTED SHINY BLACK AND THE STUCCO AND BRICKWORK PAINTED WHITE



THE GIRLS' CLUB AT HERTS IS AN EXAMPLE OF COMMENDABLE MODERN WORK



SHOW WINDOWS MADE UP OF SMALL PANES ARE INTRIGUING, EVEN THOUGH VISIBILITY IS SOMEWHAT IMPAIRED IN COMPARISON WITH THE MODERN PLATE GLASS SHOP WINDOW



OLD ALMSHOUSE, GODALMING, SURREY



OLD HOUSE AT ST. CROSS VILLAGE
NOTE THE INTERESTING THATCHED ROOF

nearly approaches that character than those model villages of England.

Lavenham is an out-of-the-way town, and about the only building I had seen pictured there was the Guild Hall. Here is a town almost complete in its ancient robes. It is unfortunately rather lacking in trees and therefore has not the inviting, hospitable atmosphere of the average English village. Its buildings are woefully neglected and run down, due apparently to the lack of prosperity there. A native industry started there would improve conditions. This would be a far better solution than "booming" the town, which would only make it go like the rest, half of the buildings replaced by new ones, and the other half poorly and cheaply restored. But Lavenham is the most completely "old" town I have seen in England. It is untouched by progress and therefore by modern buildings. One forgets here that one is living in the twentieth century.

Speaking of restoration, Lavenham is an example of how much more character the old work has, unrestored as it is, than it would have, restored in the usual manner. The old mellowness, color and texture are often lost by overdoing the restoration. The wonderful soft weathered grays and browns

of the timbers, their texture, and the softening tones of the stucco or brick between are too often painted over, and with shiny black and white. Some restorations that are at least in good taste are to be found in "King John's Farm" at Chorley Wood, Herts, Nethergate House at Clare, Suffolk, the Harvard House at Stratford, and the very early half timber house at Winchester. Sir Lawrence Weaver has done a great deal of notably good restoring of the old houses.

It would not be so deplorable to lose some of the old landmarks if we could only be assured of having them replaced by work as well studied and designed and as full of character. Unfortunately, this is all too rarely the case. Most of the new work is not done by architects, or good architects at least, and the builder of today is not the craftsman that he was a few centuries ago. While zoning protects our towns in general, it does not, and hardly can be expected to, protect their aesthetic character. It seems that only ideal community coöperation or ideal private operation can do this. This is equally necessary in protecting the old work and the character of the old villages, and a deep-seated nationwide agitation will be the principal means of bringing this about.



OLD HOUSE AT LAVENHAM, SUFFOLK

LAVENHAM IS PERHAPS THE MOST COMPLETELY "OLD" TOWN IN ENGLAND

REVIEW IN PICTURES
OF THE
SIXTH ANNUAL EXHIBITION OF THE NEW YORK CHAPTER
OF THE
AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS



ARDEN GALLERIES, NEW YORK

Opening March 11, 1929



ENTRANCE TO ROSE GARDEN



Photos by Healy

VIEWS OF THE ESTATE OF EDGAR BASSICK, BRIDGEPORT, CONN.

MARIAN COFFIN, LANDSCAPE ARCHITECT

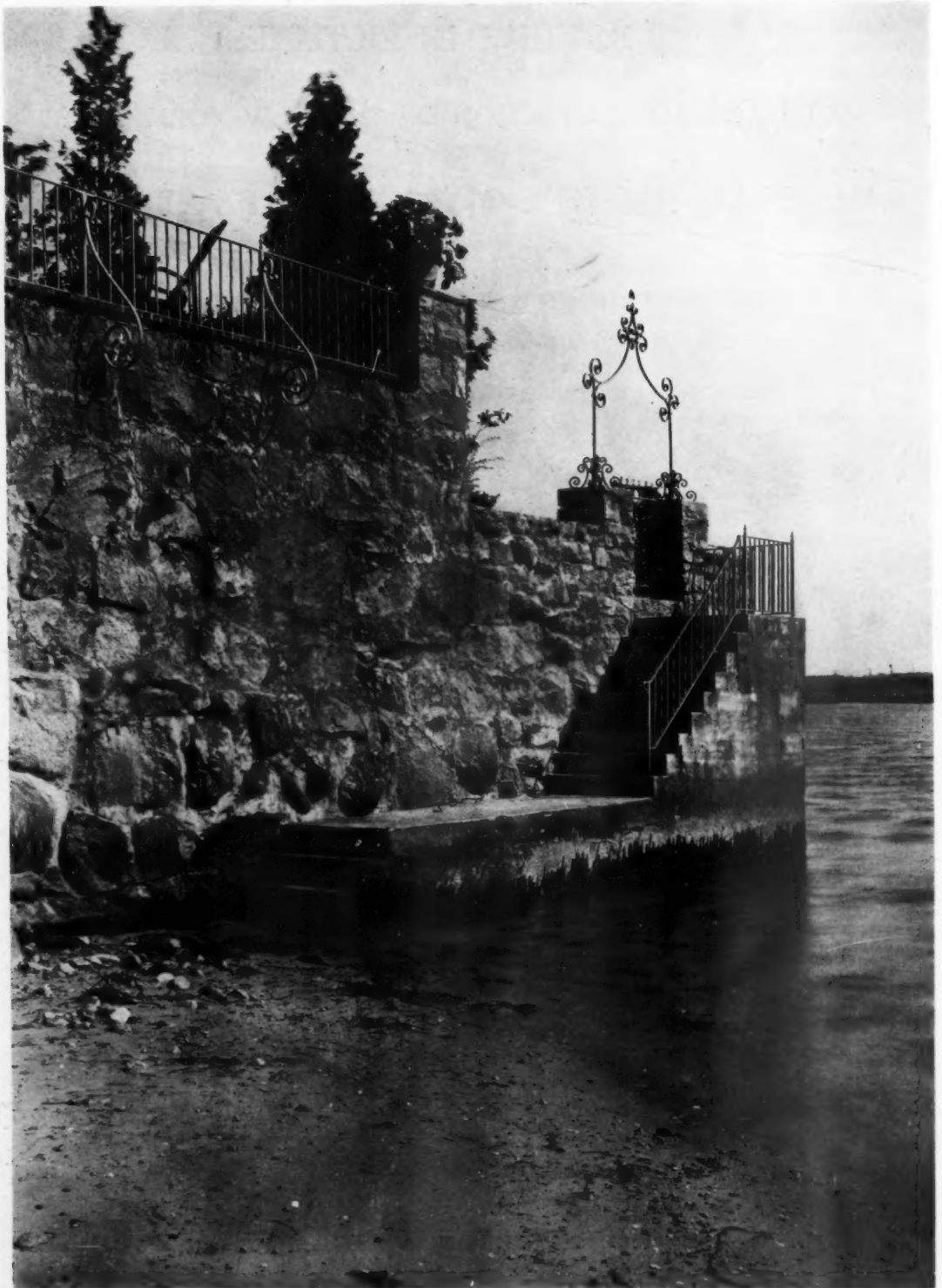


Photo by Hewitt

THE BEACH AND WATER GATE, ESTATE OF MRS. EUGENE ATWOOD, STONINGTON, CONN.
ARMAND TIBBETTS, LANDSCAPE ARCHITECT

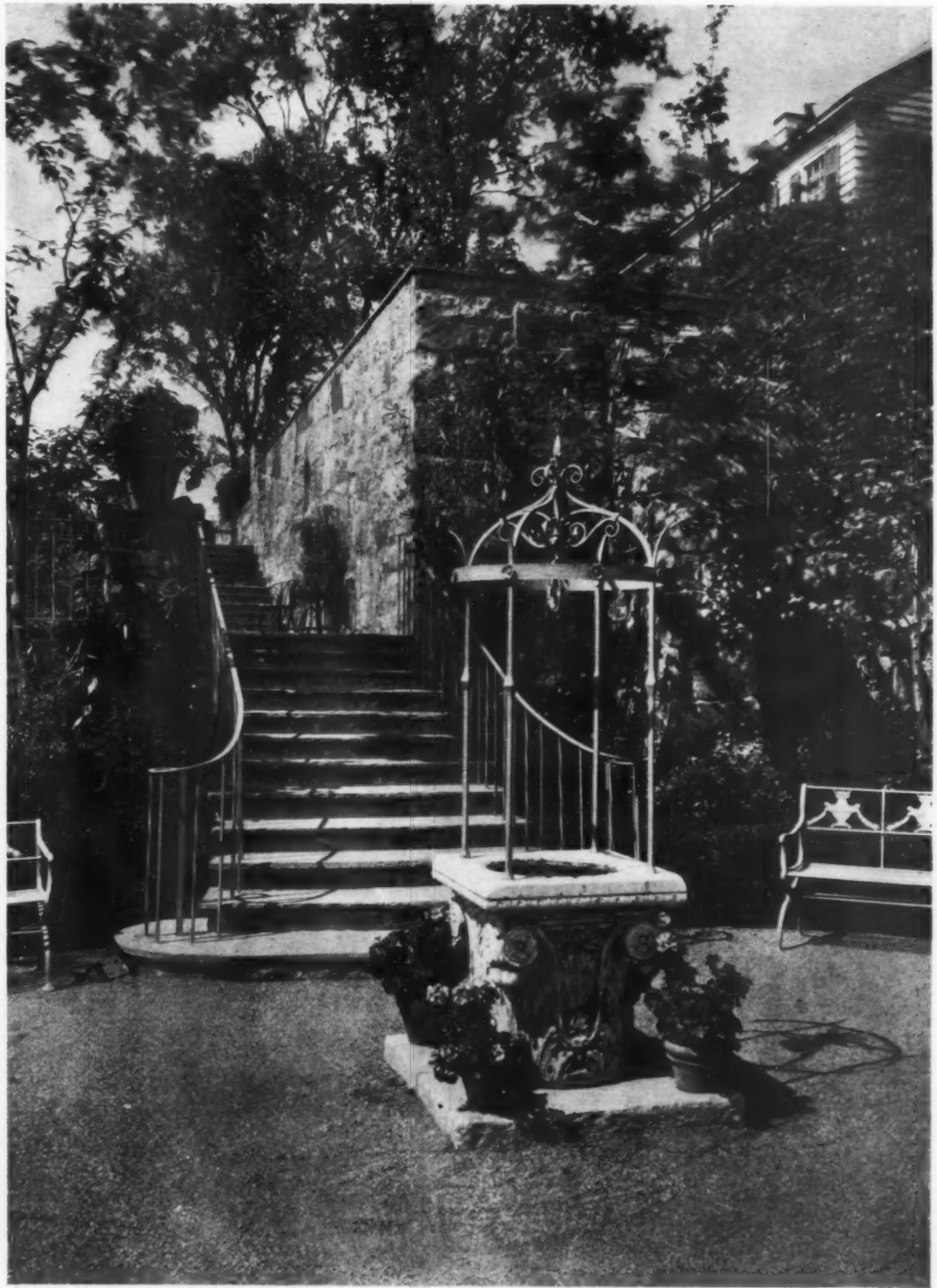


Photo by Hewitt

LOWER TERRACE, ESTATE OF MRS. EUGENE ATWOOD, STONINGTON, CONN.

ARMAND TIBBETTS, LANDSCAPE ARCHITECT

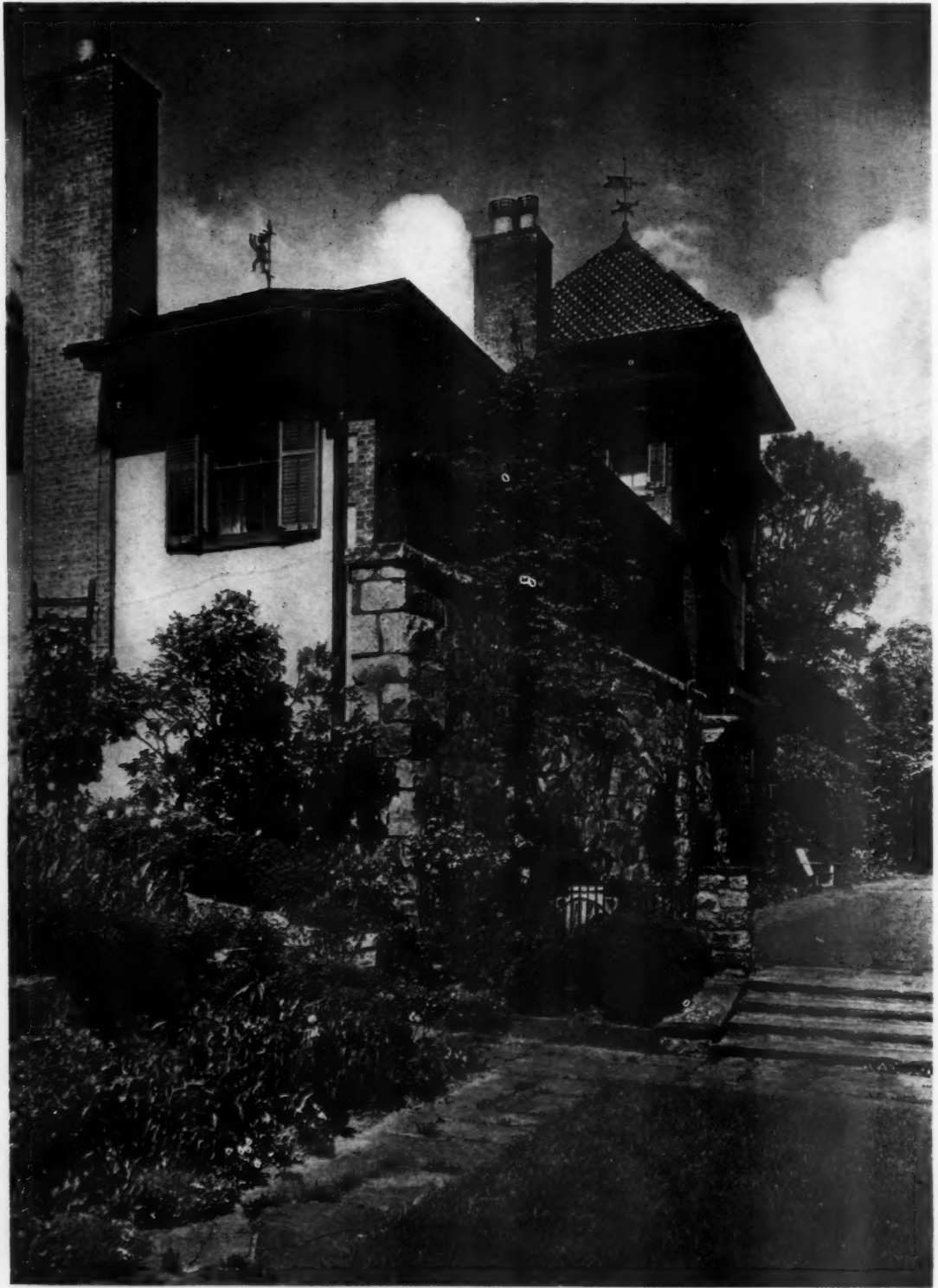


Photo by Gottscho

GARDEN ON ESTATE OF H. L. McVICKAR, TUXEDO PARK, NEW YORK

CLARENCE FOWLER, LANDSCAPE ARCHITECT



Photo by Healy

SIDE PATH IN GARDEN, ESTATE OF MRS. E. MORTIMER BARNES, GLEN HEAD, L. I., N. Y.

ANNETTE HOYT FLANDERS, LANDSCAPE ARCHITECT

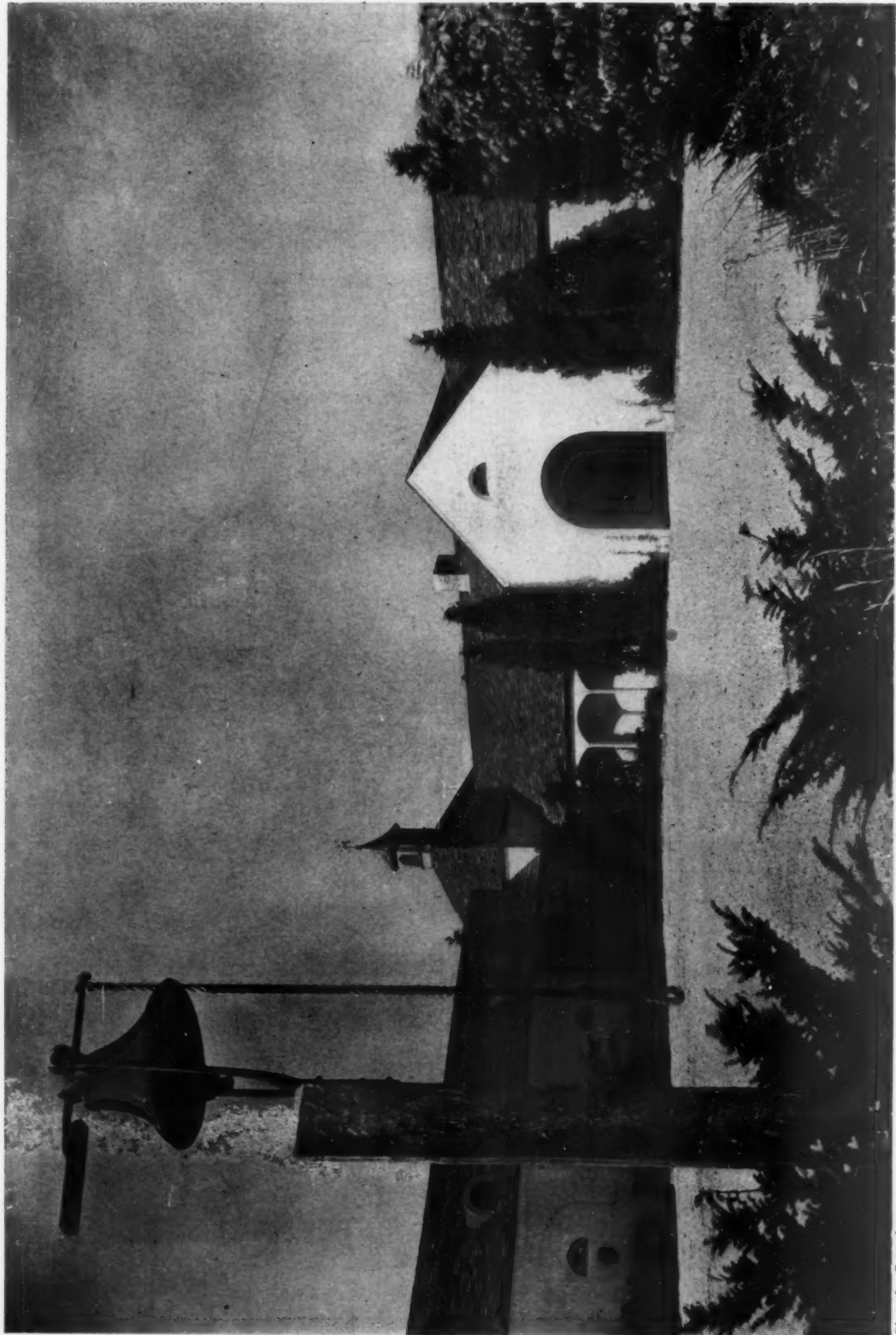


Photo by Goffredo

HOUSE COURT, ESTATE OF GERALDYN REDMOND, GLEN HEAD, L. I., N. Y.—ROBERT LUDLOW FOWLER, JR., LANDSCAPE ARCHITECT

ARCHITECT AND LANDSCAPE ARCHITECT COLLABORATE

THE HOUSE OF DONALD S. GILMORE, KALAMAZOO, MICH.

LOVETT RILE, *Architect*, WILLIAM PITKIN, JR., AND SEWARD H. MOTT, *Landscape Architects*



Photo by Tebbs & Knell

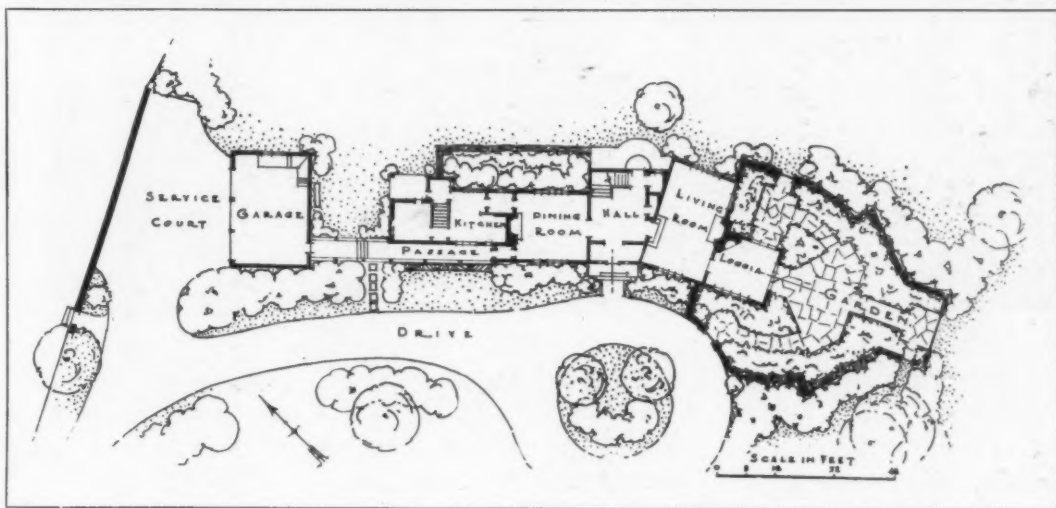




Photo by Tebbs & Knell

HOUSE OF DONALD S. GILMORE, KALAMAZOO, MICH.

LOVETT RILE, ARCHITECT; WILLIAM PITKIN, JR., & SEWARD H. MOTT, LANDSCAPE ARCHITECTS



Photo by Tebbs & Knell

HOUSE OF DONALD S. GILMORE, KALAMAZOO, MICH.

LOVETT RILE, ARCHITECT; WILLIAM PITKIN, JR., & SEWARD H. MOTT, LANDSCAPE ARCHITECTS

THE PRESIDENT SPEAKS

WHEN the President speaks, we eagerly listen and carefully ponder over his every word; more so, perhaps, than if a fellow member of the profession or even an editor lets off some "hot air." Rarely, however, does our President, faced with such perplexing problems as prohibition and economy, make any allusion to architecture. Many of us will long remember when our beloved President of a quarter of a century ago, Theodore Roosevelt, addressed a convention of the American Institute of Architects and suggested, in his characteristic phraseology, that American architecture should "smack of our soil" and that he would advise replacing the lions that guard the entrance to the Public Library in New York with buffalos. Last month President Coolidge dedicated a bird sanctuary in Florida, the gift of Edward W. Bok to the people, and during his remarks referred to American architecture, impressing on his hearers (and they were many, for his address was broadcast over the radio) that beauty is not dependent upon large areas or great heights. "Some of the most appealing and fascinating homes in the world are small," he said. They may represent but little outlay and be the abode of people of moderate means, but if there dwells a fine character within, it will shine forth and give to all the surroundings a touch of peace and loveliness which the most spacious palace cannot surpass." This is the message that we have tried so long to put over on the public. We are glad it has now come forth from the tongue of our President, for his words carry a weight that we may never even hope ours will have. His earlier remarks, too, concerning art and architecture, are very much worth repeating.

"Our country is giving an increasing amount of attention to art. We have reached a time when our people have more leisure for enjoyment and more means for gratifying their taste. Even during its Colonial history it was not without some progress in this direction. Very early it produced painters of historic merit. Some of the architecture of the eighteenth century continues to hold a very high place, but with the exception of a few public buildings these creations were for private use and reached but a few people.

"While the United States has been by no means

lacking in spiritual vision, and, considering the circumstances of its surroundings, has been remarkable in the devotion of its religious life, yet, being new and undeveloped, it has been necessary for our people first of all to give their attention to the material side of existence. We have been forced to get things done. We have been required to build cities, improve harbors, open mines, cut down forests, lay out great systems of transportation, till the soil, erect factories, open banks, and develop commerce. We have been making a new nation out of raw materials. What others have done in many centuries we have crowded into the short space of 300 years. It is only in the last generation that the great body of our people have been sufficiently relieved from the pressing necessities of existence to be able to give some thought to the art of living.

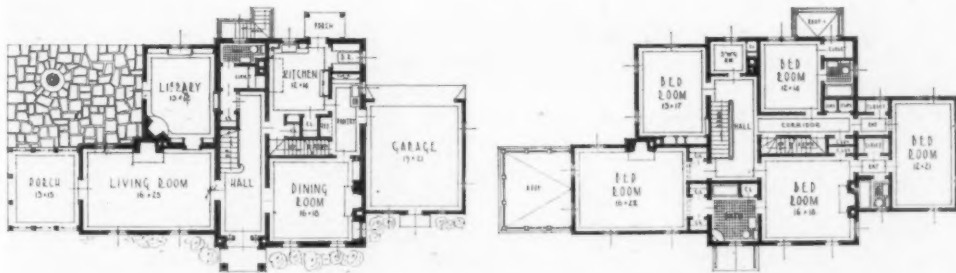
"It is significant of our institutions and of the spirit of our national life that in the opening up of the new era we have attempted to give to the people at large what in other days had been enjoyed only by a fortunate and privileged few. This effort began with popular education. The free public school, the endowed academy and college, the high school, and the state university were the beginnings of this movement. They have more recently been supplemented by public art galleries, popular concerts for the presentation of the best music, and the opening of innumerable public parks. The useful and the practical is being supplemented by the artistic and the beautiful. . . . The influence of an example like this is always contagious. The noticeable improvement of architecture in this country had its inception in the exhibition of the fine buildings of the World's Fair at Chicago. The five years following the fair at San Francisco changed the whole face of the State of California. This combination of influences has resulted in the recent enactments of Congress to span the Potomac with a memorial bridge and adorn the avenues of the Capital City with stately public buildings. Already there is a very healthy and beneficial competition in this field among various cities of the United States. Civic centers are being laid out with spacious squares surrounded by public buildings which will reflect the power and dignity of the beautiful in community life."

A GROUP OF HOUSES IN COLUMBUS, OHIO

R. G. HANFORD, *Architect*



Photo by Raper



• FIRST FLOOR PLAN •

• SECOND FLOOR PLAN •

HOUSE OF R. W. GILLESPIE, COLUMBUS, OHIO



Photo by Roger

HOUSE OF R. W. GILLESPIE, COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT

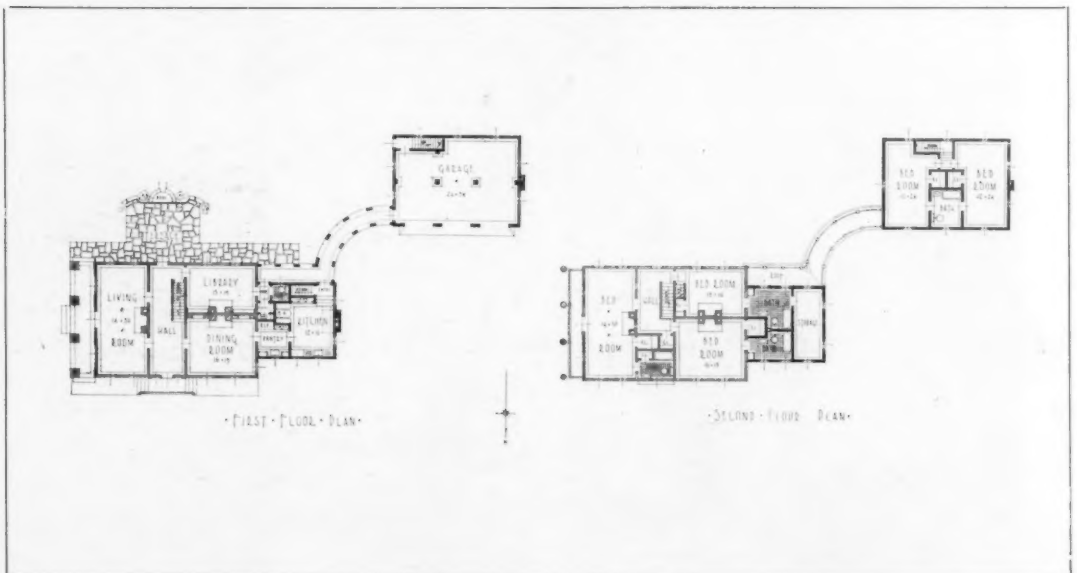


Photo by Rager

HOUSE OF W. H. DICKINSON, JR., COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT



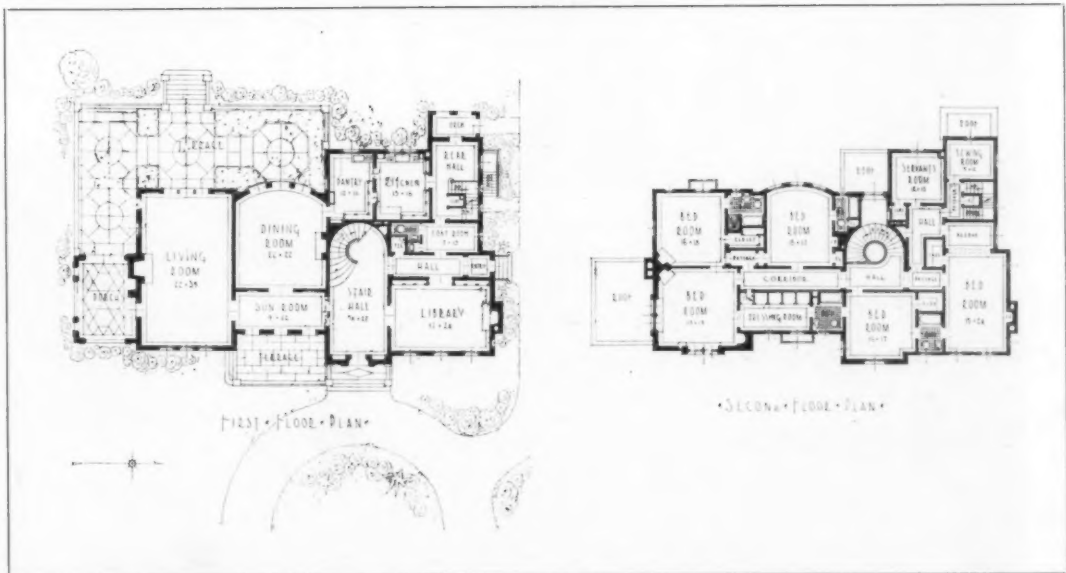
Photo by Rager



HOUSE OF W. H. DICKINSON, JR., COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT



Photo by Rager



HOUSE OF OTTO H. LINDENBERG, COLUMBUS, OHIO

R. G. HANFORD, ARCHITECT

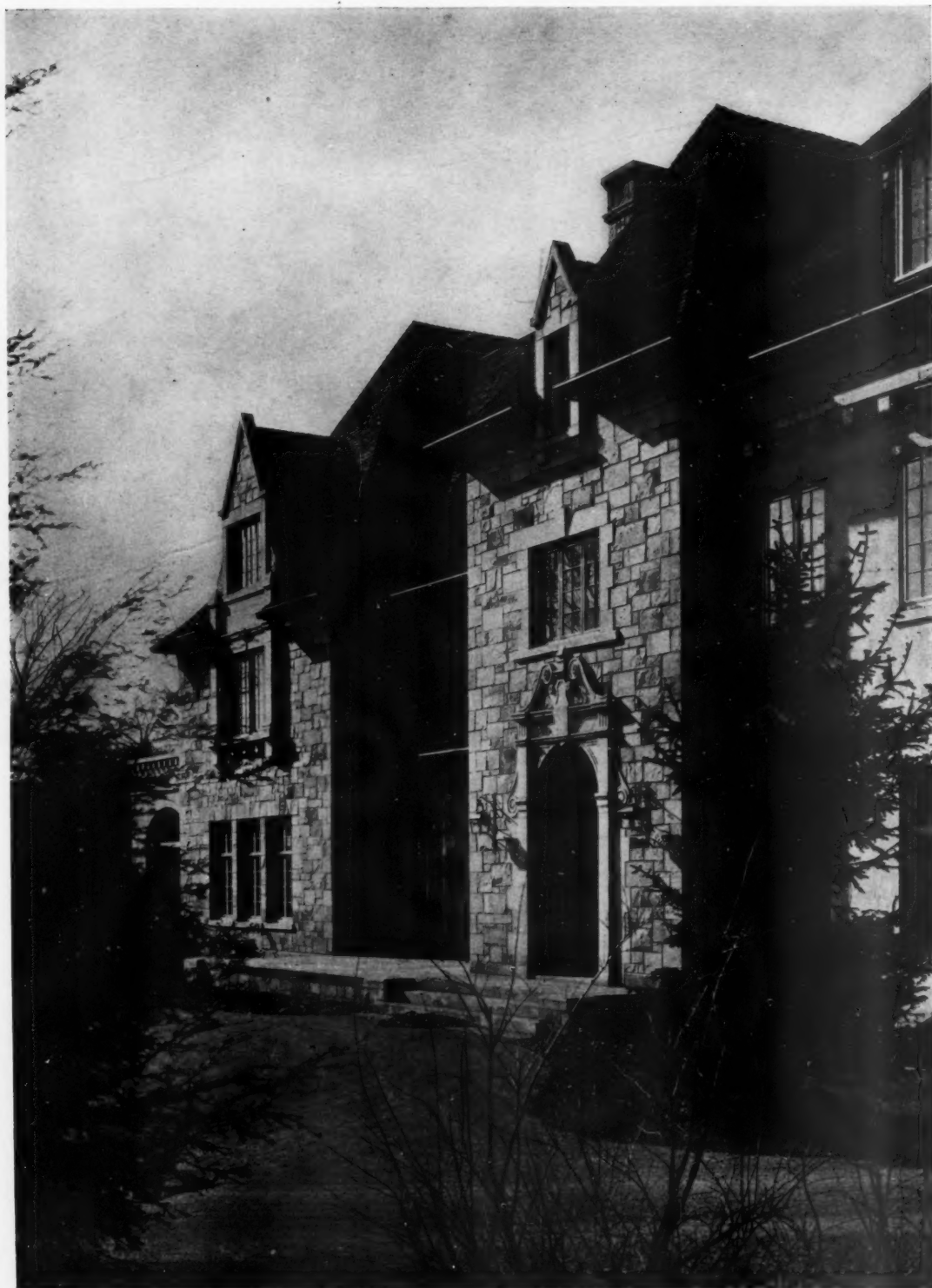


Photo by Rager

HOUSE OF OTTO H. LINDENBERG, COLUMBUS, OHIO

R. G. HANFORD, ARCHITECT



Photo by Rager



HOUSE OF EMIL W. HOSTER, BEXLEY, COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT



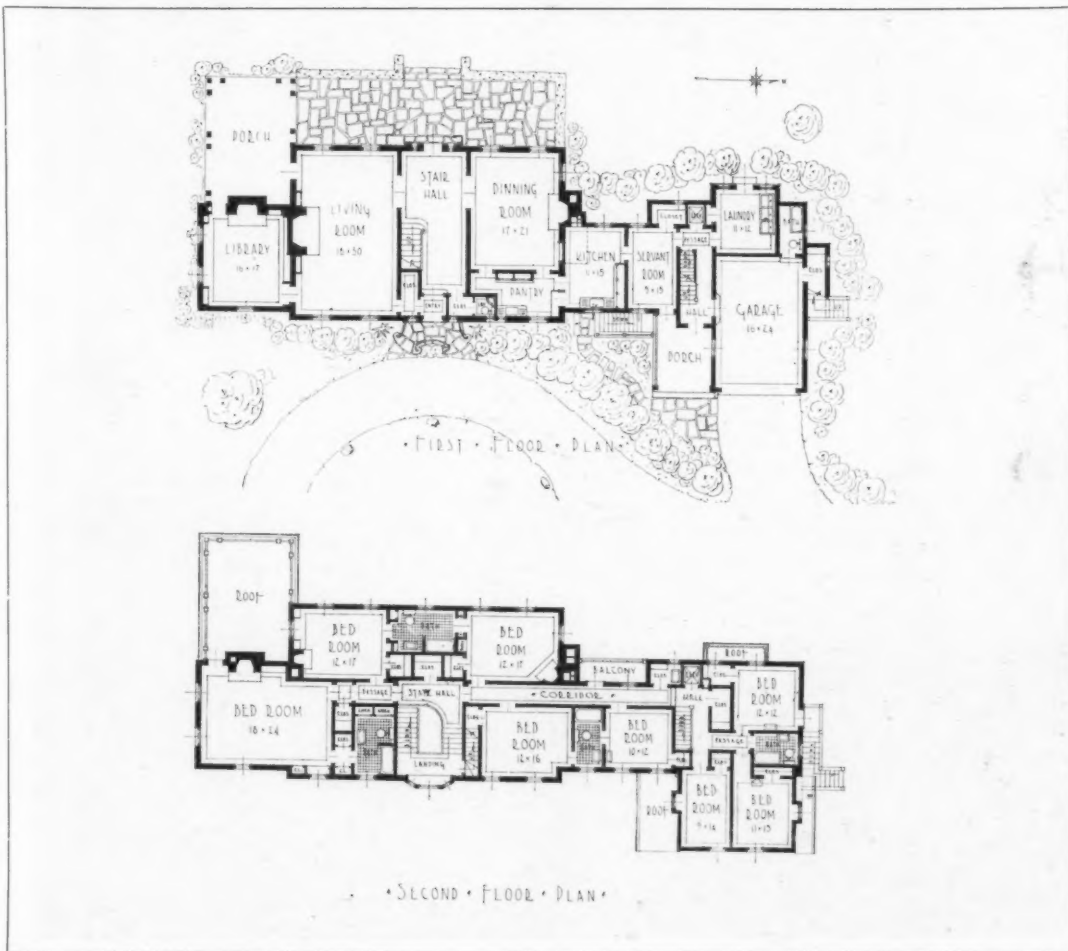
Photo by Rager

GATEWAY TO HOUSE OF EMIL W. HOSTER, BEXLEY, COLUMBUS, OHIO

R. G. HANFORD, ARCHITECT



Photo by Rager



HOUSE OF W. H. BUTLER, COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT



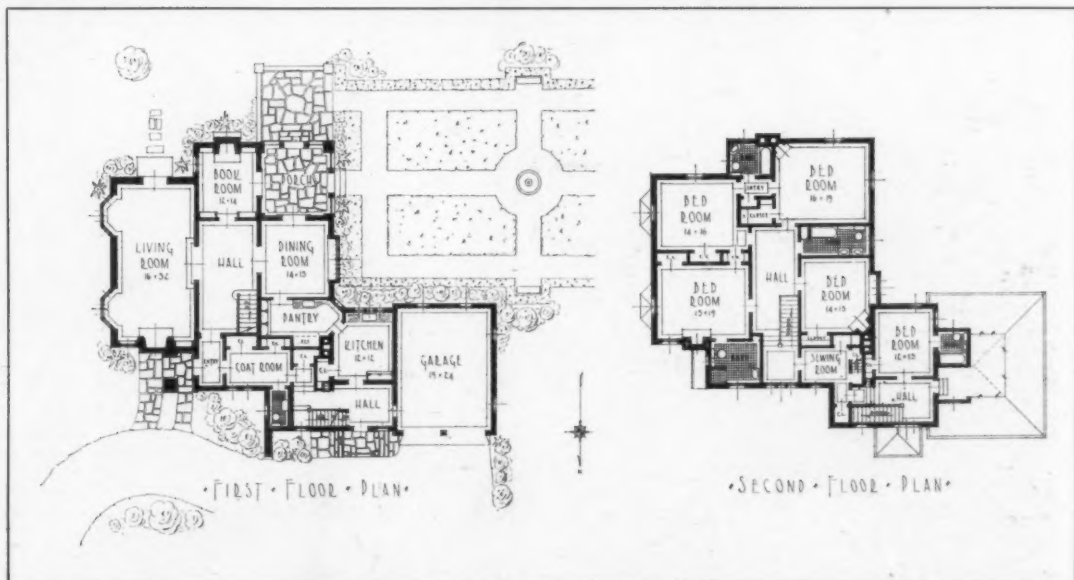
Photo by Rager

HOUSE OF W. H. BUTLER, COLUMBUS, OHIO

R. G. HANFORD, ARCHITECT

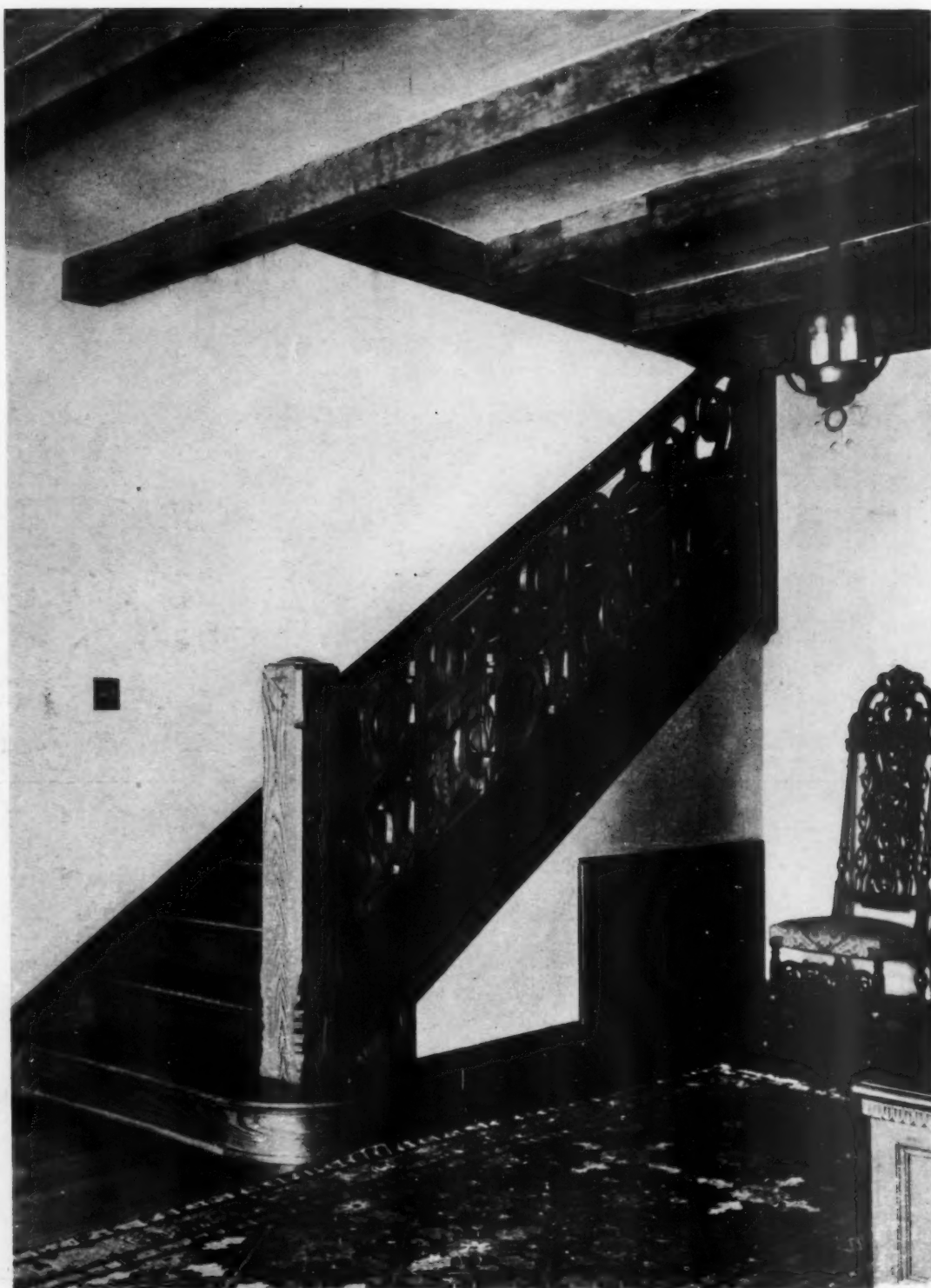


Photo by Roger



HOUSE OF FRANK L. GRIFFITH, BEXLEY, COLUMBUS, OHIO

R. G. HANFORD, ARCHITECT



HOUSE OF FRANK L. GRIFFITH, BEXLEY, COLUMBUS, OHIO
R. G. HANFORD, ARCHITECT



INTERIOR ARCHITECTURE



MANTELS AND OVERMANTELS



THE movement and glow of the open wood fire is an amenity that we still cling to. Despite the efforts of modern heating engineers to eliminate its necessity, the fireplace still remains the focal point of the living room, whether in a four-room apartment or in a forty-room house.

The fireplace treatment itself, so definitely related to the structure of a building, is logically associated with the architectural design. It frequently

happens, however, that the overmantel decoration is dispensed with in the architect's scheme and later given to an interior decorator to design. As the articles in this department have so regularly emphasized, this procedure often results in a lack of unity in the treatment of the chimneypiece. It is just as if an artist turned his half finished canvas over to another to complete.

There is now on exhibition at the Arden Gal-



Photo by Van Anda

THE TREATMENT OF THIS CHIMNEY BREAST IS THOROUGHLY HARMONIOUS IN EVERY DETAIL.

DESIGNED BY BRADLEY DELEHANTY, ARCHITECT; OVERMANTEL DECORATION BY FRANCES DELEHANTY

lery, New York, a group of mantels and overmantels which demonstrate in no uncertain terms the desirability of harmony in the design of these two elements of interior architecture. Each one of

the exhibits features an overmantel decoration which is peculiarly appropriate to its surrounding architectural treatment and to the design of the mantel or fireplace. The decorative overmantel



Photo by Van Anda

A MANTEL AND OVERMANTEL SUGGESTIVE OF COLONIAL TIMES
DESIGNED BY MOTT B. SCHMIDT; OVERMANTEL DECORATION BY FRANCES DELEHANTY

painting in each case was made by an artist in conjunction with the architect who designed the architectural treatment of the chimneypiece. The results are interesting, logical and individual; but of great-

est value is their appeal through harmony, emphasizing the importance of adhering to the principles of architecture in the development of interior architectural schemes.



Photo by Van Ande

THE VERTICAL MOVEMENT IS EMPHASIZED IN THIS CHIMNEY BREAST TREATMENT
 DESIGNED BY E. CLARENCE DEAN, ARCHITECT; OVERMANTEL DECORATION BY GEORGIANA BROWN HARBESON

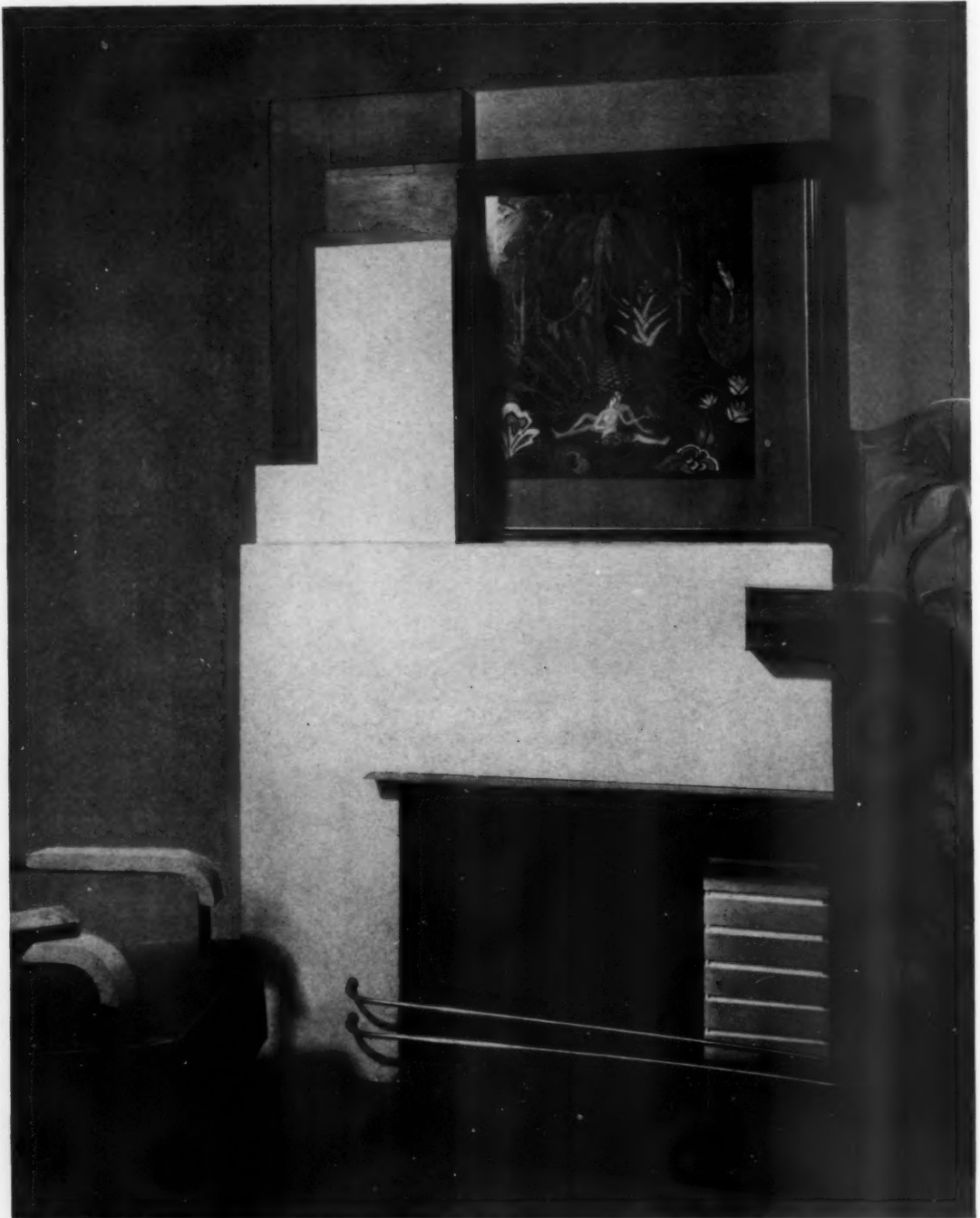


Photo by Van Anda

A MANTEL IN THE MODERN CHARACTER

DESIGNED BY LESCAZE, ARCHITECT; OVERMANTEL DECORATION BY GEORGIANA BROWN HARBESON



Photo by Van Anda

A SIMPLE YET DIGNIFIED CHIMNEY BREAST

DESIGNED BY RICHARD H. DANA, JR., ARCHITECT; OVERMANTEL DECORATION BY FRANCES DELEHANTY



Photo by Van Anda

AN ENSEMBLE OF THE MID-VICTORIAN ERA
MANTEL BY ARDEN STUDIOS; OVERMANTEL DECORATION BY FRANCES DELEHANTY

AMERICAN INDUSTRIAL ART
 EXHIBITED AT THE
 METROPOLITAN MUSEUM OF ART

IN presenting its eleventh annual exhibition of American Industrial Art, the Metropolitan Museum of Art contributes "toward the formulation of a style of design, for under its aegis moot points will find decision and trends be given direction, without too many concessions to the exuberance of novelty and with never too strong a regard for sales value." This exhibition is distinctive from its predecessors in that the material is presented in group displays, which simulate room arrangements but are not necessarily treated with the finality of a problem in decoration involving the personality of a client, as would be the case commercially. In all, there are over a dozen group schemes, ranging from a backyard garden to a business executive's office.

In the preparation of these annual exhibitions, the Museum has been assisted by an Advisory Committee on Industrial Art and it was at a meeting of this committee, last fall, that the first suggestion was made for a concerted arrangement of objects from various industries. When these annual exhibitions were inaugurated all objects shown were the result of museum study and were the work of the year; later, these requirements gave way to the important one that only pieces of American design and manufacture were shown. Now, in the eleventh exhibition, the procedure responds once more to gen-

eral tendencies and not only are all the objects shown of American conception and execution throughout, but they have been designed for the specific purpose of this showing.

An exhibition of this nature, offering, as it does, a highly specialized problem in design whose solution required continuous and close attention, would tend to be characterized by all the solidity and reality of a regular professional job in a designer's office. A Co-operating Committee, therefore, was called in to help. In fact, the actual problem of design was turned over to them. This committee consisted of Raymond H. Hood, Ely Jacques Kahn, Eliel Saarinen, Eugene Schoen, Ralph T. Walker, John Wellborn Root and Joseph Urban, all architects, Armistead Fitzhugh, landscape architect, and Leon V. Solon, ceramic designer. The success of the undertaking may be

determined by a study of the illustrations of several of the groups on this page and those immediately following.

Undoubtedly an exhibition of this nature sponsored by the Metropolitan Museum of Art will tend to encourage confidence on the part of the general public in the development of a distinctive American style of interior architecture. Owing to the interest already manifested, it has been decided to keep the exhibition open during the entire summer.



Courtesy Metropolitan Museum of Art

DINING ROOM, ELIEL SAARINEN, ARCHITECT
 LOGICAL, SIMPLE AND TRUE



Courtesy Metropolitan Museum of Art

APARTMENT HOUSE LOGGIA—RAYMOND M. HOOD, ARCHITECT

THE ADAPTABILITY OF MATERIALS TO THE OPEN AIR WAS A CONTROLLING FACTOR IN THE DESIGN. THE WALLS ARE OF CAST CONCRETE AND THE CEILING AND OVERMANTEL ARE OF A MODERN NON-CORROSIVE METAL, CHROMIUM. THE FURNITURE IS OF ALUMINUM AND IS COVERED WITH FABRIKOID ON ACCOUNT OF ITS WATERPROOF QUALITIES



Courtesy Metropolitan Museum of Art

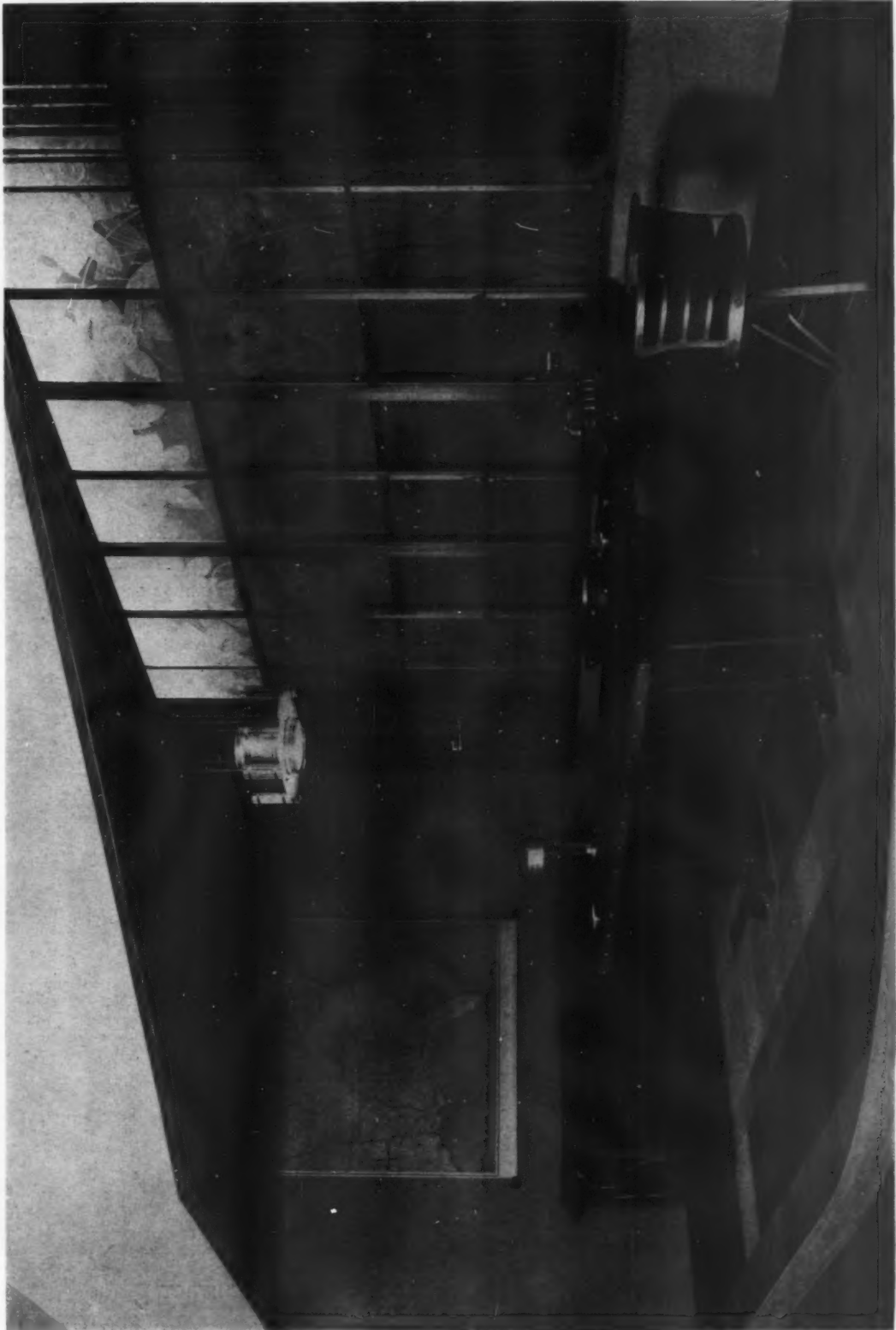
MAN'S STUDY FOR A COUNTRY HOUSE—RALPH T. WALKER, ARCHITECT

THE UTILITARIAN NEED OF THE ROOM IS RECOGNIZED. CERTAIN OF THE PANELS OF THE WAINSCOT ARE LOOSE AND HUNG ON HINGES SO THAT THEY MAY BE DROPPED DOWN TO FORM SHELVES FOR ADDITIONAL BOOKS AS THE OWNER'S LIBRARY INCREASES. THE LIGHTING FIXTURES, TOO, MAY BE MOVED IN BOTH A VERTICAL AND A HORIZONTAL DIRECTION



Courtesy Metropolitan Museum of Art

CONSERVATORY, CONCEIVED AS A SEMI-OUTDOOR ROOM—JOSEPH URBAN, ARCHITECT



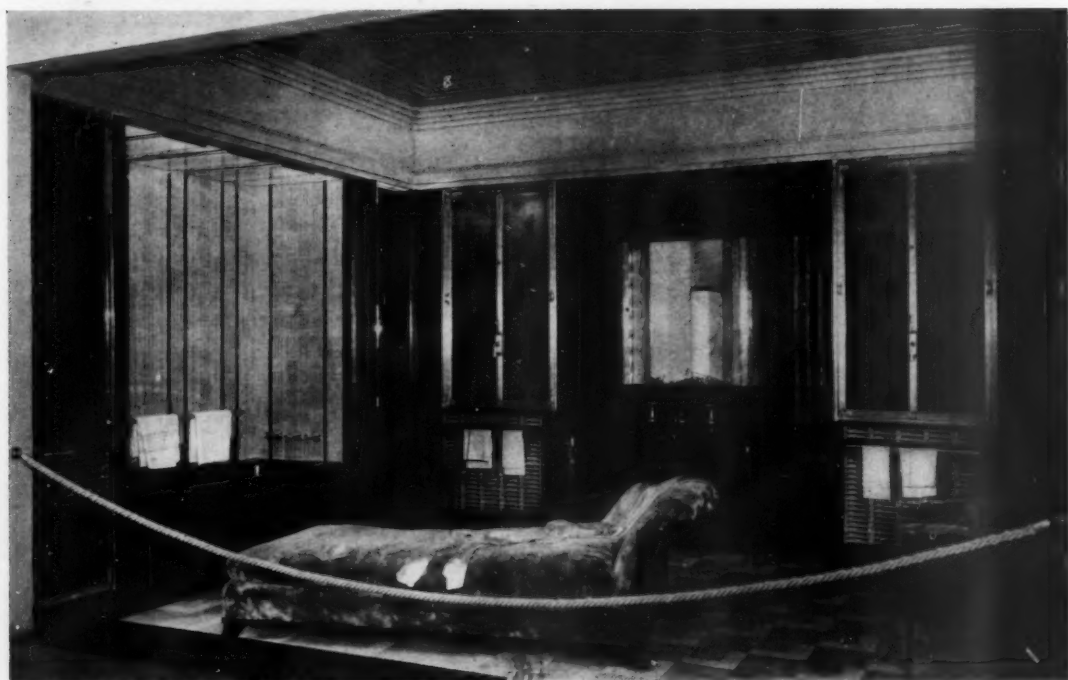
Courtesy Metropolitan Museum of Art
BUSINESS EXECUTIVE'S OFFICE, WITH ALUMINUM FURNITURE—RAYMOND M. HOOD, ARCHITECT



Courtesy Metropolitan Museum of Art

CHILD'S NURSERY AND BEDROOM—EUGENE SCHOEN, ARCHITECT

PLANNED TO STIMULATE AND MEET THE NEEDS OF THE GROWING YOUNGSTER, THE FURNITURE, FOR EXAMPLE, IS ADJUSTABLE SO THAT THE PIECES MAY BE RAISED TO ACCOMMODATE THE CHILD'S GROWTH



Courtesy Metropolitan Museum of Art

BATH AND DRESSING ROOM—ELY JACQUES KAHN, ARCHITECT

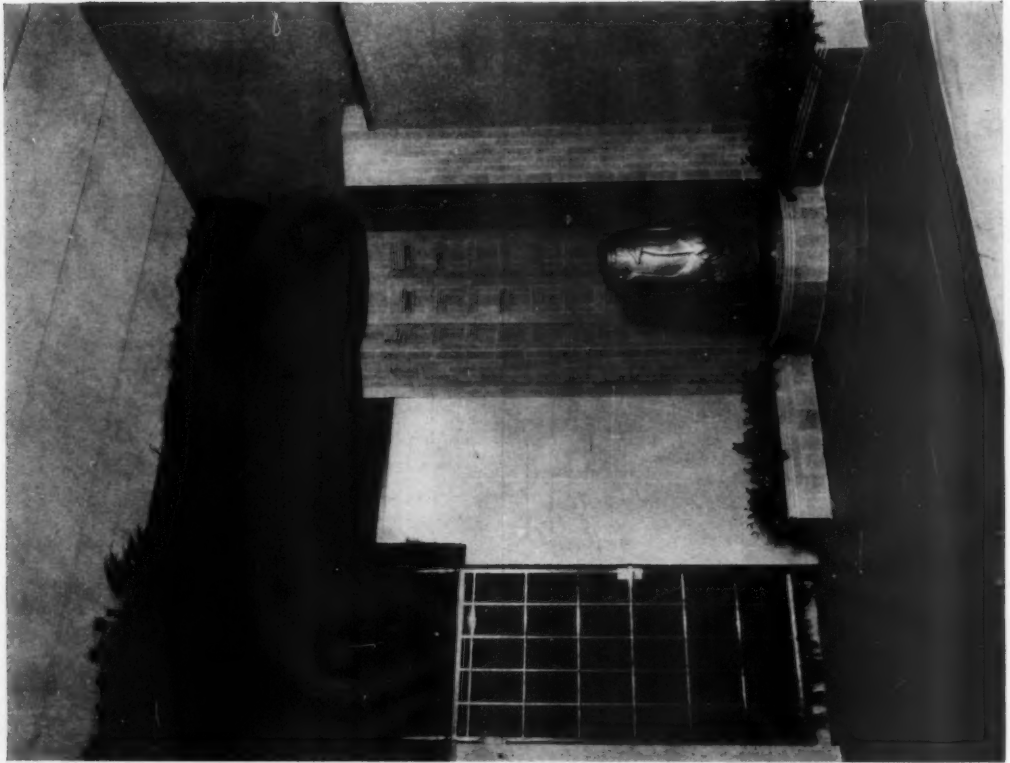
AN AGREEABLE SETTING FOR AN IMPORTANT ROOM OF THE HOUSE WITHOUT DECORATION AS A BASIS



Courtesy Metropolitan Museum of Art

MAN'S DEN—JOSEPH URBAN, ARCHITECT

THE EFFECT OF A WARM BACKGROUND AND A SHIPSHAPE ACCOMMODATION OF A MAN'S NEEDS ARE THE AIMS



CORNER OF BACKYARD GARDEN—ELY JACQUES KAHN, ARCHITECT



SALES ALCOVE—EUGENE SCHOEN, ARCHITECT

Photos Courtesy Metropolitan Museum of Art

A GROUP OF SCULPTURES
DESIGNED TO BE
EXECUTED IN VARIOUS MATERIALS

BY

Leo Friedlander, *Sculptor*



RHODA FREDA FRIEDLANDER
A MONUMENTAL PORTRAIT IN MARBLE



DETAIL OF MODEL OF PANEL ABOVE ENTRANCE, AMERICAN BANK AND TRUST BUILDING, PHILADELPHIA, PA.
SCULPTURE DESIGNED AND EXECUTED BY LEO FRIEDLANDER. DAVIS, DUNLAP AND BARNEY, ARCHITECTS



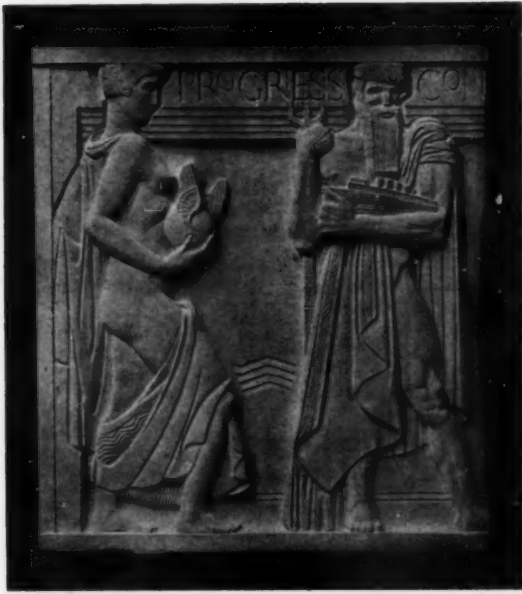
REPRODUCTION OF ORIGINAL DRAWING OF PANEL



DETAIL OF MODEL OF PANEL ABOVE ENTRANCE, AMERICAN BANK AND TRUST BUILDING, PHILADELPHIA, PA.
 SCULPTURE DESIGNED AND EXECUTED BY LEO FRIEDLANDER. DAVIS, DUNLAP AND BARNEY, ARCHITECTS



PANEL EXECUTED IN LIMESTONE, 6 FEET BY 25 FEET, LOCATED THIRTY FEET ABOVE SIDEWALK



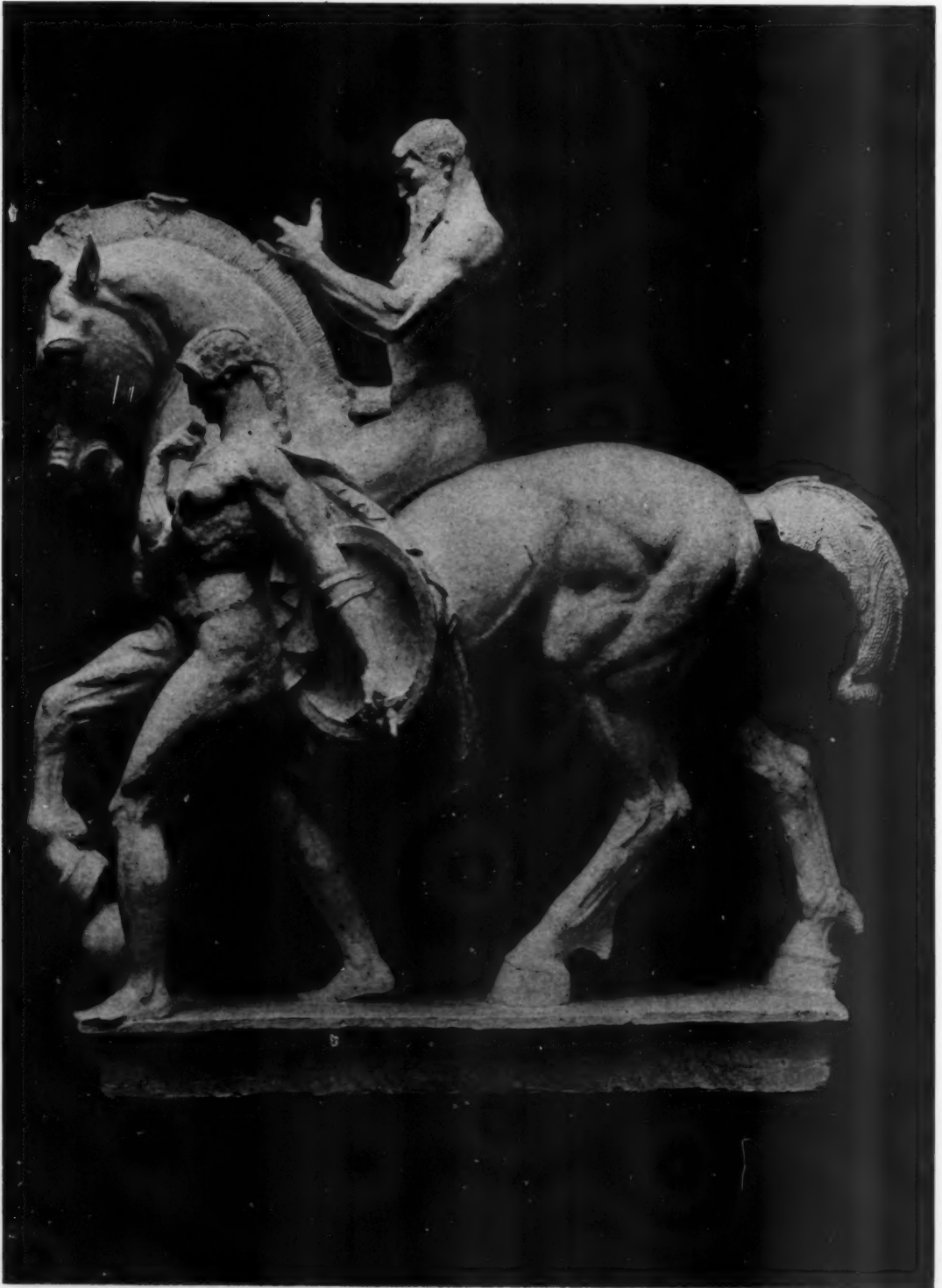
DETAILS OF MODEL OF PANEL ABOVE ENTRANCE, AMERICAN BANK AND TRUST BUILDING, PHILADELPHIA, PA.



PANEL ABOVE SIDE ENTRANCE EXECUTED IN LIMESTONE. SIZE ABOUT SIX FEET BY EIGHT FEET
SCULPTURE DESIGNED AND EXECUTED BY LEO FRIEDLANDER. DAVIS, DUNLAP AND BARNEY, ARCHITECTS



"THREE WISE MEN." BY LEO FRIEDLANDER, SCULPTOR
MODEL OF A GROUP 12 FEET HIGH IN GRANITE FOR A PRIVATE CHAPEL IN BERKELEY, CAL.



SYMBOLIC MONUMENT TO VALOR, BY LEO FRIEDLANDER, SCULPTOR
DESIGNED TO BE EXECUTED IN BRONZE



NEW YORK DOCK TRADE FACILITIES BUILDING BROOKLYN, NEW YORK

RUSSELL G. CORY, *Architect and Engineer*

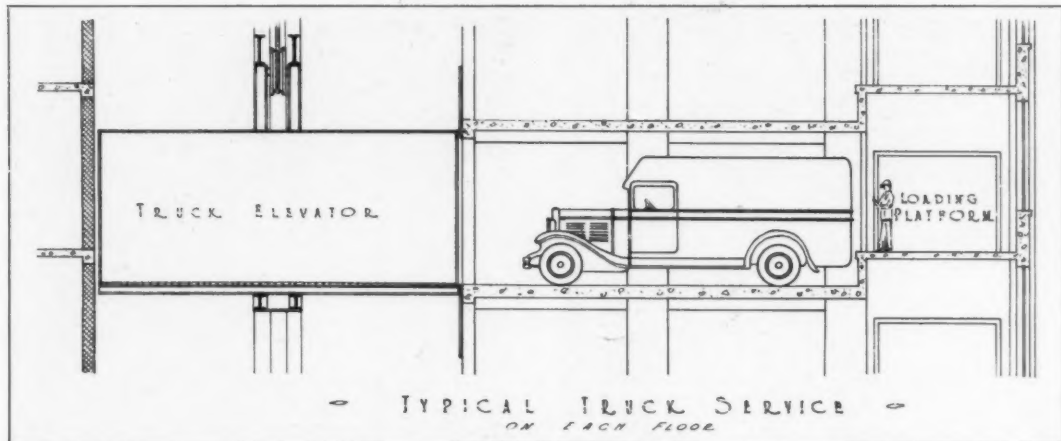
WALTER M. CORY, *Associate*

N. E. DRIVER, *Chief Engineer*

AMERICAN business is coming more and more to respond to better methods of merchandising, quicker processes in production, more economical means of distribution. This attitude encourages ventures often daring in their departure from traditional methods, yet practical, since the aim is always to quicken the pace of goods to markets to cut factory costs, and to make it easier and simpler to carry on business. It was in this spirit of enterprise that the New York Dock Trade Facilities Building was conceived as a new and better home for industry. Given a location at the hub of the world's greatest market—a site commanding harbor and rail facilities to every part of the globe, a situation readily accessible to rapid transit lines—the problem presented the architect was to discover what more might be done to serve industry in a building of modern appointments.

The New York Dock Trade Facilities Building is, concisely, two square city blocks of concrete and

steel in two parallel units, ten stories above grade, built around a battery of sixteen elevators, surmounted by a tower four stories high. Three of these elevators, each 15 ton capacity, of latest pattern, carry loaded trucks ten floors at a speed of one hundred and seventy-five feet a minute, or one minute from street level to the top floor. At each floor a depressed area permits trucks to back from the elevator to the shipping platform, thus releasing the elevator for other use while the truck is loaded or unloaded at the tenant's floor at the truck body line. This is one of the features on which patents are pending. Ten additional elevators serve a ground floor loading platform for horse-drawn and other vehicles not using the truck elevators, a forty-car railroad siding and a freight station, all inside the building. Electric platform trucks take freight from cars at platform levels to the battery of elevators, where it is carried upward to the factory door of the tenant consignee; this



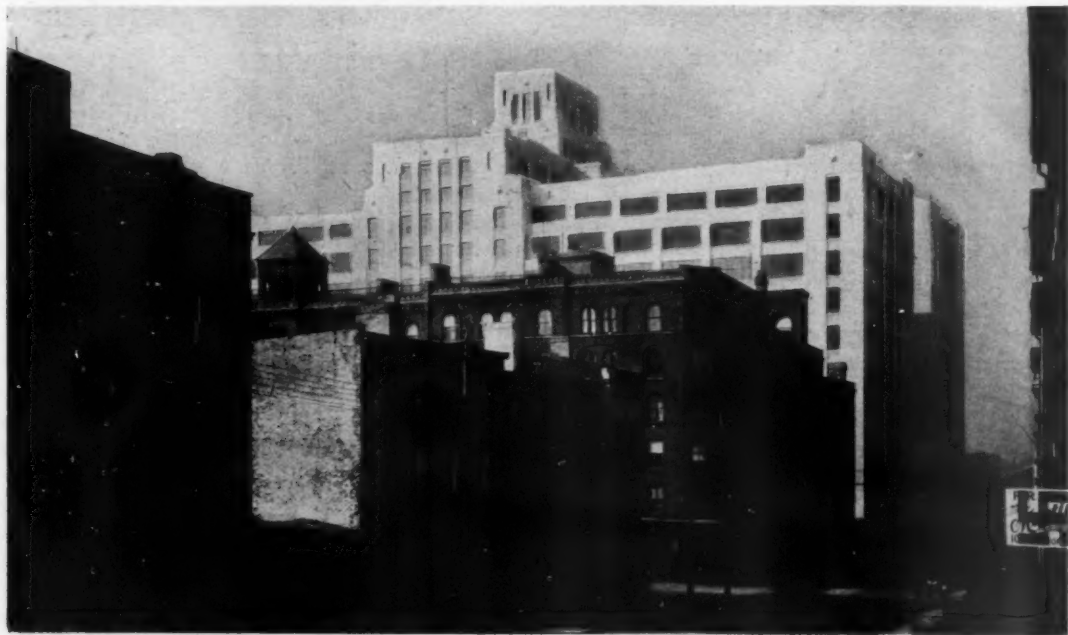
SECTION SHOWING TYPICAL TRUCK SERVICE AT EACH FLOOR

operation being reversed in the case of outbound freight. Three high speed passenger elevators for the use of executives operate directly from the entrance lobby in another wing of the building.

The electricity, steam, gas and water equipment are supplied at each floor of the service wing, there to be metered to the tenants if and as needed, and electric power mains are arranged for the convenient connection of tenants' supply lines. A battery of the latest type of high pressure, oil-fired steam boilers, capable of furnishing 3,000 lbs. of steam pressure, assures a constant supply of

steam suitable for all manufacturing requirements.

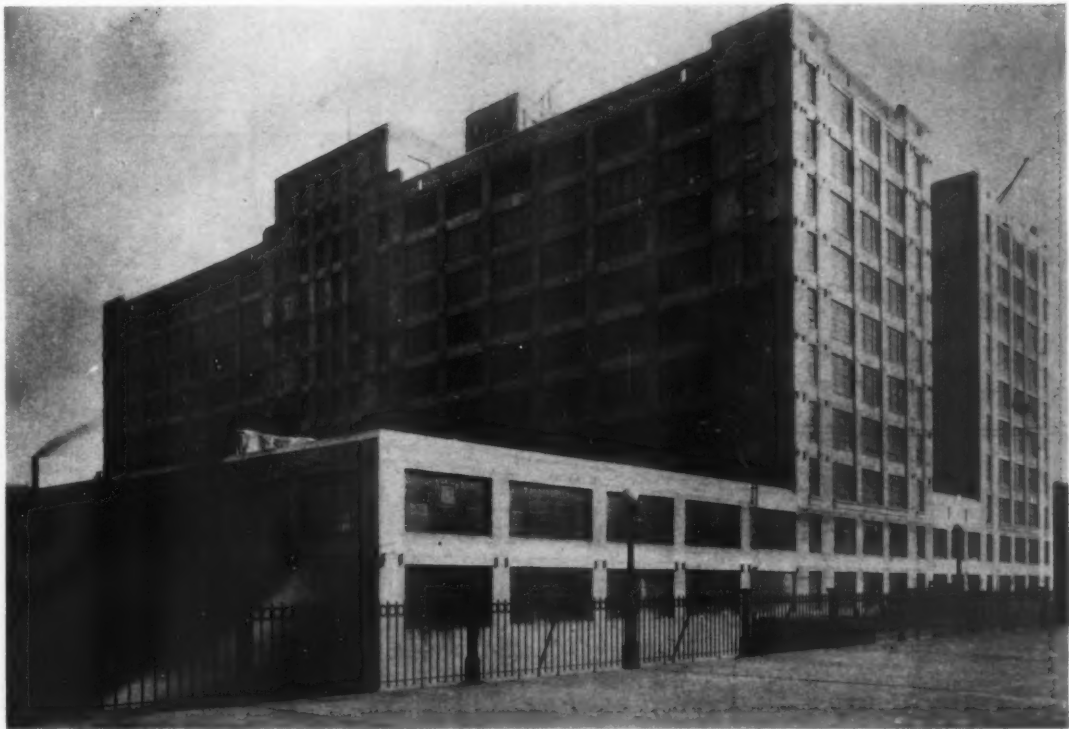
The plan shows the unimpeded expanse of floor space typical of every floor. Note that all elevators are placed in one central unit, as are stairways, corridors, lavatories and enclosures for gas, water, steam and electric mains. The segregation of service space entirely outside rentable areas provides the maximum amount of useable space free from obstructions and awkward turns and corners. It is calculated that the efficiency of the plan will effect savings in space of fifteen to twenty-five per cent for the tenants.



Photos by Van Anda

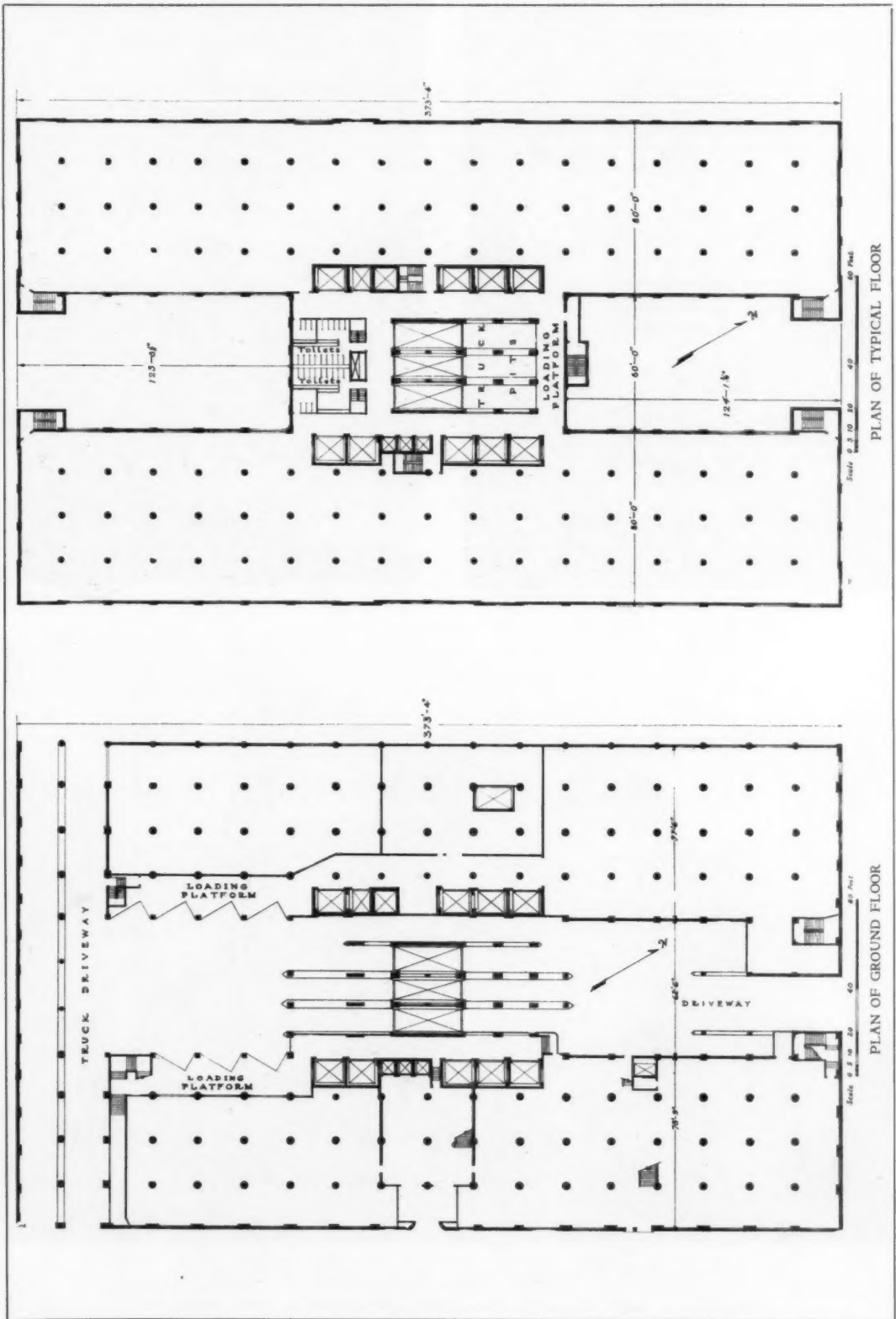
NEW YORK DOCK TRADE FACILITIES BUILDING, BROOKLYN, N. Y.

RUSSELL G. CORY, ARCHITECT AND ENGINEER; WALTER M. CORY, ASSOCIATE



Photos by Van Anda

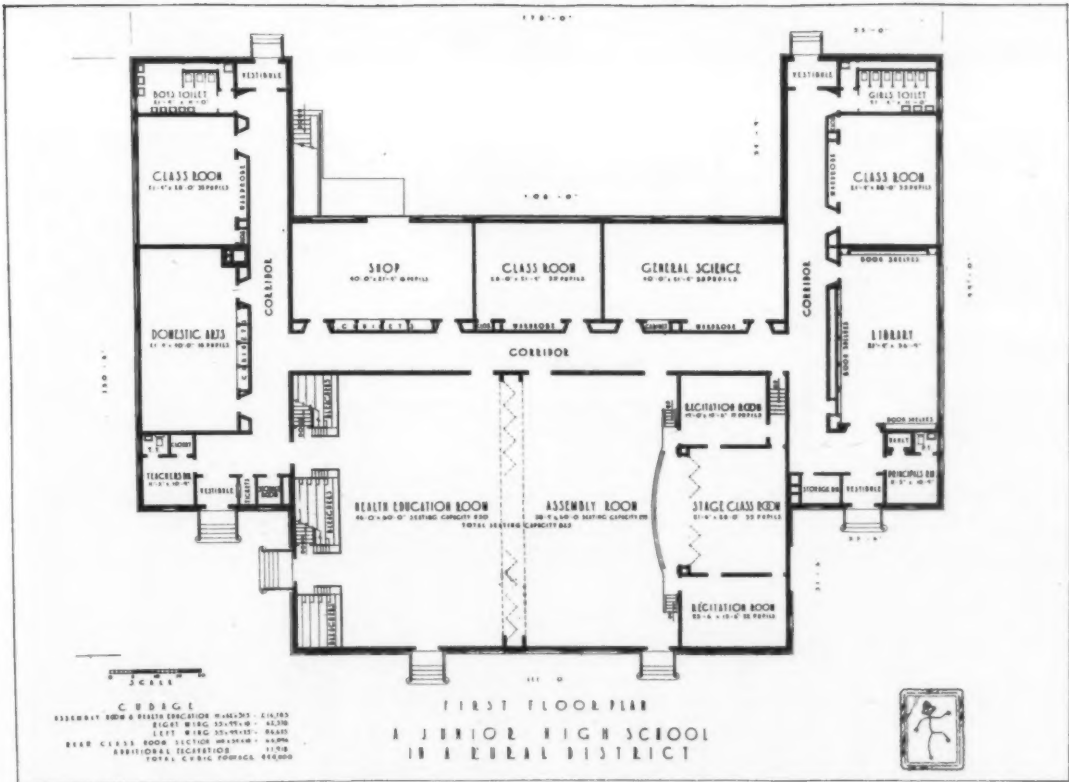
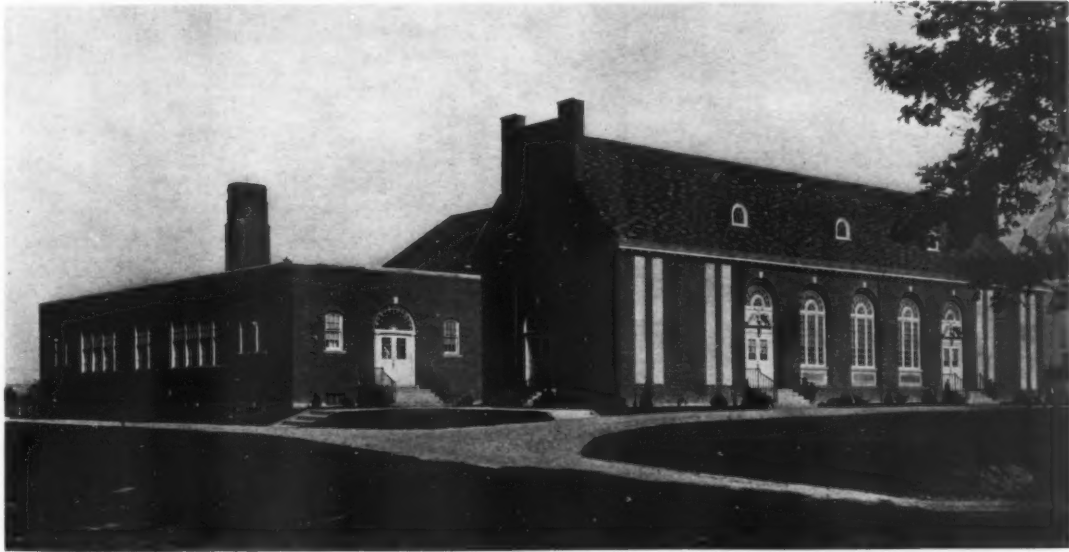
NEW YORK DOCK TRADE FACILITIES BUILDING, BROOKLYN, N. Y.
RUSSELL G. CORY, ARCHITECT AND ENGINEER; WALTER M. CORY, ASSOCIATE



NEW YORK DOCK TRADE FACILITIES BUILDING, BROOKLYN, N. Y.—RUSSELL G. CORY, ARCHITECT AND ENGINEER; WALTER M. CORY, ARCHITECT

PRIZE WINNING DESIGN—CLASS A
COMMON BRICK SCHOOL BUILDING COMPETITION

LEOLA SCHOOL, LEOLA, PA.—HENRY Y. SHAUB, *Architect*





LEOLA SCHOOL, LEOLA, PA.—HENRY Y. SHAUB, ARCHITECT

● ENGINEERING AND CONSTRUCTION ●

STANDARDIZATION OF METAL DOORS AND HARDWARE ACCOMPLISHED WITHOUT LOSS OF FREEDOM IN ARCHITECTURAL DESIGN

By C. F. BURT

THE Program of the Hollow Metal Industry, which became effective January, 1929, was developed in co-operation with representatives of the American Institute of Architects, with a view toward retaining freedom in architectural design, while retaining the advantages of interchangeable units. The problem attacked was to make the hardware, made of metal, fit the door, also made of metal, the same as a shaft must fit its bearings. This relationship is unavoidable, but the two closely related parts are produced by totally different industries working with different materials, different processes and different ideas, but a common end.

Not only has hardware been made interchangeable in the door (or partially interchangeable as controlled by the requirements of the architectural design), but hollow metal doors made in accordance with the program, are interchangeable in the openings. It should be noted that though the design or the door be special, the dimensions permitting interchangeability can still be used. Speed of delivery is, of course, reduced, and the unavoidable danger of errors frequently connected with special work is introduced, but this phase of the situation will be no different from past conditions, while as pointed out interchangeability is still possible.

The door designs regularly included in the program are, (1) the two panel door with both panels metal, (2) the same door with upper panel glass, (3) door with lower metal panel and four lights of glass above, (4) the one panel door with

The accompanying article was prepared by Mr. Burt, secretary of the Hollow Metal Door and Trim Manufacturers Association, at our request, to place before our readers the important features of Simplified Practice Recommendation No. 82 of the Department of Commerce, and to set forth the advantages to be secured by the conformance of architects to the recommendations when hollow metal doors are specified and special work is not absolutely necessary. We believe that our readers will agree that the manner in which this program was approached and formulated is unusual and that it marks a new era of recognition on the part of producers to the importance of considering architectural design in conjunction with standardization. This is of particular interest when it is recalled that totally different industries were vitally interested in the product as it is eventually assembled at the building.—THE EDITORS.

metal panel, and (5) the same door with glass. The accompanying drawings illustrate these types and also indicate some of the possible variations in hardware treatment.

To illustrate the attitude of manufacturers in the industry on questions of design, one feature of the new two panel door may be mentioned. The width of the face of the center rail, while it presented some manufacturing problems, was almost entirely a question of appearance, and in accordance with the theory controlling this program, that is, that ap-

pearance was the concern of the architect, the matter was submitted to them through the Technical Service Department of the American Institute of Architects. A referendum, obtaining the opinion of a representative architect in practically every chapter of the Institute, resulted overwhelmingly in favor of the 7" rail, which dimension has therefore been adopted as standard.

The same features which provide interchangeability, also insure proper workability. The necessary clearances have been determined and the net size of the door fixed accordingly. For perhaps the first time in history an architect when specifying a given size door has definite assurance in advance as to the size door he will get. If a 3'x7' door is specified, this will be the jamb opening size exactly, while the door with the necessary clearances taken off will measure 2'-11 13/16"x6'-11 1/4".

The door sizes covered by the program is of interest. It will be noted that, while fourteen of the

eighteen listed sizes are normal and customary, four are unusual. However, the 2'9" doors, for instance, when used as a pair, produce the frequently used dimension of 5'6". Further, where a width of 2'8" or 2'10" would ordinarily be specified, it is usually possible to substitute 2'9" without difficulty.

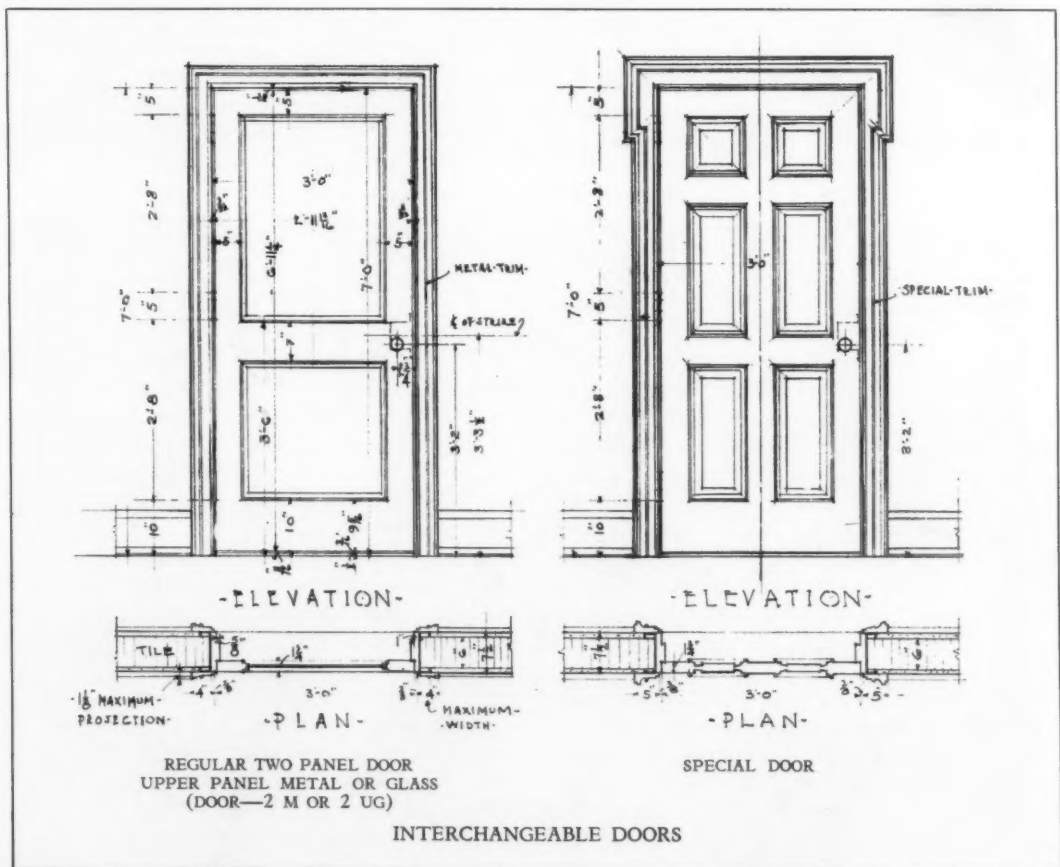
Single Doors	Resultant Pairs
2'0" x 7'0"	4'0" x 7'0"
2'3" x 7'0"	4'6" x 7'0"
2'6" x 7'0"	5'0" x 7'0"
2'9" x 7'0"	5'6" x 7'0"
3'0" x 7'0"	6'0" x 7'0"
3'3" x 7'0"	6'6" x 7'0"
3'6" x 7'0"	7'0" x 7'0"
3'9" x 7'0"	7'6" x 7'0"
4'0" x 7'0"	8'0" x 7'0"

TRANSOM AND TRIM

The drawings also show a typical transom, dimensioned to permit use with the fully dimensioned door, and also illustrate a few of the variations in trim detail coming within the program. The few dimensional limitations desirable in

designing the trim are also shown on page 338.

In addition to the interchangeability features, the new program now effective also provides for better delivery time of doors and trim, thereby facilitating construction and in many cases advancing the occupancy date. This is made possible not only by the use of stock parts heretofore not available, but by a system whereby the hardware manufacturers file with the door manufacturers a set of "Certified Template Drawings," so that the necessary hardware information is known to the door manufacturer in advance. If assured that the new template hardware is to be used throughout, the door manufacturer can proceed immediately upon receipt of hardware schedule without waiting to be furnished with the hardware and door dimensions. It should also be noted that the new program, when fully complied with, not only eliminates a large volume of correspondence between the two groups of manufacturers, but also between the manufacturers on the one hand, and the architect and general contractor on the other. Not only is correspondence eliminated, but also telegrams, long distance telephone calls and personal visitations. In



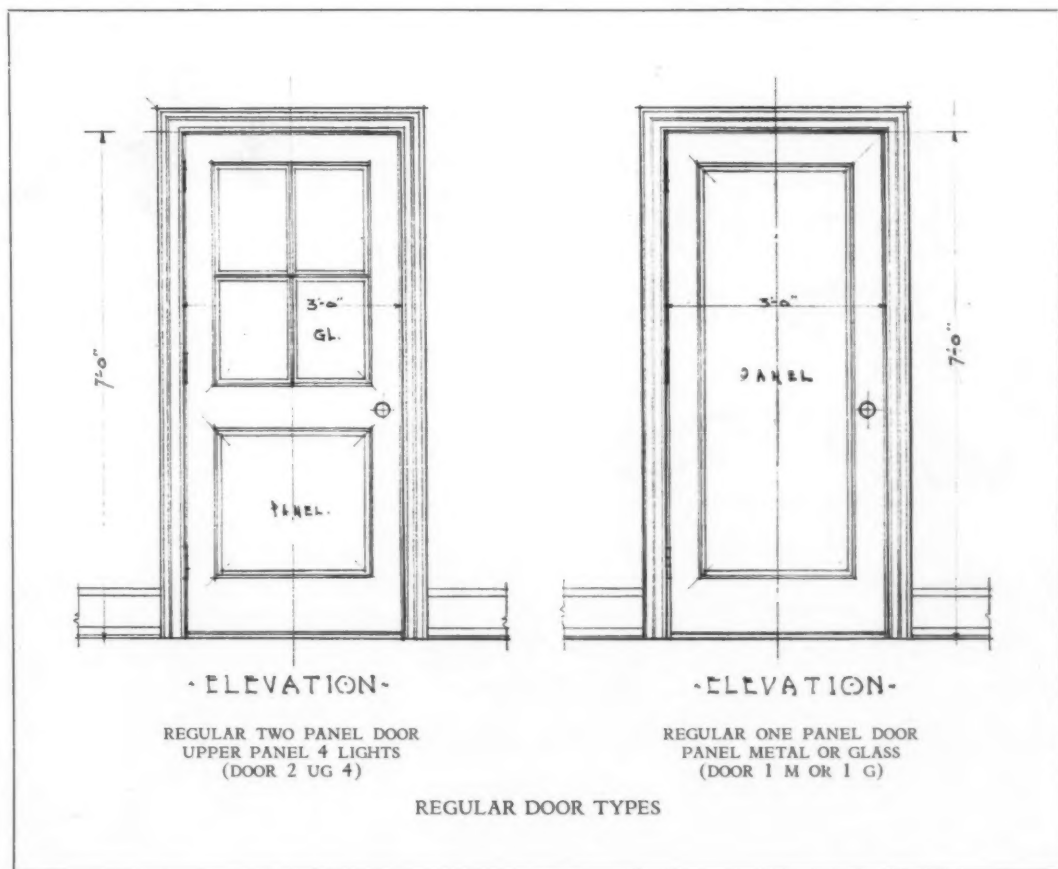
short, the certified template system arranged by the Builders Hardware Industry and the Hollow Metal Industry assures the architect that hollow metal doors and trim on the one hand, and template hardware on the other, will go through promptly, fit together properly, and get on the job without error or delay.

Since man first attempted to close the opening to his cave, the fixtures and accessories which he used to admit the friendly and bar the unfriendly have been his intimate personal concern. Museums are filled with knobs, handles, knockers and the like. Standardizing such implements would to the artistic soul seem almost sacrilege. Accordingly, it was necessary to sort out the functions and elements so as to give each its proper value. While it was desirable, for example, to have escutcheons and roses standardized so that mounting screw holes could be drilled and tapped in advance without variation, this object, so desirable from the production standpoint, was cast aside so that architects might be free to produce any effect desired without any limitation by standardization. For this reason the same rule was applied to knobs and latches.

The use of the new template locks required to carry out the program does not require a limitation of lock function or of source of supply. On the contrary, locks performing every conceivable operation or combination of operations are included in the program; over one hundred locks are already listed as commercially available by five of the leading hardware manufacturers. The template butt hinges required for the program have been produced for several years by a number of manufacturers.

The drawings illustrate a few of the many variations in the use of escutcheons with locks, all permitting the use of concealed mortised locks and strike plates, so designed as to be absolutely interchangeable in such doors as are also made in accordance with the program. Note the long slot in the door, covered by the escutcheon, and providing for all variations in location of cylinder, knob, thumb-turn or indicator.

Where the door design or the type of locks required will not permit the use of the ordinary escutcheon, but requires a thumb-latch with handle, or roses and collars, use of the new template locks will assure interchangeability of hardware, only as



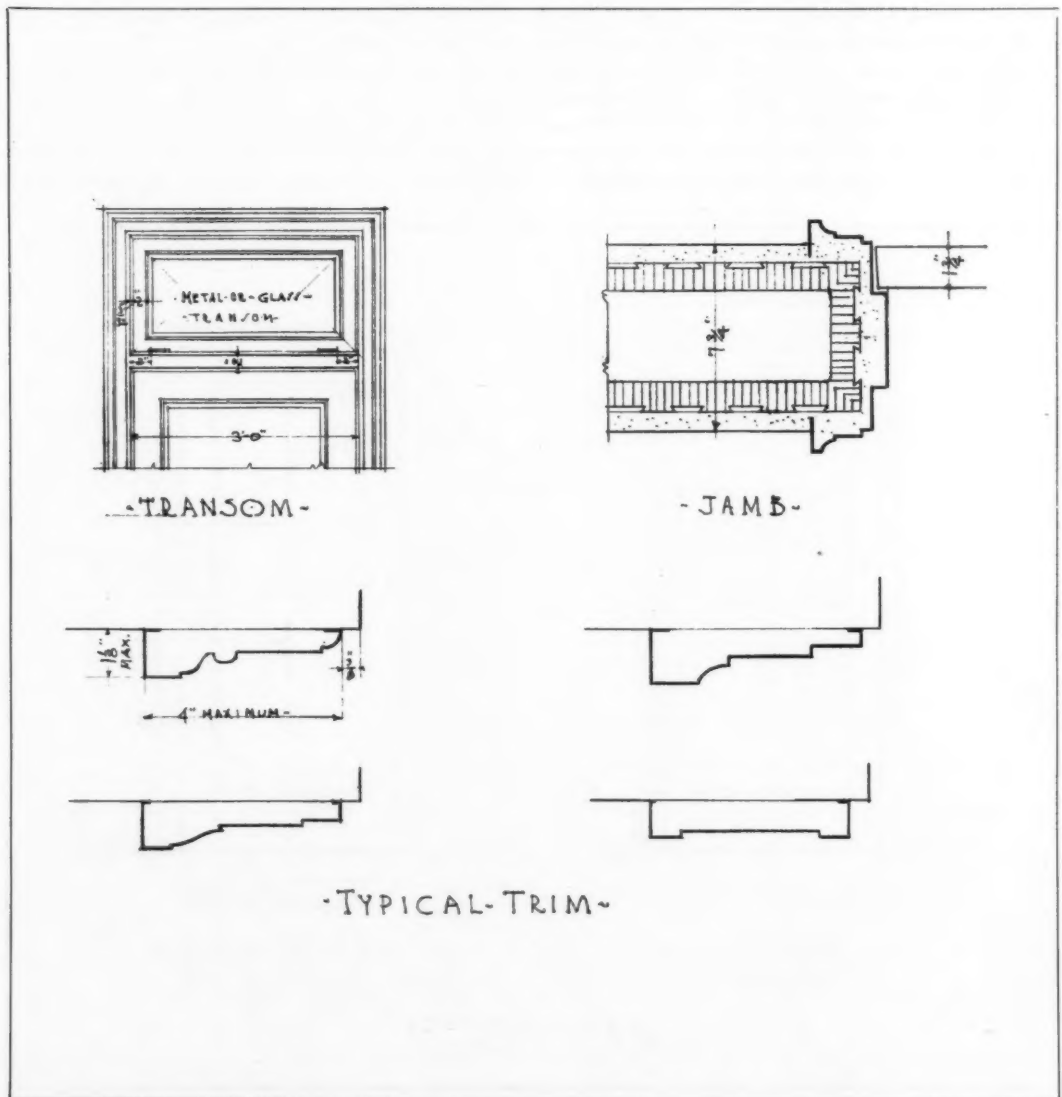
between doors using locks with the same spacing of cylinder, knob, etc. Without the escutcheon as a cover plate the long slot in the door cannot be used; special holes must be cut and will fit only the lock for which they are cut. However, the doors themselves will be interchangeable, delivery of doors and trim can be expedited, and the danger of errors connected with special work is eliminated, the same as where escutcheons are used.

To assure the greatest possible advantages under this program with no other changes in the present specification procedure the following clause is submitted for inclusion in "Door Specifications." The clause is so phrased that the specifications as otherwise and ordinarily written must be fully complied with by the manufacturer, unless data submitted

to the architect convince him that minor alterations would be beneficial to his client.

"Hollow metal doors and trim called for by this specification are to be made completely in accordance with Simplified Practice Recommendation No. 82, issued by the Department of Commerce, except (. . .). Where minor changes in design or specification will permit the use of such doors and trim, the manufacturer is to confer with the architect before proceeding with the work."

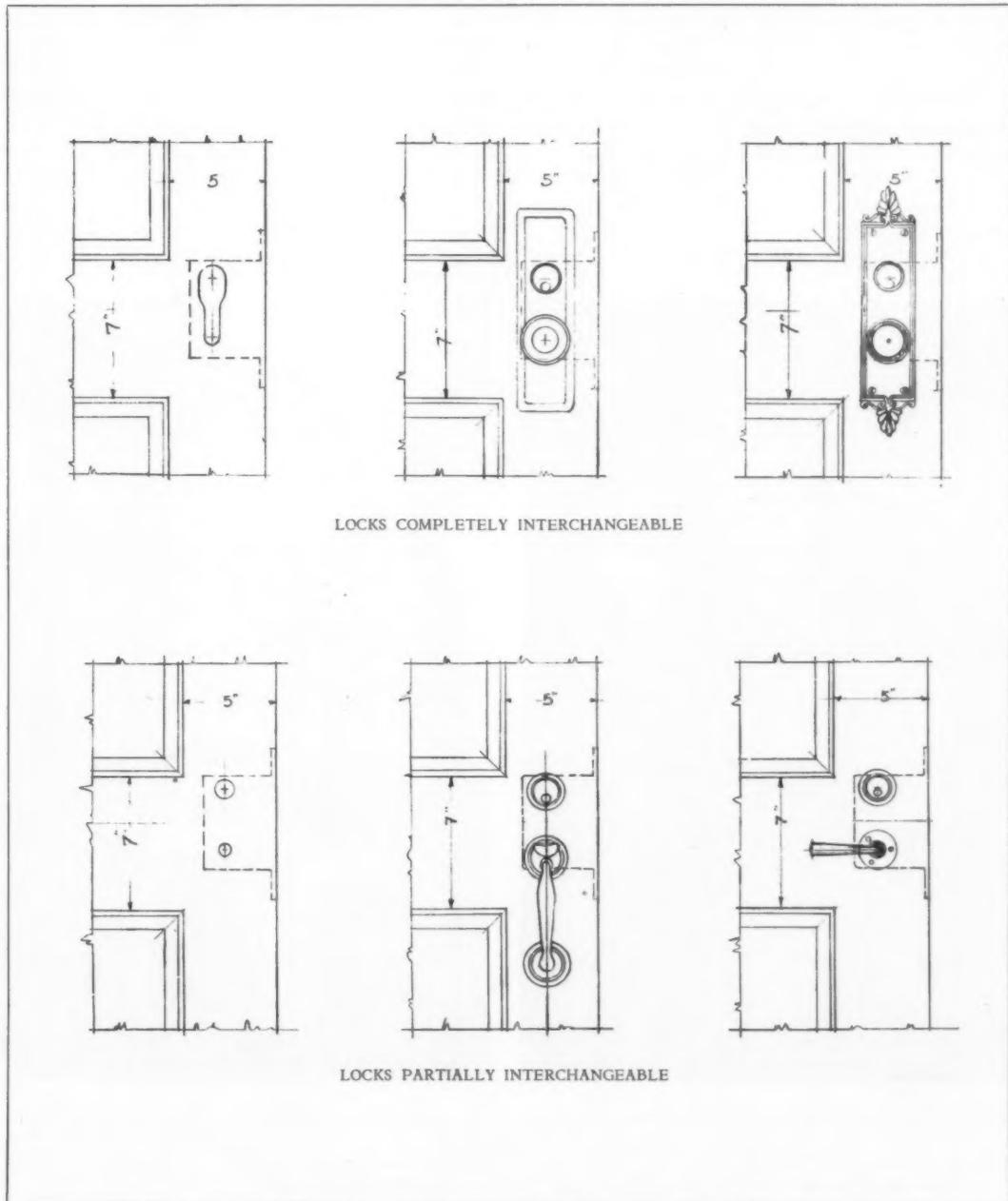
The following clause is submitted for inclusion in "Hardware Specifications." The same precautions are taken to protect the architect's design from any possibility of misunderstanding or unauthorized alteration.



"Template hardware, simplified for use with hollow metal doors built in accordance with Simplified Practice Recommendation No. 82, is to be used on all metal doors, except (. . .). Where minor changes in design or specification will permit the use of such hardware, the manufacturer is to confer with the architect before proceeding with the work."

The 1929 Program of the Hollow Metal Industry, as worked out in cooperation with the

Builders Hardware Industry, with the approval of the American Institute of Architects, and the Associated General Contractors, retains the same freedom of selection now enjoyed for work necessarily special, but gives in addition the opportunity of obtaining the greatest freedom of design, interchangeability of hardware and of doors, quicker delivery of doors and trim and elimination of errors. Also it simplifies door design and hardware treatment where this simplification can be utilized.



THE FIFTH AVENUE ASSOCIATION ANNUAL ARCHITECTURAL AWARD

THE annual architectural awards of The Fifth Avenue Association for new buildings erected in 1928 were announced February 23, 1929. The New York Life Insurance Company Building, erected on the site of the old Madison Square Garden, and the Dorothy Gray Building, at 683 Fifth Avenue, have been selected as, respectively, the best and second best commercial buildings erected in the Fifth Avenue Section during the past year. Announcement of the awards was made formally at the Twenty-first Birthday Anniversary Dinner of the Association, held in the Waldorf-Astoria on February 26th. Gold and silver medals and certificates were presented to the owners, and certificates of merit given to Cass Gilbert, Inc., architects of the New York Life Insurance Company Building, and Robert D. Kohn and Charles

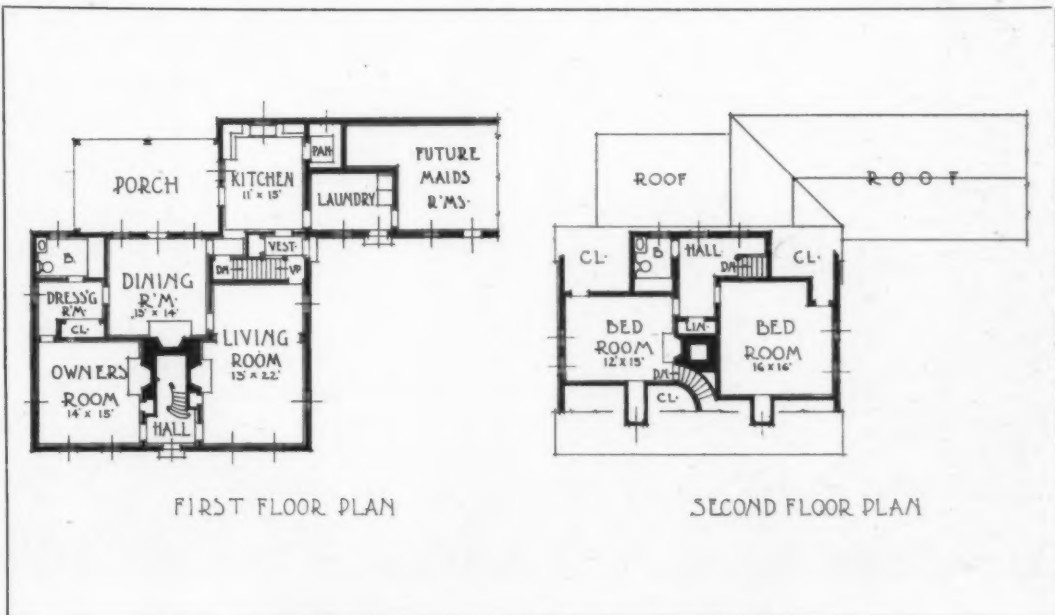
Butler, architects of the Dorothy Gray Building.

The selection of buildings which best represent the Fifth Avenue Section is made at the close of each year, after an inspection of all new and altered buildings completed within the year. The committee of selection is composed of architects and laymen appointed by the New York chapter of the American Institute of Architects and The Fifth Avenue Association. Members of the 1928 Committee were: Emil W. Kohn, Chairman; Joseph H. Freedlander, Chester H. Aldrich, Raymond M. Hood, Samuel Kurzman and James P. Roe.

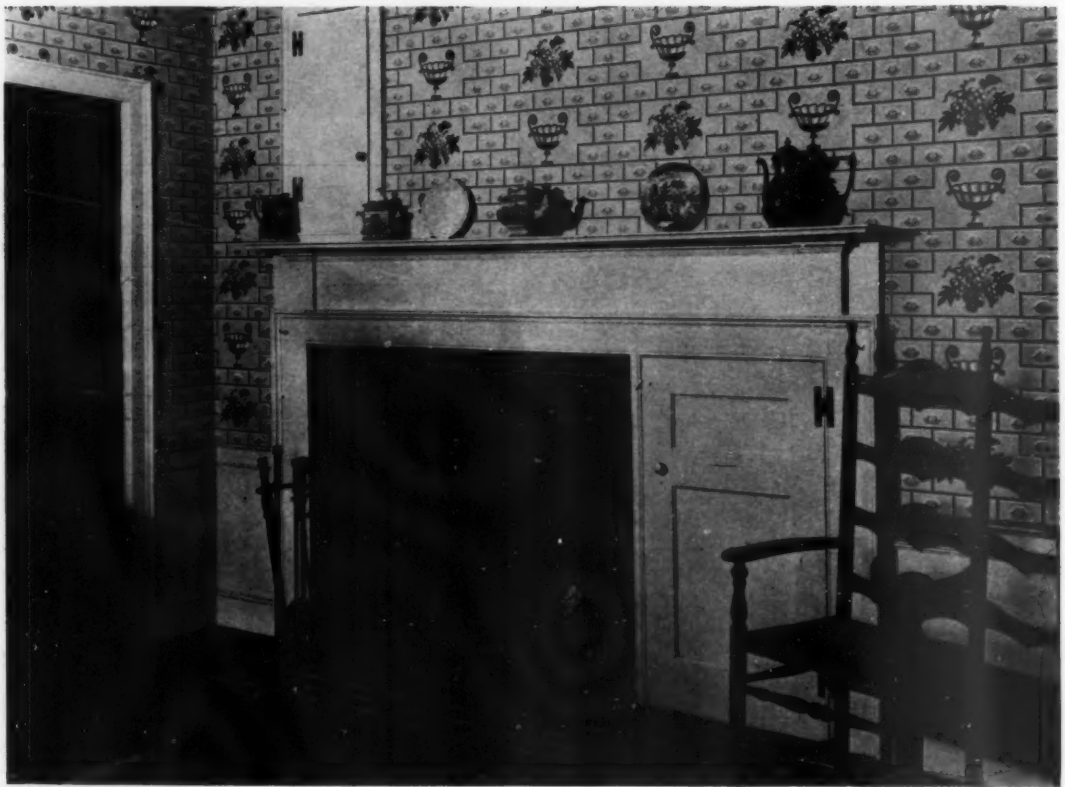
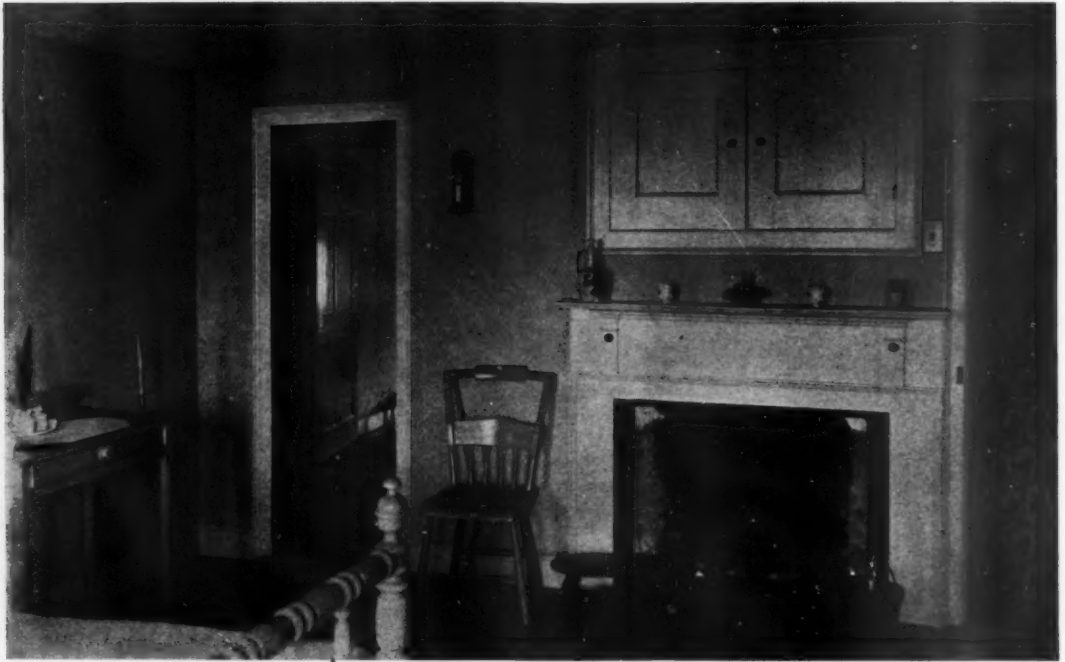
No awards for alterations to buildings were made by the Association this year, inasmuch as the committee did not feel that there is any altered building in the Fifth Avenue Section of sufficient architectural merit to be worthy of an award.



At left, NEW YORK LIFE INSURANCE COMPANY BUILDING, CASS GILBERT, INC., ARCHITECTS, AWARDED GOLD MEDAL. (THIS BUILDING WILL BE FULLY ILLUSTRATED IN THE MARCH 20, 1929, ISSUE OF THIS JOURNAL.) At right, THE DOROTHY GRAY BUILDING, ROBERT D. KOHN AND CHARLES BUTLER, ARCHITECTS, AWARDED SILVER MEDAL BY THE FIFTH AVENUE ASSOCIATION FOR NEW BUILDINGS IN THE FIFTH AVENUE DISTRICT ERECTED IN 1928



HOUSE OF CHARLES G. EICHENBERGER, EGYPT, MASS.
ALTERED AND RESTORED BY ROYAL BARRY WILLS, ARCHITECT



HOUSE OF CHARLES G. EICHENBERGER, EGYPT, MASS.
ALTERED AND RESTORED BY ROYAL BARRY WILLS, ARCHITECT



SPECIFICATIONS

Communications relative to specifications addressed to THE AMERICAN ARCHITECT will be answered, in the pages of this department, by H. R. Dowsell, of the office of Shreve & Lamb, Architects.



IN compiling the New York Building Congress Standard Specifications, it has been the aim to describe, in each division, standards for materials and workmanship covering practically all items of work falling within that trade on any type of building, and also whenever possible to quote from recognized authorities. Part B Specifications for Mass and Reinforced Concrete quote freely from the Regulations proposed by the American Concrete Institute. Concrete work, however, may include, on a small building, wall footings only, whereas on larger buildings the work may embrace the entire structure. Where the concrete work required is of relatively small extent, objection may be taken to the inclusion in such a specification of a large number of paragraphs having no application. In cases like this, it is suggested that divisions such as "Masonry and Concrete Materials," "Masonry," and "Mass and Reinforced Concrete" be combined, a one-part specification written under the heading of "Masonry," and the qualifying paragraphs copied, preceded by a statement that paragraphs (enumerate) are reprinted from the New York Building Congress Standard Specifications. The following form is suggested for such a specification:

GENERAL CONDITIONS

1. (Copy standard Paragraph No. 1)

GENERAL CONDITIONS

ARBITRATION CLAUSE

2. (Copy standard Paragraph No. 2)

ARBITRATION CLAUSE

WORK INCLUDED

WORK INCLUDED

- This division shall include all labor, materials and appliances necessary for the execution of all mass and reinforced concrete work, common and face brick work, and hollow tile backing, furring and partitions as shown on the contract drawings and enumerated herein, subject to the requirements hereinafter specified which are copied verbatim from the New York Building Congress Standard Part B Specifications for "Masonry and Concrete Materials," "Mass and Reinforced Concrete" and "Masonry."
- The location and general extent of the work are as follows:

(Enumerate items of work.)

MATERIALS AND WORKMANSHIP

MATERIALS & WORKMANSHIP

Under this heading copy such paragraphs from "Masonry and Concrete Materials," "Mass and Reinforced Concrete" and "Masonry" specifications as are required to describe standards of materials and workmanship for the items enumerated under "Work Included."

This method of using the Congress specification can be adapted for any of the trade divisions, but is recommended chiefly for specifications of smaller buildings or trades on larger buildings where the work is small in scope. If the descriptive clauses are copied verbatim, except for reference to Part A, or the words "Part A" changed to read "Work Included" and a statement included to the effect that they are so copied, the advantages of a Standard Specification will, to a large extent, be retained.

A.I.A. DIVISION 4.

STANDARD FORM OF THE NEW YORK BUILDING CONGRESS, EDITION OF 1929
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New York Building Congress Standard Specifications for MASS AND REINFORCED CONCRETE

PART B.

General Conditions.

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

Arbitration Clause.

- Any dispute or claim arising out of or relating to this contract, or for the breach 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. **Arbitration Clause**

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued.***Scope.**

3. The following requirements in regard to materials and methods specify the required standards for the execution of all mass and reinforced concrete work. Portions within quotation marks are reprinted from the Proposed Standard Building Regulations for the use of Reinforced Concrete of the American Concrete Institute, issue of May, 1928, except that where "Commissioner of Building" appears "Architect" has been substituted. **Scope**
4. These requirements, however, form a part of the Contract only insofar as they describe items mentioned in Part A of these specifications or as shown on the Contract drawings.
5. Where the requirements of the local Building Code or regulations, laws or rules promulgated by departments having jurisdiction conflict with these specifications, and are mandatory they shall be followed the same as if specifically noted in this specification. This shall not, however, be construed to mean that any requirements herein set forth can be modified because not specifically noted in the Building Code.
6. Except where otherwise definitely stated, in Part A, this Contractor shall furnish, as a part of this Contract, all forms, hoists, scaffolding and other equipment necessary for the performance of his work.

Reinforcement Drawings and Schedules.

7. As soon as possible after the award of the Contract this Contractor shall prepare and submit to the Architect, for approval, in triplicate, prints of reinforcement plan, details, column schedules, diagrams and schedules. No part of the structure shall be installed for which shop drawings have not been submitted to the Architect for approval. The plans and details shall indicate the location, general spacing and sizes of reinforcing members together with all slots, chases, recesses and openings indicated on Contract drawings. The column schedules, diagrams and general schedules shall indicate the bends, sizes and lengths of reinforcing members. These plans, details, diagrams and schedules will be checked by the Architect and one print of each returned either approved or for correction within one week from the date of submission. **Reinforcement Drawings and Schedules**
8. When corrections are required, these shall be made and prints in triplicate again submitted.
9. Each sheet shall bear the number of the floor, the name and location of the building, the name of the Architect, the Consulting Engineer, General Contractor and Sub-Contractor. Each sheet shall be dated and shall also bear the date of each correction or revision.
10. The Architect's approval will cover the general location and spacing and the design details. He will, if he discover errors, report them to this Contractor, but such notification shall not be construed as placing any responsibility on the Architect.
11. "All plans submitted for approval or used on the work shall clearly show the strength of concrete for which all parts of the structure were designed."
12. The omission from Contractor's drawings of any material shown on Architect's drawings, or called for in the specifications, shall not relieve this Contractor from furnishing same, even though the Architect has returned such drawings as approved.
13. After final approval, this Contractor shall furnish the Architect with additional prints for the use of his inspectors. Prints shall also be furnished for the use of other trades at the cost of reproduction.

Slots, Chases, Recesses, Etc.

14. Contractors for other trades requiring slots, chases, recesses or openings in concrete work will be required to furnish information regarding the size and location of same before concrete forms have been erected. The Contractor for work in this Division shall, however, notify the Architect or General Contractor in writing of his need for such information a reasonable time in advance of the execution of his work. **Slots, Chases, Recesses, Etc.**
15. All slots, chases, recesses or openings, indicated on the Contract drawings, which are not formed by sleeves, frames, boxes or other equipment furnished by other trades, shall be provided, in the location shown, by this Contractor as a part of this Contract.
16. When slots, chases, recesses or openings are not shown on Contract drawings, they shall be executed by this Contractor, under written instructions from the Architect, and will be paid for as an addition to this Contract.
17. Subsequent cutting, fitting and patching due to incorrect or incomplete information or failure of the other contractors to install their "built in" work in time, as shown on Contract plans shall be executed by this Contractor under written instruction from the Architect. Such work will be paid for as an addition to this Contract.

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued.***Building in Work.**

18. This Contractor shall examine such drawings and specifications as the Architect submits to this Contractor for Structural Steel, Waterproofing, General Masonry, Cut Stone, Terra Cotta, Roofing and Sheet Metal Work, Architectural Iron, Metal Furring and Lathing, Plumbing, Heating, Ventilating, Electric Wiring and Equipment, Elevators, and other divisions whose work may require building in or special provisions for later setting, and familiarize himself with their requirements. The responsibility for delivery at the proper time and for the correct placing shall rest with the Contractor furnishing same. This Contractor shall, however, as a part of his Contract, cooperate in the placing of such work. **Building in Work**
19. All estimates for work in this Division shall be based on furnishing materials and executing the work in accordance with the drawings issued for bidding together with Part A of this specification and such paragraphs of Part B as are noted under Part A to apply.
20. Contractors may, if desired, submit alternate estimates based on their own design and requirements of Parts A and B of this specification.

Design of Forms.

21. "Forms shall conform to the shape, lines and dimensions of the member as called for on the plans." **Design of Forms**
22. Forms "shall be substantial and sufficiently tight to prevent leakage of mortar; they shall be properly braced or tied together so as to maintain position and shape and insure safety to workmen and passersby." If adequate foundation for shores cannot be secured, trussed supports shall be provided.
23. Lumber used in forms for exposed surfaces shall be dressed to a uniform width and thickness, and shall be free from loose knots or other defects. Joints in forms shall be horizontal or vertical. For unexposed surfaces and rough work, undressed lumber may be used. Lumber once used in forms shall have loose nails withdrawn, and surfaces to be in contact with concrete thoroughly cleaned, before being used again.
24. All forms for beams shall be designed so that one side may be removed for inspection purposes without disturbing falsework or bottom portion of form. Posts for supporting forms for slabs, beams and girders, shall rest on wedges which may be loosened without producing undue stress on the floor system.
25. Bolts, rods or other approved devices shall be used for internal ties; they shall be so arranged that when the forms are removed no metal shall be within one inch of any surface. Wire ties will be permitted only on light and unimportant work; they shall not be used through surfaces where discoloration would be objectionable. Shores supporting successive stories shall be placed directly over those below, or so designed that the load will be transmitted to them without undue stress in the concrete.
26. Where required, suitable moldings or bevels shall be placed in the angles of forms to round or bevel the edges of the concrete.
27. "Temporary openings shall be provided" at the base of column and wall forms, and at other points "where necessary, to facilitate cleaning and inspection immediately before depositing concrete."

Removal of Forms.

28. "The removal of forms shall be carried out in such a manner as to insure the complete safety of the structure. Where the structure as a whole is supported on shores, removable floor forms, beams and girder sides, column and similar vertical forms may be removed within 24 hours, providing the concrete has hardened sufficiently that it is not injured. In no case shall the supporting forms be disturbed until the concrete has hardened sufficiently to permit their removal with safety. Shoring shall not be removed until the member has acquired sufficient strength to support safely its weight and the load upon it." **Removal of Forms**

Materials—Concrete.

29. The materials and methods described under the specifications for Masonry and Concrete Materials, Part B, shall apply to this Division and form part of this specification, except where other methods and materials are specifically mentioned in Part A of this Division. **Materials—Concrete**
30. Where, under Part A, the product of a certain manufacturer is called for this shall be furnished. Where a manufacturer is not named, all materials accepted for use on the work shall be subject to the approval of the Architect.

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued*

31. Unless otherwise specified under Part A, coarse aggregate shall be graded between the following limits:
32. *For Mass Concrete* (not reinforced)—Stone or gravel shall pass a 2-inch-mesh screen and be retained on a $\frac{1}{4}$ -inch-mesh screen.
33. *For Reinforced Concrete*—"The maximum size of the aggregate shall be not larger than one-fifth ($\frac{1}{5}$) of the narrowest dimension between forms of the member for which the concrete is to be used nor larger than three-fourths ($\frac{3}{4}$) of the minimum clear spacing between reinforcing bars. By maximum size of aggregate is meant the clear space between the sides of the smallest square opening through which 95 per cent, by weight of the material, can be passed."

Metal Reinforcement.

34. "Metal reinforcement shall conform to the requirements of the 'Standard Specifications for Billet Steel, Concrete Reinforcement Bars' of Intermediate Grade (Serial Designation A15-14) or for 'Rail Steel Concrete Reinforcement Bars' (Serial Designation A16-14) of the American Society for Testing Materials." Rail Steel Bars may be used for bars $\frac{3}{4}$ inch in size and smaller or for larger sizes where no bending is required. "The provision in these specifications for machining deformed bars before testing shall be eliminated."
35. "Wire for concrete reinforcement shall conform to the requirements of the 'Tentative Specifications for Cold Drawn Steel Wire for Concrete Reinforcement' (Serial Designation A82-27) of the American Society for Testing Materials."
36. Metal reinforcement, to receive the rating of "deformed bars" which permits the use of higher bend stresses than for plain bars shall show an ultimate bond strength 25 per cent greater than that shown by plain bars of equivalent cross-sectional area.

Metal
Reinforcement**Cleaning and Bending Reinforcement.**

37. "Metal reinforcement, before being placed, shall be free from rust scale or other coatings that will destroy or reduce the bond. Reinforcement shall be formed to the dimensions indicated on the plans. Cold bends shall be made around a pin having a diameter of four or more times the least dimension of the bar."
38. "Metal reinforcement shall not be bent or straightened in a manner that will injure the material. Bars with kinks or bends not shown on the plans shall not be used." Heating of reinforcement for bending will be permitted only when approved by the Architect.

Reinforcement
Cleaning
and Bending**Placing Reinforcement.**

39. "Metal reinforcement shall be accurately placed and secured, and shall be supported by concrete or metal chairs or spacers, or metal hangers. The minimum center to center distance between parallel bars shall be $2\frac{1}{2}$ times the diameter for round bars or 3 times the side dimension for square bars; if the ends of bars are anchored the center to center spacing may be made equal to 2 diameters for round bars or to $2\frac{1}{2}$ times the side dimension for square bars, but in no case shall the clear spacing between bars be less than 1 inch, nor less than $1\frac{1}{3}$ times the maximum size of the coarse aggregate. Bars at the upper face of any member shall be embedded a clear distance of not less than one diameter nor less than 1 inch."

Placing
Reinforcement**Splices and Offsets in Reinforcement.**

40. "In slabs, beams and girders, splices of reinforcement shall not be made at points of maximum stress without the approval of the Architect. Splices, where permitted, shall provide sufficient lap to transfer the stress between bars in bend and shear. In such splices the bars shall be spaced at the minimum distance specified in Paragraph 39."
41. "Splices in column bars shall provide a lap of 24 diameters for deformed bars and 30 diameters for plain bars."
42. "Where changes in the cross-section of a column occur, the longitudinal bars shall be sloped for the full length of the column or offset in a region where lateral support is afforded. Where offset, the slope of the inclined portion from the axis of the column shall not be more than 1 in 6."

Splices and
Offsets in
Reinforcement**Concrete Quality.**

43. The ultimate 28 day strength of concrete for various portions of the work shall be as specified under Part A or as indicated on the Contract drawings.
44. "The strength of concrete shall be fixed in terms of the water-cement ratio in accordance with one of the following methods:
 - (1) By established results for average materials, as provided below.
 - (2) By specific test of materials for the structure as provided in Paragraph 47.

Concrete
Quality

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—Continued.

45. "By the water-cement ratio is meant the total quantity of water entering the mixture, including the surface water carried by the aggregate," but exclusive of the quantity of water absorbed by the aggregate or admixtures, "expressed in terms of the quantity of cement. The water-cement ratio shall be expressed in U. S. gallons per sack (94 lbs.) of cement."

"Water-Cement Ratio for Average Materials."

46. "Where no preliminary tests of the materials to be used are made, the water-cement ratios shall not exceed the values in the following table. The mixes shown in the table are approximate only, and may require adjustment to give proper workability."

"Water-Cement Ratio for Average Materials"

ASSUMED STRENGTH OF CONCRETE MIXTURES.

Water Cement Ratio U. S. Gallons per 94 Lb. Sack of Cement	Approximate Mix Volume of Portland Cement to Sum of Separate Volumes of Fine and Coarse Aggregate as Measured Dry Plastic Concrete	Assumed Compressive Strength at 28 Days in Pounds per Square Inch
8¼	1:7	1,500
7½	1:6	2,000
6¾	1:5¼	2,500
6	1:4½	3,000
Moderately Wet Concrete		
8¼	1:6½	1,500
7½	1:5½	2,000
6¾	1:4¾	2,500
6	1:4	3,000

In interpreting this table, surface water contained in the aggregate must be included as part of the mixing water in computing the water-cement ratio."

"Water-Cement Ratio by Tests of Materials."

47. "Where the water-cement ratios for the various strength of concrete are to be established by test, these tests shall be made in advance of the beginning of operations using the materials proposed and consistencies suitable for the work and in accordance with the 'Standard Method of Making Compression Tests of Concrete' (Serial Designation C39-27) of the American Society for Testing Materials, including the provisions for curing in a moist room at 70 deg. F. and testing wet. A curve representing the relation between the average 28-day strength of the concrete and water-cement ratio shall be established for a range of values including all of the strengths called for in the plans. The tests shall include at least four different water-cement ratios and at least four specimens for each water-cement ratio. The water-cement ratio to be used in the structure shall be that corresponding to a point on the curve established by these tests representing a strength of concrete 15 per cent higher than the minimum ultimate strength called for on the plans and satisfactory evidence shall be submitted to show that these water-cement ratios are not exceeded. No substitution shall be made in the materials being used on the work without additional tests in accordance, herewith, to show the new water-cement ratios to be used."

"Water-Cement Ratio by Tests of Materials"

Concrete Proportions and Consistency.

48. "The proportions of aggregates to cement for concrete of any water-cement ratio shall be such as to produce concrete that will work readily into the corners and angles of the form and around the reinforcement without excessive puddling or spading and without permitting the material to segregate or free water to collect on the surface. The combined aggregate shall be of such composition of sizes that when separated by the No. 4 standard sieve, the weight retained on the sieve shall not be less than one-third nor more than two-thirds of the total nor shall the amount of coarse material be such as to produce harshness in placing or honeycombing in the structure. When forms are removed, the faces and corners of the members shall show smooth and sound throughout."

Concrete Proportions and Consistency

Control of Proportions.

49. "The methods of measuring concrete materials shall be such that the proportion of water to cement can be accurately controlled during the progress of the work and easily checked at any time by the Architect."

Control of Proportions

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued.*

50. Where the addition of a waterproofing compound, hydrated lime or an inert material, is specified under Part A, the proportions of cement, fine and coarse aggregates, shall not be altered, but the material specified shall be used as an additional ingredient. For hand mixed concrete the hydrated lime and Portland cement shall be well mixed while dry. For machine mixed concrete it will not be necessary to pre-mix the hydrated lime with the Portland cement.

Mixing.

51. "The concrete shall be mixed until there is a uniform distribution of the materials and the mass is uniform in color and homogeneous. The mixer shall be of such type as to insure the maintaining of the correct proportions of the ingredients. The mixing shall continue for at least one minute after all the ingredients are in the mixer." **Mixing**
52. When hand mixing is permitted by the Architect the mixing shall be done on a watertight platform of sufficient size to accommodate men and materials for the progressive and rapid mixing of at least two batches of concrete at the same time. The batches shall not exceed one-half cubic yard each. The materials shall be mixed dry until the mixture is of uniform color, the required amount of water then shall be added and the mixing continued until the batch is of a uniform consistency and character throughout.

Cleaning Forms and Equipment.

53. "Before placing concrete all equipment for mixing and transporting the concrete shall be cleaned, all debris and ice shall be removed from the places to be occupied by the concrete, forms shall be thoroughly wetted (except in freezing weather) or oiled, and clay or cement tile that will be in contact with concrete shall be well drenched (except in freezing weather). Reinforcement shall be thoroughly cleaned of ice and other coatings." **Cleaning Forms and Equipment**

Removal of Water from Excavation.

54. "Water shall be removed from excavations before concrete is deposited, unless otherwise directed by the Architect. Any flow of water into the excavation shall be diverted through proper side drains to a sump, or be removed by other approved methods which will avoid washing the freshly deposited concrete. Water vent pipes and drains shall be filled by grouting or otherwise, after the concrete has thoroughly hardened." **Removal of Water from Excavations**

Transporting.

55. "Concrete shall be handled from the mixer to the place of final deposit as rapidly as practicable by methods which shall prevent the separation or loss of the ingredients. It shall be deposited as nearly as practicable in its final position to avoid rehandling or flowing. Under no circumstances shall concrete that has practically hardened be deposited in the work." **Transporting**
56. "When concrete is conveyed by chuting, the plant shall be of such size and design as to insure a practically continuous flow in the chute. The slope of the chute shall be such as to allow the concrete to flow without separation of the ingredients. The delivery end of the chute shall be as close as possible to the point of deposit. When the operation is intermittent the spout shall discharge into a hopper. The chute shall be thoroughly flushed with water before and after each run; the water used for this purpose shall be discharged outside the forms."

Placing.

57. "Concrete shall be thoroughly compacted by puddling with suitable tools during the operation of placing." In thin walls or inaccessible portions of the forms where rodding or spading is impracticable, the concrete shall be worked into place by tapping or hammering the forms adjacent to the freshly deposited concrete. When necessary, openings shall be provided in the forms to permit the placing of concrete in such a manner as to avoid accumulations of hardened concrete on the forms or reinforcing bars. The concrete shall be "thoroughly worked around the reinforcement, around embedded fixtures, and into the corners of the forms." **Placing**

Curing.

58. "In hot weather, exposed concrete shall be thoroughly wetted twice daily during the first week." **Curing**

New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued.***Depositing in Cold Weather.**

59. "When depositing concrete at freezing or near freezing temperatures, the concrete shall have a temperature of at least 50 deg. F., but not more than 120 deg. F. The concrete shall be maintained at a temperature of at least 50 deg. F. for not less than 72 hours after placing or until the concrete has thoroughly hardened. When necessary, concrete materials shall be heated before mixing. Dependence shall not be placed on salt or other chemicals for the prevention of freezing. No frozen materials or materials containing ice shall be used. Manure shall not be applied directly to concrete when used for protection."

Depositing
in Cold
Weather**Bonding Fresh and Hardened Concrete.**

60. Before depositing new concrete on or against concrete which has set, the forms, if necessary, shall be retightened, the surface of the set concrete roughened, cleaned of foreign matter and laitance, and thoroughly wetted but not saturated. To insure excess mortar at the juncture of hardened and newly deposited concrete, the cleaned and wetted surfaces of the hardened concrete, including vertical and inclined surfaces, shall be slushed with a coating of 1:2 cement mortar against which the new concrete shall be placed before the mortar has attained its initial set.

Bonding
Fresh and
Hardened
Concrete**Protective Covering of Concrete.**

61. "At those surfaces of footings and other principal structural members in which the concrete is deposited directly against the ground, metal reinforcement shall have a minimum covering of 3 inches of concrete. At other surfaces of concrete exposed to the ground or weather, metal reinforcement shall be protected by not less than 2 inches of concrete."
62. "In fire-resisting construction, metal reinforcement shall be protected by not less than 1 inch of concrete in slabs and walls, and not less than 1½ inch in beams, girders and columns."
63. "In similar structures where the fire hazard is limited, the metal reinforcement shall not be placed nearer the exposed surface than ¾ inch in slabs and walls or 1 inch in beams, girders and columns."
64. "Exposed reinforcement bars intended for bonding with future extensions shall be protected from corrosion."

Protective
Covering of
Concrete**Construction Joints.**

65. "Joints not indicated on the plans shall be so made and located as to least impair the strength of the structure. Where a horizontal joint is to be made, any excess water and laitance shall be removed from the surface after concrete is deposited. Before depositing of concrete is resumed the hardened surface shall be cleaned and roughened and all weak concrete removed."
66. "At least two hours must elapse after depositing concrete in the columns or walls before depositing in beams, girders, or slabs supported thereon. Beams, girders, brackets, column capitals and haunches shall be considered as part of the floor system and shall be placed monolithically therewith."
67. "Construction joints in floors shall be located near the middle of spans of slabs, beams or girders, unless a beam intersects a girder at this point, in which case the joints in the girders shall be offset a distance equal to twice the width of the beam. In this last case provision shall be made for shear by use of inclined reinforcement."

Construction
Joints**Material Tests.**

68. Where, under Part A, special tests of materials furnished for work in this Division are specified, this Contractor shall provide in his estimate the sums stated under Part A. These sums will be expended at the Architect's discretion; any unexpended balance shall revert to the owners. All "such tests shall be made in accordance with the standard method of test, covering the particular material under consideration, of the American Society for Testing Materials" or of the "Purchase Specification for Concrete Materials" of the Concrete Institute, as specified under Part A.
69. In addition to the above tests, whether specifically specified under Part A or not, this Contractor shall, as a part of his contract, make tests on any material entering into mass or reinforced concrete construction when, in the opinion of the Architect, there is any doubt as to its suitability for the purpose.
70. This Contractor shall also, as a part of his Contract, make "tests of the concrete from time to time to determine whether the materials and methods in use are such as to produce concrete of the specified quality. Specimens for such tests shall be taken at the place where the concrete is being deposited, and shall be taken, cured and tested in accordance with the 'Standard Method of Making Compression Tests of Concrete' (Serial Designation C 39-27) of the American Society for Testing Materials."

Material
Tests

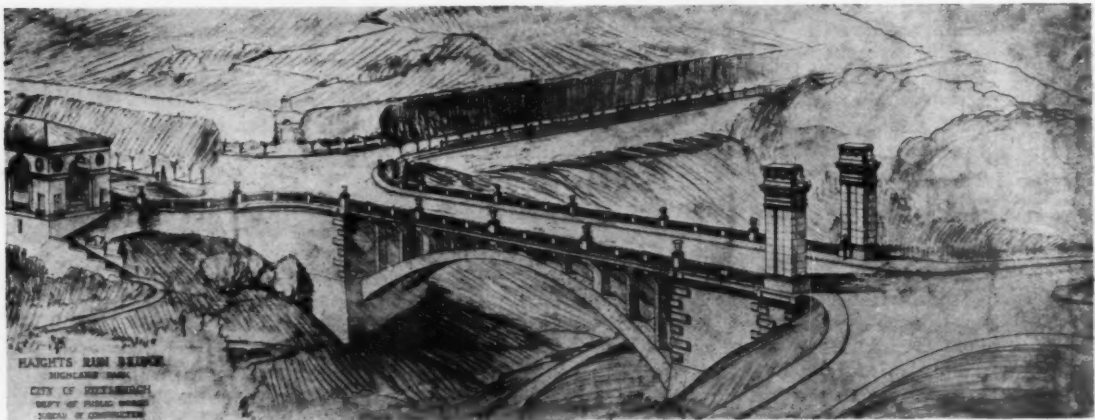
New York Building Congress Standard Specifications—

MASS AND REINFORCED CONCRETE—*Continued.***Load Tests.**

71. When the Architect has reason to believe that the specifications have not been followed he "has the right to order the test under load of any portion of a completed structure." **Load Tests**
 "Such tests shall not be required to be made on any concrete construction which is less than 60 days old."
72. "In such tests, the member or portion of the structure under consideration shall be subject to a superimposed load equal to $1\frac{1}{2}$ times the live load plus $\frac{1}{2}$ the dead-load. This load shall be left in position for a period of 24 hours before removal. If, during the test, or upon removal of the load, the member or portion of structure shows evident failure, such changes or modifications as are necessary to make the structure adequate" to carry the load for which it was designed shall be made by this Contractor as directed by the Architect.
73. In tests applied to determine the suitability of slab or beam construction, "the structure will be considered to have failed to pass the test if within 24 hours after the removal of the load the slabs or beams do not show a recovery of at least 50 per cent of the maximum deflection shown during the 24 hours while under load."
74. Should the structure tested prove satisfactory the cost of the test shall be considered as extra work and paid for as an addition to this Contract. Should the structure, erected in accordance with the Architect's design and under his inspection, fail under test, the cost of the test and the expense of repairing the resulting damage shall be borne by the owner and/or the Contractor, as may be adjusted between them or apportioned by arbitration.

Inspection.

75. The Architect or Engineer responsible for the design shall inspect the forms, reinforcement and concrete as the work progresses and the Contractor shall correct such defects as the Architect or Engineer may direct before placing of concrete. "A record shall be kept which shall cover the quality and quantity of concrete materials, including water, the mixing and placing of the concrete, and the placing of the reinforcing steel. The inspection record shall also include a complete record of the progress of the work and of the temperatures, when these fall below 40 deg. F. and of the protection given to the concrete while curing." **Inspection**
76. This Contractor shall afford the Architect or his representative every opportunity for making such inspections and records.



HETHS RUN BRIDGE ENTRANCE TO HIGHLAND PARK, PITTSBURGH, PA.—STANLEY L. ROUSH, ARCHITECT
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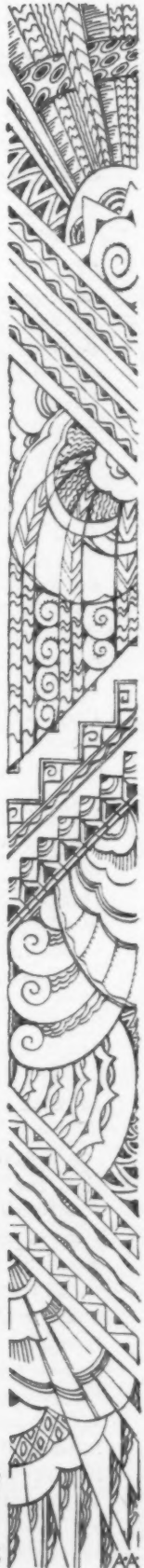
NORTHWESTERN TERRA COTTA

used for facing of lower four stories and upper four stories, this store and commercial building, located at State and Elm Streets, Chicago. Architects, B. Leo Steif & Company. Detail, part of main doorway, below. Colors: dark blue, light green, gold, with multi-colored lintels. All terra cotta modeled in advanced modern style.



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




BOOK REVIEWS


STRENGTH OF MATERIALS

TEXT books on the Strength of Materials usually bring to mind involved calculations and the terrors of higher mathematics. Jasper Draffin, assistant professor of Theoretical and Applied Mechanics at the University of Illinois, however, has written a text book on this subject particularly for engineering students, and architects who have not studied calculus. The author does presuppose that the reader has a knowledge of algebra, trigonometry and theoretical mechanics. The topics discussed are those commonly taught engineering students in undergraduate courses on strength of materials. Stress has been laid on fundamentals and principles rather than details and the derivation of formulae. The author states in the foreword—"The guiding principle in presenting the material has been to enable the student to make a reasonable estimate of the resistance that a structural part will offer to loads and to develop this estimate from the principles of equilibrium and a knowledge of materials."

Direct stresses, Materials and their Properties, Riveted Joints, Torsion, Beams, Deflection, Columns, Special Loading and Moment of Inertia of Areas are among the chapter headings. Simple problems are used to explain the various principles involved in this study of materials commonly used in building construction.

Strength of Materials, by Jasper O. Draffin, M. S. 275 pages. Illustrated, size 6 x 9 1/4 inches. John Wiley & Sons, Inc., New York, price \$3.00.

HANDBOOK OF REINFORCED CONCRETE BUILDING DESIGN

A HANDBOOK, by Arthur S. Lord, based upon the recommendations of the Committee on Reinforced Concrete Building Design and specifications of the American Concrete Institute has been issued by the Portland Cement Association. It is stated that the purpose of the book is to establish a safe and economical standard for reinforced concrete construction and to provide designers with necessary tables and diagrams that assist in designing quickly and economically. The make-up of this volume presupposes an understanding of the fundamentals of the design of reinforced concrete: it is intended to be a handbook for engineers. It covers all phases of reinforced concrete design with a

directness that greatly simplifies the subject. Cost data are included that should be found invaluable. Altogether this volume should prove of inestimable value to structural designers. An interesting, unusual and exceedingly practical feature of this handbook is the method of marginal indexing. The first page in the book contains the marginal headings. By bending the book backward, the reader finds black lines on the edge of the pages opposite the marginal headings. This greatly facilitates the location of data and tables.

Handbook of Reinforced Concrete Building Design, by Arthur S. Lord. 262 pages, illustrated, size 5 1/4 x 7 1/2 inches. Portland Cement Association, 33 West Grand Avenue, Chicago, Ill. Price \$1.00 (50 cents each in quantities of six or more to one address).

BUNGALOWS AND MODERN HOMES

A BOOK of Bungalows and Modern Homes" containing "a series of typical designs and plans" by Cecil J. H. Kelley, A.R.I.B.A., has been issued in the United States by Charles Scribner's Sons. This is an English book devoted to small one and two story houses. It is illustrated with reproductions of pen and ink perspectives and sketch plans. The estimative cost in English currency is given for each design. The foreword states that the cost estimates have been made by a Quantity Surveyor.

A Book of Bungalows and Modern Homes, by Cecil J. H. Kelley. 80 pages. Illustrated, size 5 3/4 x 9 inches. Charles Scribner's Sons, New York, price \$2.75.

DESIGNS OF ABRAHAM SWAN

A REPRINT has recently been made in book form of some of the original plates by Abraham Swan. The book, entitled "Interior Decoration of the Eighteenth Century," is from designs of Abraham Swan, selected by Arthur Stratton, F.R.I.B.A. The plates, which are all reproductions of drawings, are devoted to details of woodwork, wall treatments, staircases, chimneypieces, and so forth. The drawings, as are all those of this master-designer, are perfectly rendered, and the designs are in every case clean cut and accurate.

Interior Decoration of the Eighteenth Century. From the designs of Abraham Swan, selected by Arthur Stratton, F.R.I.B.A. London: John Tiranti & Co., 64 plates, size 11 x 14 1/2 inches, board binding.

Brick By LANCASTER



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Leola, Pa.
Henry Y. Schaub
Architect

Lofty Simplicity—Subtle Elegance

Won for this school the two highest awards

In the recent School Building Architectural Competition conducted by The Common Brick Manufacturers Association, The Leola School by Architect Henry Y. Schaub took both the first and grand prizes. These awards are particularly significant in view of the wide variety of designs submitted from all parts of the country, some representing outlays of as high as half a million dollars.

The judges, all outstanding school architects, said of the Leola School, "This entry possesses a charm which is rarely accomplished in buildings of this kind." As the most prominent part of any building is the wall, this statement of the judges manifestly was influenced by the brickwork.

We therefore feel pardonably proud that the building is faced with Quaker Colonial Brick. The beauty of this brick by Lancaster is difficult to appreciate from photographic reproductions; we should therefore be glad to send you samples for your study. Write us about this or any of our other products, there is no obligation.



Lancaster "QUAKER Colonial BRICK"

is a sand moulded brick of natural beauty. Their color is neither stepped up nor toned down; they are neither too bright nor too sombre. When laid in the wall they present a harmony of color, made doubly interesting by their horizontal and vertical fire markings produced in the kiln.

An intimate knowledge of brick making—a thorough burning—and a high calibre clay give Quaker Colonials a permanence

that equals their beauty—a strength that makes them outlast less fortunate alternates.



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A copy of this profusely illustrated catalogue describing our various products, should be in the files of every architect. Your copy is awaiting your request. Write today.


CURRENT NOTES


STUDY OF COMPRESSIVE STRESSES IN CONCRETE

BULLETIN No. 185 of the Engineering Experiment Station of the University of Illinois deals with an investigation of the failure of concrete under compressive stresses applied in one, in two, or in three directions perpendicular to each other, the aim of the tests being to study the internal action of the material as it breaks down under compressive stresses, and at the same time to obtain information on the influence of lateral stresses upon the ability of concrete to resist longitudinal stresses. The investigation included three series of tests. The bulletin contains a discussion of the methods used in testing and gives the results obtained for each of the series, together with a statement of various theories of failure applying to the subject, and a critical study of their applicability to the problem. Copies may be secured without charge by addressing the Engineering Experiment Station, Urbana, Illinois.

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GEORGE HENRY SCHWAN

DECEMBER 30th, 1928, marked the passing of George Henry Schwan, A.I.A., at the age of fifty-five, a prominent member of the architectural profession in Pittsburgh, Pa.

Mr. Schwan was trained in the office of George S. Orth, in Pittsburgh, and from there he went to the University of Pennsylvania and took a special course in architecture. He then visited Europe to study the buildings of the Old World, and on his return, about 1901, opened an office for the practice of architecture, which he maintained under his name until the time of his death. He served as a member of the commission which revised the old Pittsburgh building code. In 1922 he organized the Potomac Division of the Architects' Small House Service Bureau in Pittsburgh and acted as President of this organization for seven years.

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LOUIS BEEZER

LOUIS BEEZER, well known architect of Seattle, Wash., died recently in California.

Louis Beezer and his brother M. J. Beezer were about to reopen their offices in the Seaboard Building, Seattle, under the name of Beezer Brothers as before, after being in California, where the building of St. Dominic's Church was in progress.

PRODUCERS' COUNCIL CATALOGUE OF MOVING PICTURE FILMS

THE Producers' Council affiliated with the American Institute of Architects has issued a catalogue of moving picture films and slides illustrating the methods of application and processes of manufacture of materials and appliances used in building construction. The catalogue has been prepared in collaboration with the Structural Service Department of the American Institute of Architects and the Association of Collegiate Schools of Architecture. The films and slides listed may be obtained, with or without accompanying lectures by representatives of the industries concerned, upon application to The Producers' Council, 19 West 44th Street, New York City. The Council requires ten days' notice to arrange the material for shipment. This material is available to any institute chapter, school or club. The only charge made for the use of the films or slides is the cost of transportation one way. In some cases a projector and operator can be loaned with the films.

The list of films covers a wide range of subjects from the manufacture of pipe and brick to lumbering, manufacture of terra cotta and elevator machines.

☛

A GOOD CATALOGUE

WE are at a loss to know just when to spell the word "catalogue" and when to spell it "catalog"; we do know, however, that there are certain catalogues or catalogs that are good and certain others that are decidedly not good. By a good catalogue we mean one in which the illustrations are of the best, in which the text matter is short and concise, yet accurately descriptive of the material illustrated, and that the typography is in perfect keeping with the subject treated. We consider the new catalogue, just brought out by Todhunter, Inc., on "Early English Mantelpieces" good. It illustrates various mantelpieces of early English design carried in stock by the company, each photograph being accompanied by necessary detailed information, and the manner in which the material is presented, from both a photographic and typographic point of view, is far superior to the average business catalogue with which we come in contact. Architects should find such a catalogue as this extremely useful in more ways than one.

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STEVENS MASTER SPECIFICATIONS

WHILE the writing of specifications is among the most important services performed by architects, the subject is one that has been most difficult of solution. Men who can write a good specification are relatively few. After all, specification writing, aside from the legal aspect of contracts, is a matter of knowing what building materials and equipment are wanted, how one wants them incorporated in the building, and how to explain these requirements in simple language that is easily understood by anyone who can read and has familiarity with building construction.

Every building is an individual problem, and it is agreed that no standard specification can ever be prepared that will satisfactorily meet the requirements of all buildings. It is possible, however, to collect a group of standards, from which individual specifications can be prepared. This is the idea upon which a recent volume, "Stevens Master Specifications for Architects and Builders," has been prepared. The author, Frank B. Stevens, Jr., states in the foreword, "The present-day necessity for a certain standardization of specifications that will apply to all types of buildings is universally recognized. There has grown up throughout the entire building industry an insistent demand for an authoritative and comprehensive compilation of open-competitive specifications, designed to keep pace with constant progress in the manufacture and application of materials. The publication of this volume, therefore, puts before architects and engineers the complete data essential to a proper description of their drawings, with a view to avoiding duplication and omission, simplifying contracts, and preventing misunderstandings."

These standard specifications have been carefully arranged by trade and material classifications. It is not intended that all of the clauses of the text are to be incorporated in any particular specification, but only such clauses as apply to the project being described. The individual specifications, incorporating alternate clauses for handling various portions of the work, or accomplishing different results, are so arranged that the specification writer can list by numbers the standard clauses to be copied, and thus reduce the labor of actual writing to a matter of such portions of his specifications as are not covered by the standard clauses.

Following the standard, or "Master" specification of each trade, there are pages devoted to data on the materials of individual producers whose products would properly be included in the specification for that particular trade. The volume is

arranged in loose leaf form, indexed for quick reference.

One marvels at the vast amount of work and the thought that has been necessary to compile this book. Mr. Stevens, a recognized authority on specification writing, is to be congratulated upon his efforts in producing a volume of this kind. It is a book based upon actual practice and the experience of the author's own office, and should be found extremely useful in every architect's office.

Stevens Master Specifications are distributed without charge to architects. Additional copies may be obtained for \$7.50 per volume by addressing the publisher, Stevens Master Specifications, Inc., 159 North State Street, Chicago, Ill.

SPECIFICATIONS FOR PLAIN AND REINFORCED CONCRETE

THE Portland Cement Association has recently issued in folder form specifications for plain and reinforced concrete based upon the water-cement ratio method of proportioning. The specifications cover the subjects of materials; concrete quality and proportioning; and forms and details of construction. The specification is based on the proposed Standard Building Regulations submitted by Committee E-1 of the American Concrete Institute, 1928. The folder is prepared for filing in accordance with the A.I.A. standard construction classification. Copies may be obtained by addressing any local Association office or through the Service Department of this journal.

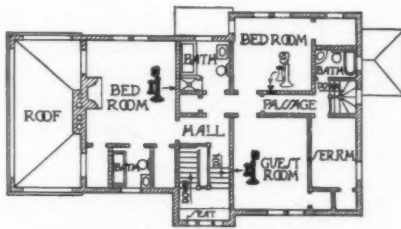
SECOND EDITION OF "TECHNIQUES"

A SECOND edition of "Techniques" has been issued by Chas. M. Higgins & Co.

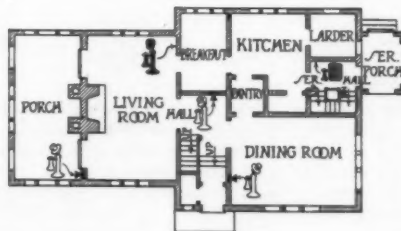
"Techniques" is a publication containing twenty pages of interesting illustrations of various types of pen and ink renderings contributed by more than twenty-five well known artists and illustrators. No attempt has been made, the publishers say, to outline all phases of work in drawing ink. Outstanding techniques, including the usual ones which first receive the study and attention of the student, are described and illustrated. The purpose of the publication is to give suggestions for treatment rather than instructions. Architects and instructors in architecture and allied subjects may obtain a copy gratis. To students and others a charge of twenty-five cents will be made. Requests should be addressed to the Educational Department, Chas. M. Higgins & Co., 271 Ninth Street, Brooklyn, N. Y.



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FIRST FLOOR

Outlined telephones indicate additional outlets

Telephone service throughout the house adds tremendously to livability and comfort . . . at comparatively little expense

1 1 1

CONVENIENCES form an important element in the planning of homes, nowadays.

Women, especially, want smartness and comfort . . . modern appointments everywhere throughout the house . . . the latest time and effort saving devices . . . light and power everywhere.

And they want *telephone convenience*, too.

Telephones strategically located throughout each floor, so calls can be placed and answered easily, without unnecessary steps and waste of time . . . telephone outlets available elsewhere, so service can be had when desired in rooms less frequently used . . . the improved appearance that comes from having wires and some of the apparatus concealed . . . the touch of smartness that cleverly placed cabinets for instruments, directories and bell boxes give.

Architects generally recognize the desirability of planning for this telephone convenience in advance. Locations for telephone outlets are best determined when the residence or building is being designed or remodeled, and conduits for the proper wiring can then be built into the walls. Provision is thus made not only for immediate service requirements, but also for the expansion or rearrangement of the service in the future.

Many families want two or more telephone lines—one, or perhaps two, for the exclusive use of the family, and another for the servants and the conduct of household business.

The Bell System is distributing two booklets, which outline desirable facilities for telephone wires and apparatus, and illustrate appropriate arrangements of telephones in different types of residences and buildings. Copies of these will be furnished without charge by the Business Office of your local Bell company.

For those interested in specific projects, the telephone company will be glad to arrange a conference with Bell representatives.



THOMAS W. LUDLOW, A. I. A.

WORD has recently been received of the death of Thomas W. Ludlow, of Pittsburgh, on January 28th, 1929. Mr. Ludlow was highly regarded by all who knew him and his passing marks a loss to the architectural profession in his city where he practiced for many years. Mr. Ludlow was a member of the firm of Ludlow and Schwab.

THOMAS E. TALLMADGE APPOINTED MEMBER
OF COMMISSION

Mr. Thomas E. Tallmudge, F. A. I. A., has been appointed a member of the Commission of Architects to advise on the restoration of the City of Williamsburg, Va., to its original Colonial form. Mr. Rockefeller, Jr., has given \$4,500,000.00 for this purpose and the work is now under way.

The other members of the Commission are: Chas. A. Platt, Fiske Kimball, Robert P. Bellows, Edmund C. Campbell, R. E. Lee Taylor, A. Lawrence Kocher and Milton B. Medary.

PERSONALS

Fry and Kasurin, architects, formerly located at 340 Nickels Arcade, announce that their new address is 904, First National Bank Building, Ann Arbor, Michigan.

John Hocke, architect, has sent us an announcement saying that he is taking larger quarters, which will be ready February 1st, at the same address where he has been located—The Harbor Bank Building, 1604 East 79th Street, Chicago, Ill.

Paul W. Hofferbert, architect and engineer, announces the opening of a new office, in addition to his present office in Florence, Ala., at 215 Etowah Trust Building, Gadsden, Ala., where he wishes also to receive manufacturers' catalogues and so forth.

John Noyes, landscape architect and town planner, and Consulting Landscape Architect to the Missouri Botanical Garden, whose office was formerly in the Missouri Botanical Garden, announces that his new address is the Railway Exchange Building, St. Louis, Mo.

Cyril Bennett & Fitch H. Haskell, architects, have opened new offices at 595 East Colorado Street (311 First Trust Building), Pasadena, Calif.

Archer and Gloyd, architects, announce the association of Joseph W. Radotinsky, formerly with Thomas W. Lamb, New York, and the formation of Archer and Gloyd, Incorporated. Their office is at 916 Pioneer Trust Building, 1016 Baltimore Avenue, Kansas City, Missouri.

EXHIBIT OF HOSPITAL PLANS AND MODELS

IN connection with the first International Congress on Hospital Management, which will take place at Atlantic City, N. J., on June 13th, 1929, and the annual meeting of the American Hospital Association which will be held immediately after the close of the World Congress, there will be an exhibition of plans and models of modern American hospitals. It is stated that this exhibit will be of interest to architects as well as to hospital administrators and that it is being prepared by a special committee of the American Institute of Architects under the chairmanship of Charles Butler, 56 West 45th Street, New York. All details concerning the exhibit may be had either from Mr. Butler, or from Dr. E. H. Lewinski Corwin, Secretary General of the International Executive Committee, International Hospital Congress, 2 East 103d Street, New York, N. Y.

BRITISH SOCIETY HONORS AMERICAN
ARCHITECT

ANOTHER American to be elected a Fellow of the Royal Society of Arts in England is Carl A. Ziegler, A.I.A., of Philadelphia, Pa. The Society was founded in 1754, and includes in its membership distinguished scientists and artists of Great Britain.

HOW ARCHITECTS BECOME WEALTHY
(From the "Washington State Architect")

THIS is a letter sent out to contractors and investors by a regularly licensed architect of this state [Washington]. The editor [of the "Washington State Architect"] will be interested in learning what the architects generally think of this offer.

Gentlemen:

The small plan House Service Bureau I have opened at . . . has been installed with the idea of making plans of well designed buildings at a price that a contractor can not afford to make them himself.

I will make to order, complete plans for any building costing not over \$5,000.00, for the sum of \$10.00, giving three sets of blueprints. Any building costing more than the above amount, regular architect's fees.

I will include three sets of typewritten specifications for \$5 extra. Satisfaction guaranteed. Hoping to receive part of your business.

Yours, etc.,

_____, Architect.

Note—This letter will be accepted as \$2.50 cash on your first trial order.

WE made quite a glaring mistake in the March 5th issue. Did you notice it? We had an editorial entitled "The President Speaks." It so happened that this editorial was written perhaps three weeks before the issue came out. At that time Calvin Coolidge was president. When the editorial reached our readers, however, the country had a new president. THE AMERICAN ARCHITECT therefore offers its apologies to President Herbert Hoover for the slight suggested. It is hoped that our readers will understand how such an error might easily have occurred and will not hold the mistake up against us. ~ ~ ~ This issue is devoted entirely to the presentation of the New York Life Insurance Company Building, Cass Gilbert, Incorporated, Architect. Our readers are all familiar, no doubt, with the fact that this building replaces the old Madison Square Garden, which was for so long so closely identified with the social and political life of this city. ~ ~ ~ Looking a little forward, we are planning to devote the May 5th issue to the Architectural and Allied Arts Exposition, which is to be held the last two weeks in April, in New York, under the auspices of the Architectural League of New York. ~ ~ ~ It is now our plan to devote the May 20th issue to the Sixty-second Convention of the American Institute of Architects. According to our annual custom, this issue will record the doings at the convention, with reports of the various committees and the high spots in the several addresses.

March 20, 1928

The Publishers



NEW YORK LIFE INSURANCE COMPANY BUILDING, NEW YORK
CASS GILBERT, INC., ARCHITECT
From a drawing by Hugh Ferriss

THE AMERICAN ARCHITECT
March 20, 1929