

THE INLAND ARCHITECT AND NEWS RECORD

VOL. LI

CONTENTS FOR APRIL, 1908

No. 4

	PAGE
Editorial—Church Architecture in America—The New York Architectural League Co-operative Competition—The Art and Business of Architecture—Division of Work Between Architectural Societies—Compensations of Architect with Small Practice—An Honest Bill to Client—Variety in Architectural Design—	25-26
Garages and Motor Houses - - - - -	27
	By C. Harrison Townsend
The University Club, Chicago - - - - -	29
Exhibition, 1908, Chicago Architectural Club - - - - -	30
The Organ Architecturally Considered - - - - -	31
	By George Ashdown Audsley, Architect
Civic Department - - - - -	32
	By Ralph Adams Cram, Architect
The Illinois Athletic Club Building, Chicago - - - - -	33
Reinforced Concrete Work - - - - -	34
	By F. D. Warren, Architect
Our Illustrations - - - - -	34
New Publications - - - - -	35
Year Book, New York Chapter A. I. A. - - - - -	36
International Congress of Architects - - - - -	36
Association News - - - - -	XII

LIST OF ILLUSTRATIONS

University Club Building, Chicago. Holabird & Roche, Architects.
 Illinois Athletic Club Building, Chicago.
 Barnett, Haynes & Barnett, Architects, St. Louis, Mo.
 Maryland Institute, Baltimore, Md. Pell & Corbett, Architects.
 St. Luke's Church, San Francisco, Cal. Sutton & Weeks, Architects.
 South Side Baptist Church, Birmingham. Warren & Welton, Architects.
 Apartment Building for H. M. Hoelscher, Chicago. Marshall & Fox, Architects.
 Y. M. C. A. Building, Houston, Tex. Sanguinet & Staats, Architects.
 Prize Design, Eighth Annual Traveling Scholarship, Chicago Architectural Club.
 By George Ausumb.
 Park Buildings for Lincoln Park Commissioners, Chicago.
 Perkins & Hamilton, Architects.
 Competitive Design, Home of Knights of Pythias, Decatur, Ill.
 H. V. Von Holst and L. A. Rawson, Architects.
 Proposed Hotel on the Lake Front, Chicago.
 Richard E. Schmidt and Garden & Martin, Architects.
 Counter Screen for Bank, Owatonna, Minn. Louis H. Sullivan, Designer.
 Refectory, Douglas Park, Chicago. W. Carbys Zimmerman, Architect.
 Seventh Regiment Armory, Chicago. W. Carbys Zimmerman, Architect.
 Bungalow, Santa Barbara, Cal. Francis W. Wilson, Architect.
 Bungalow for H. A. Bechtel. Harlan Thomas, Architect, Seattle.
 House for W. M. Reed, Kansas City, Mo. Root & Siemons, Architects.
 House for A. J. Pardridge, Chicago. Marshall & Fox, Architects.
 House for Chas. Spink, St. Louis. Barnett, Haynes & Barnett, Architects.
 House for F. C. Traver, Kenilworth, Ill. N. Max Dunning, Architect, Chicago.
 House for J. S. Ely, Cedar Rapids, Iowa. Lawrence Buck, Architect, Chicago.

Alphabetical Index of Advertisers

Page	Page	Page	Page
Abbott, A. H., & Co..... X	Follansbee Bros. Co.....XVI	Muralo Co. X	Standard Sanitary Mfg. Co. VI
Art Metal Construction Co.XIII	Holland Furnace Co.....XIV	Never Split Seat Co..... X	Southern Pacific R. R.....XIV
Atlantic Terra-Cotta Co... XI	Huntington Roofing Tile Co. XV	Northwestern Terra Cotta Co.XIII	Taylor, J. W..... X
Atlas Portland Cement Co.. V	Keasbey & Mattison Co.... XI	Pennsylvania Rubber Co.. II	University of Pennsylvania X
Bobbink & Atkins..... VII	Kimball, W. W., Co.....VIII	Press Clipping Bureau.....XIII	Wagner Park Conserva- tories VII
Cutler Mfg. Co..... XV	Larsen-Baker Ice Machine Co. XV	Reedy, J. W., Elevator Mfg. Co.XIII	Western Paradigm Co.... X
Cudell, F. E.....XIII	Leland Co.VIII	Rendle, Arthur E..... X	Wilks Mfg. Co.....XIV
Detroit Show Case Co....XIII	Magneta Co. X	Richter Mfg. Co.....XVI	Winkle Terra Cotta Co.... XV
Dexter Bros. VI	Maurer, Henry, & Son....XIII	Robbins Mfg. Co..... X	Winslow Bros. VII
Dixon, Jos., Crucible Co...XIII	Mycenian Marble Co..... III	Roebing Construction Co.. X	Woodbury Granite Co.....XIV
Expanded Metal & Corru- gated Bar Co..... IV	Mullins, W. H., Co.....XVI	Samson Cordage Works...XVI	Wolff, L., Mfg. Co..... V
Federal Co.VIII		Schreiber, L., & Sons Co.. IV	Yale & Towne Mfg. Co....XVI



THE result of many years of studied effort to create a **DEAD-FLAT OIL PAINT** for all interior surfaces. It is now in use in many public buildings, office buildings, etc. It is restful to the eyes, absolutely non-poisonous and is the best working paint on the market. Color cards and working samples upon application to the manufacturers. Send for half-tone booklet of public buildings using Marvelo Wall Paint.

The MURALO CO.

New Brighton, Staten Island

24-26 Market St., Chicago, Ill.
Battery and Filbert Streets, San Francisco, California
San Pedro Street, Los Angeles, California

J. W. TAYLOR

Monon Bldg., 324 Dearborn St. Telephone 1500 Harrison

ARCHITECTURAL PHOTOGRAPHS

Buildings, Interiors, Details, Etc.

Promise to purchase two dozen from the lot at \$4.00 per dozen, unmounted, and I will send 200 from which to make the selection.

The ROEBLING SYSTEM OF FIREPROOFING

The Roebling Construction Co.

Send for Catalogue

909 Stock Exchange Bldg., CHICAGO

The Magneta Clocks



have been adopted for most of the recent prominent buildings.

THE ONLY GOOD AND RELIABLE ELECTRIC CLOCK SYSTEM ON THE MARKET

**No Batteries
No Contact Points**

Recent Contracts Include

American Bank Note Co., New York
Singer Bldg., New York; Union Terminal, Washington; U. S. Custom House, New York; Girard Trust Co., Philadelphia; S. S. "Lusitania," Cunard Line; S. S. "Mauretania," Cunard Line.

Magneta Clock Co. 120 West 31st Street
NEW YORK

Robbins Fly Screens

RESIDENCE WORK OUR SPECIALTY!

Robbins Manufacturing Company
968 to 978 North Central Park Ave., CHICAGO

SCHOOL OF ARCHITECTURE UNIVERSITY OF PENNSYLVANIA

THE FOUR YEAR COURSE. Full professional training (with an option in Architectural Engineering) leading to the degree of B. S. in Arch. Advanced standing is offered to College graduates or the two degrees of A. B. and B. S. in Arch. can be taken in six years.

THE GRADUATE YEAR. Affords opportunity for advanced work in design and other subjects of the course leading to the degree of M. S. in Arch.

THE TWO YEAR SPECIAL COURSE. For qualified draftsmen. Offers advanced technical training with a Certificate of Proficiency.

FOR FULL INFORMATION address Dr. J. H. PENNIMAN, Dean of the College, University of Pennsylvania, Philadelphia.

Paradigm Skylights AND Fireproof Windows

Arthur E. Rendle,
18 W. 34th St., N. Y.

Western Paradigm Co.,
The Rookery, Chicago



A.H. Abbott & Co.

DRAWING SUPPLIES

Instruments, Tracing Cloth, Papers, Colors, Scales, Levels, Transits, etc.

BLUE-PRINTS

151 Wabash Ave., CHICAGO



*See
that Bolt?
Every Joint
has one.*

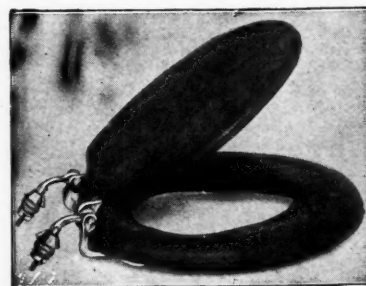
NEVER SPLIT SEATS ARE THOSE THAT HAVE THE IRON BOLTS

just as this half tone illustration shows. They are the seats that "never split", warp or crack. They are always satisfactory to architect and owner.

MANUFACTURED BY

Never Split Seat Company

EVANSVILLE, INDIANA



CATALOGUE

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

The Inland Architect and News Record

A Monthly Journal of

ARCHITECTURE

Constructive, Decorative and Landscape

ISSUED ON THE 15TH

Entered as second-class matter, June 22, 1905, at the Postoffice at Chicago, Illinois, under Act of March 3, 1879.

PUBLISHED BY PORTER, TAYLOR & CO.

PONTIAC BUILDING, CHICAGO, ILL.

NEW YORK OFFICE: 320 Broadway, Phone 636 Worth

SUBSCRIPTION:

\$10.00 a year in advance—Single copies, \$1.00

Vol. LI.

APRIL, 1908

No. 4

SPECIAL CONTRIBUTORS FOR 1908

Robert D. Andrews	Boston
G. A. Audsley	New York
Glenn Brown	Washington
T. M. Clark	Boston
Ralph A. Cram	Boston
Frederick P. Dinkelberg	Chicago
F. W. Fitzpatrick	Washington
E. Stanford Hall	Chicago
Albert Kelsey	Philadelphia
E. L. Masqueray	New York
Olmsted Bros.	Brookline, Mass.
Wallace C. Sabine	Cambridge, Mass.
Maurice M. Sloan	Philadelphia
J. Knox Taylor	Washington
Edw. L. Tilton	New York
F. D. Warren	Boston

Church Architecture in America.

It is difficult to estimate the progress of American church architecture in the past fifty years, or even since the Chicago fire, without stopping to think; and neither stopping nor thinking is popular in this strenuous age, unless one can think without stopping. Aesthetically there is not much change, as the years go by, and perhaps there never will be, except a greater correctness in architectural grammar, so to speak, as a result of our better architectural schooling. Despite all attempts to adapt to Christian religious wants the classic orders of pagan Greece and Rome, the once despised Gothic, originating in medieval Christianity, offers today such natural and ready fitness for modern religious uses that its sway in ecclesiastical design is unaffected by the flight of time. Despite all the magnificence of St. Peter's and St. Mark's, our minds turn instinctively to the pointed arch as the truest symbol of Christian aspiration; and a thorough acquaintance with Viollet-le-Duc's great *Dictionnaire Raisonné* is as valuable to the twentieth century church architect as it would have been to his thirteenth century predecessor. In the aims and methods, however, of church work there has been a great broadening of late years, and the parish house is one of its results. The church of our grandfathers was strictly a Sunday affair, locked and empty on week days, except for occasional weddings and funerals. The church of today, accompanied by its parish house, is a church that works the whole week through, seeking to cover with its mantle the literary, social, fraternal and even the convivial (in its best sense) life of its flock as well as their religious life.

AMERICAN INSTITUTE OF ARCHITECTS

PRESIDENT.	CASS GILBERT, New York City.
FIRST VICE-PRESIDENT	JOHN M. DONALDSON, Detroit.
SECOND VICE-PRESIDENT	WILLIAM A. BORING, New York City.
SECRETARY AND TREASURER.	GLENN BROWN, Washington, D. C.

BOARD OF DIRECTORS FOR 1908.

FOR THREE YEARS.

Frank Miles Day, Philadelphia; R. Clipston Sturgis, Boston; George Cary, Buffalo.

FOR TWO YEARS.

Walter Cook, New York; Edgar V. Seeler, Philadelphia; J. L. Mauran, St. Louis.

FOR ONE YEAR.

Alfred Stone, Providence; Irving K. Pond, Chicago; Ralph Adams Cram, Boston.

AUDITORS.

Robert Stead, Washington, D. C. James G. Hill, Washington, D. C.

THE ARCHITECTURAL LEAGUE OF AMERICA.

(ORGANIZED 1899.)

Boston Architectural Club	Washington University Architectural Society, St. Louis.
The T Square Club, Philadelphia.	The Washington Architectural Club.
The Cleveland Architectural Club.	The Architect's Club U. of Ill.
The Toronto Architectural Club.	The Toledo Architectural Club.
The Pittsburgh Architectural Club.	The San Francisco Architectural Club.
The Cincinnati Chapter A. I. A.	The George Washington University Club.
The Chicago Architectural Club.	The Twin City Architectural Club.
The Detroit Architectural Club.	The National Sculpture Society.
The St. Louis Architectural Club.	The National Society of Mural Painters.

OFFICERS.

President	J. P. Hynes, Toronto, Can.
Vice-President	J. M. Lyle.
Corresponding Secretary	A. H. Chapman.
Recording Secretary	H. Eden Smith.
Treasurer	C. D. Lennox.
Eden Smith, J. C. B. Horwood.	

Permanent Headquarters, 729 15th St. N. W., Washington, D. C.
Permanent Secretary, Hector S. McAllister.

NEXT CONVENTION AT DETROIT, MICH.

The N. Y. Architectural League Co-operative Competition.

The Architectural League of New York has instituted a form of competition of great interest to the allied arts. Prizes of honor and value were offered for the best designs by groups, each composed of an architect, a sculptor and a mural painter. These designs were for display and award at the annual exhibition of the League. The problem was for, An Out-door Swimming Pool and Pavilion. The mural paintings of the design placed first were for panels behind the pavilion columns. The sculpture provided a fountain, the central feature of which was a statue of Pan. A noteworthy fact was that the sculpture of this group, and also of that placed second were the work of women. Special mention was made of the exhibit of another woman for her mural paintings. This competition for the collaboration of the three arts in a problem is im-

portant as attracting the attention of the public in a conspicuous manner to the harmonious results and art value secured by the united effort of the allied arts in the solution of a building problem at the inception of the undertaking. This competition of the New York Architectural League is an example to the other architectural and art societies that is sure to lend much additional interest to future exhibitions. Like competitions will awaken greater public interest in architectural exhibitions, a condition greatly to be desired.

The Art and Business of Architecture.

The profession of architecture might be represented by a dual-faced figure; the attention of one face directed towards art, that of the other towards business. Neither the art nor the business side may be neglected in the successful pursuit of an architect's calling. He must cultivate the artistic temperament of the artist, but no less sedulously the common sense methods of the business man. In architectural associations equal attention usually is not given to these two sides of the profession. In nearly every case, the aesthetic side is favored at the expense of that of business. Does not this fact justify the forming of architects' business associations to look after the problems that more directly concern the practical side? That this was desirable was the conclusion of some of the leaders of the profession in Chicago a dozen years ago. This resulted in the formation of the Chicago Architects' Business Association, which has been found of great advantage to the profession in this city. Its membership is several times larger than that of the Illinois Chapter of the A. I. A., although many chapter members are also members of the Business Association.

Division of Work Between the Two Societies

It has been found desirable to divide between the two associations the numerous questions that are constantly arising for consideration. The Chapter takes the lead in most questions of aesthetics, rules of practice, etc., while such as regard building laws, and their enforcement, relations of the architects to the contractors, etc., are relegated to the Business Association for investigation. Final action is usually the result of the recommendations by joint committees of both associations. The influence of the strong membership of the Business Association is very potent in obtaining needed reforms. Not long since, the Illinois Chapter discussed the advisability of a merger of the two societies, but it was concluded that each association was doing valuable work separately that would hardly be as effectively accomplished by an amalgamated society. For many years Chicago has been the only city in which an Architects' Business Association has existed. It now has a follower in the Kansas Architects' Business Association, recently organized in Topeka on the plan of the Chicago Association. The emphatic success of the Chicago Architects' Business Association in the province that it elects to fill; the freedom that it affords the Chapter from undue attention to questions wholly of a business nature, and the associated strength given to the promotion of professional interests by the large membership of the less formal society, are strong arguments in favor of architects' business associations.

Compensations of Architect With Small Practice

The architect who is denied the prestige and substantial reward that comes from the execution of large projects is at least secure from the criticism that his building is merely a work of engineering—not architecture. He may not deal with large masses that of themselves are imposing, but he may put into practice in the modest church, library or village hall all of the knowledge of proportion and refinement secured through his years of study, travel, training and practice. The skill, sincerity and honesty of purpose that he puts into the work at hand will result in buildings that are a continual source of pride and satisfaction. His work will be of a higher character architecturally than usually results when the chief end in view is to secure the usual 5 per cent commission with the least work and utmost possible speed.

An Honest Bill to the Client.

When the commission is the prime object sought, an honest bill to the client might be framed in the following words: "To amount of account for professional services rendered in anxiously wondering if I could get your work, calling on you in a doubtful frame of mind, to find if anyone else had obtained the job. Taking your counsel, making several bad sketches, in one of which you kindly pointed out that I had provided no doorway for one of the rooms and no proper position for one to be placed. Making a careful under-estimate, or rather, an under-guess, of the cost, leaving out of consideration everything but the mere shell. Obtaining bids and better work for you than was specified, and in checking grumbling contractors' heavy bills of extras. Thoroughly annoying you in many ways. Making up contractors' account, and having the pleasure of sending in this one, which I hope you will settle by return mail. Five per cent on total cost." It is hoped and believed that there are few architects who succumb to the rivalry and strife of the times to the extent of placing their profession upon the low plane indicated in such a bill of particulars.

Variety in Architectural Design.

It is very interesting to observe the influence of environment upon architectural design. This perhaps has never been more striking than at the present time, although conditions would appear to favor increased uniformity in style. The easy and quick ways of transportation that prevail between the nations of the old world, and between them and America, as well as throughout this country itself, would seem favorable to the demolition of the individuality of nations and of sections of country, and tend toward more uniformity in the design of buildings. Another even more powerful influence that seemingly would have the same tendency is the fact that the knowledge and inspiration of architects of both the old world and the new are drawn from the same works and are based upon the same studies. Yet, notwithstanding these leveling tendencies, the typical work of the present day of Germany is distinctively German, as that of France is French, and of England English. To consider now the United States, a wide diversity of style is found between the East, the Middle and the far West. An emphatic difference exists even between the large centers of these sections. Boston, which is fairly typical of New England, leans to the English as exemplified in the Georgian style. In New York the modern

French prevails. In Philadelphia, also, the English is suggested. Chicago most of any of the cities embodies independent ideas in her architecture. The spirit of the far West is best exemplified, perhaps, in Los Angeles, where the architects, whether native or from the East, soon acquire the spirit that is expressed in the mission, the

bungalow and the patio buildings. In lesser degree such cities as Buffalo and Detroit noticeably differentiate in their architecture from other cities. These differences, due largely to environment, emphasize the tendency toward individuality of design as between the nations and individual designers as well.

GARAGES AND MOTOR HOUSES

BY C. HARRISON TOWNSEND



IT IS a commonplace that an architect's first consideration should be to provide himself with the data of his problem and then to bring to bear upon them his own inventiveness, backed where possible by knowledge of what others have done in the face of similar conditions. In our present case, then, dealing as we are with the home of an automobile, the length, breadth and height of this are the all-determining factors. Here we are, and are likely to be for a year or two, in a not very assured state of certainty; the height of car and the breadth of wheel base, chassis and body have, indeed, showed little change since the early days of their manufacture, and do not, in most makes, differ very widely. As regards the length, however, matters are not so simple, and two things have to be considered. In the first place, it is undoubtedly the tendency of the man who invests in his first car (for the first is never the last) to "begin small," and to be satisfied with one which is less expensive, more humble and smaller than its successor; and, secondly, the disposition on the part of makers has been, year by year, toward increased length. Indeed, I know of one garage where the lift has had to be lengthened (not widened though) twice already in the few years since the place was built. It is on the whole, therefore, better to err on the maximum side, and, with regard to a private client, to build for the cars he may have later on, rather than for that he possesses today. The following table, prepared by one of the largest manufacturers, gives the dimensions for the different kinds of vehicles of their make:

Type.	Wheel Base.	Length.	Width.	Height.
14-16, side entrance.....	8 4	12 6	5 2	5 3
14-16, side entrance, with hood up	8 4	12 6	5 2	7 5
14-16, side entrance, with hood folded	8 4	13 6	5 2	5 6
14-16, single landaulet	9 0	13 0	5 2	7 0
14-16, limousine.....	9 0	13 0	5 2	7 0
14-16, city carriage	6 10	10 8	5 5	7 4
16-20, side entrance	9 0	13 0	5 3	5 5
16-20, side entrance, with hood up	9 0	13 0	5 3	7 7
16-20, side entrance, with hood folded	9 0	14 0	5 3	5 8
16-20, seven-seater, side entrance	9 9	13 10	5 3	5 5
16-20, three-quarter landaulet	9 9	13 10	5 3	7 7
16-20, limousine	9 9	13 10	5 3	7 7
26-30, side entrance.....	9 3	13 4	5 7	5 5
26-30, side entrance, with hood up	9 3	13 4	5 7	7 7
26-30, side entrance, with hood folded	9 3	14 4	5 7	5 8
26-30, three-quarter landaulet	10 0	14 1	5 5	7 8
26-30, limousine	10 0	14 1	5 7	7 8
40 h.p., side entrance.....	9 8	13 8	6 0	5 6
40 h.p., side entrance, with hood up	9 8	13 8	6 0	7 8

Type.	Wheel Base	Length.	Width.	Height.
40 h.p., side entrance, with hood folded	9 8	14 8	6 0	5 9
40 h.p., seven-seater, with side entrance	10 4	14 4	6 0	5 6
40 h.p., three-quarter landaulet	10 4	14 4	6 0	7 8
40 h.p., limousine	10 4	14 4	6 0	7 8

N. B.—In some cases the head-lamps mean a further increase in length.

Other makers, however, vary from these dimensions, which I only offer as approximate. With respect to height, again, very often the car has to go into its house with the hood or luggage rail fixed, and perhaps a spare tire or two on its roof. For this a height of 9 feet should be allowed. Then as to length, inasmuch as cars occasionally run up to (perhaps exceed, but this I do not know from actual measurement) as much as 18 feet, it would be well, as I have said, to allow generously in respect of length. Cars 16 feet long are by no means unusual, and I should recommend that this be taken as a datum, though I admit it is a full figure and a counsel of perfection.

For giving the car proper attention—oiling, cleaning and slight repairs—space should be arranged between it and the walls at each side and at each end. This should be at least 2 feet 6 inches where a pit is provided, but if the latter does not exist, and the car is raised for under-work, the space should be 3 feet or 3 feet 3 inches. Of course, in the case of several cars standing side by side there need only be 2 feet 6 inches or 3 feet between them. So far, then, we have reached the internal size of a one-car house 16 feet + 2 feet 6 inches or 3 feet 3 inches + 2 feet 6 inches or 3 feet 3 inches = 21 feet or 22 feet 6 inches for the length, and 6 feet + 2 feet 6 inches or 3 feet 3 inches + 2 feet 6 inches or 3 feet 3 inches = 11 feet or 12 feet 6 inches as the width. As regards internal width, 10 feet is the least amount which is advisable. A width of 12 feet would be better. A length of 14 feet would take such a car as a 14-16 Town Limousine about 10 feet 6 inches or 10 feet 9 inches in length.

The height of the doors should be sufficient, I have already pointed out, to pass in a car with hood up, plus its luggage rail, and, possibly, tires on the roof, or say 9 feet. They should be at least 8 feet wide in the clear, and may be steel revolving shutters. Or they may be hinged—opening outwards, of course—and preferably under a pent-roof. Finally, sliding doors may be employed—sometimes the most difficult arrangement to provide for.

For the motor house for one or two cars not much height is required to the roof-plate, and 8 feet will be found a good minimum to start from. Some of the smaller houses follow these dimensions; notably where the plate height is 8 feet from the floor, while the ceiling is 9 feet 3 inches. Another example is within the figures I have mentioned,

being 8 feet 6 inches from floor to ceiling, the door being the same height.

The walls should either be faced—at all events, to a height of about 4 feet from the ground—with glazed bricks or lined with tiles or such other material as is non-absorbent, and can be easily washed down. They should have a coved brick or tile at their junction with the floor, to avoid the harboring of grease and dirt. All angles to recesses—such as that for the hydrant or the radiators—should be rounded, and there should be as few projecting features as possible. Just above the floor level in each external wall should be inserted air gratings. They should where possible be placed behind the small radiators. The gas resulting from the evaporation of petrol-spirit is heavier than the air, and the getting rid of it presents a problem all the more difficult as no principle based on upright extraction shafts can be of any avail.

As regards the floor, I find that in by far the larger number of the garages and motor houses I have seen there is cement laid to a smooth finish and to falls. I do not, however, think this a very efficient material. The action of the dropped oil on its surface tends to rot and “take the virtue” out of the cement, and granolithic, with its large proportion of stone chips, distinctly offers less opportunity for this. Stone flags, laid not on concrete bed but on sleeper walls for the advantage of the air space beneath thus obtained, have been used, but they seem to add still further to the risk of the dangerous sparks that may result from the car coming in or going out with a chain or stud anti-skid appliance fixed on the tires. Again, unless the space beneath is of considerable size—a cellar, in fact—there would be danger of its forming a chamber where explosive gas could collect as the result of leakage. Some of the new floor compositions, of which so many are being placed on the market, may solve the question. Indeed, I am assured by the maker of one of these that it has successfully stood the test of daily and hard usage in a garage of some size.

The drainage should not be underground pipes, but open, half-round channels to avoid the danger of their becoming charged with explosive gas from leakages, and to allow the lubricating oil, which is apt to drop from a standing car, to be kept from the rubber tires, upon which it has a highly injurious effect.

The majority of the plans now adopted make provision in the house for an inspection pit. But in dealing with automobiles we ought to recognize that we are throughout in an evolutionary stage, and that on cause shown the principle that seemed admirable and efficient yesterday may well be discarded for something else today. It is so, in particular, with regard to the pit, the necessity for which no longer exists in the same measure as a few years back, and with which there is, therefore, a growing tendency to dispense. As Mr. Max Pemberton says: “Modern cars seem designed for the special purpose of abolishing the old abyss. The best of them are wonderfully accessible. You get at your clutch by lifting a foot-board; you glance at your big ends by opening an inspection-plate; you release a spring clip and the lid of the gear-box is to be lifted off; boards raised from the floor of the tonneau permit you to get at the rear brake and the differential.” Thus much of the work which used to be done below the car can now be put in hand from above, though there still remains a distinct necessity for seeing

to the underside of the chassis. For those who dispense with the pit there are various substitutes in the direction of jacks—either the turntable jack with three castor wheels, which is placed under one end of the car and allows it to be moved in any direction, or the larger and more efficient “motor car elevator.” This is a frame adjustable to the width of wheel base, and hung on a see-saw principle. It is tilted down at one end, and the car when run on to it reveals to the repairer, at a height of about 4 feet from the ground, the lower side of the chassis.

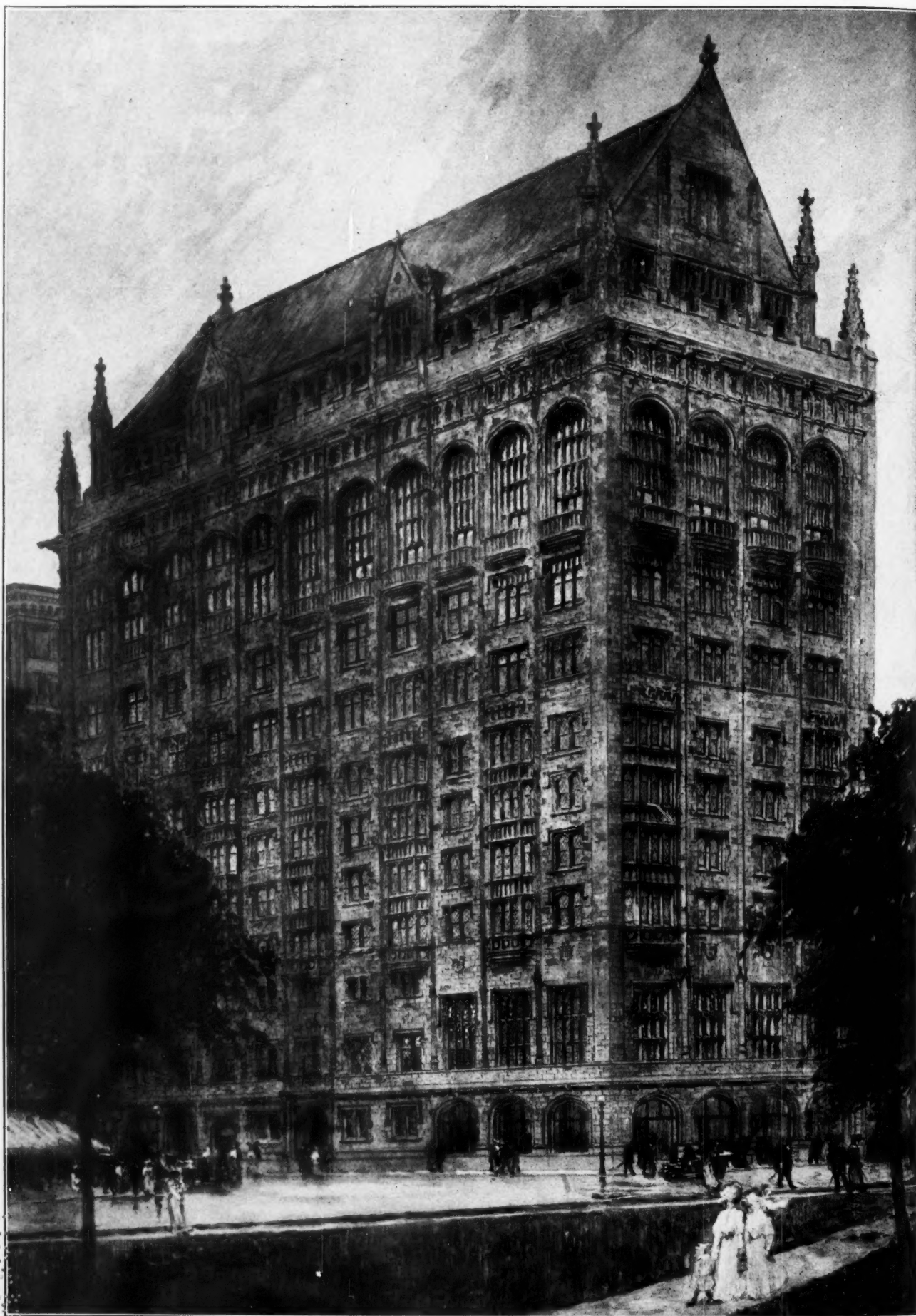
In cases where it is incumbent to make use of the pit, the best size for this is 6 feet by 3 feet by 4 feet 6 inches or 4 feet 9 inches deep. Its sides should be lined either with glazed bricks or tiles, and it will be found convenient to form in them a recess on each side in which the chauffeur when at work can place his tools from time to time. Iron ring steps afford access to it. It is all but useless to attempt to ventilate the bottom of the pit, for, as I have said, no up-cast shafts avail with a gas which is heavier than air. A pit may be ventilated by a vent flue taken from the bottom of it and carried up a chimney shaft alongside other flues. An expert strongly advocates the extension of the pit beyond the outer wall of the garage, as tending toward a certain amount of ventilation at all events, and as giving means of escape for the chauffeur, who would otherwise be shut up in a trap in case of fire. The covering of the pit should be a series of wide cover boards 2 inches thick, with a sunk-lift handle to each. They rest on the rebated edge of a 7 by 3 oak crib laid on the pit side. In one example the cover is of metal, dished to serve as a drip-pan. Occasionally guide rails are placed on either side of the pit to ensure the car's getting into position, and to prevent its wheels from a possible slip into the opening. This, however, I think, has more disadvantages than gain. The floor of the pit should be dished to a grated sump in one corner. It will be found well to lay on the floor coarse sand which should be constantly removed when impregnated and foul, and of course the proprietor will see to a liberal provision of drip-pans. In public or large garages the pit—as we shall see later—is usually of continuous length, so that several cars may be attended to at once. This only increases the risk of the gathering of foul air, and I know of more than one of these large openings as to which I am quite apprehensive of an accident some day. The pit should be provided with a special electric lamp for examining the underside of the car with minuteness. That usually employed for inspecting the inside of casks will be found very useful for this purpose. There is also, when electricity is not available, a benzine safety lamp which can be used with all security.

It is not of great use placing a skylight, as is sometimes done, above the pit, since the car when standing over the latter naturally blocks out the light. A long low window quite near the floor is a better arrangement by far, and can be made also to help in the ventilation so desirable. A pit has been designed no less than 8 feet deep, being in fact a portion of the basement extending under the garage. This arrangement is open to the objections that trestles are a necessity to raise the worker to his proper height, and that the maneuvering of these in a narrow space is awkward.

A garage should be of fireproof construction, the roof no less than its other portions.

[To be Continued.]

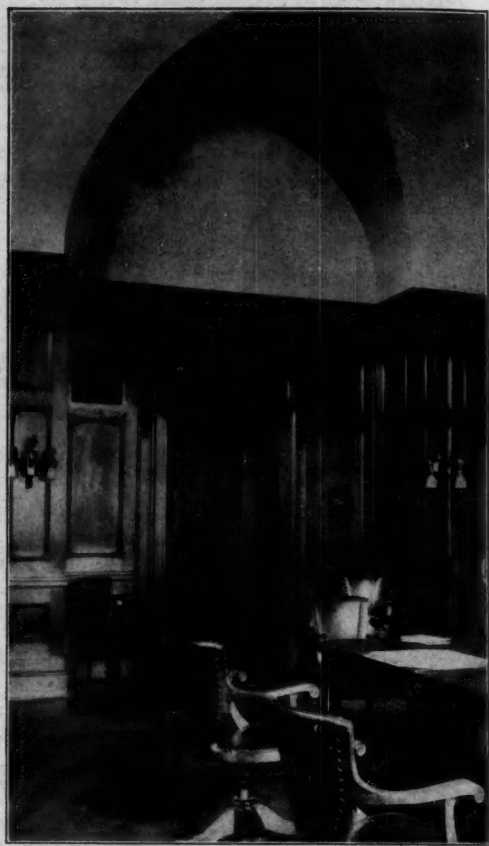
1010



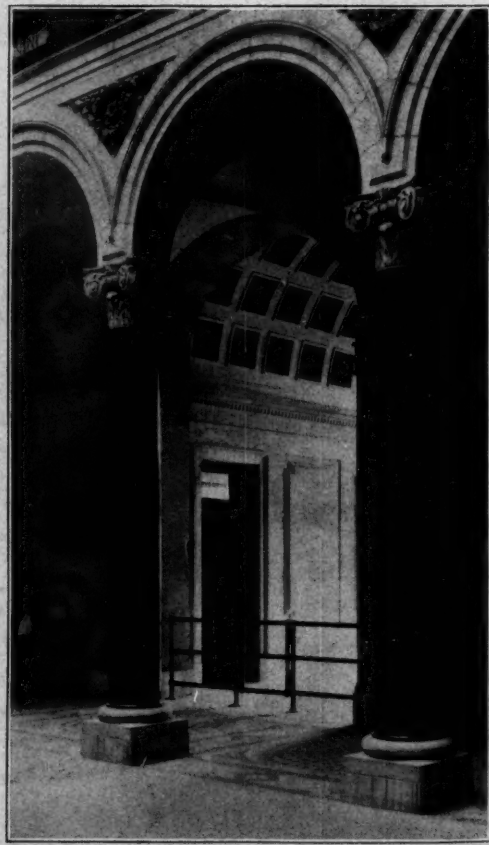
THE UNIVERSITY CLUB BUILDING, CHICAGO

Holabird & Roche, Architects

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

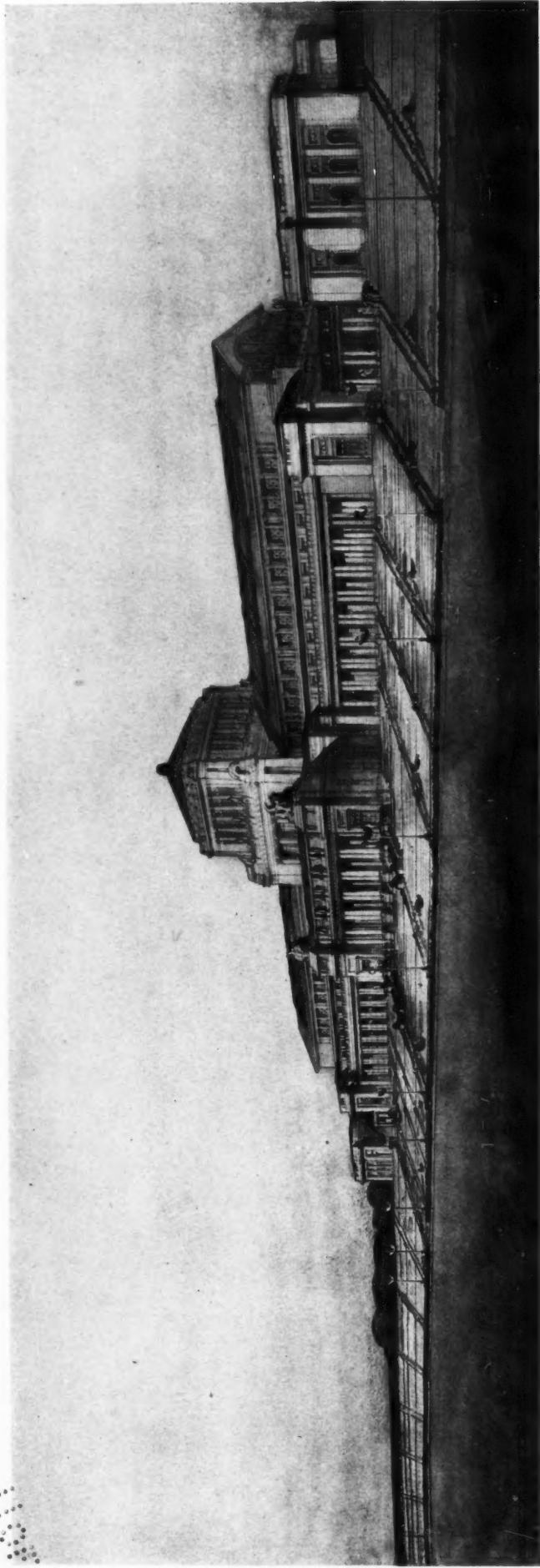


INTERIOR VIEWS, MARYLAND INSTITUTE, BALTIMORE, MD.
Pell & Corbett, Architects, New York

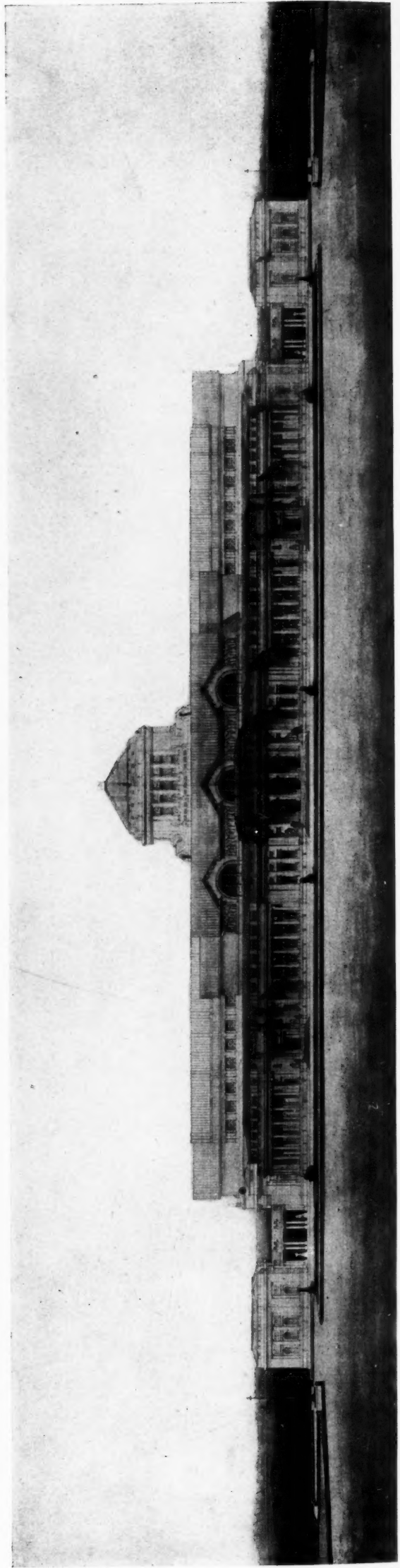


THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

1000



Perspective



Elevation

A PUBLIC GYMNASIUM AND BATHS, BY GEORGE AUSUMB, CHICAGO
Successful Competition Design, Chicago Architectural Club Traveling Scholarship

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

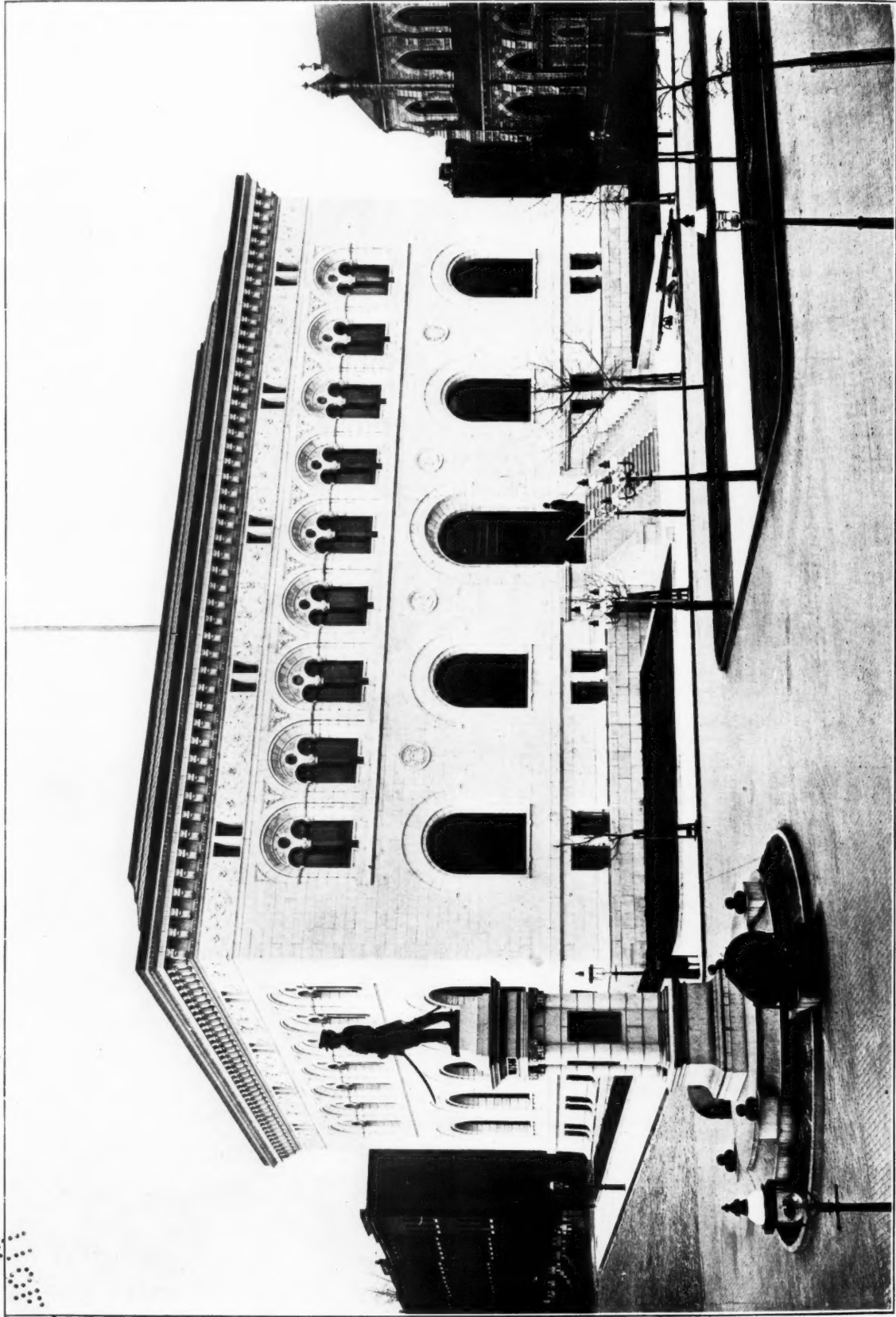
1700



HIGH SCHOOL BUILDING, NEW CASTLE, PA.
W. G. Edler, Architect

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

1104



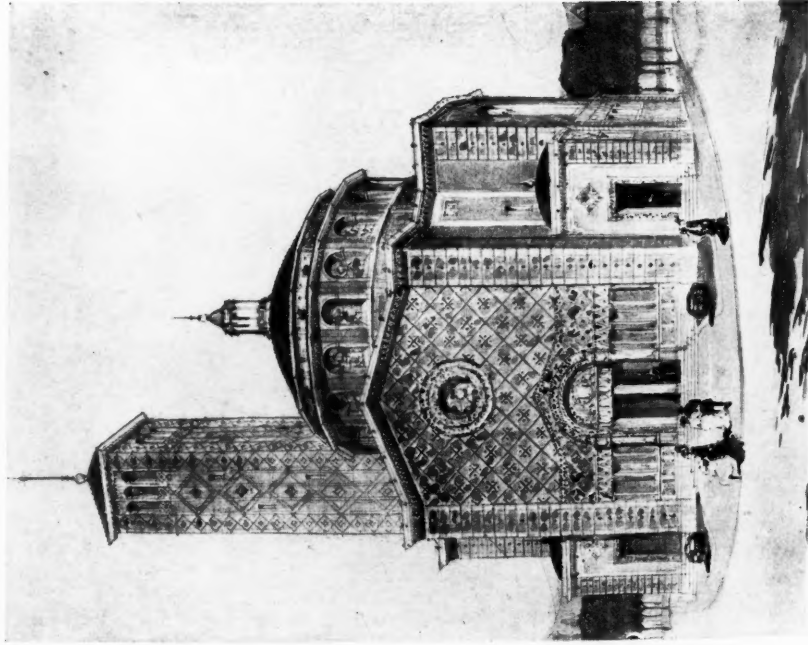
MARYLAND INSTITUTE, BALTIMORE, MD.
Pell & Corbett, Architects, New York
Design Awarded Medal of Honor by N. Y. Chapter, A. I. A.

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

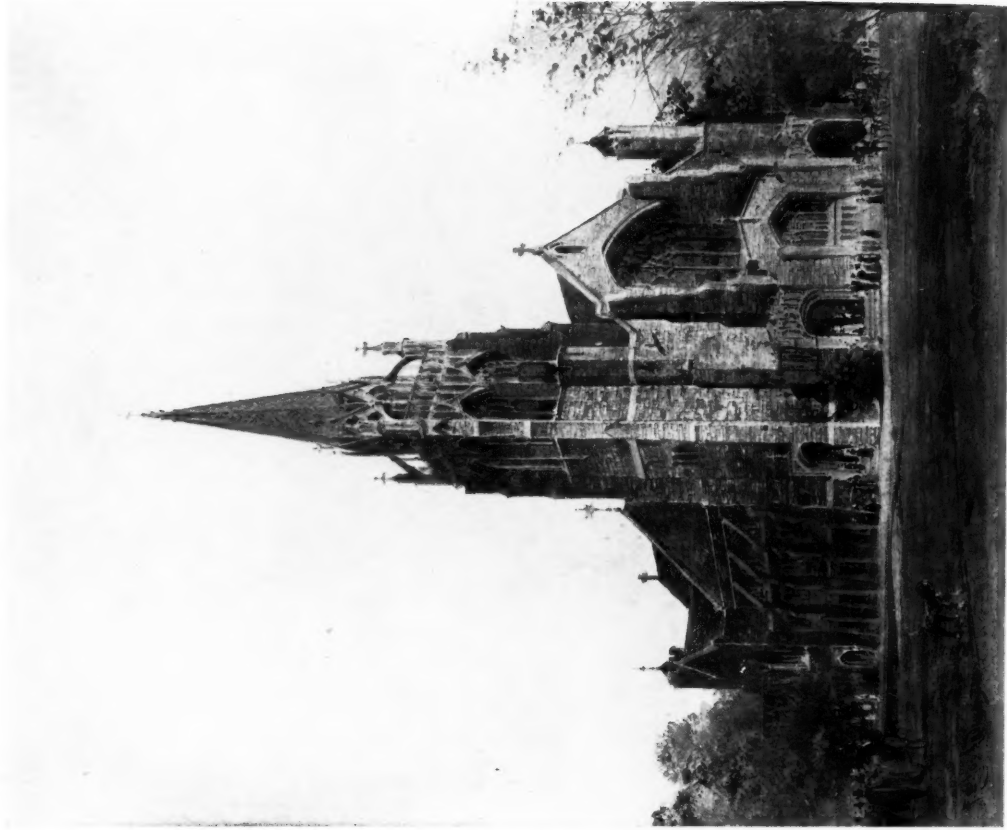
100/100



Arlington Club Portland, Whidden & Lewis, Architects

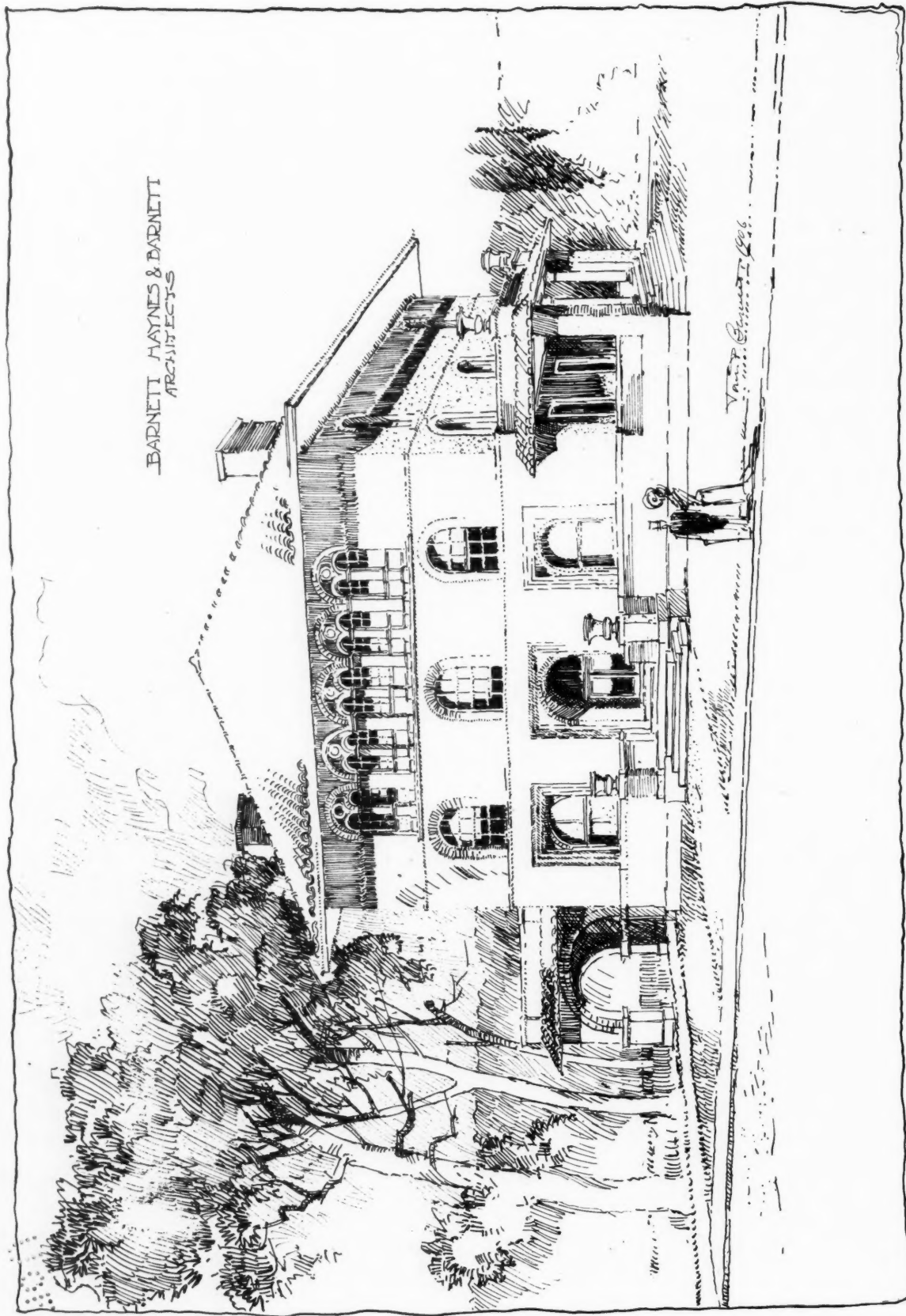


South Side Baptist Church, Birmingham, Warren & Welton, Architects
SELECTIONS FROM EXHIBITION, PORTLAND ORE., ARCHITECTURAL CLUB



St. Luke's Church, San Francisco, Sutton & Weeks, Architects
THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1906

100



BARNETT HAYNES & BARNETT
ARCHITECTS

HOUSE FOR CHAS. SPINK, ST. LOUIS, MO.
Barnett, Haynes & Barnett, Architects

1000



VIEW IN ROTUNDA, ILLINOIS ATHLETIC CLUB, CHICAGO
Barnett, Haynes & Barnett, Architects

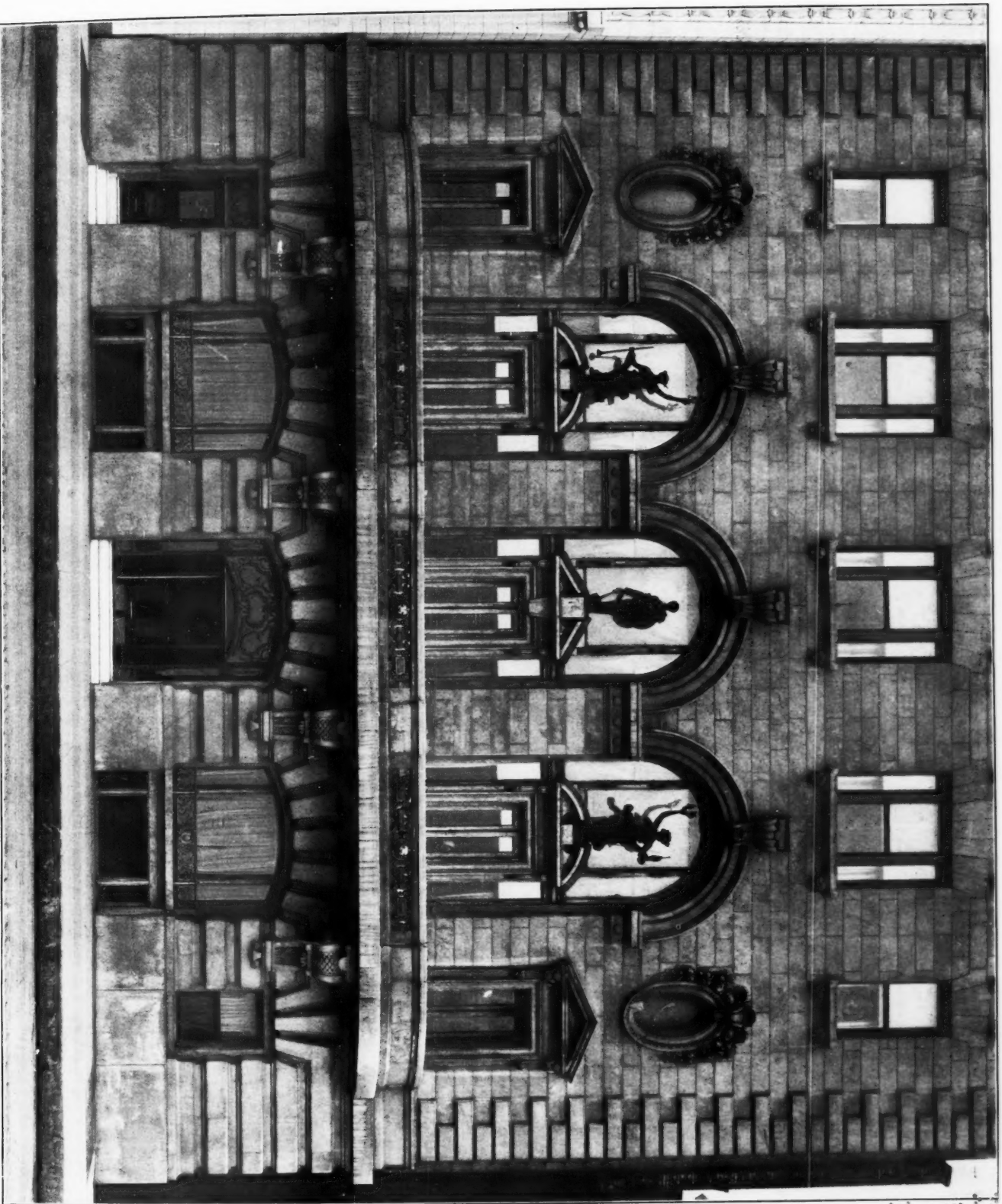
THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

100



ILLINOIS ATHLETIC CLUB, CHICAGO
Barnett, Haynes & Barnett, Architects

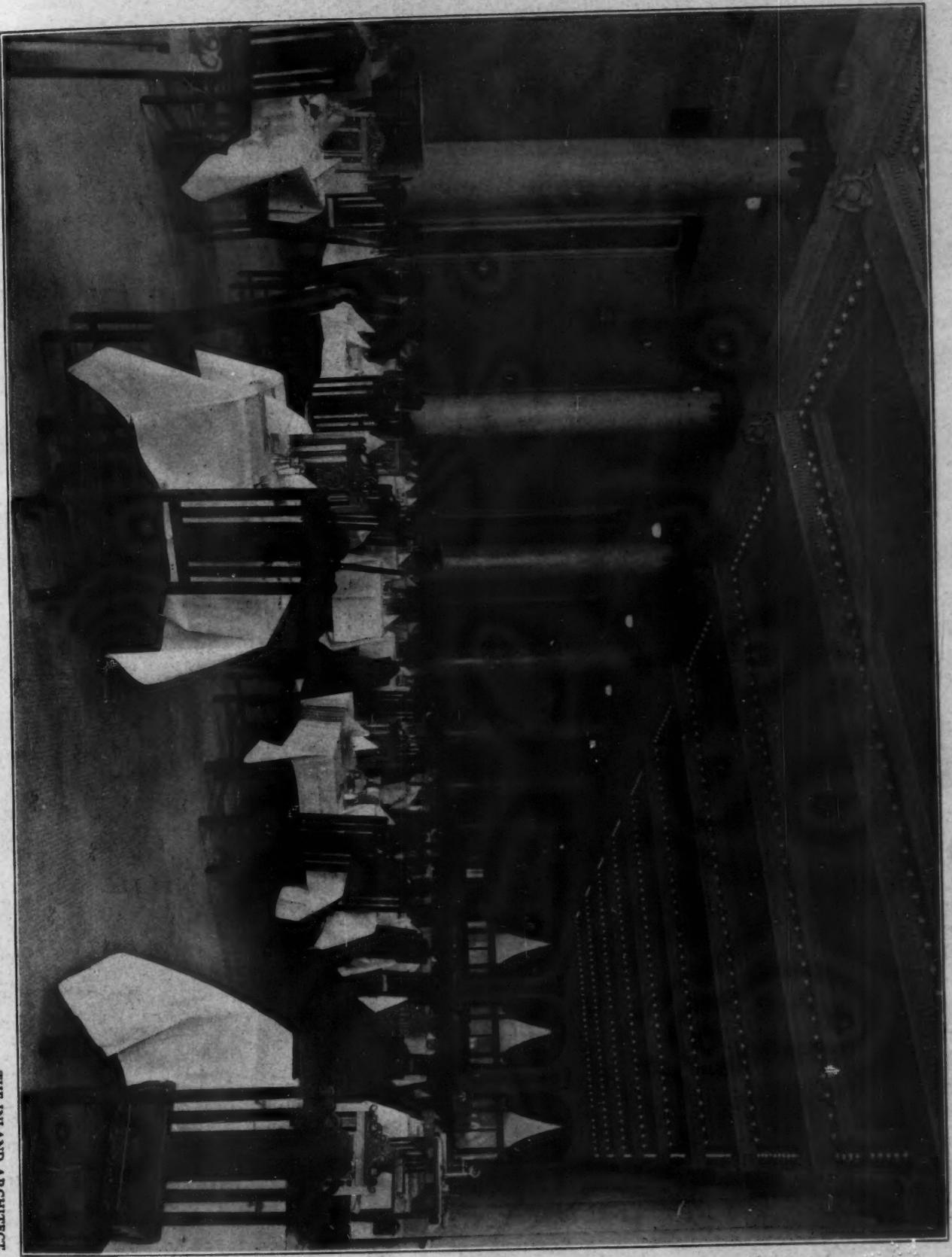
THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908



LOWER STORIES, ILLINOIS ATHLETIC CLUB, CHICAGO
Barnett, Haynes & Barnett, Architects

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

1901



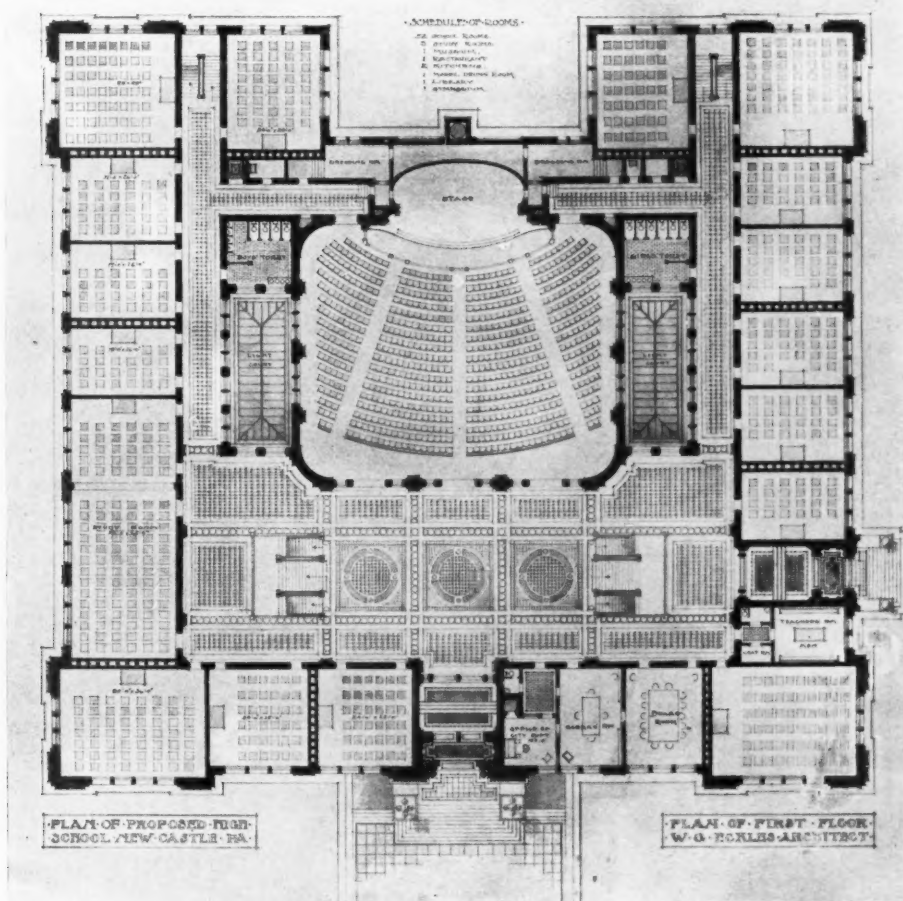
VIEW IN DINING ROOM, ILLINOIS ATHLETIC CLUB, CHICAGO
Barnett, Haynes & Barnett, Architects

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1906

107



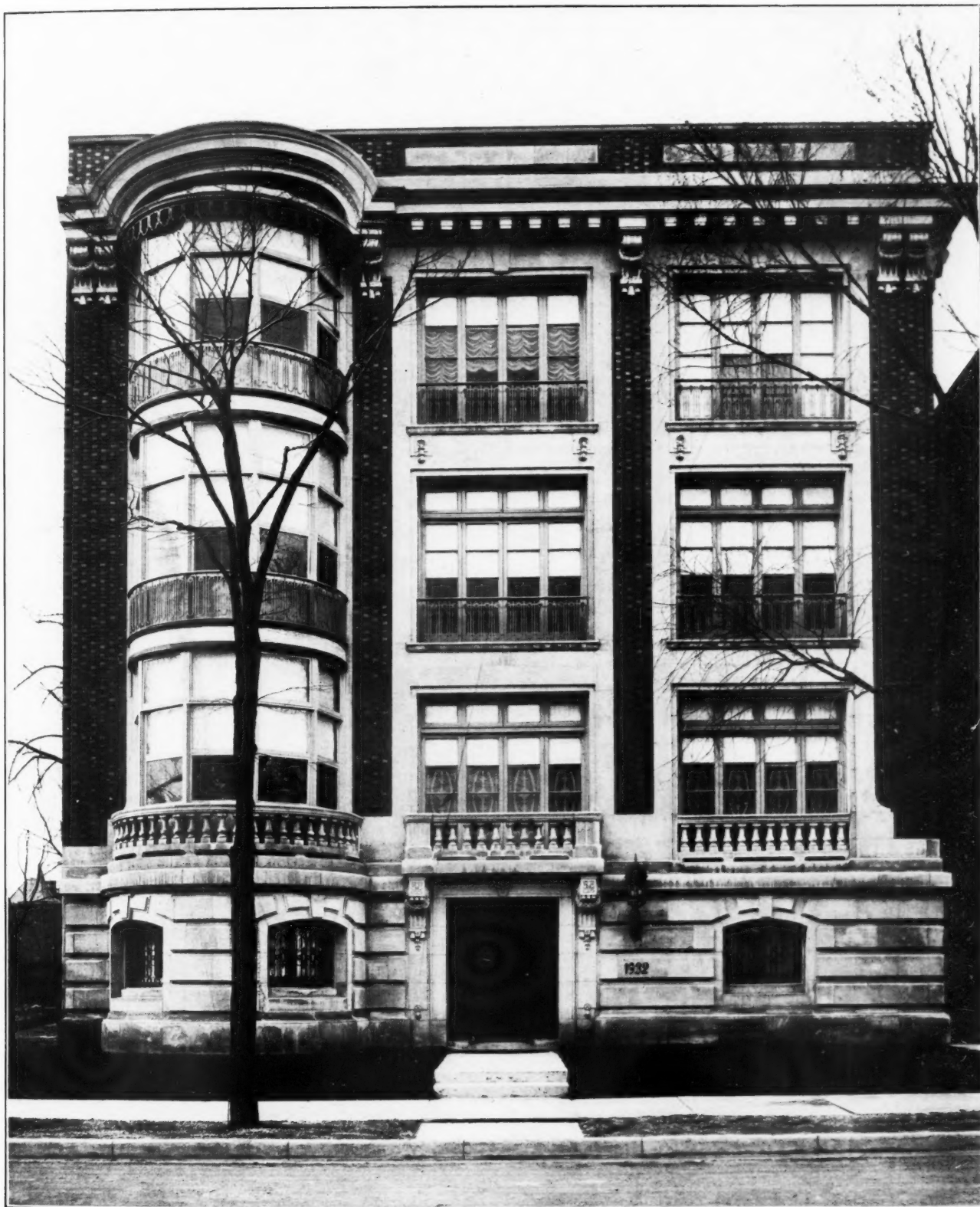
PLAN, HOUSE FOR CHAS. SPINK, ST. LOUIS, MO.
Barnett, Haynes & Barnett, Architects



PLAN OF HIGH SCHOOL, NEW CASTLE, PA.
W. G. Eckles, Architect

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

Urb. M.

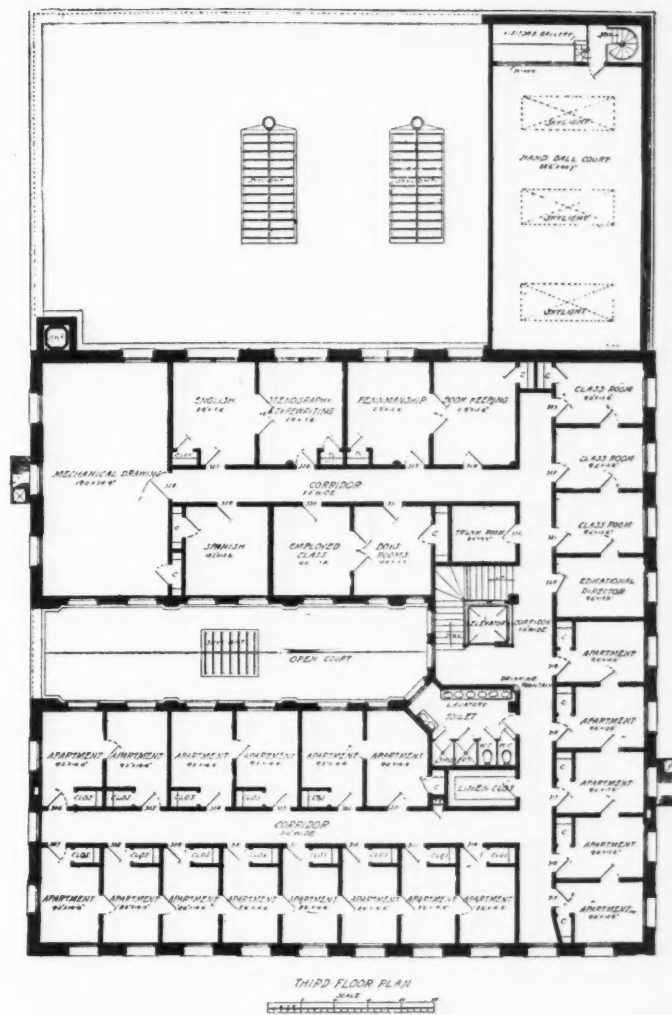
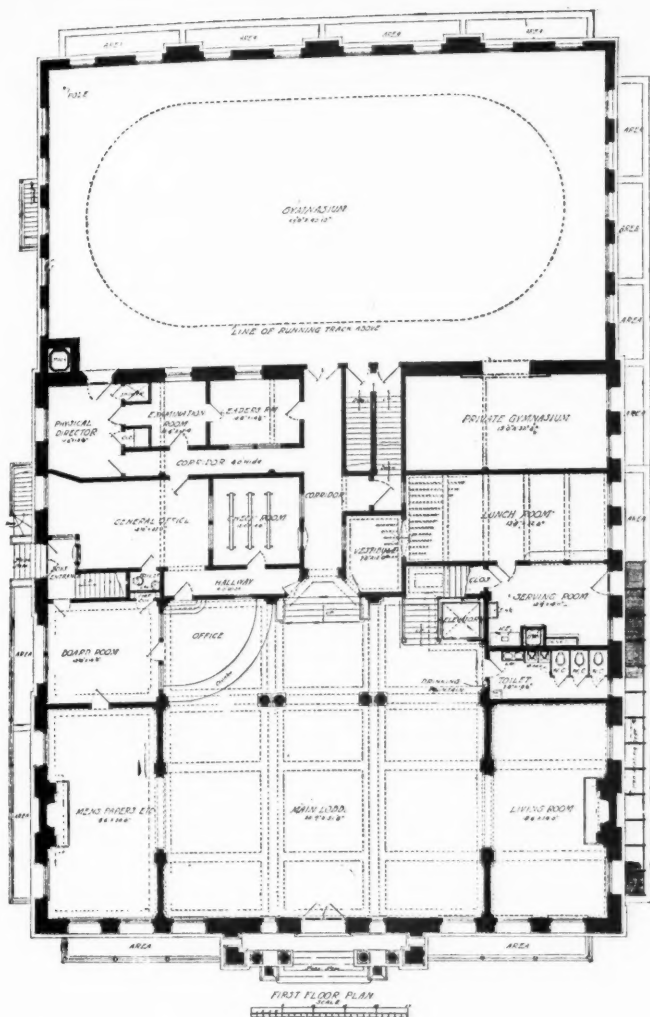


APARTMENT BUILDING FOR HERMAN M. HOELSCHER, CHICAGO
Marshall & Fox, Architects

UOPM

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

1840

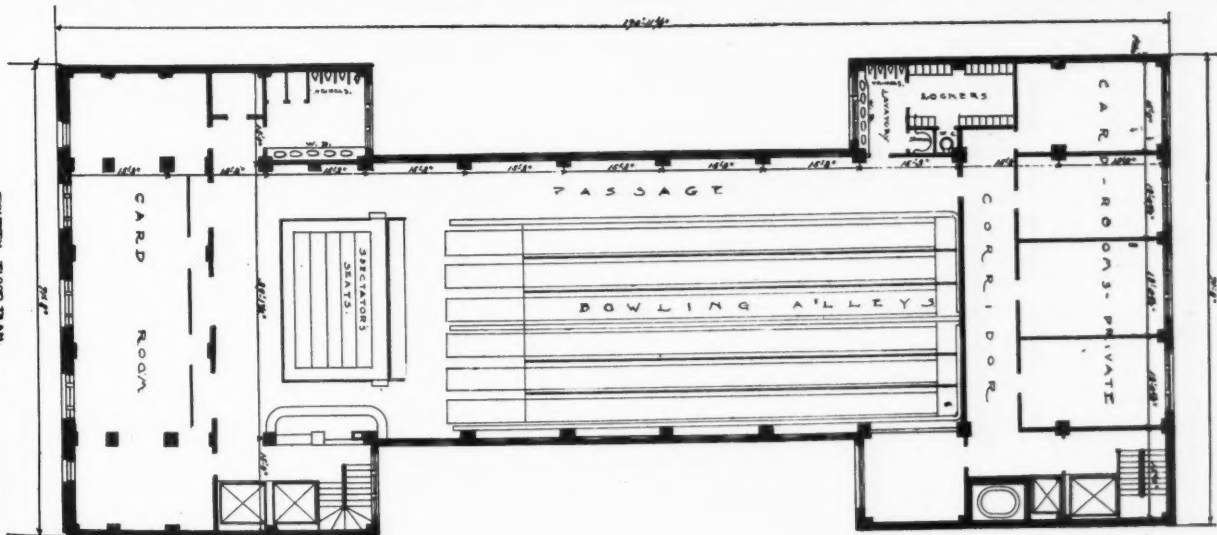
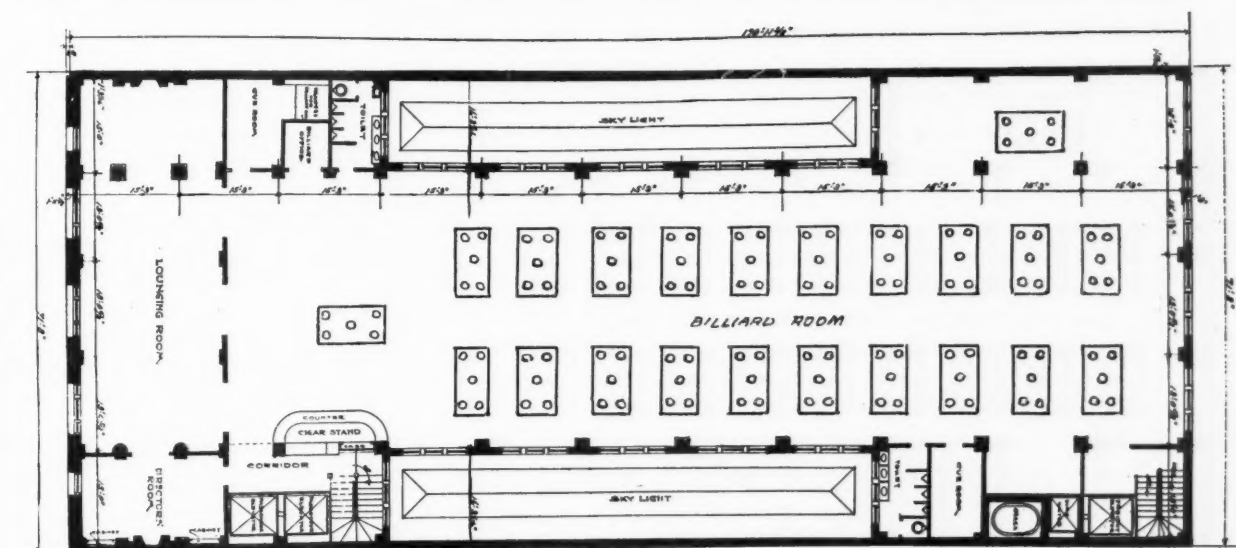
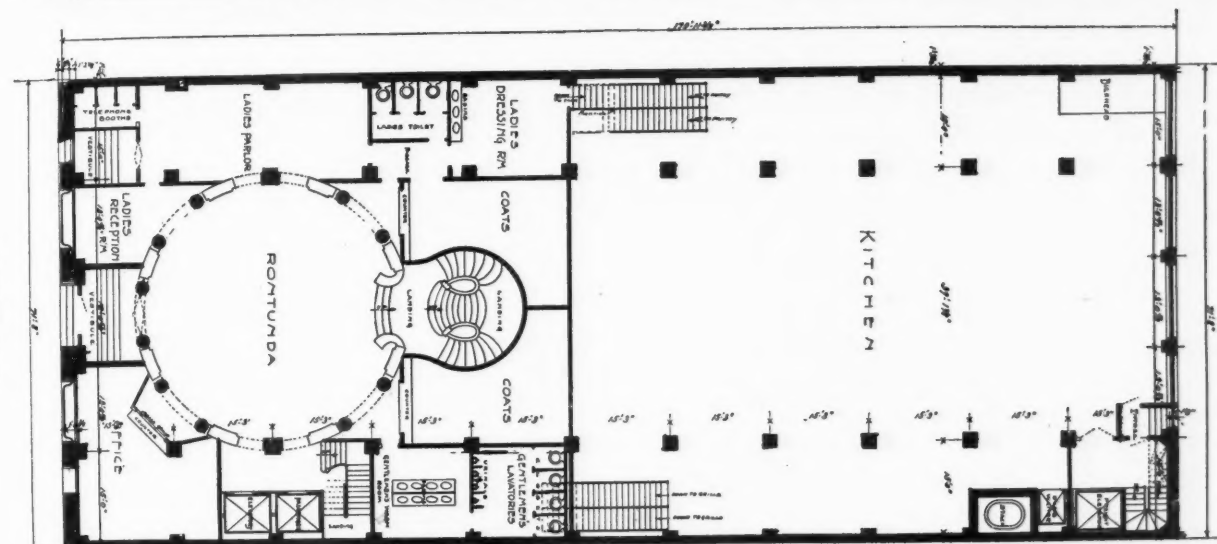
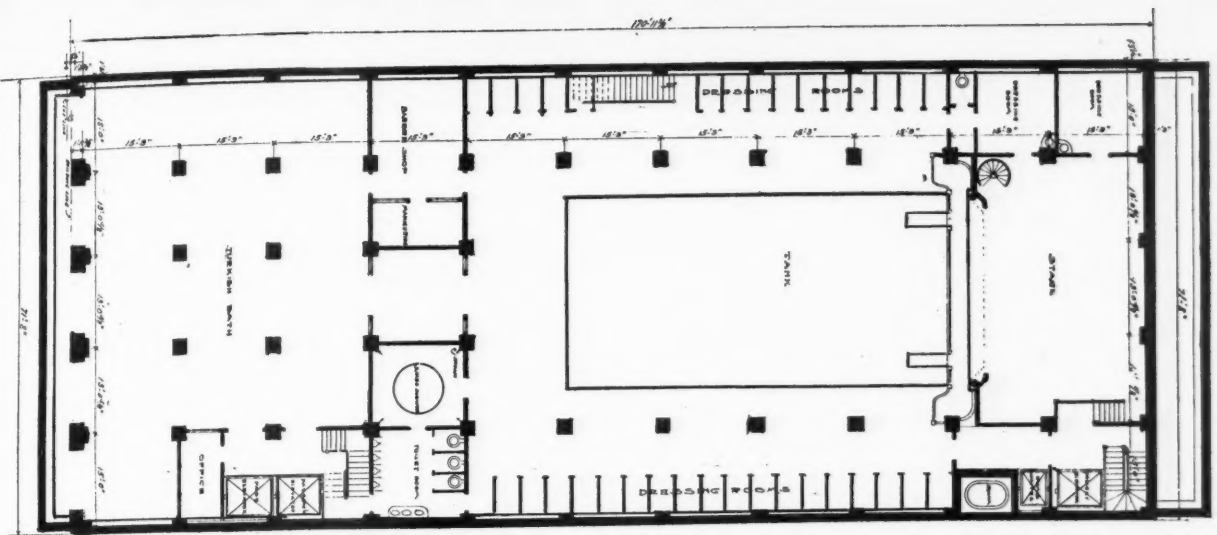


Y. M. C. A. BUILDING, HOUSTON, TEXAS

Sanguinet & Staats, Architects

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

23



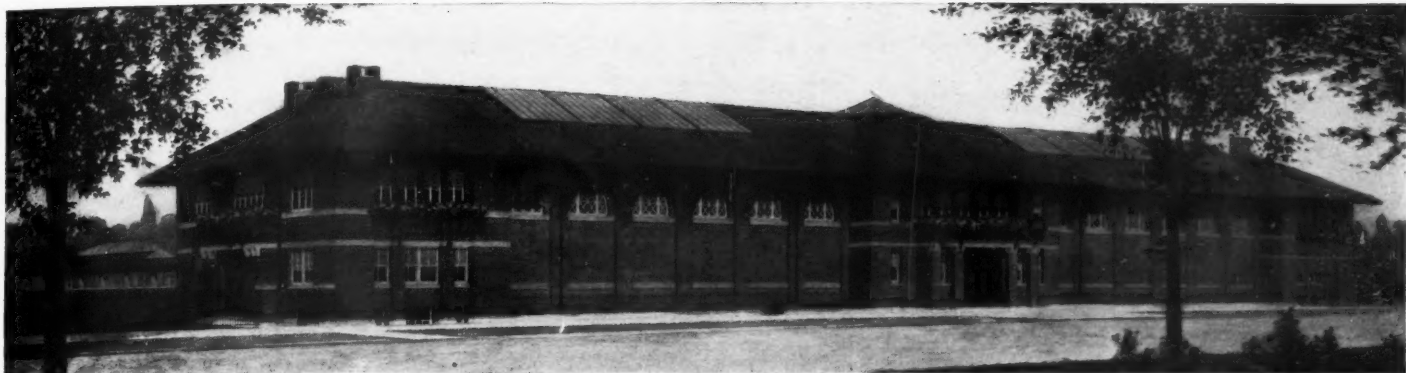
PLANS, ILLINOIS ATHLETIC CLUB, CHICAGO
Barnett, Haynes & Barnett, Architects

FIRST FLOOR

THIRD FLOOR PLAN

TOURTH FLOOR PLAN
THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

2003



Field House and Gymnasium for Lincoln Park Commissioners, Chicago
Perkins & Hamilton, Architects



Field House and Gymnasium for Lincoln Park Commissioners, Chicago
Perkins & Hamilton, Architects



Competitive Design, Home of Knights of Pythias, Decatur, Ill.
H. V. Von Holst and L. A. Rawson, Architects, Chicago

SELECTIONS FROM EXHIBITION, CHICAGO ARCHITECTURAL CLUB EXHIBITION, APRIL 1908

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

340



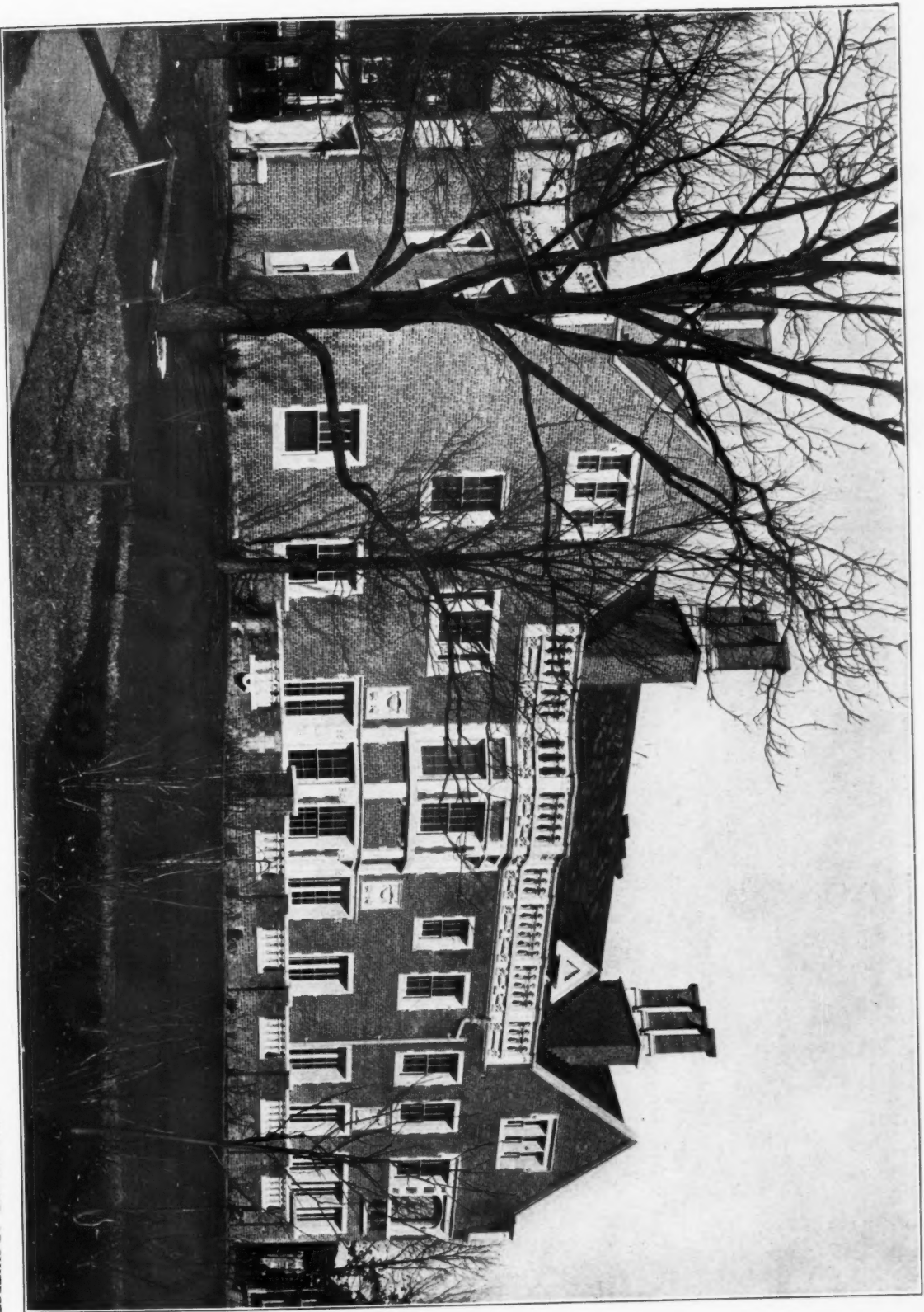
BUNGALOW, SANTA BARBARA, CAL.
Francis W. Wilson, Architect



BUNGALOW FOR H. A. BECHTEL
Harlan Thomas, Architect, Seattle, Wash.

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

100



HOUSE FOR W. M. REED, KANSAS CITY, MO.
Root & Simon, Architects

THE INLAND ARCHITECT
AND NEWS RECORD
APRIL, 1908

Mr. U

THE UNIVERSITY CLUB

HOLABIRD & ROCHE, ARCHITECTS



THE University Club of Chicago is erecting at the northwest corner of Michigan avenue and Monroe street a building, which in completeness of appointment and in luxury, it is expected, will equal any structure previously erected for club purposes in this country.

Approaching the club from the south, the purpose of the building and the spirit of its conception and the conviction of beholding the expression of an ideal will be realized. Here we find no attempt at lavish display, no conscious endeavor toward grandeur or sumptuous effect. The design expresses dignity and refinement and proclaims the building far removed from commercial uses. Its quiet domesticity places it above the suspicion that it may be the temporary abode of hurried travelers. The one fact is evident that it is the destined home of an organization of learned attainment and of cultured ideals—a University Club.

This expression may be traced to two causes: first, the frank exposition upon the exterior of the building of its various offices and their functions, and, secondly, to the choice of the English Collegiate style, as the medium best suited to the solution of the problem presented to the architects. The buildings of Oxford University, more particularly those of Magdalen College, have provided inspiration, and the Perpendicular Period of the Gothic, somewhat modified to suit varying conditions, has been followed as consistently as possible. Probably no other architectural style so readily lends itself to the expression of those ideals of scholarship and of aspiration toward higher learning which have ever been associated with that greatest of Anglo-Saxon universities.

The building has a frontage on Michigan avenue of 68 feet, and on Monroe street 170 feet, and rises to a height of ten stories at the parapet, above which is an additional high story, receding somewhat from the main wall lines, and terminating in a sharply pitched roof with a gable at either end. The material of the exterior is Bedford stone on the two street fronts and on the alley to the west; roof of green tile. All mullions and tracery in windows or other openings are of stone.

The principal entrance to the Club is situated in the center of the Monroe street side, and is flanked on either side by windows opening into the main hall and office. To the left of the main entrance, from which it is somewhat removed, is the entrance for ladies. Otherwise the first story is occupied by shops, three opening on Monroe street and four on Michigan avenue, the fronts of which are so treated as to detract as little as possible from the appearance of the club, being deeply recessed in heavily moulded arched openings, with strong piers between.

The height of the building, which at first thought might seem disadvantageous to a successful treatment in the architectural style chosen, has been turned to account by a frank acceptance of the condition, and a strongly emphasized verticality has been maintained. This quality has the effect of uniting the somewhat varied units of the Monroe street facade, where these are considered in their horizontal relation, and it is one of the indefinable charms of the Gothic style that a certain irregularity as

opposed to absolute repetition is productive of pleasing results. As instances of this principle in the design under consideration, attention may be called to the full acknowledgment of the lowered second story and its mezzanine beyond the three bays of the lounging room, with its high mullioned windows; the same condition is met in a similar manner in the ninth story, where the series of six tall and traceried windows of the dining-room, with their corbelled balconies, give way to the simpler treatment of the two stories of kitchens. Note also the abrupt change of character in the eighth story windows on Monroe street, where the two openings lighting the end of the library are succeeded by those of College Hall. The third, fourth, fifth and sixth stories, with their alternating traceried bays and mullioned windows in absolute repetition, bespeak the fact that they contain the bed chambers of the club.

The high story above the parapet, with its steep tiled roof, contains the courts for racquets and squash, and the roof garden.

Entering the arched and deeply recessed doorway of the club and ascending a short flight of steps within the stone-walled and vaulted vestibule, the main hall is reached. This hall departs from the purely Gothic character which is seen upon the exterior of the club, and is designed in the Elizabethan or English Renaissance style. The free standing piers and the pilasters at the walls are of stone, while the wall surfaces are panelled in English oak. Over the openings to the office, visitors' room, elevator lobby, order room, etc., are arches of oak supporting perforated and carved panels. Here is seen the main stairway, also of English oak, with richly carved balustrade and newels. Below this is the stairway to the basement, and the telephone booths.

On the right is the office, cigar counter, order desk and the check room; on the left of the entrance is the visitors' room, while further back is the elevator lobby and entrance to lavatory.

Ascending to the second floor the treatment of the main hall is found to be extended up the stairway to include the hall in this story. On this floor is the lounging room, purely Gothic in style, panelled its full height in English oak, with a ceiling of plaster divided into panels by cambered beams of oak. The windows are mullioned and filled in the upper portions with small leaded panes, the lower part being of clear glass in single lights to afford a perfect view from the inside. A large fireplace of stone occupies the northern end of the room. Connecting with the lounging-room is the writing-room, of ample size, simply panelled in oak. Separate from other portions of this story are the ladies' dining-room, reception and retiring rooms, with toilet and coat rooms. Adequate service room, service bar, and telephones are provided on the second floor.

The second story mezzanine is occupied solely by servants' quarters, including bed-rooms, dining-rooms, locker and toilet-rooms.

The third, fourth, fifth and sixth stories are given over entirely to club-rooms, except for four private dining-

rooms, and the barber shop on the sixth floor. The bedrooms are ample in size and all have bath-rooms in connection.

On the seventh floor are the card and billiard rooms, the café and four private dining-rooms. The main bar is located in this story. The rooms for games and the café are wainscoted in oak and have vaulted plaster ceilings. The library and college hall are on the eighth floor, and there are also three private dining-rooms. The library is Elizabethan in treatment with paneled walls, decorated plaster ceiling and a fireplace of stone. College hall is paneled in oak to the ceiling, which is of plaster, divided into panels by heavy wooden beams. Around the frieze is a series of shields, decorated with the arms of various colleges. The Assembly Room, for use when banquets are to be given, also a large service room and officers' dining room are found on the eighth floor.

It is in the main dining room on the ninth floor that

the pride of the members will be centered. This room is planned to equal in grandeur of effect the famous Crosby Hall in London, of which it is an adaptation. The walls and floor of stone; the tall pointed windows with their carved tracery, filled with diamond paned glass; the great trussed roof with its myriad pendants and lace-like carving, all will combine to produce an impressive picture.

The main kitchen, with its mazzanine, occupies the remainder of the ninth story. Next above is the racquet court, with toilet and locker rooms, and above this are the squash courts and roof garden. Galleries for spectators are provided for both racquets and squash.

In the basement are the bath department, bowling alleys and boiler and engine rooms. The swimming tank, 20x51 feet, will be lined with enameled terra cotta and have a depth of from 4 to 9 feet.

This imposing building is a substantial evidence of a culture not generally credited to Chicago.

CHICAGO ARCHITECTURAL CLUB EXHIBITION, 1908.



MOST artistically arranged were the galleries of the Art Institute devoted to the Architectural Exhibition just closed. This was possible through the unusual number of exhibits of the allied and accessory arts. Furniture, draperies, sculpture, etc., not only beautified and strengthened the exhibition, but were so disposed throughout the galleries as to add greatly to the comfort and interest of visitors.

The exhibition this year was chiefly local in character. The principal reason for this was that it was thought inadvisable to enter into competition with the T. Square Club of Philadelphia for Eastern exhibits. It was quite a compliment to the Chicago Club that the superb exhibit made by Cram, Goodhue and Ferguson at the recent exhibition of the Architectural League of New York was sent intact to Chicago. This exhibit consists chiefly of well-rendered drawings in line and wash of the more recent church designs of this firm, including the masterly design for St. Thomas church, New York. In one instance, that of the drawings for Nova Scotia cathedral, the rendering seems not quite to the standard set by this firm.

No effort was made this year to secure the usual representation of the work of the architectural schools. In place of the school work attention is drawn to the prize and mention drawings submitted in the Traveling Scholarship competition. The subject for this competition was "A Public Gymnasium and Baths." It was one of the most successful competitions yet held by the Chicago Architectural Club. The prize design by George Ausumb is illustrated in this number. It shows much breadth in conception and treatment of the problem, and unusual skill in rendering. The first mention design by Vernon S. Watson and the second mention by Paul T. Haagen are well conceived and rendered.

Two of the largest building projects of the present year for Chicago were shown in large colorings by Lawrence Buck. These are the Hotel La Salle and the University Club, both by Holabird & Roche, architects. The hotel is an attractive adaptation of the style of Louis XIV. It

depends for effectiveness more upon imposing proportions than elaborate ornamentation. The Collegiate Gothic was the style chosen as appropriate for the University Club. The architects evidently met the usual difficulty of adapting this style to a building of numerous stories and varied parts. Their success has warranted the attempt.

D. H. Burnham & Co. exhibited interesting drawings for the civic development of San Francisco, and elevations and plans of the new Ford building, Detroit.

Two important buildings were represented by models—the Corn Exchange bank, Chicago, Shepley, Rutan & Coolidge, architects, and the Illinois Supreme Court building, Springfield, W. Carby Zimmerman, state architect. These well illustrate the advantage of the model in the study of a design. The most prominent examples of sculpture in the exhibition were the models in heroic size by Charles J. Mulligan, sculptor, of the two groups to flank on either side the entrance to the supreme court building.

A photograph was shown of the water front of the incomplete commercial building for Montgomery Ward & Co., Chicago, Richard E. Schmidt, Garden & Martin, architects. This is one of the largest buildings of reinforced concrete construction yet undertaken. It is very complete in arrangement for the needs of a great warehouse. The cement gray of the walls is relieved by courses of red brick. Nimmons & Fellows exhibited photographs of large manufacturing plants that are models of such buildings.

Recent schoolhouse design in Chicago was well illustrated by photographs and drawings of buildings by Dwight Heald Perkins, architect for the Board of Education. These show much that is commendable in originality in design and convenience of planning. These characteristics are shown also in the exhibits of the general practice of the firm of Perkins & Hamilton, which include designs for office buildings, schools, college group, park buildings and residences. Distinctly original also were the designs exhibited by George W. Maher, prominent among which were the Swift Engineering Hall for Northwestern University, Evanston, Ill., and the Kenilworth Assembly Hall. Another design, thoroughly modern, is the suggestive

sketch by F. P. Dinkelberg for a polychromatic terra cotta store front.

In residence work the largest exhibits and also among the most attractive architecturally were those of Lawrence Buck and of Albert Kahn, Ernest Wilby, associate. Those by Buck were in charming colorings; the Kahn exhibits were photographs of finished work. One example only was shown of the interesting residence work of Pond & Pond, the Sinnissippi farm house for Hon. Frank O. Lowden, Oregon, Ill. The President of the Club, H. V. Von Holst, was represented by several attractive drawings. Quite a large display of church work was made by John Sutcliffe.

This shows many conveniences in plan; the designs in most instances are better than the rendering.

The exhibition would have had much added interest both for the building and general public had a group competition been inaugurated in which a problem was developed by groups consisting of an architect, a sculptor and a mural painter. The success of such a competition was demonstrated in the recent exhibition of the Architectural League of New York.

The Chicago Exhibition as a whole was one of the best in arrangement, character and number of exhibits, and their rendering, yet held of the work of local architects.

THE ORGAN ARCHITECTURALLY CONSIDERED

BY GEORGE ASHDOWN AUDSLEY, LL. D., ARCHITECT



WE have correctly said, in our first article on the present subject, that it must be borne in mind that an organ which cannot be properly *seen* cannot be properly *heard*; and that an organ which cannot be properly heard is practically a valueless instrument. While these remarks are specially applicable to church organs, they are also true with reference to organs in concert-rooms and private music-rooms, notwithstanding the fact that several organs, *supposed* to be properly treated and acoustically successful, have been packed into low or high chambers, the only openings of which are either covered with perforated screen-work or, what is much worse, some textile fabric. This last treatment can only be advocated by those who do not wish the organ to be seen, and are indifferent as to how it sounds to the ear.

It is difficult to imagine on what reasonable grounds the hiding of an organ can be advocated, for, in the hands of an accomplished designer, its exterior can be made an artistic and beautiful object. This is amply proved by the superb organ-cases which are among the chief glories in the interiors of numerous European churches—notably the Church of St. John, Bois le Duc, North Brabant; the Church of Stralsund, Pomerania; the Marienkirche, Dortmund, Westphalia; the Cathedrals of Seville and Taragona, Spain, and Westminster Abbey, and the Church of St. Bartholomew, Armley, England.*

It is surely to be desired that the architects, and especially the church architects, of this country, should awake to the great importance of the organ, and treat it as a most effective feature in the interior scheme of their churches. As we have said elsewhere, all who neglect the organ err seriously both on utilitarian and artistic grounds.

In brief articles like the present—necessarily few in number—it is quite impossible to discuss, in any sufficient and profitable manner, the desirable positions of, and the necessary accommodation for, organs of varied dimensions in churches having widely different plans and interior appointments; for it is obvious that there are numerous circumstances and treatments, dictated by certain peculiarities of site, different rituals or forms of worship, and different styles of architecture, which must, in the proper order of things, control to some considerable extent the organ question. In each case, however, one of two conditions must obtain so far as the position of the organ is concerned. The instrument will either be more

or less confined in a portion of the church constructed for its reception, commonly called an organ-chamber, or it will be erected on a gallery, a raised platform, or on the floor of the church, where it will be entirely free, on three or all of its sides, from obstructions to sound.

Owing to the ignorance or thoughtlessness of church architects in matters affecting the organ, the very name *organ-chamber* has become an abomination to organ builders and those interested in church music. Serious mistakes have been made without number where there were no difficulties in the way; and where properly proportioned and constructed organ-chambers could have been designed and erected just as easily as insufficient ones. It is not desirable to point to existing examples of objectionable and tone-destroying organ-chambers, "their name is legion"; for to do so would be practically to name the architects who are responsible for such thoughtless work. Professional etiquette certainly forbids such a course. If the following conditions are observed by the architect in the planning and construction of the organ-chamber, no serious objections can be advanced against its introduction; provided, of course, the too common mistake of having an organ out of all proportion to it is not made.

First, ample floor space must be provided to allow the organ to be erected thereon without the slightest undesirable crowding of its parts, leaving sufficient space behind and at its sides to give free egress to sound and easy access for tuning, regulating, and repairing.

Secondly, ample height must be given for the organ to stand at the most desirable elevation, and yet leave considerable space above the highest portion of the instrument for the free emission of the sound from all divisions of the pipe-work. It must be borne in mind, while determining the height of an organ-chamber, that even in an instrument of the smallest size, suitable for a church, the longest pedal pipe will call for, at least, the height of eighteen feet from the floor on which its wind-chest is placed. In large organs, the longest pedal pipes will, in all probability, require a height of about thirty-four feet.

Thirdly, one or more openings of the largest possible dimensions must be provided; the principal one, toward the choir or auditorium, being the entire width and height of the chamber, so that no sound may be locked in above the organ. As a general rule, whatever shape the arch or upper part of this principal opening may be, it is desirable that the ceiling of the chamber should follow it closely, and, if possible, at the same level.

[To be Continued.]

*Illustrations of the organ cases in all, save one of these churches, are given in "The Art of Organ-Building," Vol. I.

CIVIC DEVELOPMENT*

BY RALPH ADAMS CRAM, ARCHITECT

[Continued from March.]



WITH us the tide also has turned, and the first evidence of the awakening of a civic sense was shown by the development of the park idea. Suddenly the municipalities of the United States seemed to become conscious of the fact that something had to be done in the direction of beauty, and the first step was taken through the laying out of great systems of parks on the outskirts of our cities.

Now I don't wish to minimize in the least the importance of this work, or the credit due to the landscape gardeners who fathered the work and carried it through, but I do wish to say that this great park development, while undoubtedly the first step toward a civilized expression of civilization, was only one step in the direction of making our cities what they should be, if we are indeed a civilized race. For many years the idea was current that a great park system was all that was needful to insure complete civic development; a very narrow way of looking at things, fortunately now being discarded in favor of a broader and more inclusive view of the necessity of cities and the duties of citizens.

Now that we are advancing in the line of civic development, the question that naturally presents itself at a time like this is, what is a city? what lines would it follow in its development if before some one man were placed the extraordinary task of laying out, *de novo*, a great city. In the first place, a city is made up, very largely of certain focal points devoted to industries and manufactures, wholesale and retail trade, finance, transportation, residence, higher education, amusement, together with many minor foci, distributed more or less evenly through the residential sections as, for example, the foci of worship, primary education, recreation, fresh air. From this it would appear that parks form one category only, becoming merely a small part of the general scheme of an ideal city. The great question of the actual beauty of the municipality has not yet been touched. Before considering this question, however, there is yet another matter which should be touched on. Cities, as planned a century ago, perhaps, do not develop either on convenient or beautiful lines. They have an irresistible tendency to go wrong, and there is, therefore, a constant demand for the services of the surgeon, not so much the doctor, as the surgeon, with his knife. A city is a great living organism, with skeleton, nerves, brain, muscles, but, unlike the human organism, it has this perverse tendency to go wrong, and the drastic methods of the surgeon are constantly in demand.

Take, for example, Washington, our own capital city, which started right, with a splendid and logical plan, but which refused to grow the way it was intended to, and all the business part rushed off into that section which had been prepared solely for residential purposes. Little by little, with the connivance, I fear, or, at all events, with the tacit consent of Congress, the city persisted in its course of going wrong. Fortunately, before any serious evil was accomplished, it fell into the hands of the late Colonel Shepperd, who certainly deserves enormous credit for what

he did esthetically, if a smaller measure of credit is not to be attributed to him in other directions; but once more, after he was removed, the same irresistible tendency overtook the capital city, and now Congress became an active agency for leading it astray. Matters got worse and worse, until at last the so-called "Burnham Commission" was put in charge, made up of two architects, a sculptor, and a landscape gardener, all of the utmost eminence. Now the city is well won back from its evil ways and bids fair to develop for the future along the lines laid down by its original designers. Of course there is the constant enmity of the governmental powers to be reckoned with, but, by eternal vigilance, the city may be held for the future in its proper course, until the entire scheme of the Burnham Commission has been worked out in all its splendid and masterly details.

Precisely the same tendency toward wrong-doing has been manifested by European cities: Paris went wrong, London, Berlin, Buda Pesth, and drastic reforms have been necessary in every case, and at great expense, owing to the fact that the evil course has been persisted in for so long a time that only at huge cost could the mistakes of the past be corrected; as, for instance, in London, where, during the last few years, millions of pounds have been spent in trying to make up for the shortsighted policy shown in the seventeenth century, when Sir Christopher Wren's masterly project for new streets, after the great fire, was rejected, and London was permitted to pursue its own unfortunate devices. Precisely the same course must be followed here in America, is being followed even now in Chicago, San Francisco, St. Louis, Cleveland, Buffalo, Pittsburg, Boston. Nature is only too willing to help us at every point, but sometimes she rather overdoes her kindness, as you will realize if you remember the state of things in San Francisco. There a superb scheme for the development of the city had been laid out, and Nature, with her violent enthusiasm, came along, and in order to make possible a carrying out of this fine scheme, wiped out the entire city. Here is where she overdid it, for though she left a perfectly clear field, she wiped out everything else, as well as the material obstacles, and after she got through there was little ambition remaining in the people toward the carrying out of Mr. Burnham's project.

Now let us note here that all these great American schemes for municipal development, while possessing an essentially esthetic quality, are actually primarily utilitarian. They begin with centers and with streets. Now streets are to a great city what stairways are to a house. Without adequate means of communication a city is a blundering mass of confusion. Streets are the arteries and the veins of the city, and they not only serve as the channels of life, but they tie it together into a united whole, while they offer splendid vistas and adequate sites for public buildings and statues. If a street can be conceived on the magnificent lines that hold in the case of the one you are to see here tonight, a street beginning somewhere, going somewhere, and touching main lines of traffic as it goes, a street beginning in the business center and widening as it approaches the perimeter of the city, until it develops at the farthest end into a great civic center, then you have

*Address of R. A. Cram, F. A. I. A., F. R. G. S., at the annual meeting of the Fairmount Park Art Association in Philadelphia, Pa., 1907.

a true and perfect street, and this scheme to be placed before you tonight is such a one as I believe has not been placed before any American municipality before. The opportunity that offers is greater than any that I can now recall, unless one excepts, possibly the city of Paris.

It is, however, not enough to cut a street through blocks of intervening buildings from one point to another, or to make a vague cut in some general direction, in order to avoid some particular building, zigzagging the street until it finally reaches its goal. By such zigzagging you can, of course, get where you want to go, but the thing will have been done wrong, for all vistas have been lost, and with them, logic, consistency and practicality. An example of this will be shown you later and you can easily see how one plan is direct, straightforward, impressive; the others incompetent, half-hearted, ineffectual.

But, as I say, just cutting the street through is not enough, even if it follows the proper course. The law must provide for the taking of enough land on each side and for placing restrictions on whatever may be built thereon. If you have a street a mile long, and fifty, eighty or one hundred feet wide, and then allow all kinds of snaggle-toothed buildings, ranging in height from one to twenty stories, to impose their erratic sky line on your great street, you have destroyed all the glory thereof.

In a case of this kind, that is, where a great metropolitan improvement is in hand, individualism must withdraw into the background, and the citizens, as an individual, must be made to understand that, when he is building on such a street, he is not acting solely for himself, but rather as a part of a thing that is far greater than he is, and that is the community as a whole, the civilization society of which he forms one small, component part.

And here, I believe, is the great, underlying principle of municipal improvement. Of course by developing ade-

quate streets, by providing proper centers for all the different functions of the city, by casting over the whole the quality of beauty, you make a city a great, well organized whole, and even though all these schemes of improvement must begin with the streets, first of all, they go farther than this, and, by adding the element of beauty, they give to the city a great asset of absolute commercial value, for beauty is a practical asset in any community, and if we reject it we cast away one of the great material possibilities that offer themselves.

But in the end, we shall see that while improvements of this kind possess enormous practical, commercial, and esthetic value, they still have an underlying quality, which is, it seems to me, the greatest element they possess, and that is that they tend to correct the aggressive individualism and selfishness of men as units. They make all citizens realize that they are not disassociated individuals, each man being permitted to do what pleases his fancy, but that they are, as I say, in this aspect, only a portion of a thing far greater than they. No man is at liberty to block a scheme of public improvement for his own selfish desires, and no more is he permitted to build an ugly building, or to deface a beautiful building—or even a hideous one, for that matter—with egregious and flamboyant signs and decoration. He can no more follow this course than he can exhibit himself on the public street clothed gloriously in a pea-green silk hat and a lavender kimono. Before such schemes of public improvement as the one to be shown you tonight, the individual must realize that he is simply a part of civilized society and in the end we shall all realize that schemes of municipal improvement, whatever they may be, and however much they may argue for themselves in the line of practicality or esthetic value, are yet, when you analyze them, really and primarily, first lessons in good citizenship.

ILLINOIS ATHLETIC CLUB BUILDING, CHICAGO

BARNETT, HAYNES & BARNETT, ARCHITECTS



OR the New Illinois Athletic Club an inside lot facing Michigan avenue is occupied.

The problems thought most important in working out this building were the perfect lighting of all compartments; the construction of the principal rooms free of columns and obstructions; the perfect lighting and ventilating of the gymnasium; the economical operation of the service compartment, and the safeguarding of the people attending the entertainments, swimming events and boxing entertainments given by the club. With regard to the lighting, the building is designed with a double court, that lights each and every bedroom and furnishes abundant light to the gymnasium, which occupies the eleventh and twelfth stories of the building.

The dining room is lighted by large windows at the front and rear, and is twenty-five feet in height.

The room is well lighted at all times during the day by natural light. This is also true of the lobby, office and ladies' waiting rooms, the smoking and lounging rooms and the card room.

The grill room and swimming tank are artificially lighted, being almost entirely underground.

A notable feature of the planning of the building is

the omission of all interior columns derogatory to the appearance and convenience of its principal rooms, there being but two lines of columns in the building running from east to west, which allows a clear space forty feet in width.

The gymnasium, which occupies the top floor of the building, is lighted from four sides with skylights forming perfect light and ventilation.

The building is designed with a view of great economy of operation.

The kitchen occupies a central space between the main dining room on second floor and the grill room and swimming pool in the first basement.

The service stairs extend down to the grill room from the kitchen and up to the dining room; an arrangement that makes the service to both these compartments direct and expeditious.

The floor of the kitchen is practically the height of a wagon bed above the alley, which enables stores, meats, etc., to be delivered to the kitchen direct without additional handling or the consumption of unnecessary power for transferring stores from one portion of the building to the other.

Service elevator runs from the kitchen to all floors

and the gymnasium for service in the upper portion of the building.

The entertainment feature of the club has been carefully studied from points of economy, safety and convenience.

The swimming pool is designed in Pompeian style, with surrounding galleries after the manner of a theater. The stage occupies one end of the room, the other balcony end being a portion of the grill room, from which the pool can be seen through the windows. When theatrical entertainments are given, the swimming pool is framed over, forming a parquet, in which case this room becomes practically a theater.

For boxing bouts, the ring is formed in the center of the flooded pool, which gives the entire surrounding space to spectators.

There are eight separate and distinct exits in this room for use in case of fire or panic; four leading to Michigan avenue and four to the alley.

The rotunda at the entrance of the building is circular in plan and finished in Messinian marble. It is modern French in architectural treatment. The office and ladies' reception room open from this rotunda.

A special stairway from the rotunda leads to the grand dining room which occupies the entire second floor of the building.

The third and fourth floors are occupied by the billiard room and bowling alleys, respectively.

The exterior of the building is constructed entirely of Bedford stone in the style of modern French. The first floor is embellished with rusticated stylobate courses, ornamental balconies, bronze statuary and grille effects. The frieze at the eleventh story typifies the Olympian games.

Reinforced Concrete Work

By F. D. Warren, Architect

[Continued from February.]

In short struts the limit may be considered as 250 pounds per square inch. When reinforced with vertical rods only, having an area of about 1 per cent of the cross section, the safe compressive stress may be raised to 500 pounds per square inch. Further reinforcement by hooping or by similar methods will raise the working stress to much higher limits, depending upon the amount and disposition of lateral reinforcement, provided due care be exercised in selecting the mixture, in mixing and in placing. With this fact assured and demonstrated by tests, is it fair to all concerned to place some arbitrary limit upon the safe compressive stress which limit cannot be exceeded, however variable the conditions may be and regardless of the amount and arrangement of the steel? It may easily be seen that a column size two to four times that actually necessary, provided lateral reinforcement be used, may be required to fulfill the same conditions. This not only reduces valuable floor space, which represents a considerable sum of money capitalized, but causes unnecessary weight to be brought upon the soil beneath, resulting in unnecessarily large piers and footings to distribute the load to the soil, especially when poor soil is encountered.

Municipal Supervision vs. Municipal Restriction.—In view of the foregoing, which of the two methods of con-

trol of the situation is preferable? The former acts directly, right at the causes of trouble affecting both the design and the erection, while the latter restricts the usage except upon fixed lines and so regulates the design without the least semblance of guaranty that the erection will be safely performed.

By referring to causes of failure in the past, considerable light on the subject may be had. While doubtless some accidents have resulted from oversteering the concrete, a greater majority of the cases have been reported by the investigators to result from careless methods of construction. Under such conditions, protection cannot be assured by limiting the working stresses when such factors as careless methods of construction enter the case to neutralize or nullify the results intended. More injury may result to reinforced concrete during the stage between initial and final set, by a jar, than can be offset by increasing the factor of safety many times. The only way to prevent or forewarn disaster in such cases is by careful inspection.

Again, it is interesting to note whether failure by crushing of the concrete or by other causes has been more prevalent. To ascertain this, it is only necessary to refer to the many tests to destruction carried on in the past. For instance, in the series of tests made at the Massachusetts Institute of Technology, reference to which has already been made, in only two or three cases did failure result from the crushing of the concrete. Likewise in the series made by the Chicago, Milwaukee & St. Paul Railway, already published in the engineering magazines, only two failures out of thirty or more resulted from the crushing of the concrete. The majority of the causes of the failure brought out by testing may be assigned to diagonal tension or excessive web stresses; thus regulation by the restriction of the compressive stress of the concrete, without requiring reinforcement to care for the web stresses or without regulating them in some manner to raise their endurance on a plane with the compressive stress, seems only a portion of the remedy.

(To be continued.)

OUR ILLUSTRATIONS.

Bungalow, Santa Barbara, Cal., Francis W. Wilson, architect.

Bungalow for H. A. Bechtel, Harlan Thomas, architect, Seattle.

Refectory, Douglas Park, Chicago, W. Carby's Zimmerman, architect.

St. Luke's church, San Francisco, Cal., Sutton & Weeks, architects.

House for A. J. Pardridge, Chicago, Marshall & Fox, architects.

South Side Baptist church, Birmingham, Warren & Welton, architects.

Counter screen for bank, Owatonna, Minn., Louis H. Sullivan, designer.

Seventh Regiment armory, Chicago, W. Carby's Zimmerman, architect.

House for Chas. Spink, St. Louis, Barnett, Haynes & Barnett, architects.

House for W. M. Reed, Kansas City, Mo., Root & Siemons, architects.

House for J. S. Ely, Cedar Rapids, Iowa, Lawrence Buck, architect, Chicago.

House for F. C. Traver, Kenilworth, Ill., N. Max Dunning, architect, Chicago.

Park buildings for Lincoln Park Commissioners, Chicago, Perkins & Hamilton, architects.

Proposed hotel on lake front, Chicago, Richard E. Schmidt and Garden & Martin, architects.

Prize design, Eighth Annual Traveling Scholarship, Chicago Architectural Club, by George Ausumb.

Competitive design, home of Knights of Pythias, Decatur, Ill. H. V. Von Holst and L. A. Rawson, architects.

University Club building, Chicago, Holabird & Roche, architects. Extended description is given elsewhere in this number.

Illinois Athletic Club building, Chicago, Barnett, Haynes & Barnett, architects, St. Louis, Mo. Description in detail is given in another column.

Maryland Institute, Baltimore, Md., Pell & Corbett, architects. Design awarded the medal of honor for 1908 of the New York Chapter A. I. A.

Apartment building for H. M. Hoelscher, Chicago, Marshall & Fox, architects. The completion of this three-flat building at 1932 Diversey boulevard, just off Lake Shore drive, for Mr. Hoelscher, who occupies the lower apartment, marks a new departure in high grade flat construction. It is a common thing in the medium and cheaper grades of flat buildings for the owner to occupy the lower flat and rent the upper one, but this is the first instance in the case of high class buildings. The Hoelscher flats rent for \$250 a month. They contain eleven rooms, have an elevator, and ground floor entrance.

Y. M. C. A. building, Houston, Tex., Sanguinet & Staats, architects. This is the largest association building in the south, and contains 66,000 square feet of floor space. The cost is \$200,000. The game room is supplied with four regulation bowling alleys, also a large casino. There is one large main locker room, 40x50 feet, and a smaller room, 27x35 feet, which furnish ample accommodations for both young men and business men. Capacity, 1,000 and 200 lockers, respectively. The plunge and shower baths occupy a large, light and airy room, with sixteen marble showers and a natatorium 21x75 feet, with a capacity of 75,000 gallons of water. The main gymnasium, 48x90 feet, or one-third of the first floor, has three necessary qualifications, viz.: space, light and ventilation. With its equipment it will furnish facilities for the gymnast as well as courts for tennis, basket ball and indoor base ball. The cork running track, ten feet above the main floor (25 laps to the mile), will also serve as a gallery. The auxiliary gymnasium, 15x32 feet, will contain many pieces of special apparatus. The assembly room is 34x61 feet. Accessible by separate entrance from McKinney avenue, is the boys' department, which is entirely separate and distinct from the other parts of the building. It includes well lighted and ventilated reading and club rooms, also spacious game and locker rooms and check room and offices complete. The members of this department will reach the gymnasium and baths by means of a rear stairway.

NEW PUBLICATIONS.

FLATS, URBAN HOUSES AND COTTAGE HOMES. A Companion Volume to The British Home of Today and The Modern Home. 24 pages in color and 96 pages of black and white illustrations. Text by F. T. Verity. Edwin T. Hall, Gerald C. Horsley and Walter Shaw Sparrow, editor. Price, \$3.00. A. C. Armstrong & Son, New York. Paul Wenzel, publisher and importer of Architectural and Art Industrial Books, 31 East Twelfth street, New York.

The designs shown in this work are numerous and varied, and are characteristic of the better class of British architecture. Among the designs shown are those by Ashbee, Verity, Briggs, Baillie Scott, Lutyens, Dauber and many other equally well known designers. The plates in color are a delight. The several contributions to the reading pages give a literary character to the book as well as elucidate the subjects illustrated.

AMERICAN ART ANNUAL, 1907-1908. Florence N. Levy, Editor. Published at 20 West Thirty-fourth Street, New York.

This annual is full of information of much interest and value to all those appreciative of any form of art activities in America. The subject of Art Education is given prominence. The contents include List of Sales of Paintings, 1905-1907;

Catalogues of Important Sales; Tabulated Report of Auction Sales, 1905-1907; Art Books Published; Sculpture Unveiled; Exhibitions; Reports of Art Museums and Societies of Boston, Chicago, New York and Philadelphia; Directory of Painters, Sculptors and Illustrators; List of Art Dealers, etc. The Studio Directory is a new feature of interest. The long experience and wide acquaintance of the editor enables her to select what is of most interest and use to the art public, and this is contained in attractive form in this annual. Upwards of thirty illustrations adorn the work.

MODERN PIGMENTS AND THEIR VEHICLES. Their Properties and Uses Considered Mainly from the Practical Side and How to Make Tints from Them. By Frederick Maire, Author of the "Modern Wood Finisher," the "Modern Grainer." 266 pages. Cloth, \$2.00. New York, John Wiley & Sons. London, Chapman & Hall, Limited, 1908.

To aid those who have but a casual idea concerning the properties of pigments is the province of this book. The suggestion is pertinently made that the protection extended by the government to secure purity in other materials should be applied also to paint and paint products. Its purpose is to give a brief and concise history of all valuable pigments useful in painting—the main source of their derivation and supply; their properties and chief uses; their good qualities and their defects are pointed out and incidentally there are presented the best methods of detecting adulteration.

PROBLEMS IN STRENGTH OF MATERIALS. By William Kent Shepard, Instructor in Mechanics in the Sheffield Scientific School, Yale University. Ginn & Co., Publishers, New York and Chicago. 70 pages. List price \$1.25; mailing price \$1.30.

A collection of over five hundred practical problems in the strength of materials for students in all branches of engineering. Graded problems are given on tension, compression, and shear; elastic deformation; thin cylinders and spheres; riveted joints; cantilever and simple beams; overhanging, fixed and continuous beams; columns and struts; torsion; combined stresses; compound columns and beams; thick cylinders and guns; and flat plates. In addition to the problems a new practical discussion is given on the efficiency and design of riveted joints, with reference to their application to boiler shells. Illustrations accompany the text, and tables necessary for the solutions of the problems will be found in the appendix.

STYLES OF ORNAMENT. Exhibited in Designs and Arranged in Historical Order with Descriptive Text. A Handbook for Architects, Designers, Painters, Sculptors, Wood-Carvers, Chasers, Modellers, Cabinet-Makers and Artistic Locksmiths as well as also for Technical Schools, Libraries and Private Study by Alexander Speltz, Architect. Translated from the Second German Edition by David O'Connor. 400 full pages; illustrations with illustrated descriptive text. Bruno Hessling, Publisher, Berlin and New York.

So numerous and varied are the designs in all schools and periods contained in this book that it is difficult to conceive of requirements in this direction that the work does not cover. The plates throughout the book are numbered and credit given the designers and sources from which the selections are taken. A carefully prepared and arranged alphabetical index gives facility in reference. There is also a useful supplementary index of authors' names. The work is invaluable to anyone who requires an aid in designing architectural and decorative details.

THE SLIDE RULE POCKET MANUAL. A Treatise on the Structural Slide Rule with Illustrations, Examples and Tables. By John L. Hall.

This manual aims to set forth concisely the purpose and limitations of certain logarithmic slide rules, and to give such instruction as will enable any intelligent person, who so desires, and is already familiar with the principles of logarithmic calculations, to use them with facility. The scales prepared by the writer will compare favorably with any others for the same purpose thus far invented, and the incorporation of so many useful features in one handy instrument will insure a place for the "Structural Slide Rule" with busy engineers and designers. The rule has been in use in a leading engineering office for more than a year, and has proved itself a highly satisfactory and labor saving device. The three faces of the instrument have

three distinct slide rules, offering ready solutions of all the more common problems relating to beams, columns and general numerical calculations. It is the first instrument of its kind and marks a decided advance in slide-rule construction, as well as great economy in the labor of structural designing. Much of the hitherto routine calculations is replaced by an infallible mechanical means of attaining the desired results. The manual gives a clear idea of the use of the instrument, and contains a concise and quite complete treatment of the Mannheim Slide Rule. Further information may be obtained from The Slide Rule Club, Box 12, Station J, New York City.

PRINCIPLES OF REINFORCED CONCRETE CONSTRUCTION. By F. E. Turneaure, Dean of the College of Engineering, University of Wisconsin, and E. R. Maurer, Professor of Mechanics, University of Wisconsin. John Wiley & Sons, New York; Chapman & Hall, Ltd., London; 1907. Price, \$3.00.

The authors in this work discuss the properties of concrete and steel, citing various tests of reinforced concrete beams and columns as aids to the establishment of values for working stresses and coefficients to be used in the formulæ which are given in succeeding chapters dealing with the design of beams, floors, columns, arches, retaining walls, and miscellaneous structures. Examples are illustrated of noteworthy applications in actual constructions. The beam formulæ given are virtually those of the British Reinforced Concrete Committee, and the Prussian government, and therefore have the weight of these authorities. The formulæ provide for the design of rectangular and T-beams with single and double reinforcement, and are supplemented by a number of diagrams and tables for the simplification of computations. A useful feature about this part is that its contents can be employed without the necessity for referring to others portions of the book when designs are about to be undertaken. In the remaining pages of the work there are four useful chapters on the application of reinforced concrete to building construction, arches, retaining walls, dams, and miscellaneous structures. These chapters relate chiefly to principles of design rather than to practical construction, but they contain much that is likely to prove of service to students and architects. The work includes complete analytical treatment of the arch with diagrams, extensive tables of floor slabs, etc. The volume is well arranged and has an index for ready reference, and is a good piece of book making, the diagrams and illustrations being particularly well reproduced.

MODERN BATHS AND BATH HOUSES. By Wm. Paul Gerhard, C. E. Contents: Preface; Historical Notes on Bathing; the Purposes of Bathing; the Different Forms of Baths; the Modern Rain Bath; House and Tenement Baths; Public Bath Houses; People's Baths; Factory Baths; School Baths; Baths for Military Barracks, Prisons and Jails; Hospital Baths; Baths for Clubhouses, Gymnasias, Hotels and Barber Shops; River and Sea Baths; Air and Sun Baths; Medical and Electric-Light Baths; the Water Supply and Plumbing of Bath Houses; Bibliography on Baths and Bathing. Appendix: Bathing in Various Countries; the Dog Bath; Alphabetical Index. 311 pages, 130 figures. Cloth \$3.00 net. New York: John Wiley & Sons.

This is the first book published upon this subject which is of much importance to all. It is treated from the standpoint of the sanitary engineer whose large practice has brought him in practical contact with all phases of the subject. The book brings together many valuable data and much information on swimming baths, as well as details of rain baths and other bath appliances. The complete specification for the plumbing and water supply of bath houses, prepared by the author, should prove of great value to architects entrusted with the planning and execution of such structures. To them, as well as to librarians, the complete bibliography on the subject, compiled by the author, will be of inestimable value. The general reader will find much to interest him in the introductory chapter and in the appendix, which deal with bathing and bathing practices from a historical and geographical point of view, for the history of bathing is closely allied with the history of civilization in different countries. Physicians, medical practitioners and managers of sanatoria will find valuable, interesting and novel features in the chapters dealing with medical, electric light and air and sun baths.

YEAR BOOK, NEW YORK CHAPTER A. I. A.

The Year Book of the Chapter, recently issued, is an attractive little book of much historic interest. It contains a full list of the past presidents and past secretaries with dates of service of both the American Institute of Architects and the New York Chapter. Several pages are devoted to the Seventh Annual Dinner given December 16, 1907, in honor of George B. Post, and commemorative of his seventieth birthday; and marking as well the fiftieth anniversary of the Institute and the fortieth following the incorporation of the New York Chapter. At the dinner Mr. Post spoke feelingly of his associates during his architectural life, which is nearly coincident with that of the Institute. Reminiscences were given of Upjohn, T. U. Walter, Isaac Green Pierson, "builder of the twenty-five and fifty-foot dwelling houses, now destroyed, which by their elegance of interior proportion and detail challenged admiration"; Hatfield, Renwick, Wray-Mould, Wells, Cabot, Eidlitz, Vaux, Diaper, Snell, and Gilman. Of Richard Morris Hunt, Mr. Post said: "He returned from Paris, where in Beaux Arts he had captured all the honors which were open to an alien, and commenced that long career in which by distinguished ability, restless enthusiasm, hatred of sham, and fearless advocacy of all that was honest and good he not only exerted a dominating influence on his own pupils, but impressed his own spirit largely upon the profession in which until his death he was a recognized leader." Mr. Hunt was persuaded to receive pupils in architecture and instruct them by Beaux Arts methods. Dwelling upon this period, Mr. Post said: "How well I remember our first meeting in the studio! How Hunt walked silently to the blackboard on which dear old Billy Bobby Ware subsequently drew each day for weeks a full-size Corinthian capital, and printed in large letters across the top, 'ARS LONGA VITA BREVIS,' and pointing to it solemnly turned to us and said: 'Young men, never forget that motto—'Art is long, Life is short.' If you live to be as old as Methuselah and study day and night, you will find at the end, by the great and ever living Caesar (his favorite expletive) that you are but at the threshold of your art.'"

The activities of the chapter are in charge of the following committees, listed in the Year Book: That on library, education and publication, admission, professional practice and competitions, fine arts federation, examinations, surveys of unsafe buildings, audits and budget, nominations, medal of honor, registration of architects, by-laws, entertainment, legislative information, revision of the charter with regard to the Fine Arts Commission, revision of tenement house laws, schedule of charges, city improvement commission, revision of building code, standard specification, widening of Fifth avenue, recruiting the membership of the Chapter, and on new prison. The book contains also a list of the chapter members, the constitution and by-laws, and closes with the code for competitions adopted by the American Institute. The book presents in condensed and attractive form much of interest to the architects in general and the New York Chapter in particular.

ASSOCIATION NOTES.

COLUMBUS (OHIO) SOCIETY OF ARCHITECTS.

On March 28 the Columbus Society of Architects was organized at Columbus, Ohio, with a charter membership of forty-one practicing architects. The object of the society "is the advancement of interest in architecture and the allied arts, the professional improvement of its members, and to bring into social relations those interested in these objects." The officers are: President, A. M. Allen; vice-president, C. A. Stribling; secretary-treasurer, Fred W. Elliott; directors, Frank L. Packard, C. E. Richards, Edwin E. Pruitt, C. E. Bellows.

WASHINGTON (D. C.) ARCHITECTURAL CLUB.

The club has issued a circular relating to its annual exhibition, which is to be held in the Corcoran Gallery of Art from May 8 to 22, and has also announced an open competition for a design for the cover of its catalogue and year book. This design should be adaptable for use during succeeding years, suitable for reproduction on cloth, in not more than three col-



Illustrating a Concrete Block House of Dr. H. C. Howard, Champaign, Illinois, Prof. F. M. White, Architect, roofed with Asbestos "Century" Shingles, laid French Method.

A LIFETIME WITHOUT REPAIRS

Asbestos "Century" Shingles

will outlive the building without
either Paint or Repairs

EXPOSED to the action of the atmosphere and elements for a short period, the hydration and subsequent crystallization which takes place, converts Asbestos "Century" Shingles into absolutely impermeable roof coverings, which, as such defy all changes of climates, and thus become greatly superior to other forms of roofings.

Asbestos "Century" Shingles are 5 cents per square foot at Ambler, Pa.

Asbestos "Century" Shingles

Reinforced Asbestos Corrugated Sheathing

FACTORS: The Keasbey & Mattison Co., Ambler, Pa.

Atlantic Terra Cotta Co.

The LARGEST Manufacturers in the World of
Architectural Terra Cotta

Our work is recognized as the standard of Excellence and our Exclusive Manufacturing Advantages enable us to successfully meet every demand of the architect.

We especially solicit the opportunity of estimating on western work; our very complete organization assures to architects prompt and careful attention to all drawings and requests sent to us.

MAIN OFFICE, 1170 BROADWAY, N. Y.

FOUR LARGE PLANTS:

Tottenville, New York City, Perth Amboy, N. J. Rocky Hill, N. J.

PITTSBURG, Fulton Bldg.
NEW ORLEANS, Godchaux Bldg.
SAN FRANCISCO, 255 California St.

SEATTLE, S. W. R. Dally, Colman Bldg.
KANSAS CITY, Bryant Supply Co., Bryant Bldg.
MILWAUKEE, L. H. Taylor, Miller Bldg.

ATLANTA, 622 Austell Bldg.

ADDRESS INQUIRIES TO NEAREST OFFICE

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

ors, and measure ten by thirteen and one-third inches. It must incorporate the words, "Seventh annual exhibition and year book, The Washington Architectural Club, 1908," and be delivered to M. D. Morrill, 729 Fifteenth street, before 5 p. m., April 14. A jury of three will pass upon the designs entered in competition, and the prize offered is \$20. For the exhibition of the Architectural Club entries must be received not later than April 24 and exhibits before May 5. Invited exhibits will be collected in New York, Philadelphia and Baltimore.

KANSAS STATE BUSINESS ASSOCIATION.

A number of the architects of the state met at Topeka recently and perfected a permanent organization to be known as the Kansas State Business Association of Architects. The officers selected are T. H. Lescher, of Topeka, as president; C. E. Hair, Salina, vice-president; J. F. Stanton, Topeka, secretary, and W. T. Wellman, of Lawrence, treasurer. The organization effected is the result of a move started in Topeka some weeks ago among the architects for the purpose of securing protection in various ways for the members of the profession. The committee on rules and regulations recommended the adoption of the rules and code of practice now in use by the Illinois Architects' Business Association subject to slight changes. One of the objects of the association is to secure the passage of a law compelling architects to secure a license before they can do work in the state. The following architects were made charter members of the association: W. R. Stringfield, C. W. Terry, Wichita; H. W. Brinkman, Emporia; D. T. DePry, J. N. Smith, Hutchinson; J. H. Shiff, Newton; C. E. Hair, Salina; W. T. Wellman, Lawrence; George P. Washburn, Ottawa; T. H. Lescher, Joseph Marshall, L. M. Wood, J. C. Holland, C. H. Chandler, N. F. Neilsen, J. F. Stanton and E. L. Hopkins, Topeka.

RHODE ISLAND CHAPTER, A. I. A.

At a recent meeting the chapter adopted a memorial testifying to the esteem in which the members held Edward I. Nickerson, who had been secretary of the chapter during eighteen years of his life and president of the branch for four years. The memorial, which was adopted and a copy of which was sent to his daughter with the sympathy of the chapter, was in part as follows:

"In the death of Edward Irving Nickerson the Rhode Island Chapter of the American Institute of Architects has lost one of its founders, a loyal member who has taken a prominent part in all of its activities, maintaining and upholding a high standard of professional ethics in harmony with that of the national parent body, the American Institute of Architects.

"A student of architecture in the office of Clifton A. Hall, the oldest practitioner now living in Rhode Island, Mr. Nickerson had an independent practice for thirty-seven years. His clientele was large and somewhat varied. Dwelling house construction enlisted much the larger share of his attention, as is shown by the number that remain to testify to his skill.

"Possessed of ample means, he was able to indulge his taste for travel, going abroad many times, visiting Great Britain, all of continental Europe and northern Africa. He acquired an intimate knowledge and wide information of the physical characteristics of many lands. By his genial sociability he made himself familiar with people of varied nationalities, and enjoyed imparting to interested listeners the results of his observations.

"The members of the Rhode Island Chapter—few of whom have enjoyed in anything like the same degree his exceptional privileges—profited by his frequent and graphic descriptions of notable buildings and works of art, and the opportunity to examine his rare and unique collection of articles of vertu—equalled by few and surpassed by none in this vicinity.

"Sociable, companionable and interesting, his genial presence and valuable counsel were appreciated and enjoyed by us who were so closely drawn to him by professional interests and familiar intercourse. His absence from our circle creates a vacancy which cannot be filled, but the memory of his life will abide."

The chapter elected Charles E. Carpenter, of Stone, Carpenter & Sheldon, of this city, a delegate to the international conference of architects which is to be held in Vienna, Austria, in May.

THE INTERNATIONAL CONGRESS OF ARCHITECTS

The preliminary programme of the Eighth Congress, to be held in Vienna on the 18th to 24th of May, 1908, is as follows:

Monday.—Meeting in hall of the Architects' and Engineers' Association.

9 o'clock: Meeting of the Permanent Committee.

10 o'clock: Distribution of circulars, cards, invitations, etc.

3 o'clock: Excursions through the city: At the Hofburg, by carriages and street cars.

8 o'clock: Reunion in the Kunstlerhaus, in the Fine Arts Palace; entertainment by the Sculptural Society of Vienna.

Tuesday.—First Section in the Hall of the Engineers' and Architects' Association of Vienna.

10 o'clock: Business meeting.

Second Section in the Trades Union Hall.

10 o'clock: Conferences with Professor Karl Konig and Mr. Bauer.

3 o'clock: Visit to the Exposition of Prater; excursion to Kahlenberg.

Dinner given by the Austrian Society of Engineers and Architects.

Wednesday.—10 o'clock: Business meetings and conferences in the same halls in which the meetings were held Tuesday.

3 o'clock: Excursion to Klosterneuberg and to the Chateau of Kreutzenstein.

5 o'clock: Reception at the Imperial Court.

Thursday.—The entire day will be devoted to an excursion to Semmering.

Friday.—10 o'clock: Business meetings and conferences in the same halls.

3 o'clock: Visit to the City Library.

8 o'clock: Reception in the Rathaus.

Saturday.—9 o'clock: Meeting of the Permanent Committee.

10 o'clock: Closing meeting.

3 o'clock: Promenades, visits, etc.

8 o'clock: Closing banquet, the fee for which will be fixed later.

The following subjects will be discussed at the Congress:

I.

CONTINUATION OF THE SUBJECTS CONSIDERED IN LONDON IN 1906.

First: State of legislation on the Property Right of Design.

Second: Organization of International Competitions in Architecture.

Third: The Legal Qualifications of an Architect.

Fourth: Preservation of Public Architectural Monuments.

Fifth: Reinforced Concrete Construction.

II.

NEW QUESTIONS.

Sixth: The Public Administration of Fine Arts; the Utility of, the Dangers of, and the Methods of Organization.

Seventh: To Safeguard the Artistic Interest in Municipal Building Ordinances.

Eighth: The Modification of the Business Methods of the International Congress.

III.

DISSERTATIONS.

The following dissertations and discussions have been announced:

Prof. Karl Konig: The Influences and Tendencies of Modern Art on Architecture.

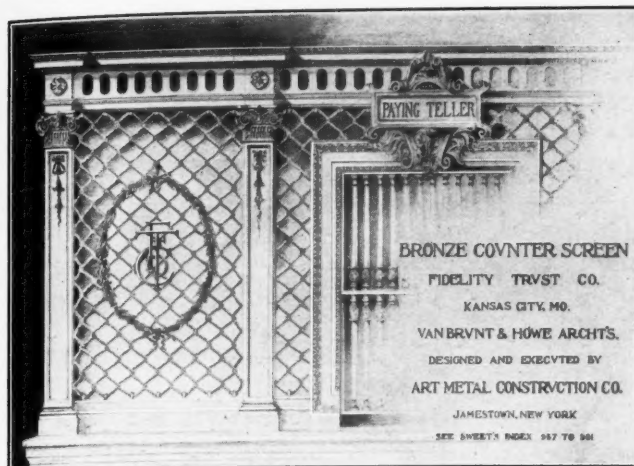
Mr. Leopold Bauer, Architect: The Influence of Historic Styles on the Development and Forms of Modern Architecture.

Prof. Meydenbauer, Berlin: Measurements of Light.

Mr. Daumet, Paris: Discussion on architectural subject.

The Permanent Committee of the American Section is as follows: William S. Eames, F. A. I. A., chairman; Francis R. Allen, F. A. I. A.; Glenn Brown, F. A. I. A.; George B. Post, F. A. I. A.; George Oakley Totten, Jr., A. A. I. A., secretary, 808 Seventeenth street, Washington, D. C.

Further information may be obtained by addressing Secretary Totten.



NORTH-WESTERN TERRA COTTA CO.

WORKS AND OFFICE:
CLYBOURN AND WRIGHTWOOD AVENUES
Branch Office: 1415 Railway Exchange Building
CHICAGO

ESTABLISHED 50 YEARS Henry Maurer & Son

Manufacturers of

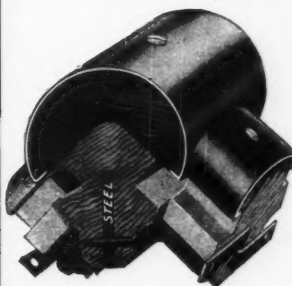
Terra Cotta (Hollow Tile) Fireproof Building Materials

420 East 23d St., New York

Pennsylvania Bldg., Philadelphia

If you want an incombustible fire resisting building, why hunt around for fads, when bona fide fireproof material — Terra Cotta — is at hand; commanding lowest insurance rates?

Specify **PETZ** PATENT STORE FRONT CONSTRUCTION Made in Detroit



Secures lowest rates from Plate Glass Insurance Companies because of its great strength, durability and permanent, practical merit.

Satisfies the merchant because it gives every inch for display and is the neatest, handsomest corner post and transom bar on the market.

Endorsed by leading architects, contractors and glaziers, because glass can be set from the outside, and broken glass replaced without disturbing window trim or removing window enclosure.

Our new book "Metal Store Fronts" gives full details. Write for a copy.

Detroit Show Case Co.

481 Fort Street, West
DETROIT, MICH.



The expense and annoyance of painting will not recur every year or two if you use

Dixon's Silica-Graphite Paint

the "Proven Shield for Steel Work." Durability records in all climates; write for a few.

Joseph Dixon Crucible Co., Jersey City, N. J.



Put into the White House by the U. S. Government.

F. E. CUDELL'S
Patent Sewer-Gas
and Backwater Trap

For Wash Bowls, Sinks, Bath
and Wash Tubs.

CLEVELAND - OHIO



J. W. REEDY ELEVATOR MFG. CO.

PASSENGER AND FREIGHT
ELEVATORS

83-91 Illinois Street

CHICAGO

Advance News Indicating Chances to Sell Plans, Materials, Fixtures, Furniture, Machinery

may be secured with promptness, accuracy and thoroughness, and at reasonable rates, from

THE PRESS CLIPPING BUREAU

Robert and Linn Luce

26 Vesey St. - NEW YORK 68 Devonshire St. - BOSTON
206 E. Fourth St. - CINCINNATI Railroad Bldg. - DENVER

You need the Information

Contained in

Concrete and Reinforced Concrete Construction

By HOMER A. REID, Assoc. M. Am. Soc. C. E.
Assistant Engineer, Bureau of Buildings. New York City

906 pages; 715 illustrations; 70 tables; \$5 net, postpaid

200 working drawings of bridges, bridge piers and culverts; 60 working drawings of sewers, water mains and reservoirs; 30 working drawings each of retaining walls and dams; 200 working drawings of buildings and foundations, including shops, round-houses, etc. Every structure illustrated is described, the method of construction is explained and where possible the cost is given. There are chapters telling how to compute girders, arches, columns, tanks, bins, walls, conduits and chapters on proportioning, mixing and laying concrete, on doing concrete work in freezing weather, on facing and finishing concrete, on waterproofing concrete, on the physical properties of concrete, on cement testing and on concrete block manufacture and construction.

This book contains more text pages, more drawings and more tables of test data on concrete and reinforced concrete construction than any other book in the world. It has more new matter—material never previously published. This work is a combination of several books in one; it is complete, up-to-date and original. No other book on concrete contains one-tenth as much of the very latest data on tests, theory and practice. The cost to publish this book has been more than double the original estimate, but the price will for the present remain at \$5 net postpaid.

Every Architect and Draughtsman should have a copy

PORTER, TAYLOR & CO., Publishers
358 DEARBORN STREET, CHICAGO

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.