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ARCHITECTURE AS A COMMODITY

BY WILLIAM ROGER GREELEY, A. I. A.

IN the May issue of a certain architectural journal there was published an article entitled "Salesmanship in Architectural Practice." This article throws much light upon the architect's hidden sources of genius. It explains that the "architect is constantly exercising creative genius, the results of which must be 'sold' to others." It states that "his interest lies in the fields of creative effort, and his role is that of originator and salesman of architectural products." Originator and salesman! It goes on to say: "It is as much an architect's business to know how to promote and finance a project and to consider actively the means of doing this as it is for him to know how to use mosaic tile intelligently!" The article then rises to its climax in its definition of salesmanship. "When one individual endeavors to influence another to adopt a certain mental attitude, or to act in a certain way, he is practicing salesmanship." This is interesting doctrine, and is sufficiently prevalent in the business atmosphere of today to merit more than passing comment.

The emphasis that is being put on salesmanship must have its effect upon the quality of every business and profession. If we can convince the man who has services to render that what he needs

to be proficient in is salesmanship, and that good salesmanship will result in prosperity for him, then, by inference, we have admitted that excellence in the quality of the service is not the only thing required for success, and further, that it is not really required at all. Average quality,

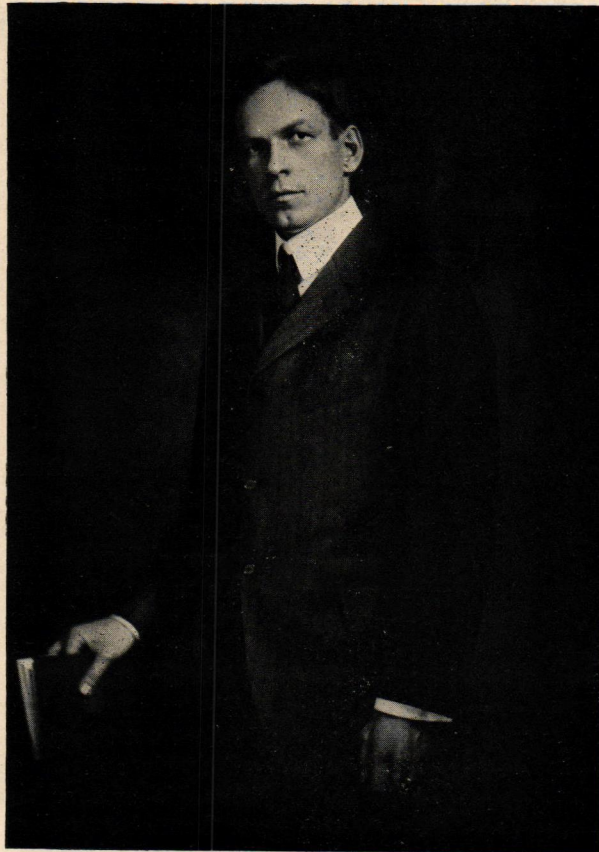
plus more than average salesmanship, spells success.

This is good doctrine in that it is measurably true, but it is the doctrine of decadence nevertheless. It is the same principle that has governed the conduct of the labor unions and has leveled the mechanic to a dull average of skill and output. Looked at critically, it is the principle of getting by, rather than of service. The emphasis is on persuading the prospective purchaser to buy a measurably good service and not upon improving to the limit of excellence the quality of the service.

The result will, of course, be poorer and poorer service and better and better salesmanship, until we reach in professional fields the "ne plus

ultra" of business success—quantity production and sale of the product which is just good enough to enable skillful salesmen to put it across.

This doctrine is too practical to be dismissed with irony or deprecation. It is the besetting temptation of the professional man. He realizes



WILLIAM ROGER GREELEY, A. I. A.

that if he will he can sell his birthright for a mess of pottage. He realizes that some of his competitors will actually do this and that their action will tend to make his pathway thorny. All that he will have left to depend upon is an intelligent and discriminating clientele. It may be a dwindling clientele or it may not, according as people are educated to be thoughtful and discerning.

A public that chooses its professional men by the noise they make in their own behalf will soon have no professional men worth choosing. If this public goes to the Canvasback Portrait Company, Inc. to sit for its portrait instead of to Sargent, because the former house employs better salesmanship, it will fool no one but itself. If it buys a book to read because the book is widely advertised, it will waste only its own time. If it hires a minister because of his persuasiveness, it will hire him only to fire him.

If the public wants to have good service it can get it in one way, and only one way—by discriminating between good and bad service and patronizing the good—and that doesn't involve salesmanship, except that salesmanship is bound to confuse the issue. If it didn't confuse it, it wouldn't be good salesmanship. Salesmanship is good only when it is successful in selling. The public is prone to mistake good salesmanship for good service and hence confusion must result.

Now to return to the "article." What is salesmanship? If one is practicing salesmanship whenever "he endeavors to influence another to adopt a certain mental attitude or to act in a certain way" then hypnotism is the most effective kind of salesmanship. This is probably the case. The current methods in advertising are coming to be recognized as hypnotic in their effect. The mind succumbs to the oft repeated and, in fact, endless iteration and reiteration of an alleged fact.

According to the same definition of salesmanship, you are a salesman when you are proposing marriage, although you are not selling anything, and the woman is not buying anything if she accepts. She is giving herself up and binding herself to be loyal and true to you. To call this salesmanship is profanity and bad English.

By the same token, a teacher who is trying to make the pupils behave is a salesman, and if he is a salesman when he is training a philosopher or a bricklayer or an athlete, why isn't he a salesman when he is training a seal to do arithmetic, or a donkey not to balk? If we are to throw away the dictionary and make a new language we can call salesmanship "any use of the human mind or will power that affects the conduct of another mind or will power."

Let us, however, sober down and admit that salesmanship is an English word defined as "the art of selling." "Sell" has two meanings. The first is "to transfer to another for an equivalent."

It is correlative to "buy." The second is "to impose upon; to trick; to deceive." Salesmen may use it in the first sense on others after having applied it in the second to themselves.

Buying and selling constitute a very small part of the activity of human beings in influencing each others minds. If you get a doctor out of bed at two A. M. to see if your child has the measles the doctor is not selling you anything. If you send for an accommodator to come out and cook a meal the accommodator isn't a salesman or saleswoman. When you pay a conductor the conductor is not a salesman. When you go to the village undertaker he does not become a salesman. Nothing is shallower than the remark that "everyone is a salesman." Very few of the "working classes," so-called, can be salesmen.

Under what conditions is salesmanship an advantage to the prospective builder?

Where production is insufficient to supply the market salesmanship is not required. Where production exceeds the normal demand salesmanship is needed to secure the sale of the commodity, both by increasing the demand and by outstripping competitors. During the influenza epidemic the temptation for the doctors to advertise was absent. Their commodity was too much in demand already so that they all but wore themselves out trying to meet it. Time was when doctors were largely bent on bleeding their patients and the public held medicine in derision; some advertised and so the patent medicine business was evolved; but the real medicine men have stuck to their last and have won confidence. Today they occupy a firmly established place in the community which could not be strengthened by any personal use of advertising matter or salesmanship. Such a program would, on the contrary, shake the people's trust in doctors.

A salesman who finds it necessary to dwell on his own ability is already a dead one.

He who emphasizes his rival's shortcomings is almost equally feeble.

The constructive presentation of the goods to be sold is the one line to be followed.

The architect has only his own services to sell. He does not sell plans. That is left to the ladies' periodicals and others. What can a man say about his own services? That he is willing to put them at your disposal is a foregone conclusion. That he thinks his services to be the best is almost equally certain. That he exists at all may not, however, be known. Here is the chance. He may insert a card in the local paper stating that he exists, is an architect, and is doing business at a certain address. But this "ad" the classified telephone list already supplies without apparent protest from ethical experts. Perhaps there is one other thing that he may permit himself to divulge to the eager public—namely, what he has done. To point to his record is legitimate. "So-

and-so, Architect, 160 Fifth Avenue, New York. The following buildings are among his works: Item, item, item, etc." The adoption of this method would mean a display of many columns of names and buildings, some well known, some unknown. The names alone, however, would soon prove wholly inadequate to give an idea of the character of the work. Illustrations must follow. This is expensive advertising. Only a few are left in the race. If it proves successful, however, the business man enters the field. He incorporates, hires an "architect" as a member of his organization, and advertises on the strength of this architect's record. If the record is a meager one photography may fail. Drawings, however, can be made to prove anything. Enter another element—the smart draftsman.

Soon this latter combination of shrewd business acumen and pretty picture making wins the advertising race and the business corporation gets the work and begins to hire architects to do it. By this gradual commercializing of the profession we have put the business side of it in the hands of business men, and the architects are doing the designing and making the drawings. There is some degree of propriety in such a division, except that the commercial tail wags the professional dog.

The transformation could be pictured as "Tiffanizing" architecture. It is the difference between hiring your sculptor to design your monument or going to the "Monument Works" opposite the cemetery entrance and having something done to order. The latter appeals to the American idea of efficiency and service. Its success is absolutely guaranteed by the result as seen in our cemeteries.

With a degree of common sense and dignity, which some among the architects could emulate, the sculptors are refraining from advertising their ability to do gravestones. They are not clamoring that the stonecutter is usurping their field. They have better things to do.

The painters are apparently able to contemplate without too much panic the advent of the poster industry. We have not heard them bewailing their fate that people do not recognize in them the true profession through which posters should be done.

Yet there are architects who view with concern the increasing usefulness of the engineer in building enterprises. To be an engineer is not necessarily a disgrace. Leonardo da Vinci was an engineer. So, too, Roebing. That an engineer should be employed to design a furniture warehouse does not necessarily mean that architecture is on the wane in America. Fifty years ago we had no architects. Then came a feeble few, groping. Now there are many architects, and strong ones, not groping but carrying forward a noble standard, bravely. The public has discovered

this. It has recognized merit where merit existed and entrusts to the architect the bulk of its most serious difficulties. Architecture, instead of being on the wane, is on the increase. No other fact could account for the action of engineers and business men in assuming to be architects. They are too canny to accept a disguise that will injure them. Imitation is the sincerest flattery. Now, if architects follow suit by pretending to be engineers and by adopting the purely commercial methods of business men, the rule will operate in reverse and the architect will throw away the distinction that was his.

The pocketbook side of the profession is important but will not furnish a basis for professional existence. The commodities which architects have to sell are training, taste, imagination, and ability. The fruit of that ability is not invisible as in the case of a lawyer. It stands four-square, ready to be inspected by all. Under present conditions of professional conduct the man who executes his first commission carefully, intelligently and with taste, will go on to larger opportunities, but under a regime of advertising no man would have a chance except by the liberal expenditure of capital used in celebrating what he considers to be his ability. All would have to assume the new burden of advertising. Here would be another case of keeping up with Lizzie!

Let us look at it from the client's point of view. What does he gain and what does he lose? This, after all, is the important question. The architect exists to perform a service. How will this service be affected by advertising and salesmanship?

First, the cost to the client will be increased, for the client must pay for the advertising in the end. It will be charged into the architect's overhead and passed on to the client.

Second, the selection of a good architect will be more difficult. The advertisement is essentially a form of special pleading and to that extent is unreliable, especially as compared with the present practice of picking an architect on his visible record.

Third, the letting loose of a new horde of solicitors will form but one more aggravating burden on the already irritated public. The insurance agent, the book agent, the bond salesman, and the architect's "drummer." Behold the advance agents of civilization!

What is left for the rest of us? We can only plug away and keep up our courage by reciting to ourselves:

STRADIVARIUS

By GEORGE ELIOT

Your soul was lifted by the wings today
Hearing the master of the violin;
You praised him, praised the great Sebastian too
Who made that fine Chaconne; but did you think
Of old Antonio Stradivari?—him
Who a good century and a half ago

Put his true work in that brown instrument
And by the nice adjustment of its frame
Gave it responsive life, continuous
With the master's finger-tips and perfected
Like them by delicate rectitude of use.

No simpler man than he: he never cried,
"Why was I born to this monotonous task
Of making violins?" or flung them down
To suit with hurling act a well hurled curse
At labor on such perishable stuff.
Hence neighbors in Cremona held him dull,
Called him a slave, a mill-horse, a machine,
Begged him to tell his motives or to lend
A few gold pieces to a loftier mind.

Naldo, a painter of eclectic school,

Knowing all tricks of style at thirty-one,
And weary of them, while Antonio
At sixty-nine wrought placidly his best,
Making the violin you heard today—
Naldo would tease him oft to tell his aims.
"Perhaps thou hast some pleasant vice to feed—
The love of louis d'ors in heaps of four,
Each violin a heap—I've naught to blame;
My vices waste such heaps. But then, why work
With painful nicety? . . .

Antonio then:
"I like the gold—well, yes—but not for meals.
And as my stomach, so my eye and hand,

Have hunger that can never feed on coin.
Who draws a line and satisfies his soul,
Making it crooked where it should be straight?

God be praised,
Antonio Stradivari has an eye
That winces at false work and loves the true,
With hand and arm that play upon the tool
As willingly as any singing bird
Sets him to sing his morning roundelay,
Because he likes to sing and likes the song."

Then Naldo: "'T is a petty kind of fame
At best, that comes of making violins;
And saves no masses, either. Thou wilt go
To purgatory none the less."

But he:
"'T were purgatory here to make them ill;
And for my fame—when any master holds
'T wixt chin and hand a violin of mine,
He will be glad that Stradivari lived,
Made violins, and made them of the best.
The masters only know whose work is good:
They will choose mine, and while God gives them skill
I give them instruments to play upon,
God choosing me to help Him."

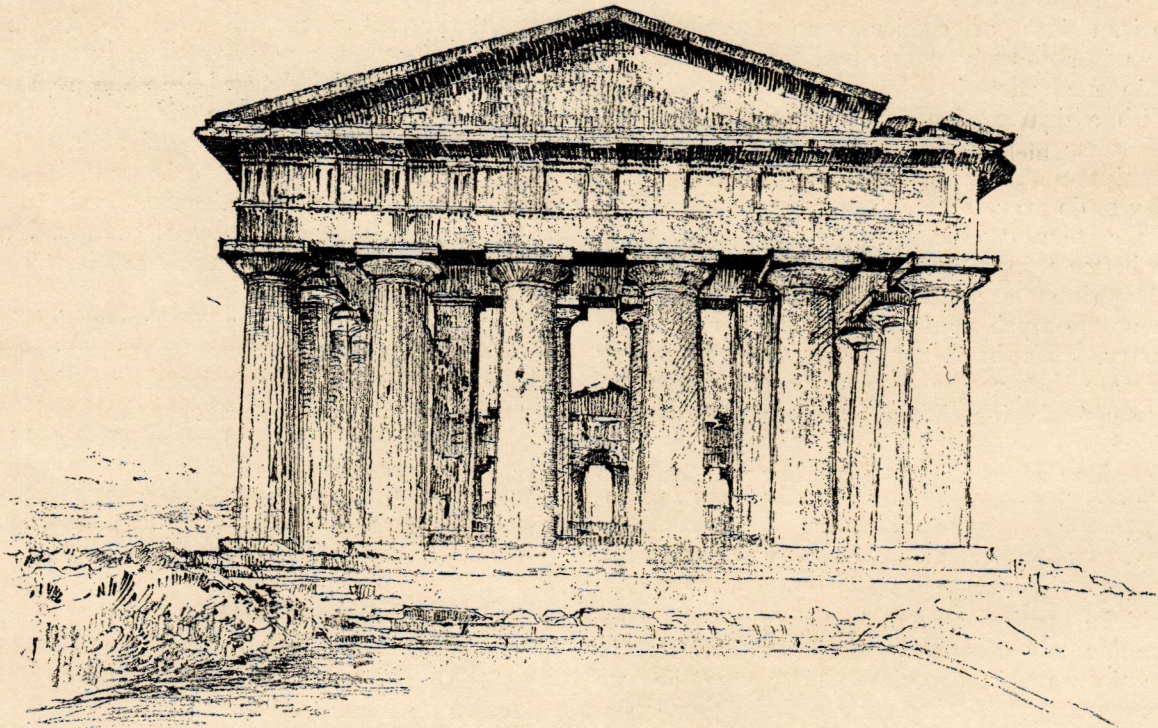
"What! were God
At fault for violins, thou absent?"

"Yes;
He were at fault for Stradivari's work."

"Why, many hold Giuseppe's violins
As good as thine."

"May be: they are different.
His quality declines: he spoils his hand
With over-drinking. But were his the best,
He could not work for two. My work is mine,
And, heresy or not, if my hand slacked
I should rob God— . . .
Leaving a blank instead of violins.
I say, not God Himself can make man's best
Without best men to help Him. I am one best
Here in Cremona, using sunlight well
To fashion finest maple till it serves
More cunningly than throats, for harmony.
'T is rare delight: I would not change my skill
To be the Emperor with bungling hands,
And lose my work, which comes as natural
As self at waking."

'T is God gives skill,
But not without men's hands: He could not make
Antonio Stradivari's violins
Without Antonio. Get thee to thy easel."



• PAESTUM - DEC. 19-23.

John P. Morgan

FROM THE ORIGINAL SKETCH BY JOHN P. MORGAN

BALTIMORE CITY COLLEGE COMPETITION

REPORT OF THE JURY

AFTER very careful examination of the designs submitted, we have selected design marked No. 119 as, in our opinion, giving promise of the best results when carefully studied in all its parts and details.

Our recommendation to your Committee is, therefore, that design No. 119 be premiated.

The Jury congratulates the Commission on the exceptional merit of the design, which it has placed first. It indicates a complete mastery of every element of the problem. In fact, such a set of drawings shows conclusively that its authors are eminently qualified to carry out the problem as stated in the program, or develop it along any line which your Commission might elect to follow in the future.

Not only have all the esthetic and artistic requirements of the problem been admirably grasped, but the essentially practical elements, such as the relation of buildings, playgrounds, approaches, circulation, service, etc., to the irregularities of site, have been most successfully handled.

The employment of the authors of this design as the architects of the proposed City College, gives every assurance of adding to the City's School System a monument worthy of its high purpose, and marking an important step in the City's development.

MILTON B. MEDARY
PAUL P. CRET
HARVEY W. CORBETT

EXTRACT FROM THE PROGRAM

The act of an architect in submitting a design in this competition shall constitute a guaranty on his part that the design so submitted was produced in his own office under his personal direction. It being of the essence of the public interest that the design premiated in this competition be carried to execution by and under the direction of its original authorship it is provided that no change in personnel of such authorship as it existed in the competition, whether it consist of one or more than one individual or of principals or subordinates, shall be made by the appointed architect without the written consent of the Commission. To this end each competitor shall add to his name in the envelope to be enclosed with his design the name of the other person or per-

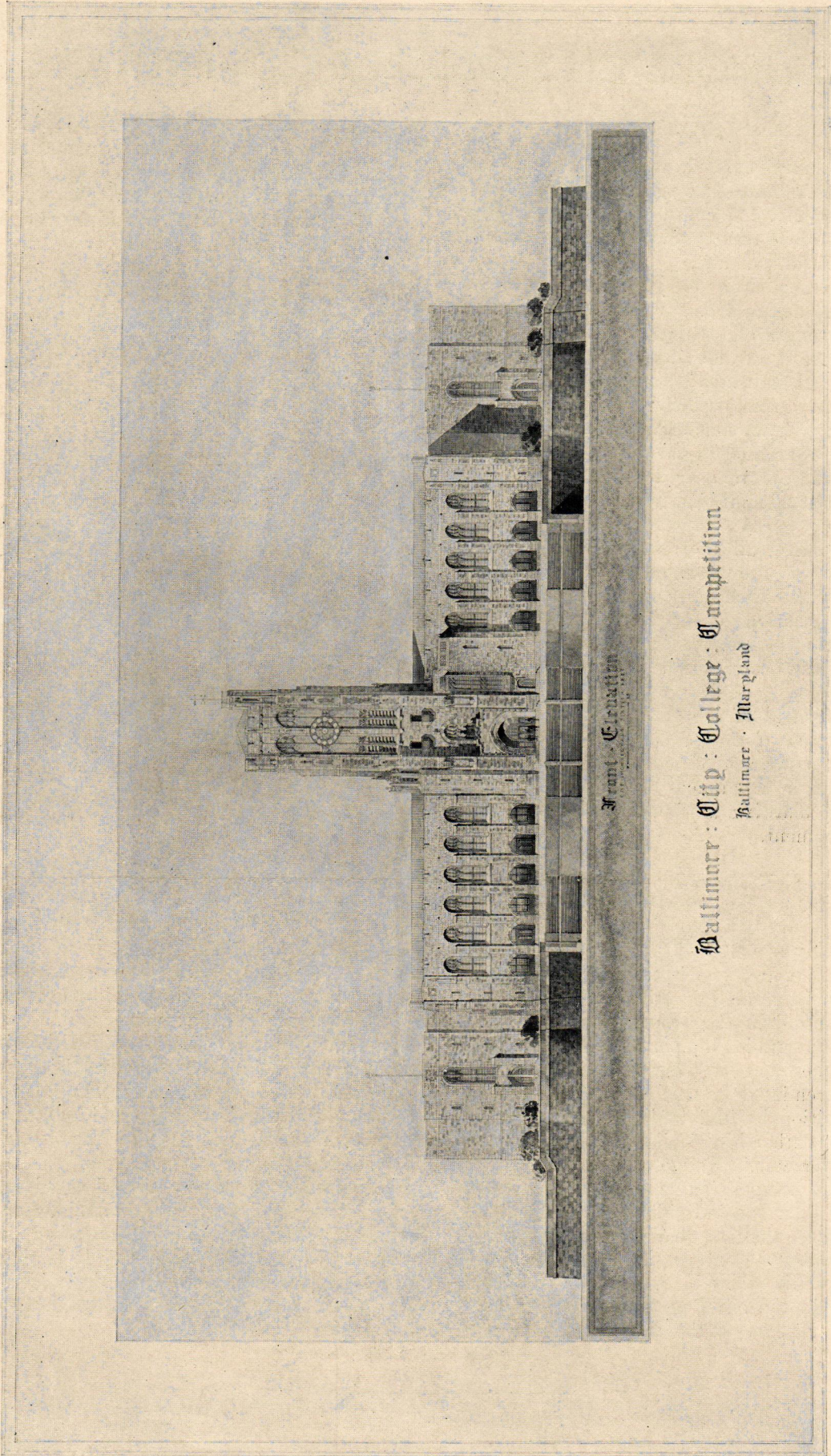
sons, if any, who were jointly responsible with him for the authorship of the design submitted by him. Action in violation of the above provisions, as proved by evidence satisfactory to the Commission, will constitute ground for the annulment of any award made in favor of the competitor, including his appointment as architect. No competitor may submit more than one design; flaps and alternative drawings are not permitted and no design shall be accompanied by drawings, models, diagrams or any means of illustration other than those called for. No nom de plume or other identifying name or mark is to appear on the wrapper in which the design is to be delivered, nor upon any of its contents save within the sealed envelope as provided, nor shall any competitor, either directly or indirectly, reveal the identity of his design to, or seek to influence in his favor (except by a proper submission of his design) any of the persons named in this program or any member of the jury. It is understood that in submitting a design each competitor affirms that he has complied and will comply with all of the foregoing provisions and agrees that any violation of any of them shall render null and void any rights which he otherwise might have under both this agreement and any engagement arising from it. No design shall exceed in volume the cubage limit or contain less than the minimum story heights specified in the building requirements stated.

AN ADVERTISING COMPETITION

ON another page in this issue is an announcement regarding a competition for original advertisements addressed to architects, conducted by THE AMERICAN ARCHITECT.

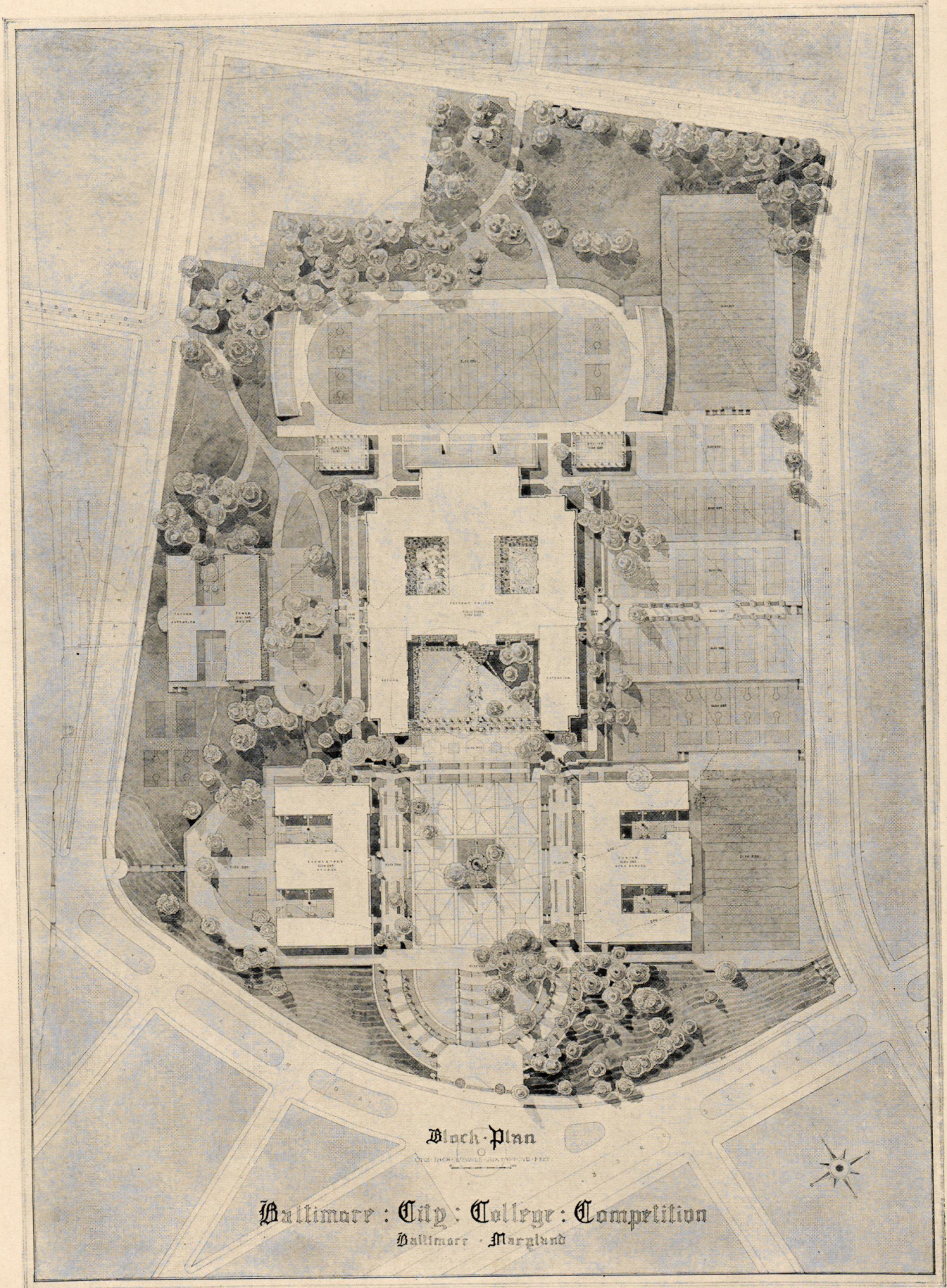
The thought back of this competition is the desire further to improve the advertising section of this publication in the belief that this section can be made just as interesting and helpful to the architectural profession as are the letter-press and plate sections.

While architects are not trained as advertising men, they should know, better than anyone else, what they would most desire in an advertisement both as to illustration and text. It is therefore hoped that this preference and their ideas will find expression in many entries in this competition from architectural offices.



Front Elevation
Baltimore : City : College : Competition
Baltimore · Maryland

WINNING DESIGN
BUCKLER & FENHAGEN, ARCHITECTS



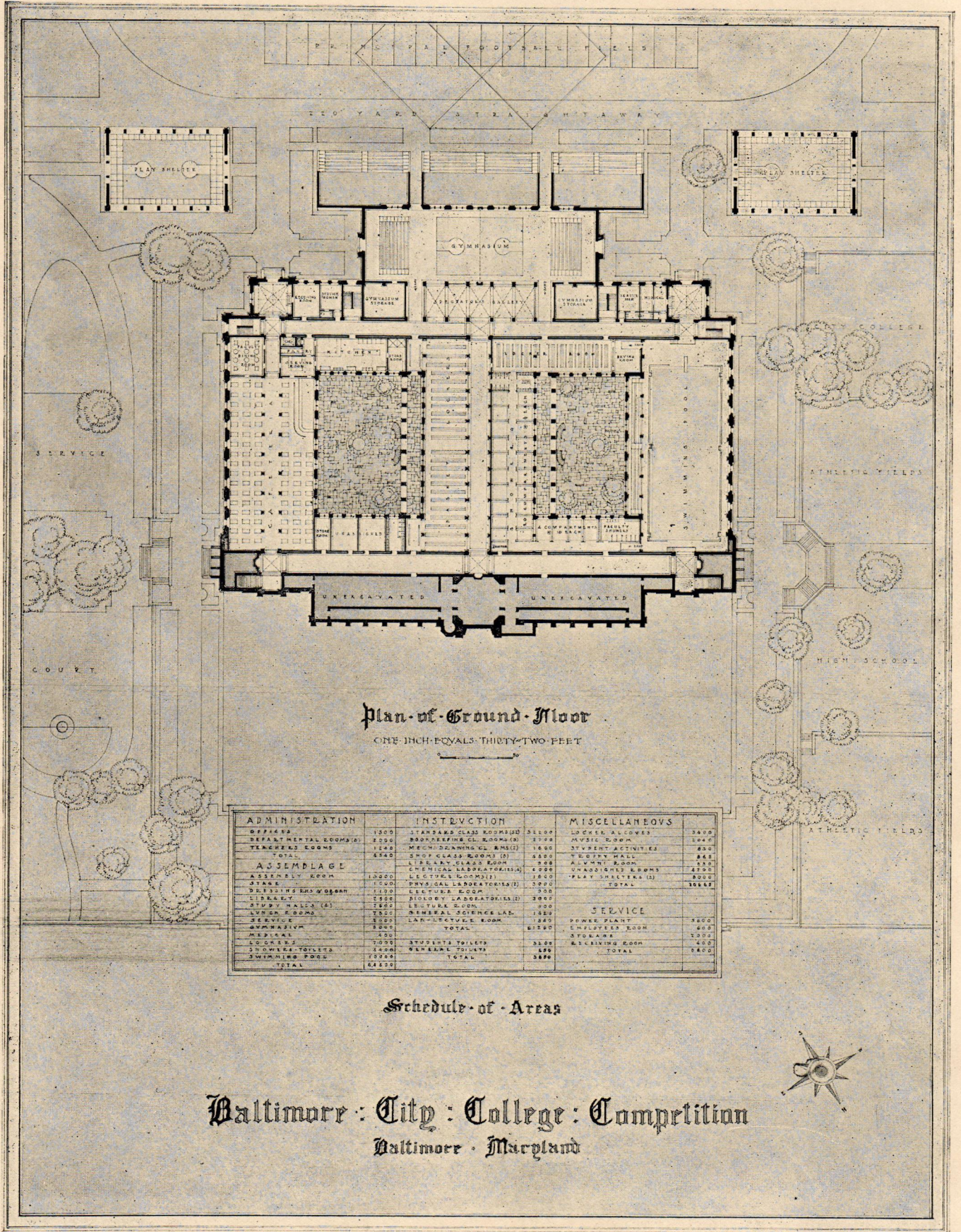
Block Plan

ONE HUNDRED AND SIXTYFOUR FEET

Baltimore: City: College: Competition
Baltimore: Maryland

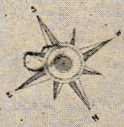
WINNING DESIGN

BUCKLER & FENHAGEN, ARCHITECTS

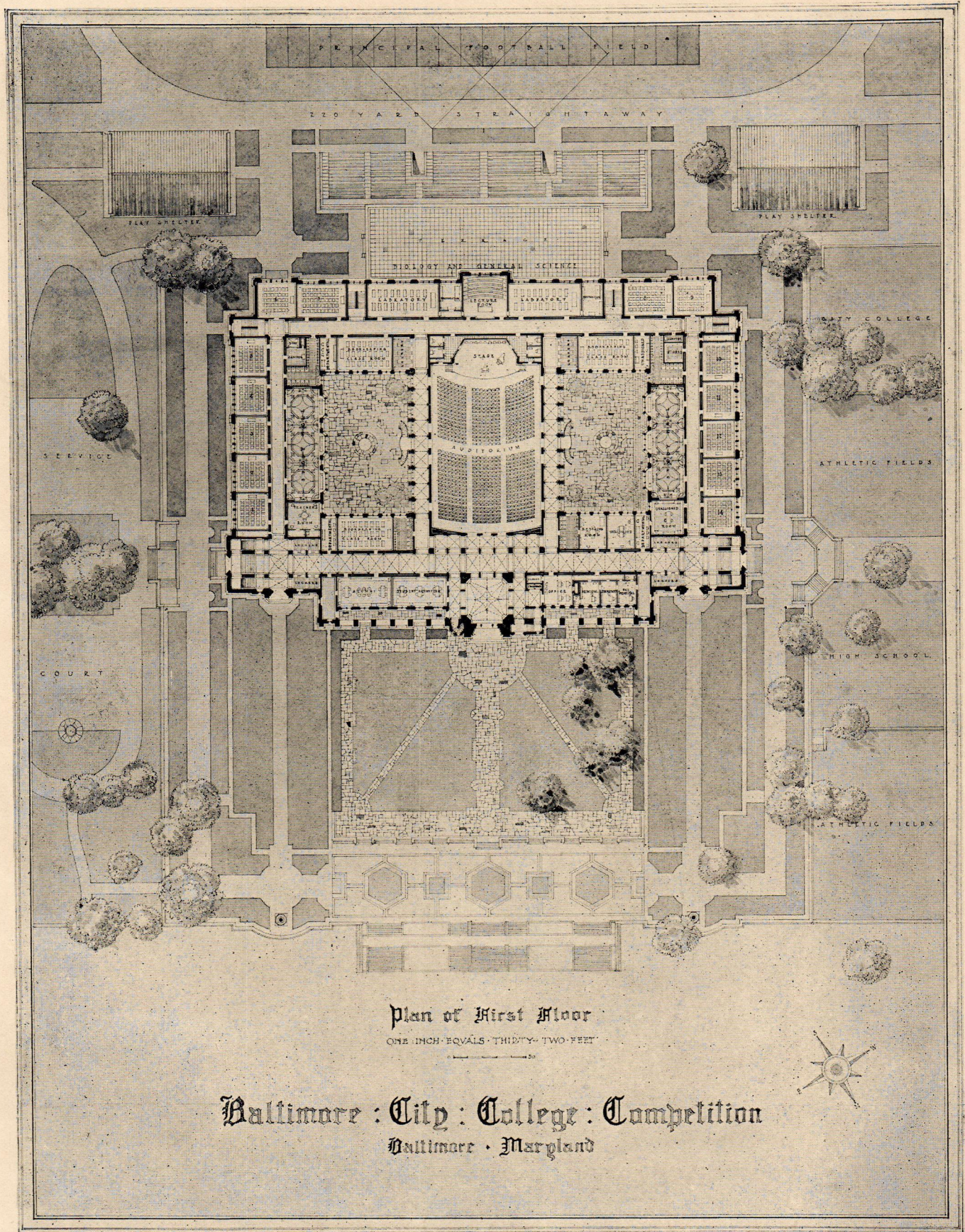


Schedule of Areas

Baltimore : City : College : Competition
Baltimore · Maryland



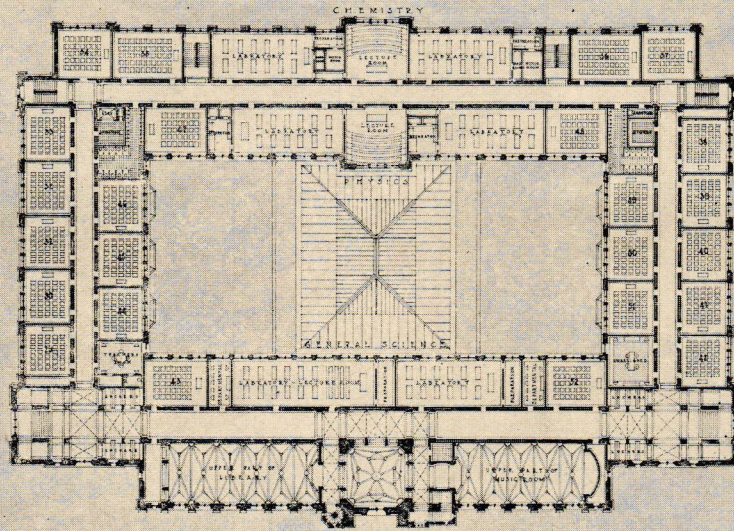
WINNING DESIGN
BUCKLER & FENHAGEN, ARCHITECTS



Plan of First Floor
ONE INCH EQUALS THIRTY-TWO FEET

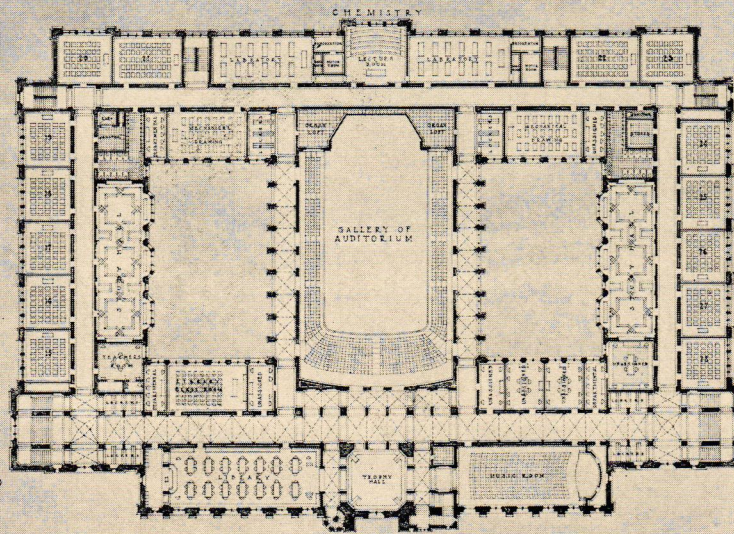
Baltimore : City : College : Competition
Baltimore • Maryland

WINNING DESIGN
BUCKLER & FENHAGEN, ARCHITECTS

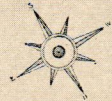


Plan of Third Floor

ONE INCH EQUALS THIRTY-TWO FEET



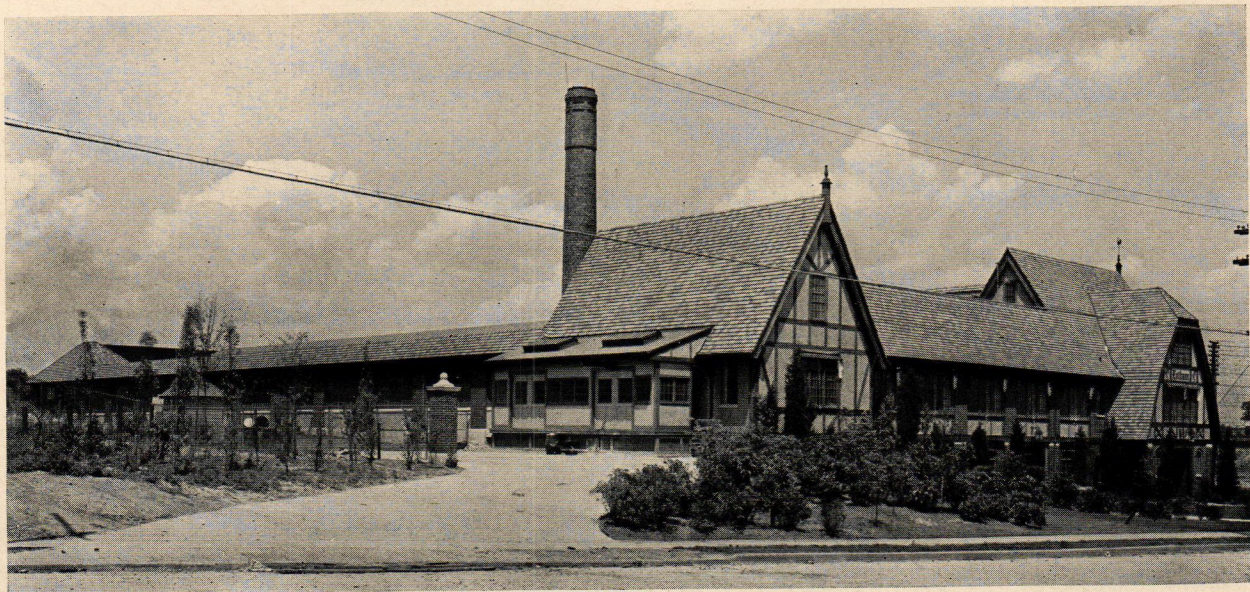
Plan of Second Floor



Baltimore : City : College : Competition
Baltimore · Maryland

WINNING DESIGN

BUCKLER & FENHAGEN, ARCHITECTS



VIEW FROM SOUTHEAST, SHOWING SHIPPING PLATFORM, TO THE WEST OF WHICH IS THE PRESS ROOM

AN HOUR *in the* FACTORY of the LATHAM LITHO & PRINTING COMPANY, LONG ISLAND CITY, N. Y.

HUNTER McDONNELL AND HOWARD B. PEARE, *Architects*
WALTER KIDDE & CO., INC., *Engineers and Constructors*

(For additional illustrations see Plates 62 to 64 inclusive)

THE usual conception of a lithographing or printing plant is that of a place of utility only—utility in the popular acceptance of the term, unsightly, noisy and dirty. It is an unusual experience to see a factory which incorporates those modern utilitarian factors and which also includes beauty of structure, light, heat, ventilation and proper sanitary equipment—and more, close co-operation between satisfied employees and reasonable employers. It is all of these finer things that distinguish the lithographing house of the Latham Litho & Printing Company, Long Island City, New York, just across the river from Manhattan.

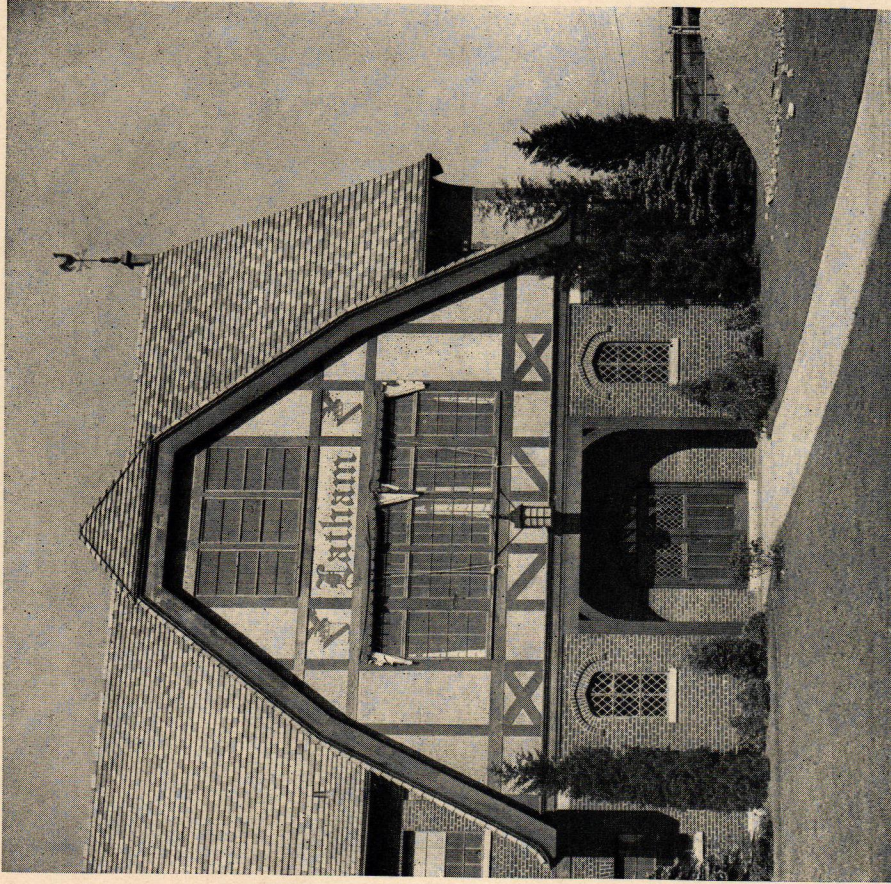
The principal fronts, east and north, are two stories high. The lower story and piers above are faced with a rough, dark, reddish-brown brick; the panels and gables are covered with buff stucco in combination with light brown, stained half timber work; the roofs are covered with dull-glazed, flat tile in several shades of green. The one story south and west fronts are finished in the same style with a steep, tile covered false roof extending high enough to hide the sawtooth roof construction which lights the greater portion of the main floor. Large, triple casement windows occupy the spaces between the piers, and the different elements of the exterior walls and roof are exceedingly well proportioned and harmoniously colored. The roof,

between the projecting gables on the north front is raised above the other roofs to admit a vertical, three-panel billboard on which, from time to time are placed the new posters as they are produced by the plant. This difficult problem in design has been very successfully accomplished.

The landscape work is well under way toward completion with a well selected planting of spruce and cedar trees and rhododendrons and mountain laurel from the Carolina mountains. The inviting entrance at the north end of the east elevation is the only one for people. Everyone, from the president down to the most minor employee, enters and leaves through the same door, an example of democracy and an indication of a common purpose which is a large factor in the success of the business.

The same spirit prevails inside. Every facility for the convenience and health of the occupants is provided. Ample light, heat and ventilation aid the worker in maintaining as large a volume of output as is consistent with the fine quality of the product.

The entire physical plant is the product of the owner, the architect and the engineer and contractor. Without the fine accord which obtained among them, this most satisfactory result could not have been attained. To such owners much praise must be given. It is because of their



MAIN ENTRANCE IN THE EAST FRONT, WITH OFFICES ABOVE

AT LEFT: ENTRANCE TO GARAGE IN THE EAST FRONT



BUILDING FOR THE LATHAM LITHO AND PRINTING COMPANY, LONG ISLAND CITY, N. Y.

HUNTER McDONNELL AND HOWARD B. PEARE, ARCHITECTS

WALTER KIDDE & COMPANY, INC., ENGINEERS AND CONSTRUCTORS

desire to own a building that possesses the elements of beauty and usability, that the architect, the engineer and the constructor have the opportunity better to apply themselves to their utmost. The designing was the joint work of the architects and the engineering constructors. The latter designed the plant layout, equipment and construction details in which they specialize for printing houses.

An incident will illustrate the care with which the plant was designed and constructed. Approaching the building at a certain place, the back of the south end of the west wall above the main roof was visible and out of harmony with the general aspect of the plant. A short tile-covered return on the west end of the south wall and again north over the main roof, hid from view the unsightly back of the west wall.

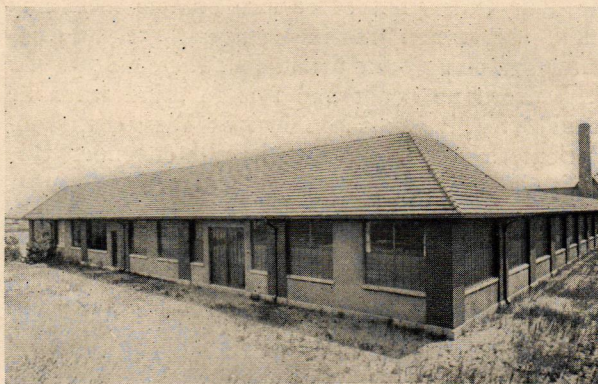
The building site has a natural slope to the north and east. The lower or ground floor extends along the north and east fronts with a depth of about 25'-0". The inner wall of this floor retains the ground on which rests the major portion of the main floor. A large rectangular reinforced concrete reservoir is at the ground floor level and below the main floor. It is used as a reserve water storage for the fire protection equipment and displaces the ugly water tanks which disfigure the majority of commercial and industrial buildings. On the ground floor are located the fuel and boiler rooms, the air conditioning and ventilating equipment, the machine shop and garage, the main entrance to the building, the men's and women's locker and wash rooms and cafeterias, the employees' stairs to the main floor, the waste paper baling and storage room, the freight elevator to the main floor and a large paper and ink storage space. These materials, paper and ink, are delivered to the storage room at the doors in the gabled projection in the middle of the north front. The finished product is shipped from the wagon platform of the shipping department near the east end of the south wall at the main floor level.

The main floor contains the offices in the northeast corner of the building, back of which along the north front are the artists' studios and the photographic, projection and other special process rooms. South of these, and lighted by sawtooth skylights, are rooms where the lithographic stones and zinc plates are proved up and prepared for the press room and also where these stones and plates are resurfaced ready for future use. South of these are located the paper conditioning and ink mixing departments and the balance of the floor, except the sorting, packing and shipping departments along the east wall, is given over to the large press room.

The making of a poster involves from two to twelve printings on each of the ten or twelve sheets that go to make up a complete billboard poster. It is apparent that the slightest contrac-

tion or expansion of the paper during many printings would destroy the quality of the output. To overcome this difficulty, the paper is brought from the storage room and the sheets are suspended vertically and singly in a room where a constant temperature and humidity are maintained by mechanical means. The same temperature and humidity are maintained throughout the press room. When the paper is "conditioned" it remains in that exact state until it receives its final imprint in the presses.

Equal care is taken in preparing the zinc plates from which the lithographic printing is done. One plate is used for each color and each color must



VIEW FROM SOUTHWEST, SHOWING CONSTRUCTION DESIGNED TO HIDE THE SAW-TOOTH SKYLIGHTS

register in its exact position to produce a perfect print. All of these processes are of infinite variety and extreme interest. And the presses, both the hand-fed and of the automatic-feed type, are masterpieces of mechanical design and production. These, with the offset presses, the two-color presses and the lithographic stone presses, seem almost human in some respects and very unhuman in the perfection of their automatic action and tireless performance.

The artists, projecting from the small master-drawing to the greater size, transferring and rendering the outlines and shades for each color on the zinc plates, compel respect for their skill and craftsmanship. The rooms devoted to that secret process which produces such beautiful and amazing prints, are open but to the few who understand. To us they resemble in part a chemical laboratory, an instrument room that looks like an X-ray department and mysterious dark rooms full of strange apparatus.

Perhaps if architects, more particularly those who specialize in industrial plants, could spend an hour with Mr. Wenning, the secretary of Latham's they would have a broader conception of the necessity of that fine and exact co-ordination of the parts of the structure with its equipment, skilled craftsmanship and just relations between men, employers and employed.

A Y. M. C. A. COMMUNITY BUILDING and FIRE STATION, WESTPORT, CONN.

WILLIAM B. TUBBY, Architect

SINCE the World War a new spirit has developed in the United States, especially in the smaller cities and towns. During the War the question of service was the predominating note, and people gathered in groups everywhere to make this service more effective. After the War this spirit of service became local and found expression in the community buildings which are being built throughout the country. E. T. Bedford no doubt had this in mind when he decided to give to the Town of Westport, Connecticut, a building which would engender this spirit.

The scheme contemplated was to house the social activities of the Town, including a Y. M. C. A., a Woman's Town Improvement Association, the Red Cross and an Art Association, with an adjoining structure to take care of the Town Fire Department and Ambulance Station. In working out this scheme it was decided to allot the first floor to the use of the men, the basement to the boys, and the second floor for the use of the women. A terrace leads up from the main square to the main entrance for the men and boys. On the side street is the entrance to Bedford House which is the women's department.

The main entrance opens into a large foyer, in the rear of which is a wide open staircase to the second floor and basement, with an office at one side of the staircase and a coat room on the other side. At the right of the foyer is the men's reading room with a large fireplace, and to the left is the men's social room with its tables for games. Opening from the social room is the billiard room in which are three tables. Back of the billiard room is the private office of the secretary.

From the main foyer you descend a few steps into the gymnasium which is a room about 50 feet by 75 feet.

Opening directly from the side hall off the foyer is the men's locker and shower room, from which a few steps lead to the gymnasium.

The basement contains three bowling alleys opening from the main basement hall and also the boys' social room and boys' game room and billiard room. It has provision for an assistant to the secretary, who controls these various rooms. The boys' locker and shower room is in the basement and from this room a few steps lead up to the gymnasium. From the basement you descend a few steps to the boiler and coal rooms.

Opening from an alley between the Fire House

and main building is an entrance to the gymnasium for the public with a staircase to the auditorium on the second floor. This fire tower, so to speak, allows the use of the gymnasium and auditorium by the public without in any way disturbing the activities of the other sections of the building.

On the side street is the entrance to the women's department. Directly off this entrance on the first floor are the headquarters for the district nurse and a public comfort station for women. From this hall the stairs lead to the women's quarters on the second floor. On this floor is a large social room with generous fireplace with a large work room opening off same for the use of the Red Cross. Adjoining is the domestic science room and a kitchen for banquet service. Opening off the hall on the second floor are locker and shower rooms for the women with a private staircase to the gymnasium, which is used on certain days wholly by the women. At the foot of this staircase, opening into the gymnasium, is the physical director's office.

At the head of the main staircase on the second floor one enters a hall leading to the room which is devoted to the art societies, with a large banqueting room or class room between the art gallery and the kitchen. These rooms are so arranged that men or women can use this floor.

From the second floor one goes up a few steps to the auditorium which has a bowl floor and a large stage. The auditorium seats about 400 people. On the mezzanine floor off the auditorium are the moving picture booth and store rooms.

The desire of the donor in regard to the design for the exterior and interior was to get away as far as possible from an institutional atmosphere. The ceilings, therefore, are comparatively low and the interior is made as homelike as possible. The exterior has been designed in half timber Elizabethan feeling with clinker brick for the first story and half timber work above. The gables have carved verge boards and the roof is covered with graduated and variegated slate.

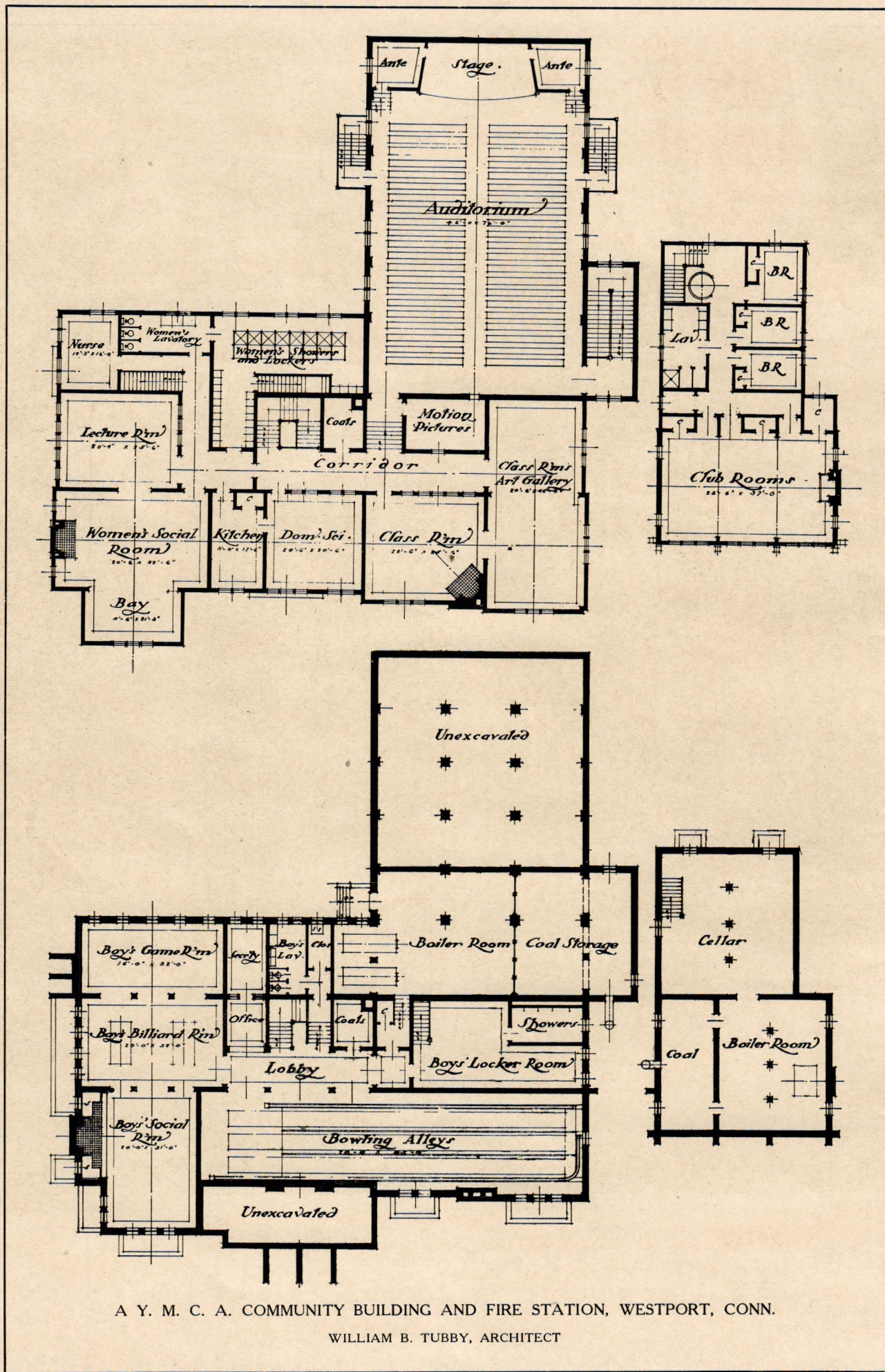
The Fire House is separated from but is on the same property as the main building. It is planned to house a section of the Fire Department and also to serve as an Ambulance Station. On the second floor is a large social room, with bedrooms and lavatories for the men. The exterior has been carried out in the same spirit as the main building so as to form a harmonious group.



A Y. M. C. A. COMMUNITY BUILDING AND FIRE STATION, WESTPORT, CONN.

WILLIAM B. TUBBY, ARCHITECT

(See plans on other side)



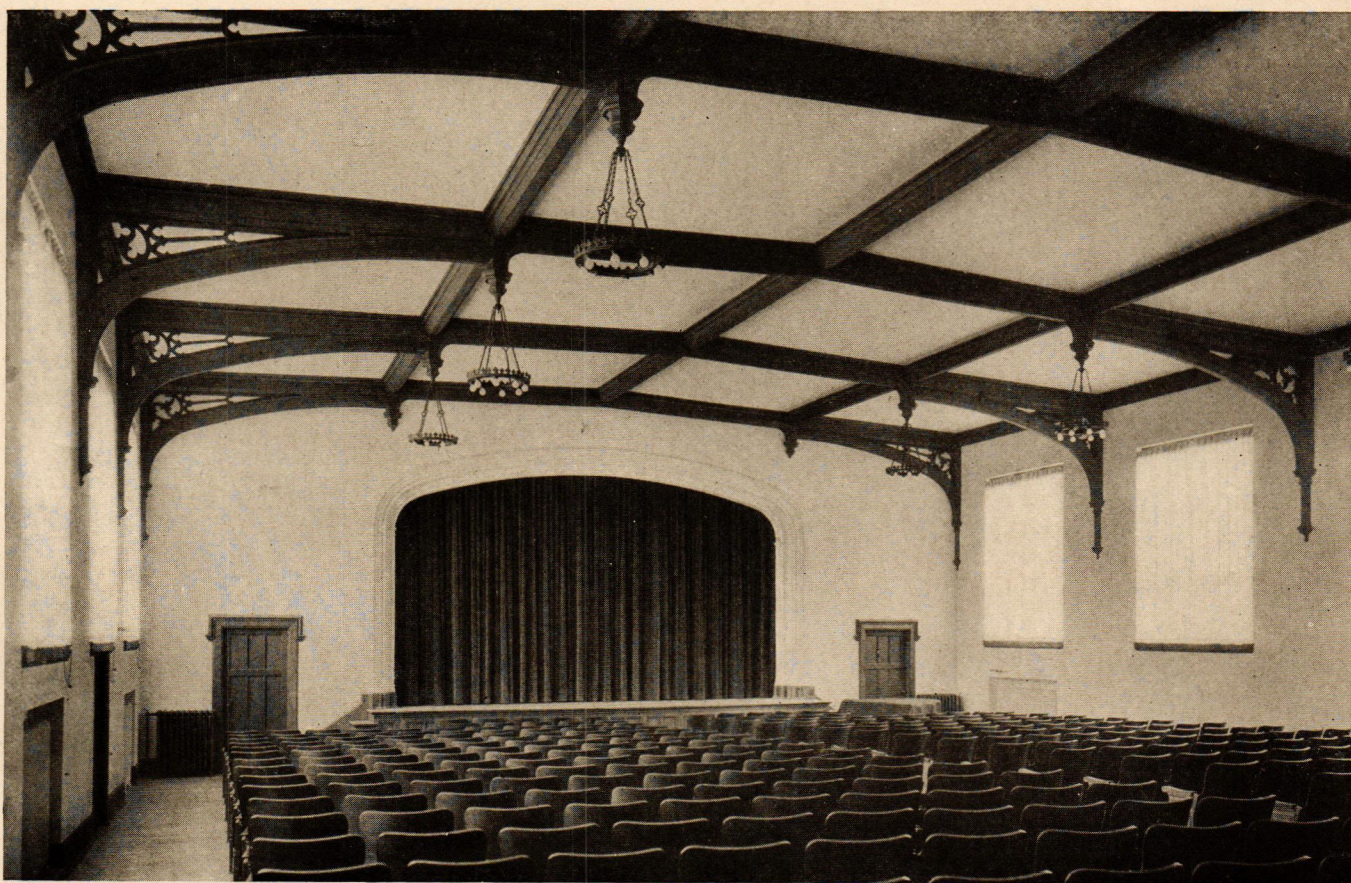
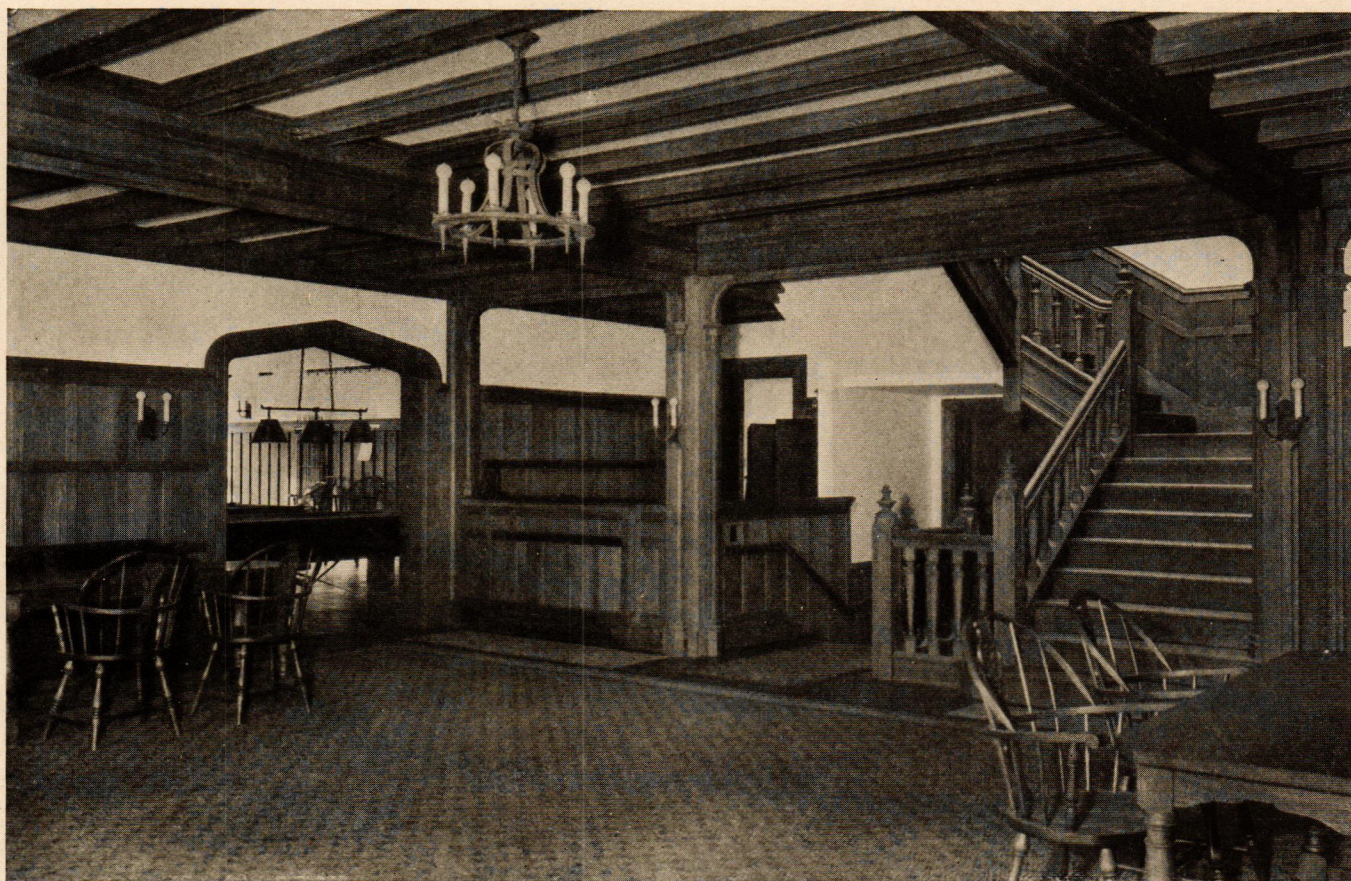
A. Y. M. C. A. COMMUNITY BUILDING AND FIRE STATION, WESTPORT, CONN.
 WILLIAM B. TUBBY, ARCHITECT



DETAIL, SHOWING FIRE STATION

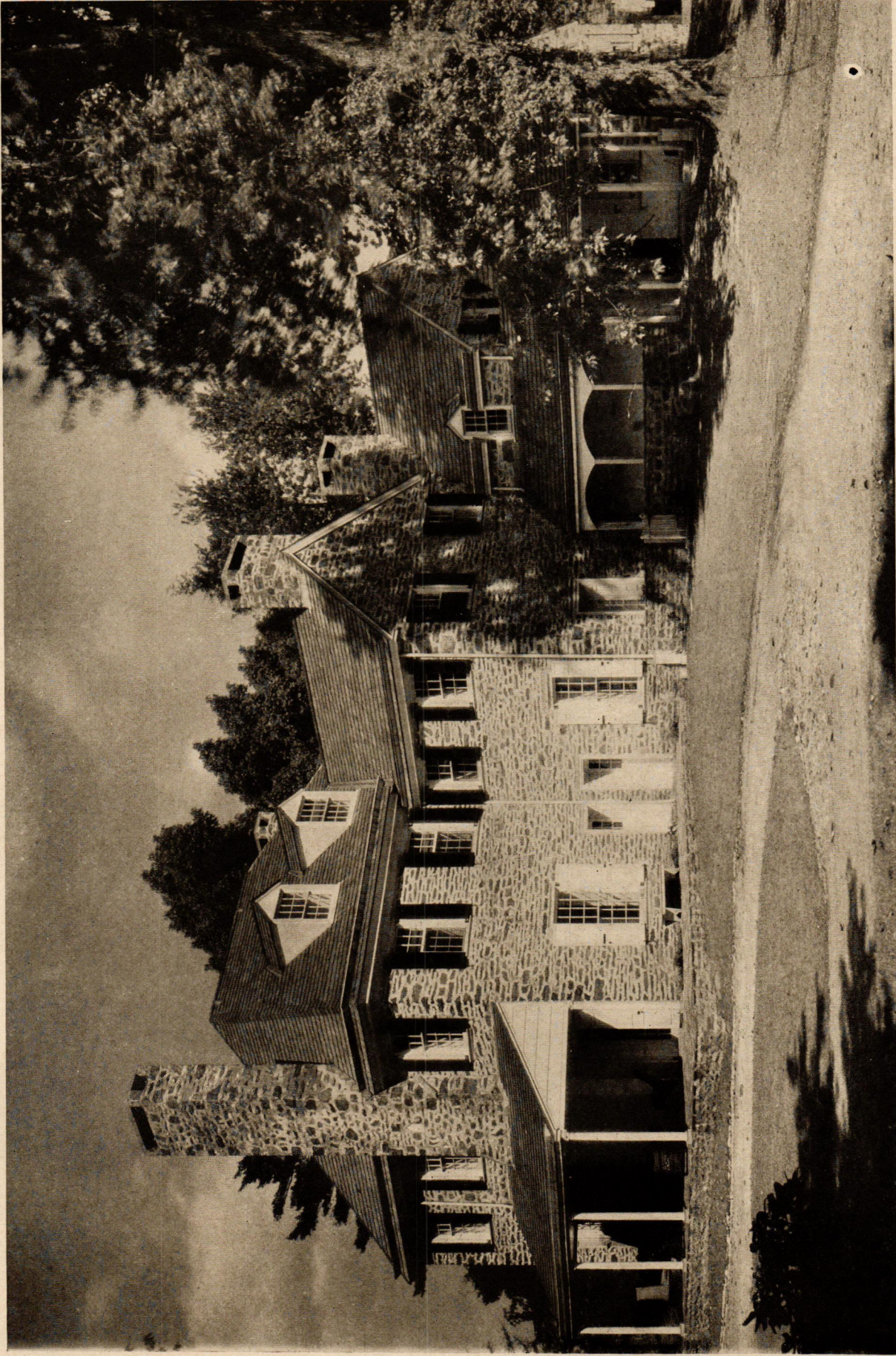
A Y. M. C. A. COMMUNITY BUILDING AND FIRE STATION, WESTPORT, CONN.

WILLIAM B. TUBBY, ARCHITECT



A Y. M. C. A. COMMUNITY BUILDING AND FIRE STATION, WESTPORT, CONN.

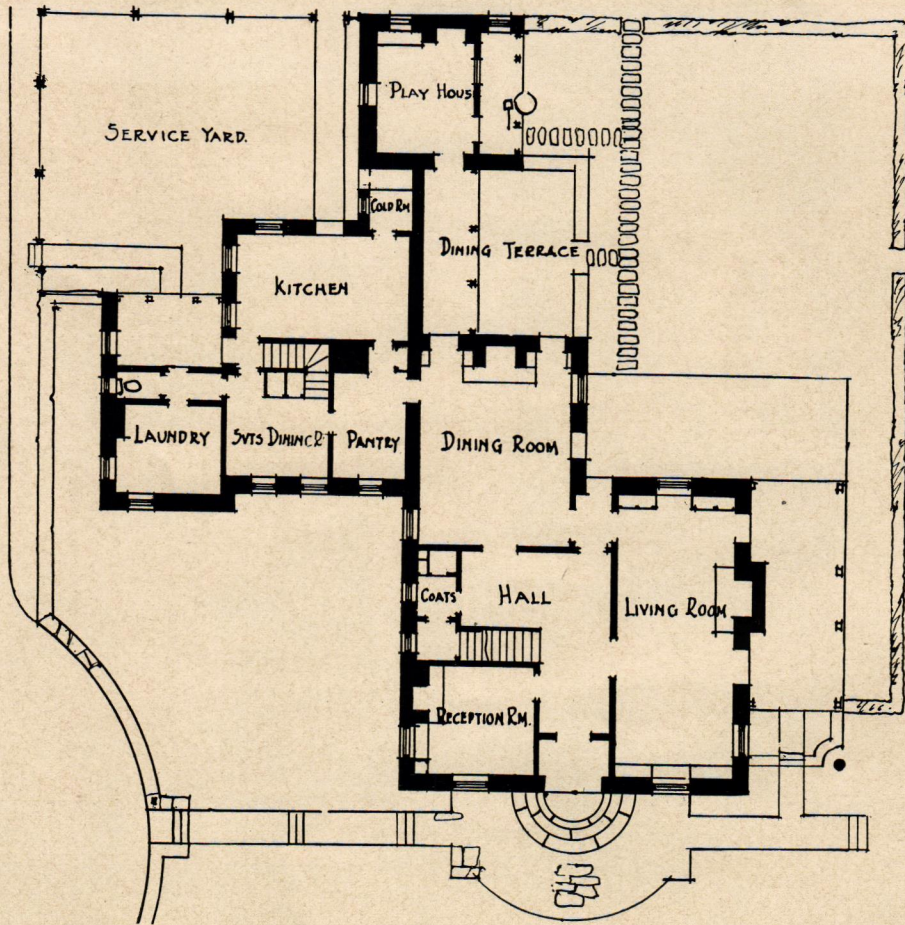
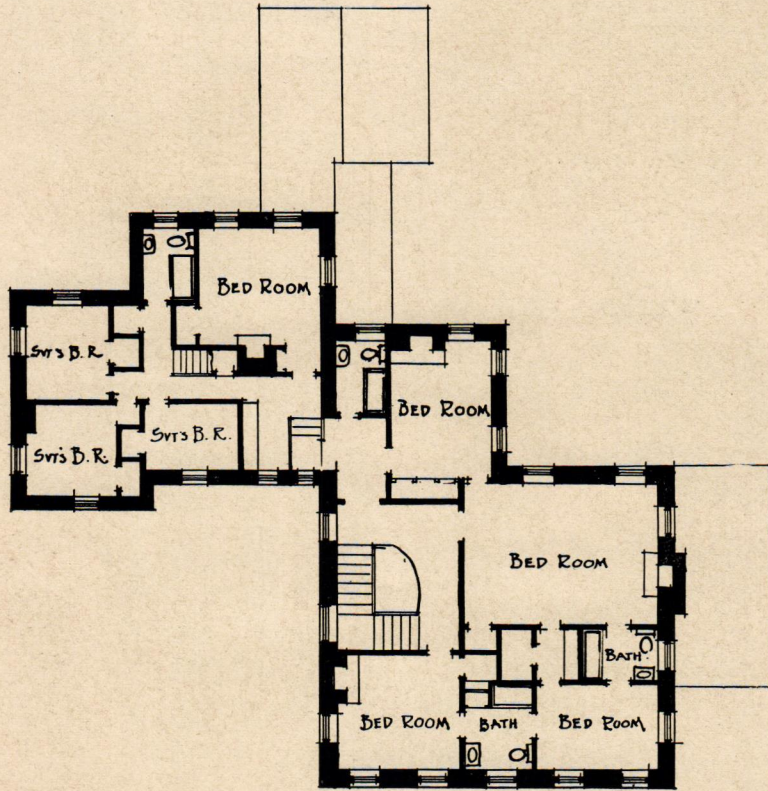
WILLIAM B. TUBBY, ARCHITECT



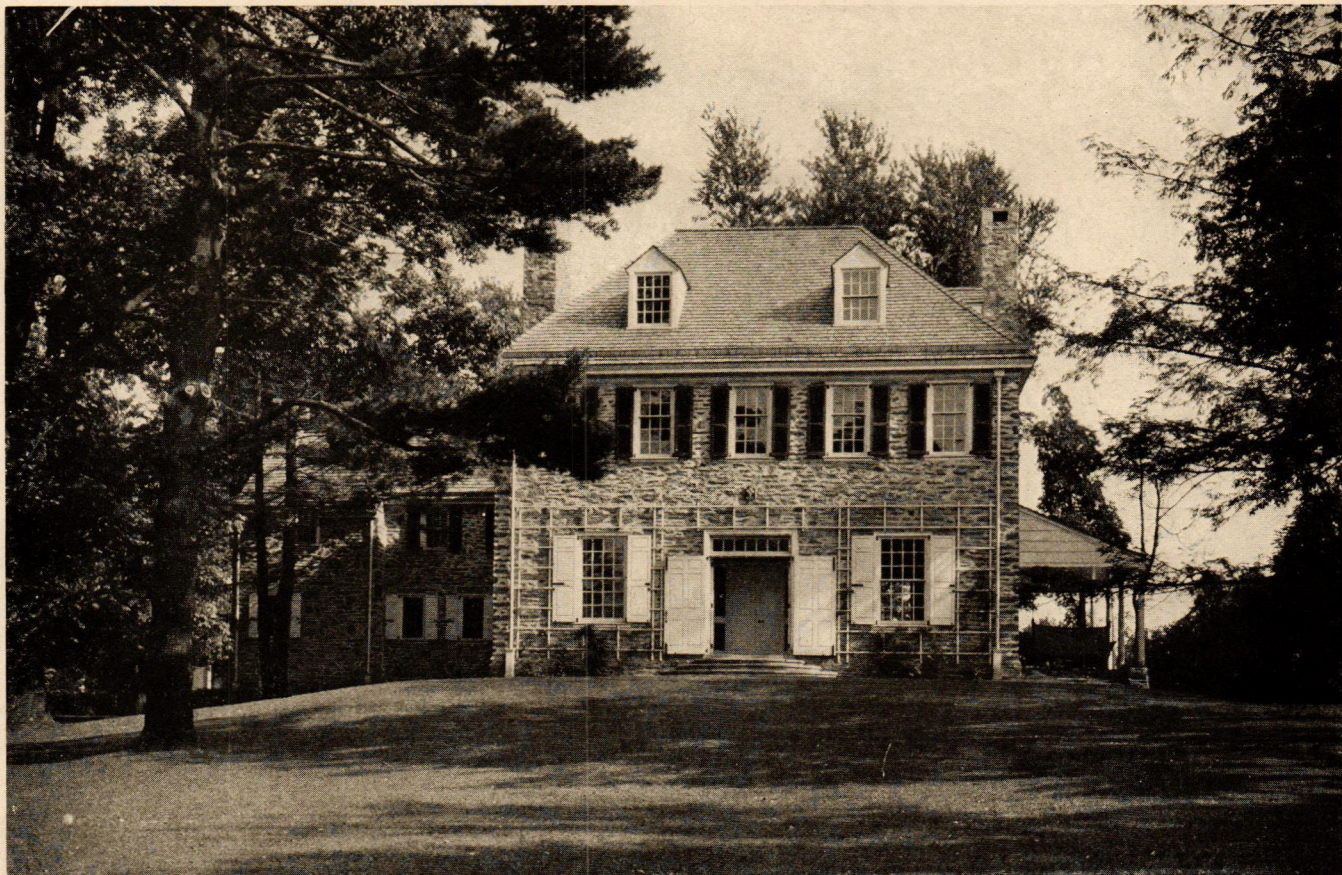
HOUSE OF I. WISTAR MORRIS, CHESTNUT HILL, PHILADELPHIA, PA.

R. BROGNARD OKIE, ARCHITECT

(See plans on other side)

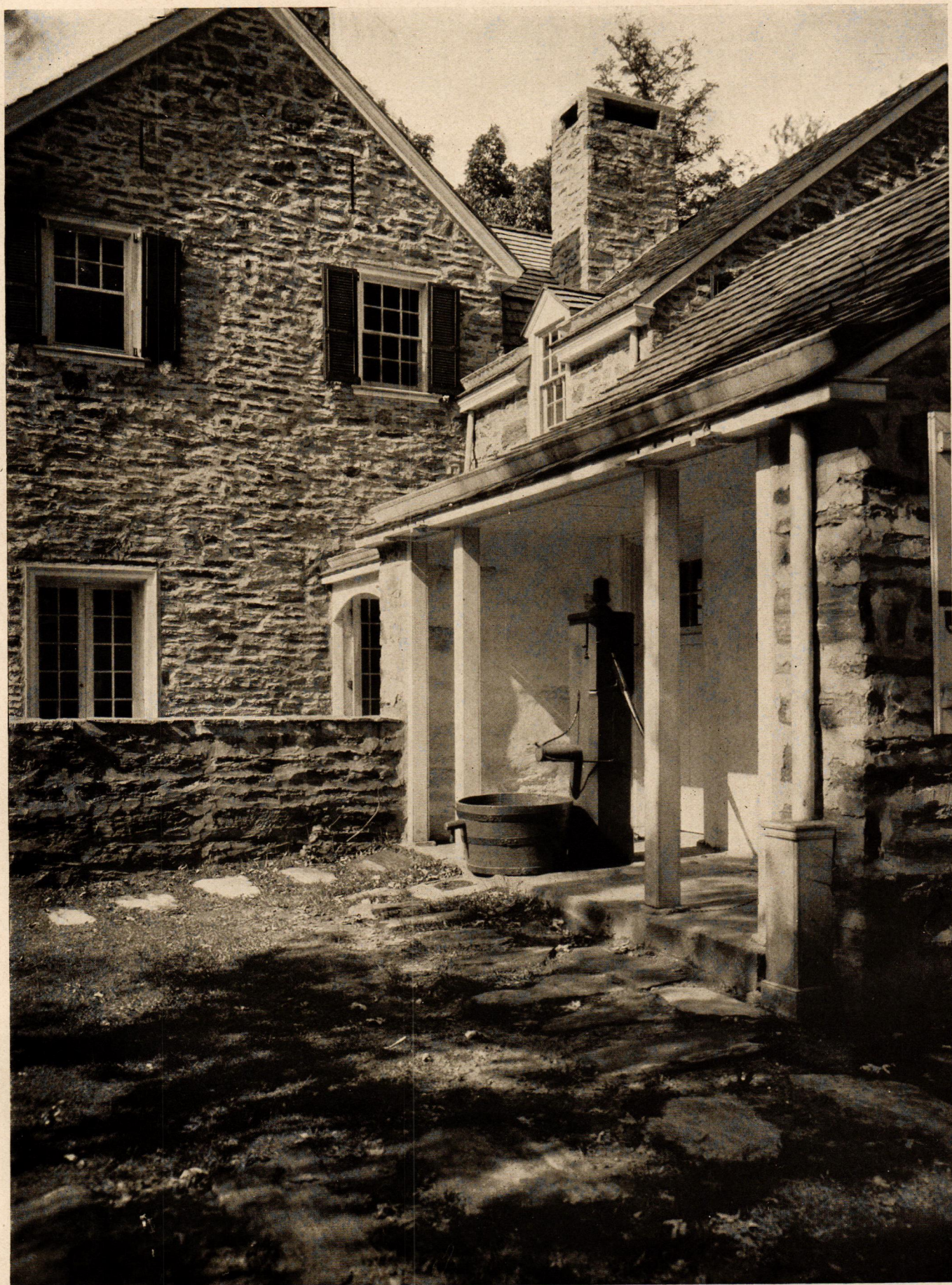


HOUSE OF I. WISTAR MORRIS, CHESTNUT HILL, PHILADELPHIA, PA.
R. BROGNARD OKIE, ARCHITECT



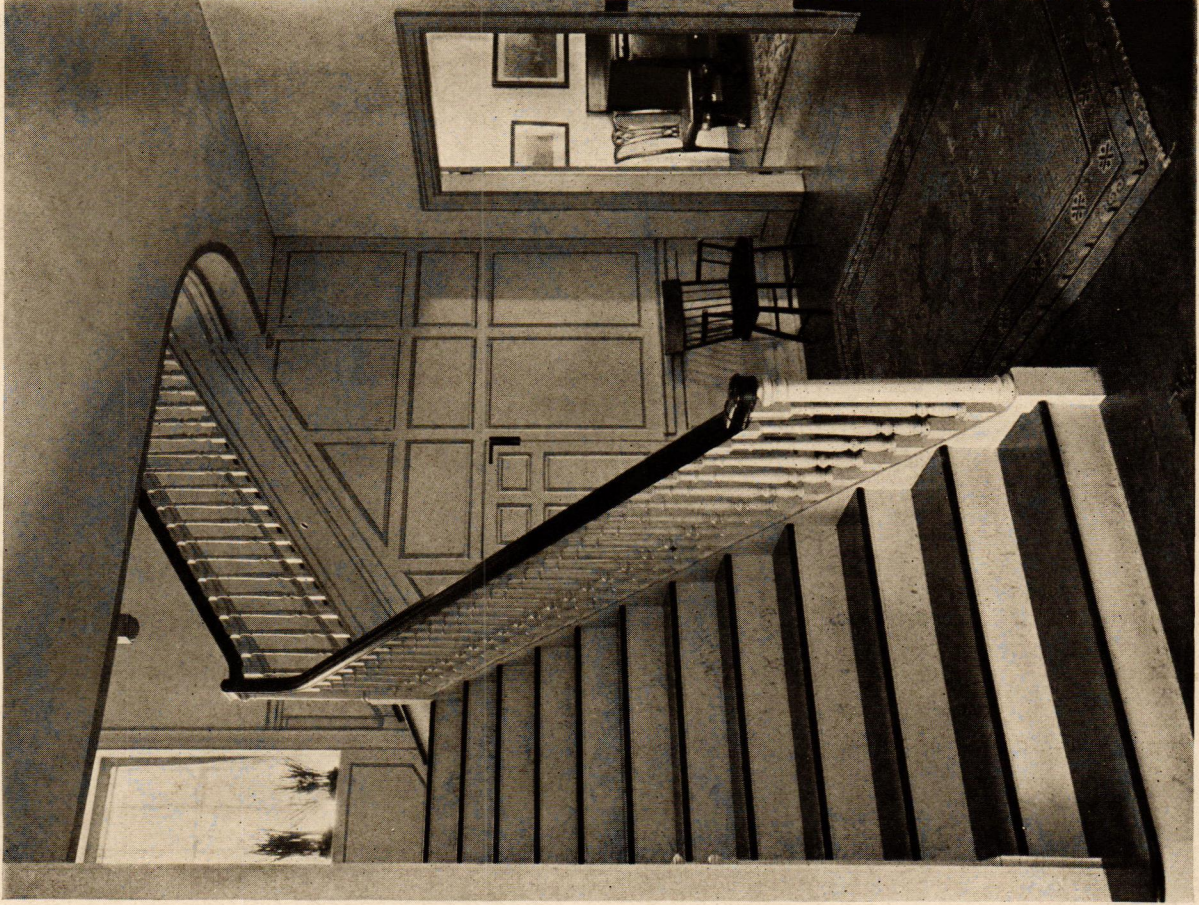
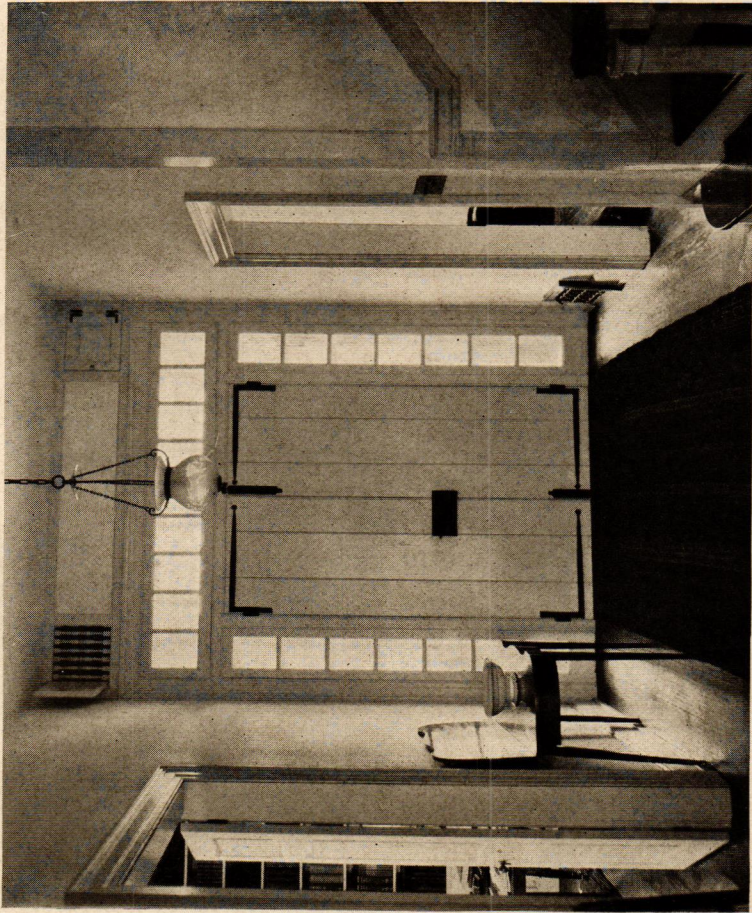
HOUSE OF I. WISTAR MORRIS, CHESTNUT HILL, PHILADELPHIA, PA.

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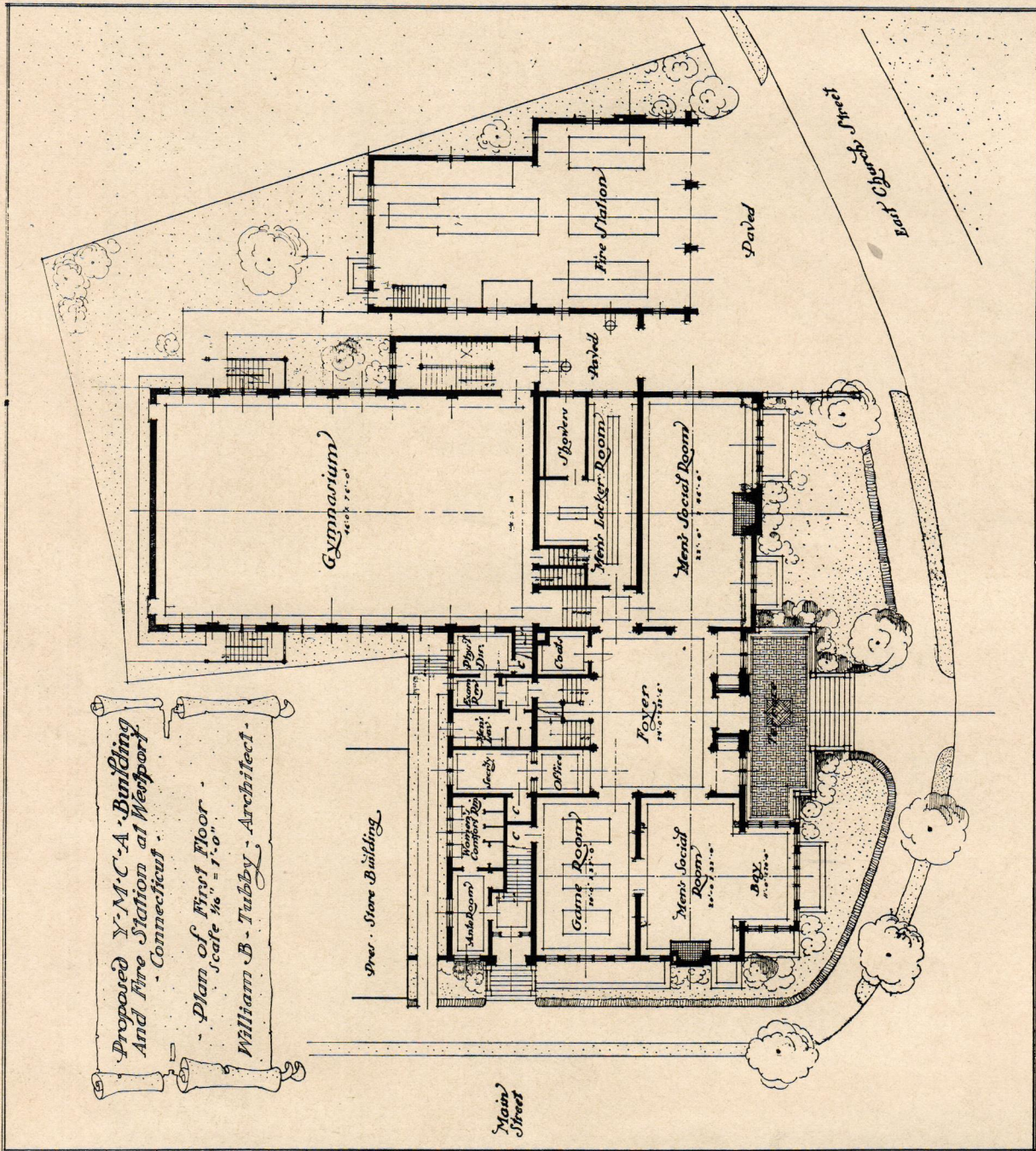


A. Y. M. C. A. COMMUNITY BUILDING AND FIRE STATION, WESTPORT, CONN.

WILLIAM B. TUBBY, ARCHITECT

(See plan on other side)

THE AMERICAN ARCHITECT
August 13, 1924, Plate 49



Proposed Y.M.C.A. Building
 And Fire Station at Westport
 - Connecticut -
 Plan of First Floor
 Scale $\frac{1}{16}'' = 1'-0''$
 William B. Tubby, Architect.

Dray Store Building

Main Street

Westport Avenue

Gymnasium

Fire Station

Paired

Paired

Shower

Men's Locker Room

Men's Social Room

Men's Room

Wash Room

Company Room

Office

Locker

Men's Social Room

Boy's Room

Game Room

Men's Social Room

Locker

Men's Social Room

Boy's Room

Game Room

Men's Social Room

Locker

Men's Social Room

Boy's Room

Game Room

Men's Social Room

Locker

Men's Social Room

Boy's Room

Game Room

EDITORIAL COMMENT

PUBLISHING is a legitimate business and is usually carried on for profit. It is advertising, alone, that makes possible the professional, technical and trade journals that serve so well the needs of their readers. Intelligent advertisers base their purchases of space on qualifications which are well established. It is a business of barter and sale. Exceptions are made of those few journals which do not sell advertising space but find sufficient revenue in the subscriptions paid, or those which confine their scope to the affairs of some association or organization which bears the expense of publishing by a portion of the membership dues.

Purchasers of advertising space are sometimes confronted with conditions that are well described in the following extract from a recent bulletin issued by a business papers' association:

N. Y. TIMES RAPS AN "ASSOCIATION ORGAN"

Under the heading "Advertising Under Pressure," the *Times* commented upon the launching of a new paper to be known as *POLICE* which will be published by the Police Department of New York. Among other things the *Times* said—"Advertising in this magazine, as in all others of its class, is well nigh worthless in any proper advertising sense. To use the word 'blackmail' would be too harsh but that there will be a faint tint of coercion through promises and threats, tacit but real, cannot be denied. Those who advertise in it will do so in the hope of making themselves thereby in better standing with the police than if they refused." We might have told the *Times* about a number of other "pass-the-hat" organs which infest our field.

The ability to apply "pressure" is not in any way restricted to policemen. Their methods may be more crude but others operating on a higher plane of occupation usually employ more subtle methods. Any organization or group composed of persons whose members have the power, as individuals, to control the purchase of any material thing, can apply an "invisible" pressure to secure advertising in their particular organization or group journal, even though it may have no value as a competent advertising medium.

Some such organizations make a great to-do about their codes of ethics which deprecate and prohibit anything contrary to the common conceptions of honesty. How, then, can their members reconcile their code requirements with the "pressure" solicitation of their publication's advertising department of prospective advertisers? The comment of the *Times*, using the harsh word may be questioned but the "faint tint of coercion" is clearly discernible to many publishers and advertisers. Would it not be better for these organization journals to confine themselves to the business of their owners and at the sole expense of their

members, leaving the field of technical publication to the several journals which are so well qualified for this purpose?

* * *

REMINISCENT of the ages of long ago were the brilliant essays which made up the symposium on Plagiarism as a Fine Art at the recent convention of The American Institute of Architects. To retrace this vague recollection to its source requires some hours under the library lamp. It became evident that only in some rare old philosophy would its origin be found. Where then, except in the discourses of Epictetus? It appears that even in the days of Nero, this Ancient found conditions similar to those of today as indicated in the symposium. For he said:

"As bad performers cannot sing alone but in a chorus, so some persons cannot walk alone. If you are anything, walk alone, talk by yourself, and do not skulk in the chorus. Think a little at least; look about you, sift yourself, that you may know what you are."

Apparently the herd instinct was sufficient, even in those days, to compel mass thinking and a compliance with the resulting conventions. How dreadfully stupid a performance would be if it consisted only of a chorus which repeated the same theme without end. Would it not be better that those who can sing alone be supported by a select but small chorus, each member of which is an understudy who can carry on the master's work as and where the opportunity presents itself? By developing a sufficient number of solo artists or masters there would be a multitude of choric groups which would comprehend the entire range of harmony.

Just what particular kind of people Epictetus had in mind when he made the reference to the chorus, it matters not. He will have accomplished much if his words will induce us to become *good* performers, who can walk and talk alone and think a little at least.

* * *

MRS. "JACK" GARDNER of Boston, who recently died, was a personage of extraordinary traits. A woman of rare personality, of the finest culture, and with a highly developed discriminative taste, she gathered in her house in the "Back Bay" district a collection of art treasures that in value and rarity has perhaps only been excelled in this country by the collection of the late J. Pierpont Morgan. For many years Mrs. Gardner's house was a Mecca for art lovers; its dignity, singularity and romantic beauty were beyond criticism. As a social personality, Mrs.

Gardner will be missed in Boston. She possessed a rugged forcefulness that bordered on eccentricity, but at no time did these characteristics dull the keenness of her appreciation for the best in art.

There have been, comments an anonymous writer in a recent appreciation of Mrs. Gardner, but three women in our time who have developed a strong personality in art connoisseurship,—Mme. Edourd Andre (Nellie Jacquemart), Mrs. H. O. Havemeyer and Mrs. Gardner.

There are many good reasons why women of culture and education may become successful collectors and patrons of the arts. As a relaxation from overstressed social activities and relief from the boredom of a daily life not overburdened with accomplishment, rich women in this country might find a new field of man's endeavor that they are now so eager to invade, in an appreciation of the Fine Arts and in the gathering together of worth while collections.

* * *

A COMMUNICATION

To the Editors,
THE AMERICAN ARCHITECT:

AS a former student at the Massachusetts Institute of Technology, and at the Ecole des Beaux-Arts, I read with much interest the discussion of architectural education, by M. Ferran, printed in the July 16 issue of THE AMERICAN ARCHITECT AND THE ARCHITECTURAL REVIEW. (By the way, may it be hoped that you will soon devise a title for your Munseyfied magazine that will lessen the wear and tear on the jaw and typewriter?)

There is much that is admirable in what M. Ferran says. Amusingly true is his observation of the custom of our American schools of architecture to enroll students, with no "particular qualifications for such a course of study." But nowhere in his argument does M. Ferran indicate the relation which his theories bear to the *practice* of architecture. Now the chief reason for the study and practice of architecture, at least in America, is to wring a living out of it. Consequently, it is the executed works and not the pretty pictures that really count.

M. Ferran will probably admit that most of the buildings erected about the world since 1900, which can be dignified by the name of architecture, are to be found in America, and that they have

been designed by American architects, who have been educated mainly in American schools where, as he says, "the scheme of education is to combine a general education with an architectural training." Apparently the "scheme" works pretty well! Not that it can't be bettered—perhaps along the co-operative lines suggested at the close of his address.

After all, the proof of the pudding is in the eating. Where, oh where, are any buildings to be found in France, built in this first quarter of the twentieth century, that bear the remotest resemblance to the projets so beautifully drawn and rendered by the hand picked French geniuses of the ateliers of the Ecole? Compare the appearance of the newer French buildings with those of America. Is there anything more brutal in the history of architecture than the average façade of a Parisian apartment house? And to find a parallel in horrors to the dwellings that disfigure the suburbs of the French capital, we have to imagine the consequences of a German invasion. What, one is led to ask, does the Frenchman do when he quits the Ecole? Apparently the best thing he does is to come over here and teach our boys theory—and generally he makes a good job of it. But teaching the theory of architecture is a vastly different thing from practicing architecture, and "a general education" appears to be a pretty good asset in getting a job to design and construct a building.

By all means, though, give the students more time for Design, as M. Ferran suggests. Cut out the crucifying Calculus (God, how I loathed it!), and eliminate that other instrument of mental torture—Applied Mechanics. On the other hand, the course in English Literature should, if anything, be enlarged. Then we should know better how to talk engagingly, and write tactfully, to our clients, and so enable us to retain their friendship after the final payment and perhaps secure from them another job (or at least a certificate of reasonable doubt) as pointed out by Paul Waterhouse in his delightful article—further along—on "Clients."

Your July 16 number is full of meat, and I take this opportunity to compliment you once again on the continually improved appearance and contents of THE AMERICAN ARCHITECT AND THE ARCHITECTURAL REVIEW—all but the title!

OSWALD C. HERING
NEW YORK CITY

INTERIOR ARCHITECTURE

The Dutch Influence on English Decorations: *The William and Mary Period*

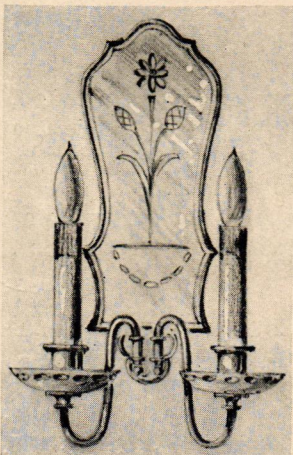
SUCCEEDING to the crown in 1685 without opposition, James II, by his pronounced favoritism showered on Catholics, soon found himself at odds with Parliament and the people generally of England. After three years of discord and unrest, with the certainty that the newborn heir would be brought up in the Roman Catholic faith and thus continue the disturbing policies promulgated by his father, the country resolved to rid itself of its king. At the invitation of many of the leading politicians of England, William, Prince of Orange, Stadtholder of the United Netherlands, came to England with his

army to restore religious liberty and harmony between church and state, and, early in 1689, he and his wife, Mary, eldest daughter of the de-throned James II, were proclaimed King and Queen of England.

In their home in Holland, William and Mary had been living with all the splendor of a governor's household, and had thus been surrounded with the best that that country had to offer in the way of life's embellishments. It is necessary to remark, perhaps, that

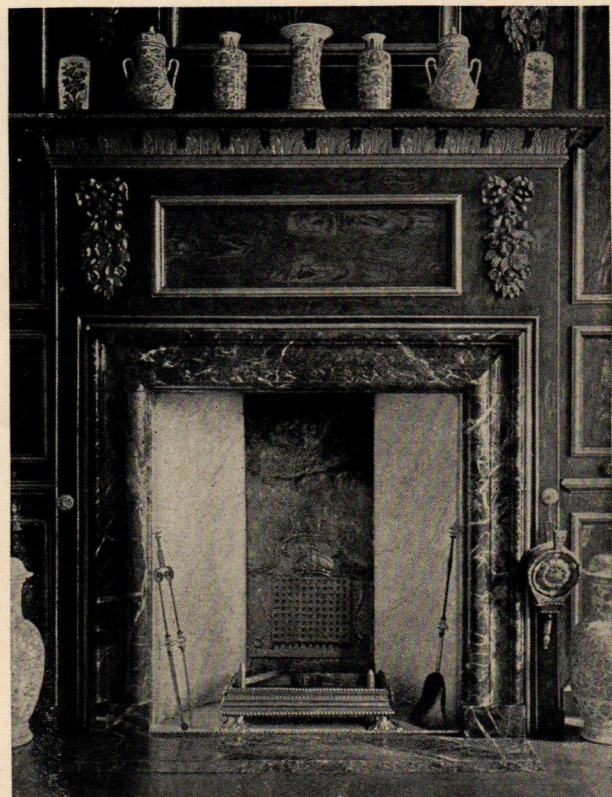
period, make the style of William and Mary's time worthy of distinction in the annals of English furniture and decoration.

Ships laden with Dutch and foreign furniture began at once to arrive at English ports, and the market became filled with their contents. Foreign craftsmen, also, were imported, and English workmen were forced to copy the new style or go bankrupt. During the preceding Jacobean period, England had become accustomed to the squarely



WALL BRACKET WITH BACKPLATE OF CUT MIRROR AND BRASS ARMS, A POPULAR COMBINATION OF THE WILLIAM AND MARY PERIOD

at that time, strange as it may seem to our modern ears, the Netherlands were more advanced in the decorative arts than was the more isolated country of England. On their accession to the English throne, William and Mary imported with themselves much of the Dutch furniture and decorations to which they had become accustomed and attached. Although many of the details which had been worked out in England during the preceding Renaissance period by such masters as Inigo Jones and Sir Christopher Wren still remained, the influence which the Dutch ideas had on the future designs of English artists is very striking. The Dutch development did not reach its high water mark, to be sure, until after the beginning of the eighteenth century, while Queen Anne was ruling England, but its decided influence on English ideas and its paving of the way for the more complete development during the later



FIREPLACE IN THE BLUE DRAWING ROOM, HAM HOUSE, LONDON

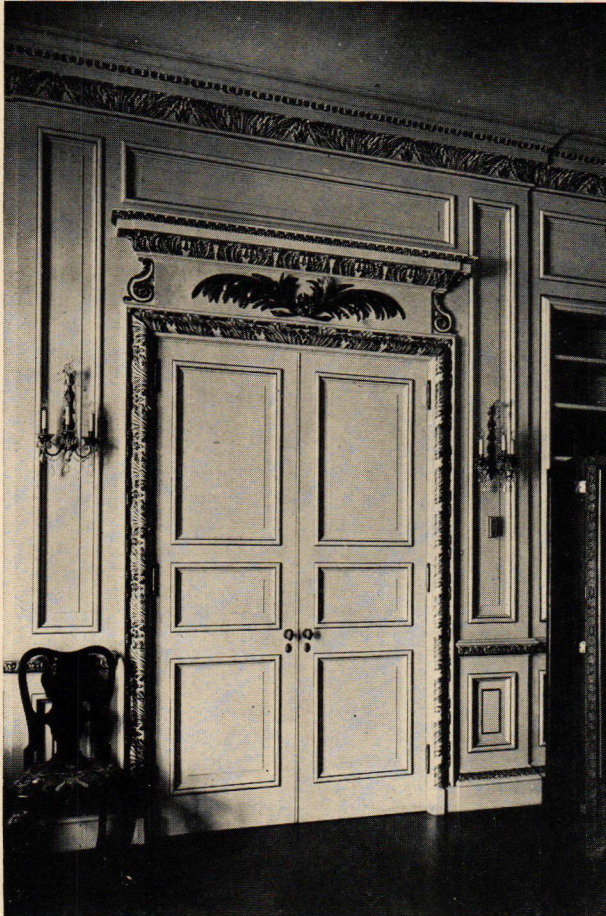
Peculiarities of the period which are conspicuous in this fine example of William and Mary decoration are the heavy bolection moulding which acts as a frame for the fireplace, the carved ornament on the mouldings of the shelf and the festoons beneath as well as the arrangement and detail of the panelling

(From English Furniture and Decoration)

constructed, immovable type of furniture which so characterized that period, and the introduction of these strange pieces, easily portable and delicate with grace, completely revolutionized furniture design of the country. English architects and designers were compelled to follow similar lines, but the strong individuality of Sir Christopher

Wren and the beautiful English Renaissance which he had created, developed, under the patronage of the new King and Queen, the style of interior decoration associated with the period.

Generally speaking, walls of rooms were treated with ornamental woodwork from floor to ceiling. A dado divided the surface into two rows of panels, and a cornice capped them at the intersection with

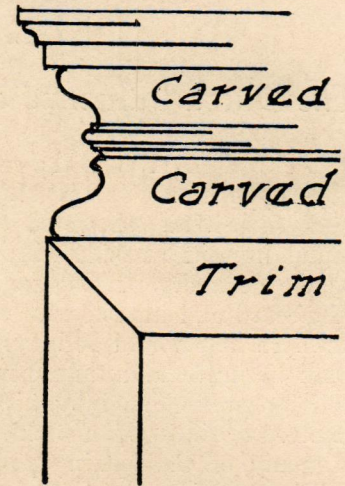


DOORWAY IN THE LIBRARY OF HOUSE OF FREDERICK A. GUEST, ROSLYN, L. I., N. Y.
CARRERE AND HASTINGS, ARCHITECTS
CHARLES OF LONDON, DECORATORS
True in every detail of line, proportion and ornament of the William and Mary period

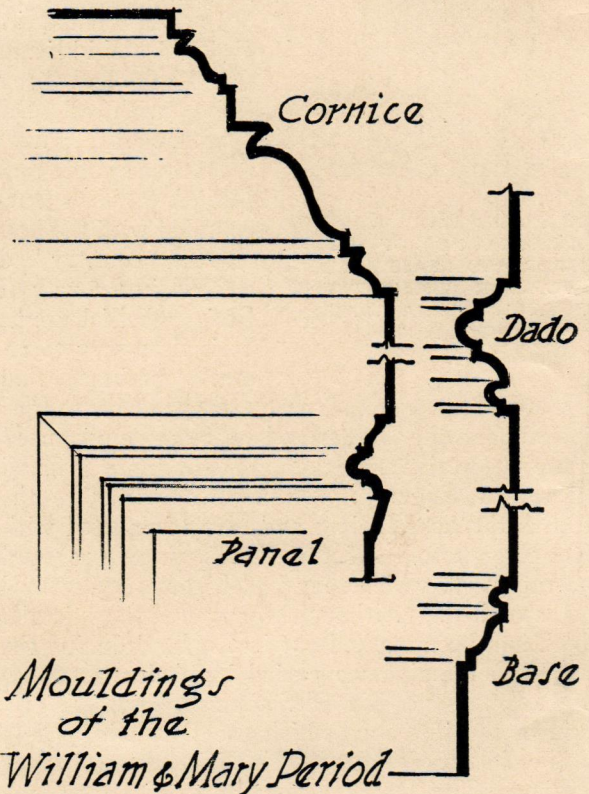
the ceiling. The panels were bevelled and framed in with a heavy but simple moulding. The field of the panel projected in front of the stiles. The contour of all mouldings was bold, but, in the more important rooms, mouldings were often carved, which relieved them considerably of their heaviness. Trim and cornice mouldings were also frequently ornamented, but overdoors and overmantels were made the feature of the architectural scheme. In the best examples of door surrounds, the richly carved trims were mounted by pediments which were supported by elaborate and beautiful trusses. A frieze, carved in characteristic ornament out of a bold cyma-shaped or ovolo

moulding and supporting a richly carved cap moulding, often surmounted the trim as an overdoor treatment. This same type of frieze designed as part of the cornice mould did away with the flat frieze, brought down from classic times as a part of the entablature. For overmantels, high relief festoons of flowers and fruit, exquisitely carved in lime wood by Wren's contemporary, Grinling Gibbons, framed a picture, a mirror, or a panel, the latter often quartered or inlaid in a geometrical design. The fireplace itself was usually framed with a heavy bolection moulding, cut out of marble, stone, or wood, with no mantel shelf.

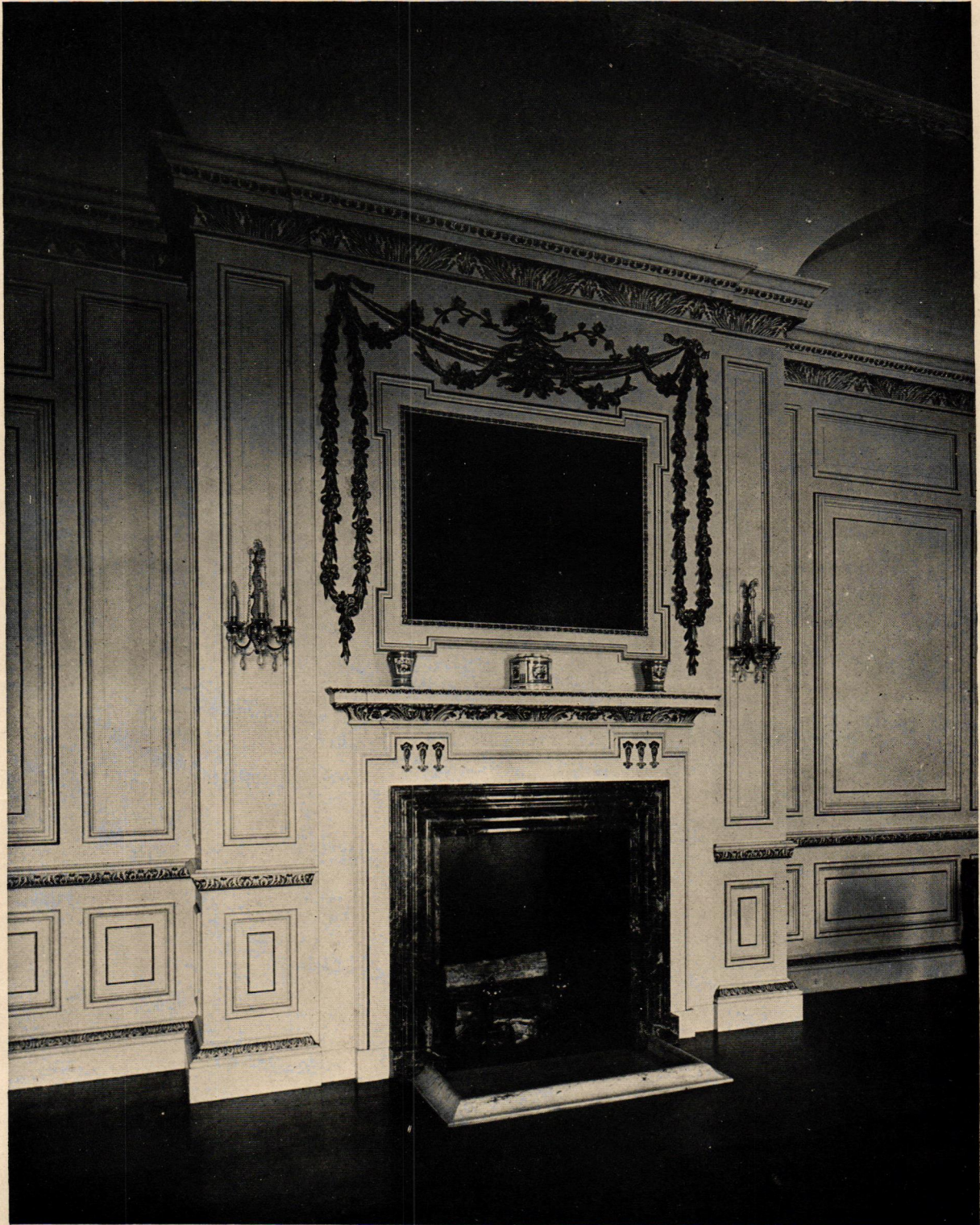
Ornament throughout the entire design was along lines peculiarly characteristic of Gibbons.



AN OVERDOOR IN THE QUEEN'S GALLERY AT HAMPTON COURT PALACE, ENGLAND



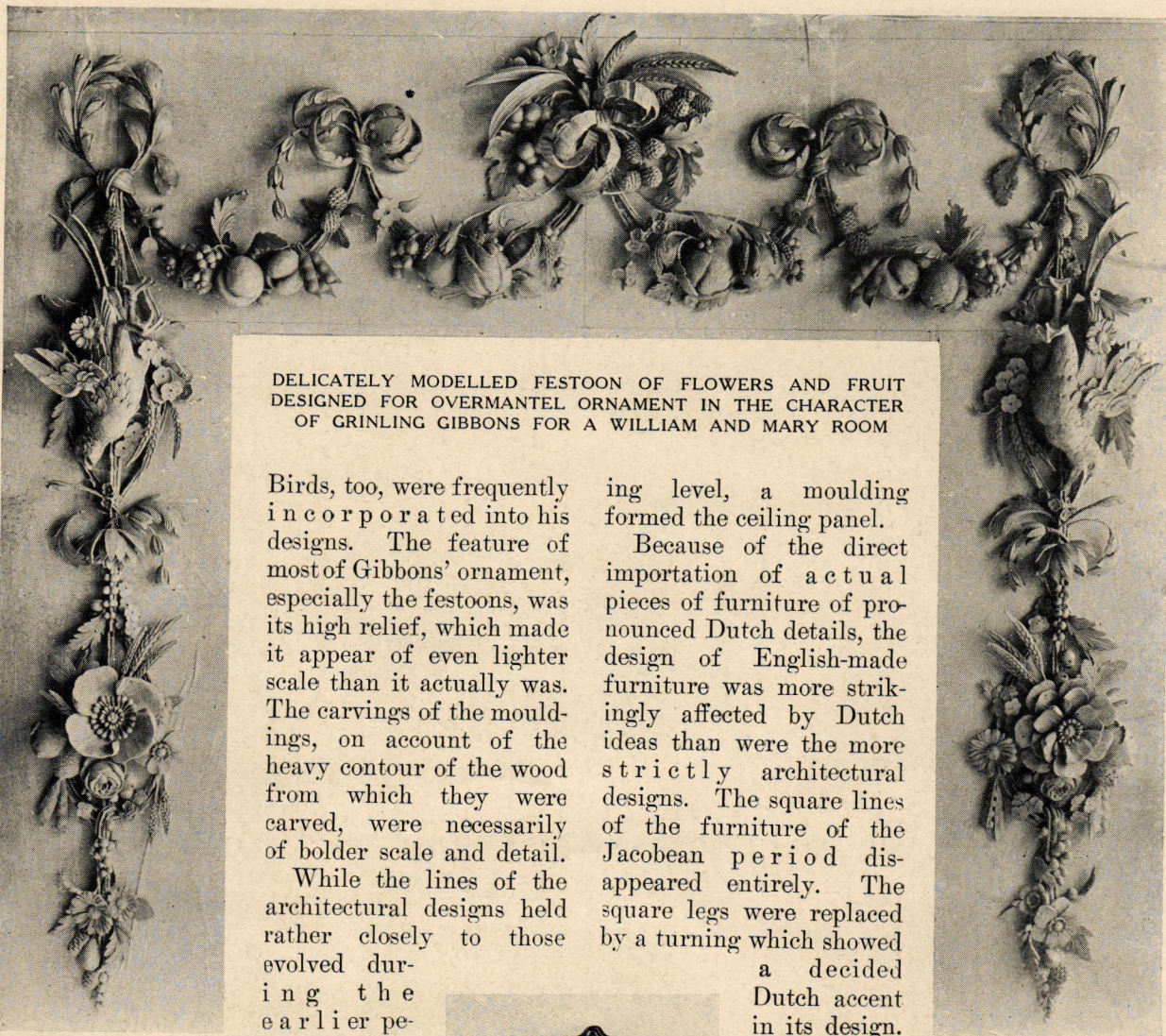
The acanthus leaf, as he used it, was a part of almost every design made for carving mouldings. The long, slender palm leaf was conspicuous in his festoons, as were naturalistic fruits and flowers.



LIBRARY IN THE HOUSE OF FREDERICK A. GUEST, ROSLYN, L. I., N. Y.

CARRERE AND HASTINGS, ARCHITECTS
CHARLES OF LONDON, DECORATORS

This room is carried out in accurate details of the William and Mary period. Many of the mouldings are carved in characteristic ornament, and the picture in the frame over the mantel is surrounded by a festoon in high relief. The heavy moulded marble facing of the fireplace is typical of the period, also



DELICATELY MODELLED FESTOON OF FLOWERS AND FRUIT DESIGNED FOR OVERMANTEL ORNAMENT IN THE CHARACTER OF GRINLING GIBBONS FOR A WILLIAM AND MARY ROOM

Birds, too, were frequently incorporated into his designs. The feature of most of Gibbons' ornament, especially the festoons, was its high relief, which made it appear of even lighter scale than it actually was. The carvings of the mouldings, on account of the heavy contour of the wood from which they were carved, were necessarily of bolder scale and detail.

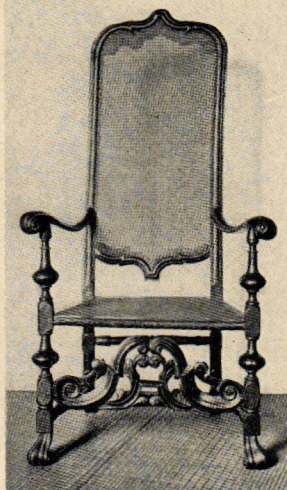
While the lines of the architectural designs held rather closely to those evolved during the earlier periods by

Wren, Jones and others, the heavy character of the mouldings, the boldness of the proportion, as evidenced, for instance, in the shape of the wall panels, showed marked influence of the Dutch. This boldness again appears in the ceiling design and decoration. The intricate and elaborate strapwork patterns which featured the Elizabethan and Jacobean periods were of too small scale to harmonize with the bold and heavy details of this period. A carved moulded band, enriched after the manner of the various mouldings of the woodwork, in high relief, formed a severe panel treatment on the ceiling. Quite frequently, a huge cove rested on the wood cornice of the wall panelling and, at its junction with the ceil-

ing level, a moulding formed the ceiling panel.

Because of the direct importation of actual pieces of furniture of pronounced Dutch details, the design of English-made furniture was more strikingly affected by Dutch ideas than were the more strictly architectural designs. The square lines of the furniture of the Jacobean period disappeared entirely. The square legs were replaced by a turning which showed a decided Dutch accent in its design. A feature of the turning,

and one by which furniture of this period can be readily traced, was the inverted-cup member near the top of the leg. This was supported by a slender tapering shaft, resting on other turned members. The foot, too, was turned, of rather heavy proportions, often shaped like a ball. In its later stage, the turned foot gave way to a carved design, somewhat suggestive of the scroll. This foot, as illustrated at left, is as truly characteristic of the William and Mary period as is the inverted-cup member of the turning described above. Legs of chairs, tables and cabinets frequently rested on an underframing, or stretcher, turned in a similar manner to the legs, but in the more truly Dutch designs, the stretchers, too, were



CHARACTERISTICS OF THE WILLIAM AND MARY PERIOD EVIDENCED IN THE DESIGN OF THIS CHAIR ARE ITS TURNED MEMBERS, ITS CARVED FEET AND THE SHAPE OF ITS BACK

(From *English Furniture and Decoration*)



LIVING ROOM IN THE HOUSE OF MRS. EDNA A. HOFFMAN, RIVERDALE, N. Y.

DWIGHT JAMES BAUM, ARCHITECT

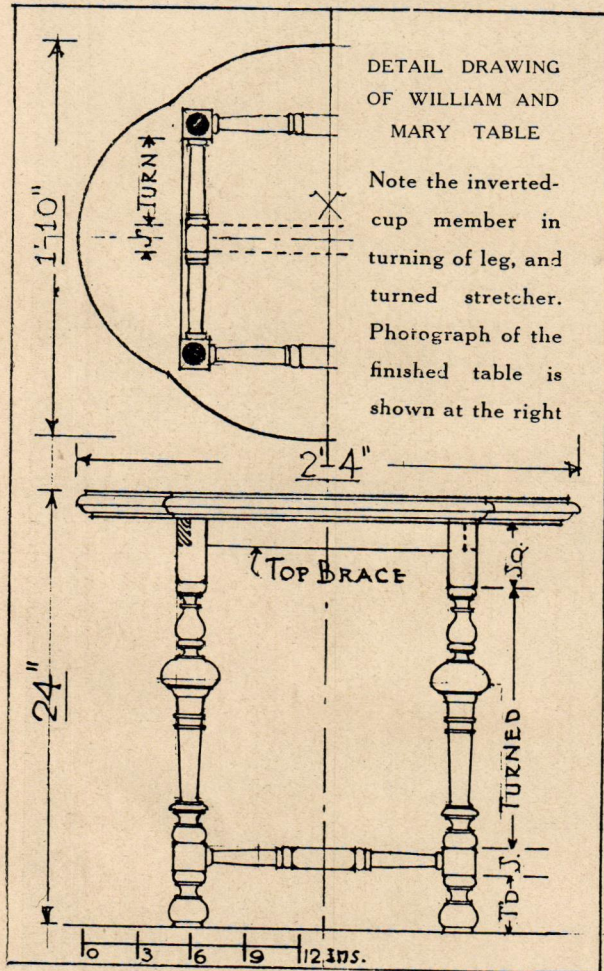
The room is treated with characteristic William and Mary panelling, and a typical ornamental ceiling of the same period. A pronounced feature of the decorative scheme is the valance above the window draperies, which is embroidered in a design true in every line and detail to the period of decoration of which it is a part.

carved in a design characteristic of the continent country.

With the discarding of the square lines of the Jacobean period designs, chairs lost, too, their perpendicular backs, and took on a more sinuous line in accordance with that given by nature to the human spine. Backs also became high, often shaped at the top and bottom with evidence of the Dutch in its lines, the side rails extending from the two back legs. A small settee, formed of two arched chair backs joined together, was a favorite

a pronounced feature of the period, and great ingenuity was shown in their disposition and mechanical contrivances. The furniture itself was made in oak, veneered with Italian walnut, and banded with other woods and decorated with burr and marquetry.

Color played an important part in the decorative schemes of this period and was brought in principally through the fabrics and upholstery materials. Tapestries were frequently used as



hangings on the subdued wall panelling; velvets, richly embroidered, and skillful needlework were extensively used for furniture covering. While occasionally the wood panelling was painted in some soft shade of gray or green, the oak, pine, or deal woodwork was more frequently finished in its natural subdued hue. Floors, too, often lent color to the scheme, for the practice of inlaying and parqueting the floors in patterns wrought in different colored woods was quite common, especially in the more elaborate rooms. It is also worthy of note that casement windows, so common during the preceding periods, with their small leaded patterns, gave way to the double hung sash, which had the effect of making window openings taller and not so wide.

Acknowledgment is made to the following firms for their courtesy in supplying illustrative material: Cassidy Co., Jacobson Mantel & Ornament Co., Schmieg, Hungate & Kotzian, Inc.

piece of furniture of this period, and continued so during later styles. Perhaps the most popular and original piece of furniture of this period was the large bureau, standing on either a chest of drawers or on a framework supported by turned legs. The upper part of the bureau was made up of a number of small drawers and cupboard recesses, beautifully decorated with marquetry. These drawers and cupboards were enclosed either by double doors or a large flap, arranged to be let down for writing, and surmounted by an ovolo frieze divided into marquetry panels. The secretary, so much in use in later years, can be directly traced to this piece of furniture of the seventeenth century. The ovolo frieze itself usually formed a secret drawer, for such drawers and spaces were



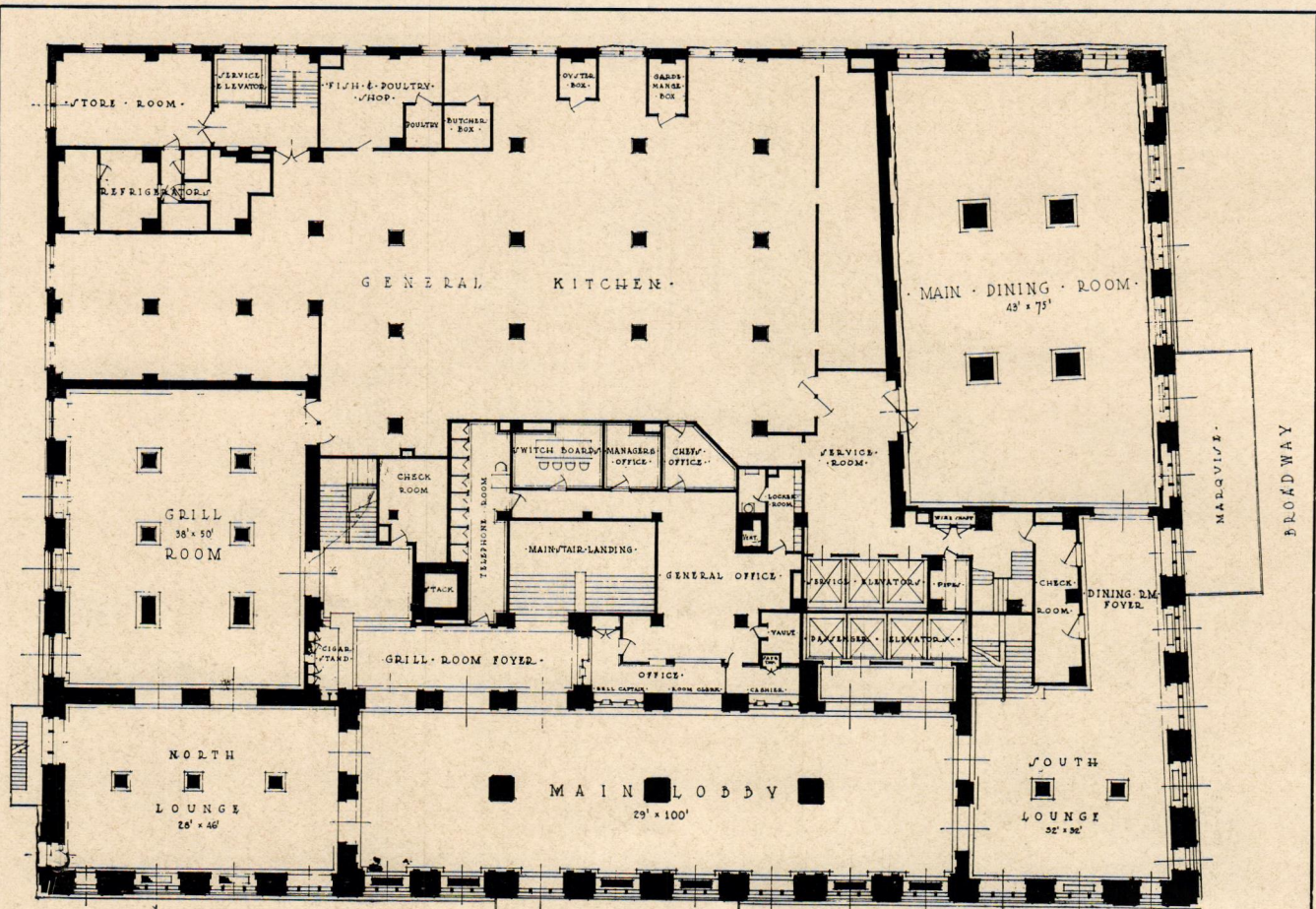
STOCK PLASTER COVE CORNICE MOUNTED IN COMPOSITION ORNAMENT IN THE CHARACTER OF THE WILLIAM AND MARY PERIOD



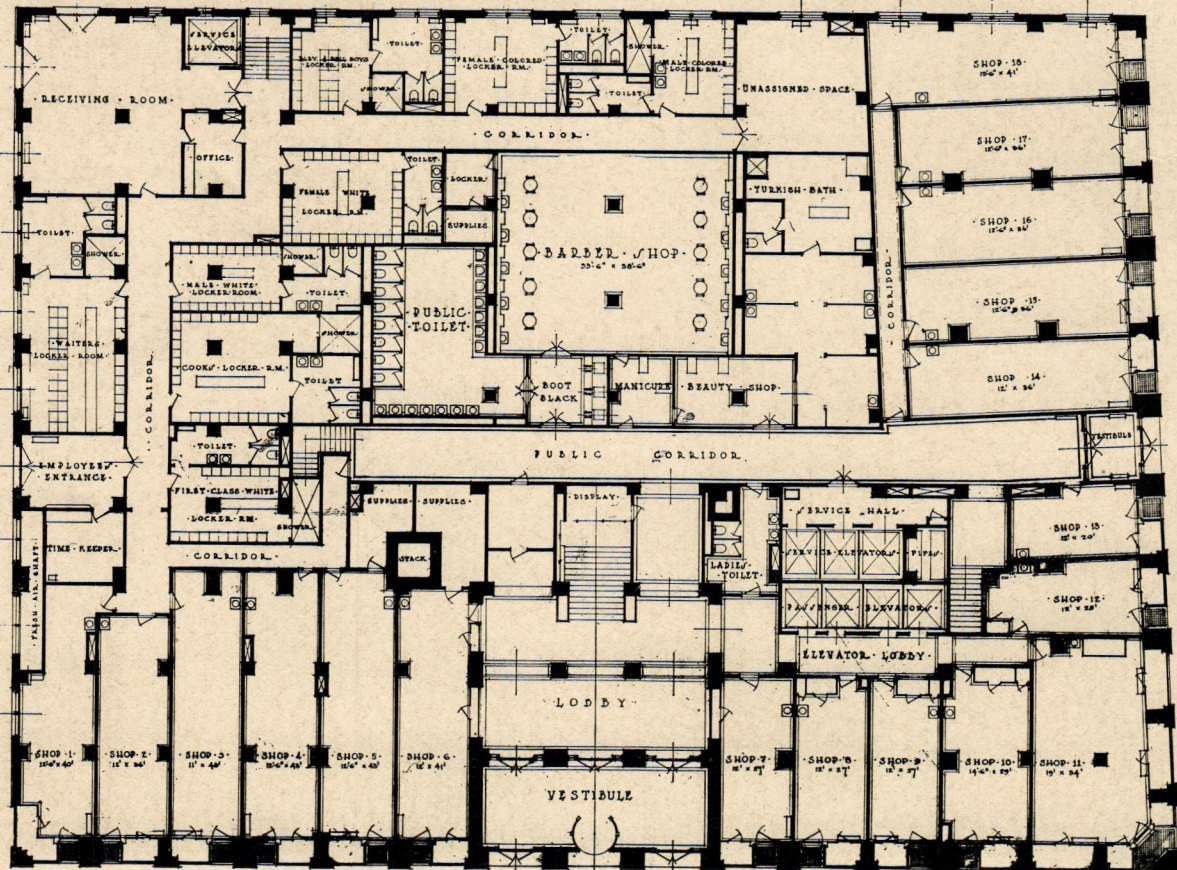
THE BROWN HOTEL, LOUISVILLE, KY.

PRESTON J. BRADSHAW, ARCHITECT

(See plans on other side)



SECOND FLOOR PLAN



FIRST FLOOR PLAN

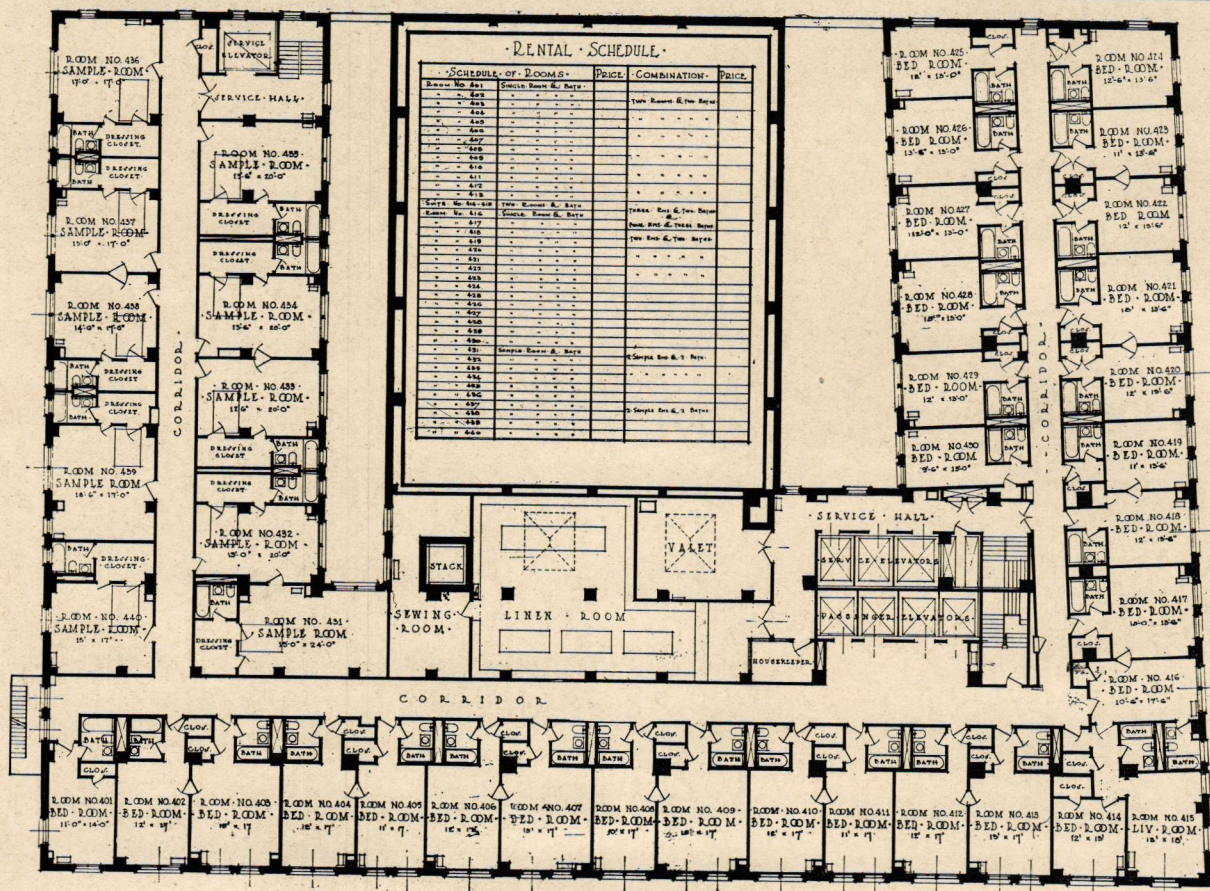
THE BROWN HOTEL, LOUISVILLE, KY.
PRESTON J. BRADSHAW, ARCHITECT



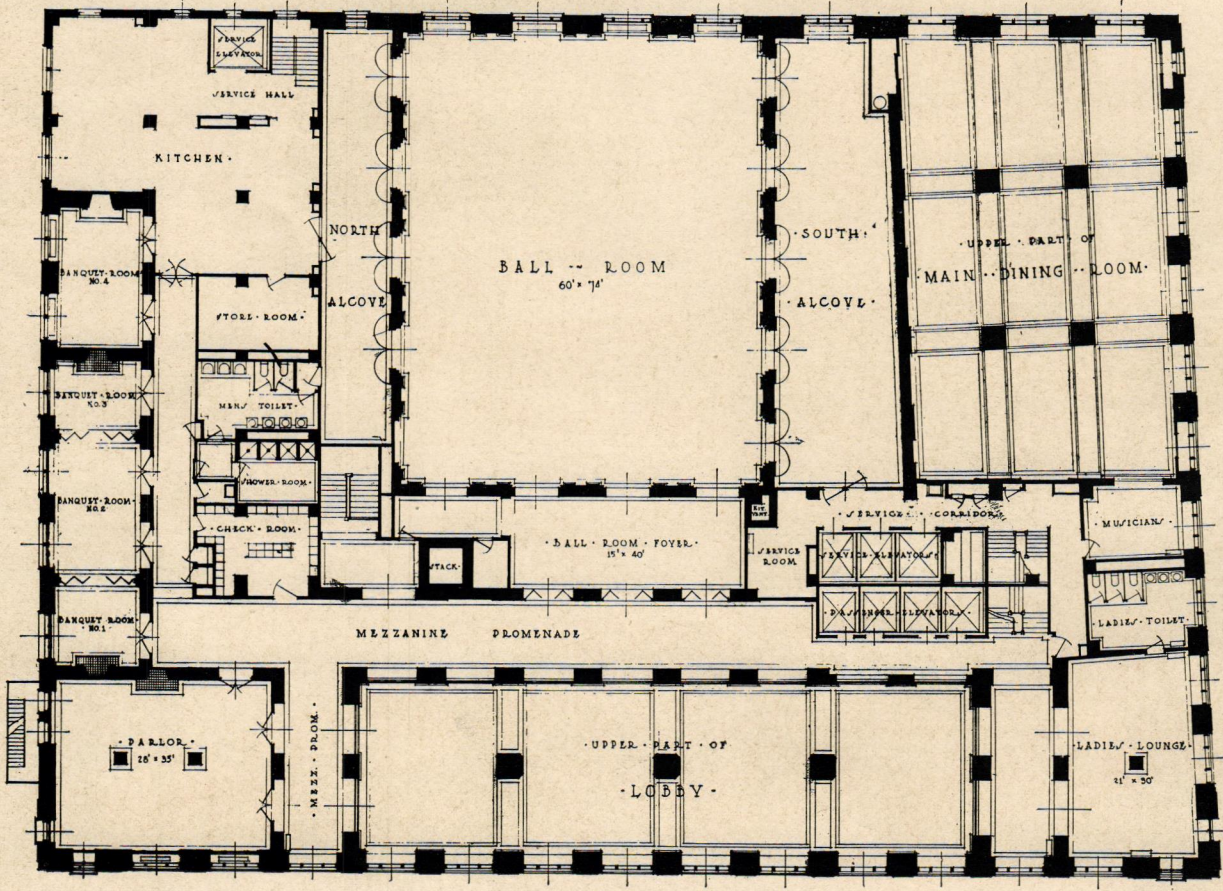
THE BROWN HOTEL, LOUISVILLE, KY.

PRESTON J. BRADSHAW, ARCHITECT

(See plans on other side)



FOURTH FLOOR PLAN

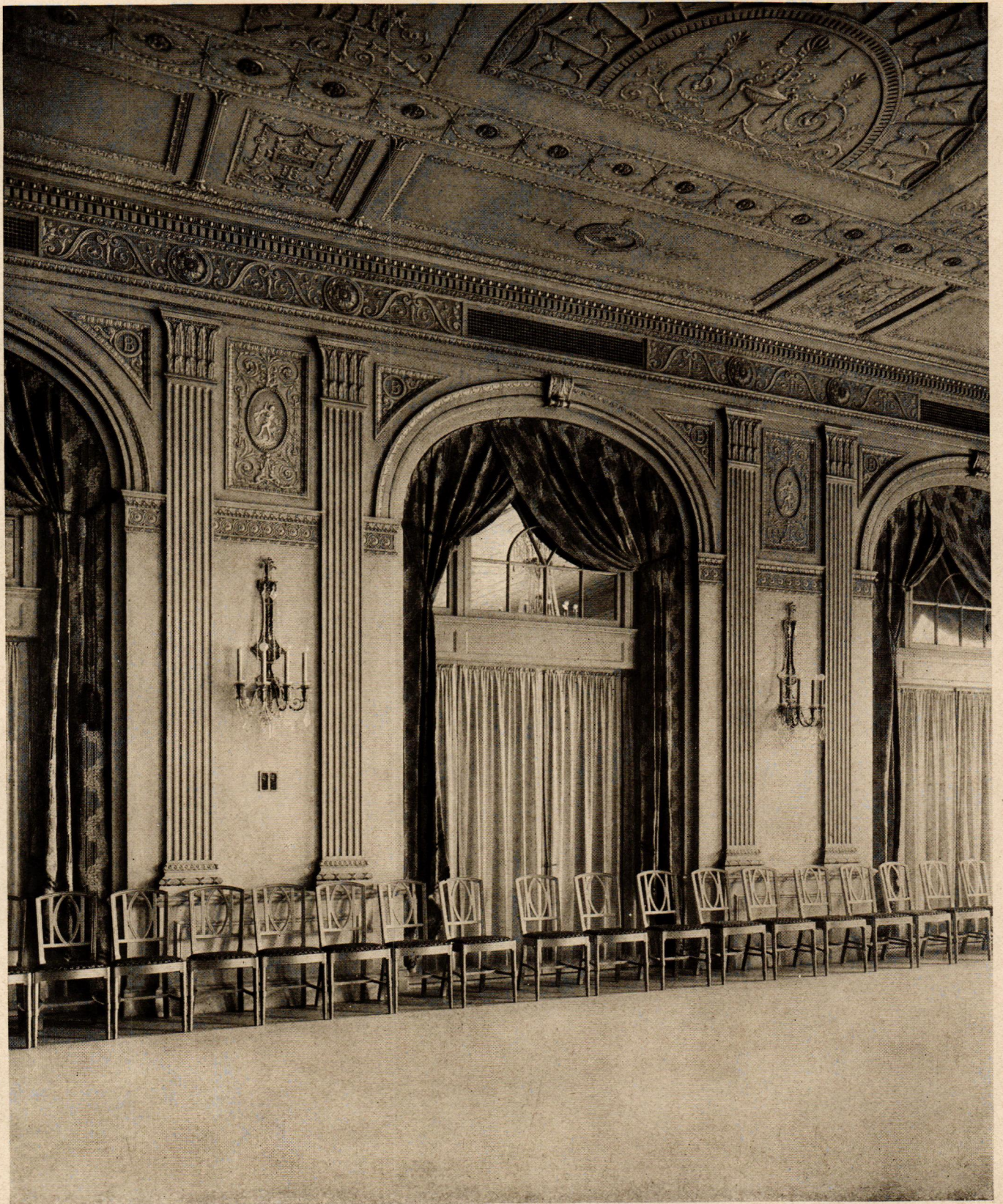


THIRD (MEZZANINE) FLOOR PLAN
THE BROWN HOTEL, LOUISVILLE, KY.
PRESTON J. BRADSHAW, ARCHITECT

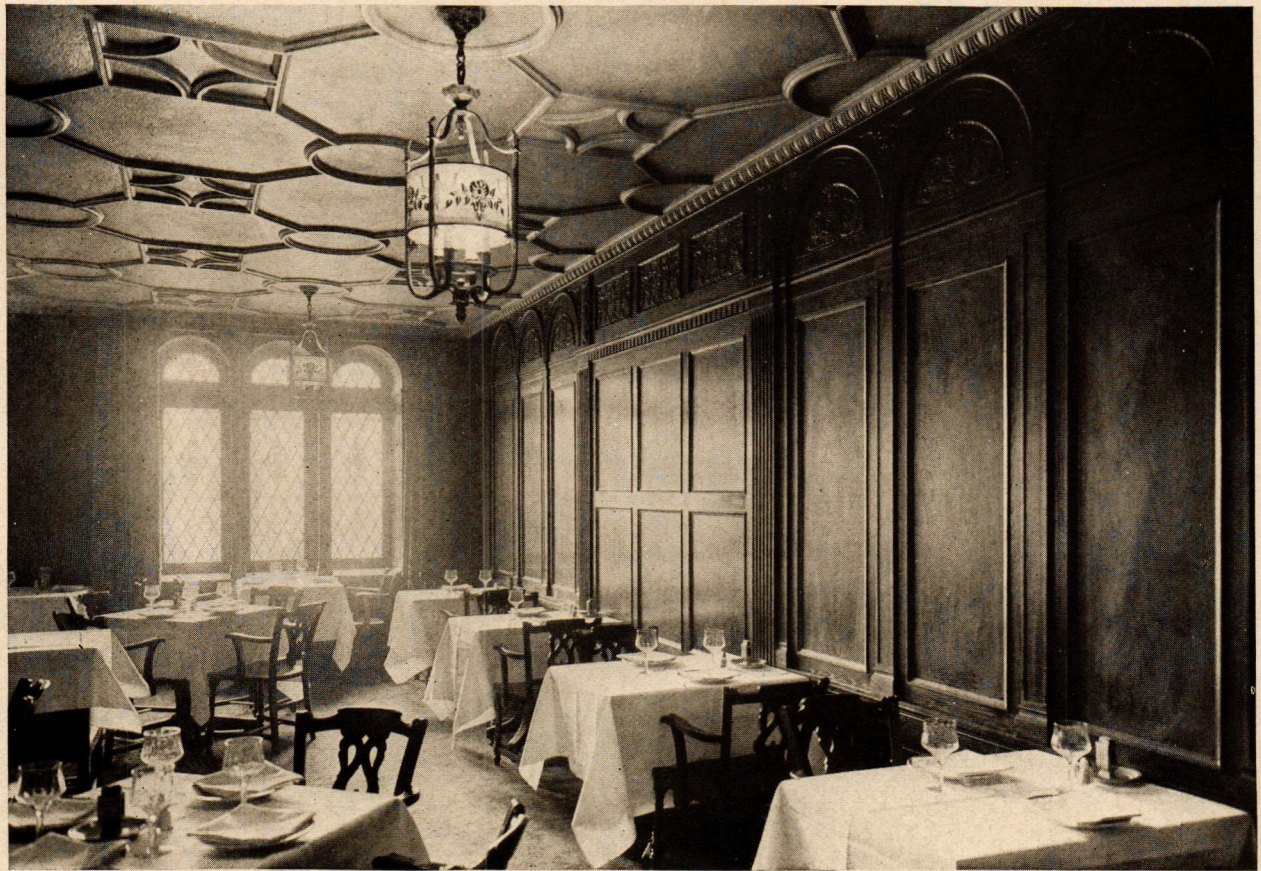
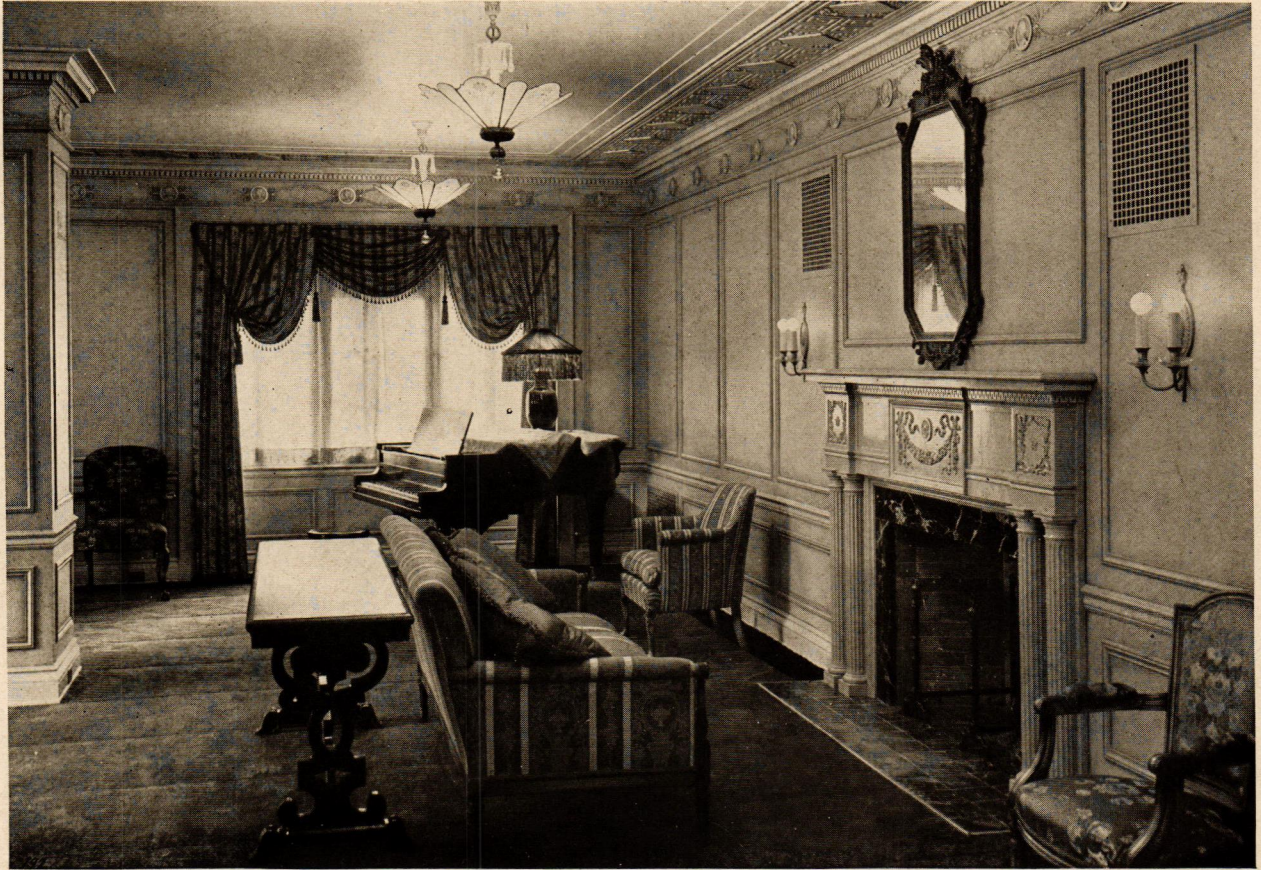


THE BROWN HOTEL, LOUISVILLE, KY.

PRESTON J. BRADSHAW, ARCHITECT



THE BROWN HOTEL, LOUISVILLE, KY.
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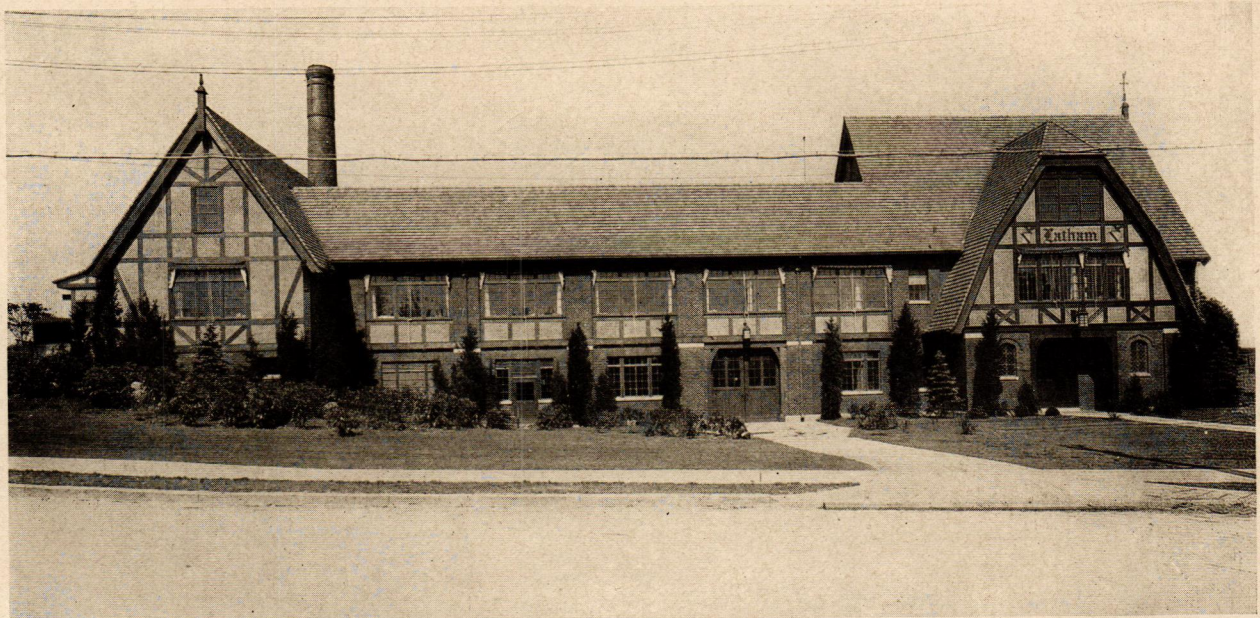


THE BROWN HOTEL, LOUISVILLE, KY.

PRESTON J. BRADSHAW, ARCHITECT



NORTH ELEVATION



EAST ELEVATION

BUILDING FOR THE LATHAM LITHO AND PRINTING COMPANY, LONG ISLAND CITY, N. Y.

HUNTER McDONNELL AND HOWARD B. PEARE, ARCHITECTS

WALTER KIDDE & COMPANY, INC., ENGINEERS AND CONSTRUCTORS



BUILDING FOR THE LATHAM LITHO AND PRINTING COMPANY, LONG ISLAND CITY, N. Y.

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THE AMERICAN ARCHITECT
August 13, 1924. Plate 63



BUILDING FOR THE LATHAM LITHO AND PRINTING COMPANY, LONG ISLAND CITY, N. Y.

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THE AMERICAN ARCHITECT
August 13, 1924, Plate 64

ARCHITECTURAL ENGINEERING

THE USE of RADIUM in BUILDINGS

BY WILLIAM H. DEY

RADIUM may not commonly be considered as a building material but it is becoming a factor in architectural specifications. In building construction, the application of radium is confined to two uses which require the attention of the architect. One of these uses is as a therapeutic agent, which makes it necessary to provide special construction. A radium emanation plant must be designed by specialists in this subject. At least two rooms must be provided, as the scientific instruments for measuring emanation tubes must be located as far as possible from the supply of radium itself. Other special features have to be installed and these should be provided for in the plans and specifications rather than make alterations and changes after the building is constructed.

Where X-Ray apparatus is installed in these rooms, special electric feeders must be installed from the service point. This service, being of extremely high voltage, presents two problems. First, the high voltage wires, which are generally rods or tubes of considerable cross-section for strength, should be located high in the room for safety. They also must be widely separated from each other and the building structure. They should be installed in the same manner as are high voltage transmission lines. In order to protect people in rooms adjacent to these machines and radium, the walls, floor and ceiling must be covered with sheet lead from one-eighth to one-quarter inch thick. It is generally considered sufficient to provide sheet lead of one-eighth inch thickness; as the direction of the X-Ray tube is downward, the lead protection on the floor should be one-quarter inch thick. Owing to these requirements, it is preferable to locate the X-Ray rooms in the basement rather than in the upper floors of the building. Barium sulphate plaster has been used, in some instances, instead of sheet lead, for protection from the X-Ray. Experiments are being made with zinc oxide paints which have the ability to absorb ultra-violet rays. It is possible that a paint may be developed which will serve the same purpose as sheet lead.

The other use of radium in building construction is in the application of radium luminous material to commercial products. The definition of a radioactive self-luminous material given by Dr. N. E. Dorsey, when in charge of the radium

division of the U. S. Bureau of Standards, in a special report prepared for the National Advisory Committee for Aeronautics, is as follows:

"Self-luminous radioactive materials consist of mixtures of a responsive base, usually zinc sulphide, with small amounts of radioactive substances. Luminescence is caused and maintained by the bombardment of the responsive base by the alpha radiations accompanying the disintegration of the radioactive constituents of the material."

The duration of the useful life of this material is a question which is frequently raised. There are different combinations of radioactive materials and differences in the qualities of zinc sulphide used by the various manufacturers, but standard luminous materials as made in this country all have a life estimated at from ten to fifteen years. Foreign made materials are for the most part much shorter lived. Radium luminous material has been manufactured in this country for about eight years, and the deterioration shown during this period has been in keeping with the life charts upon which the above estimate was made, and it is entirely probable that this estimate will prove to be conservative. The electrical manufacturer is quite competent to select a luminous material upon which the architect can rely.

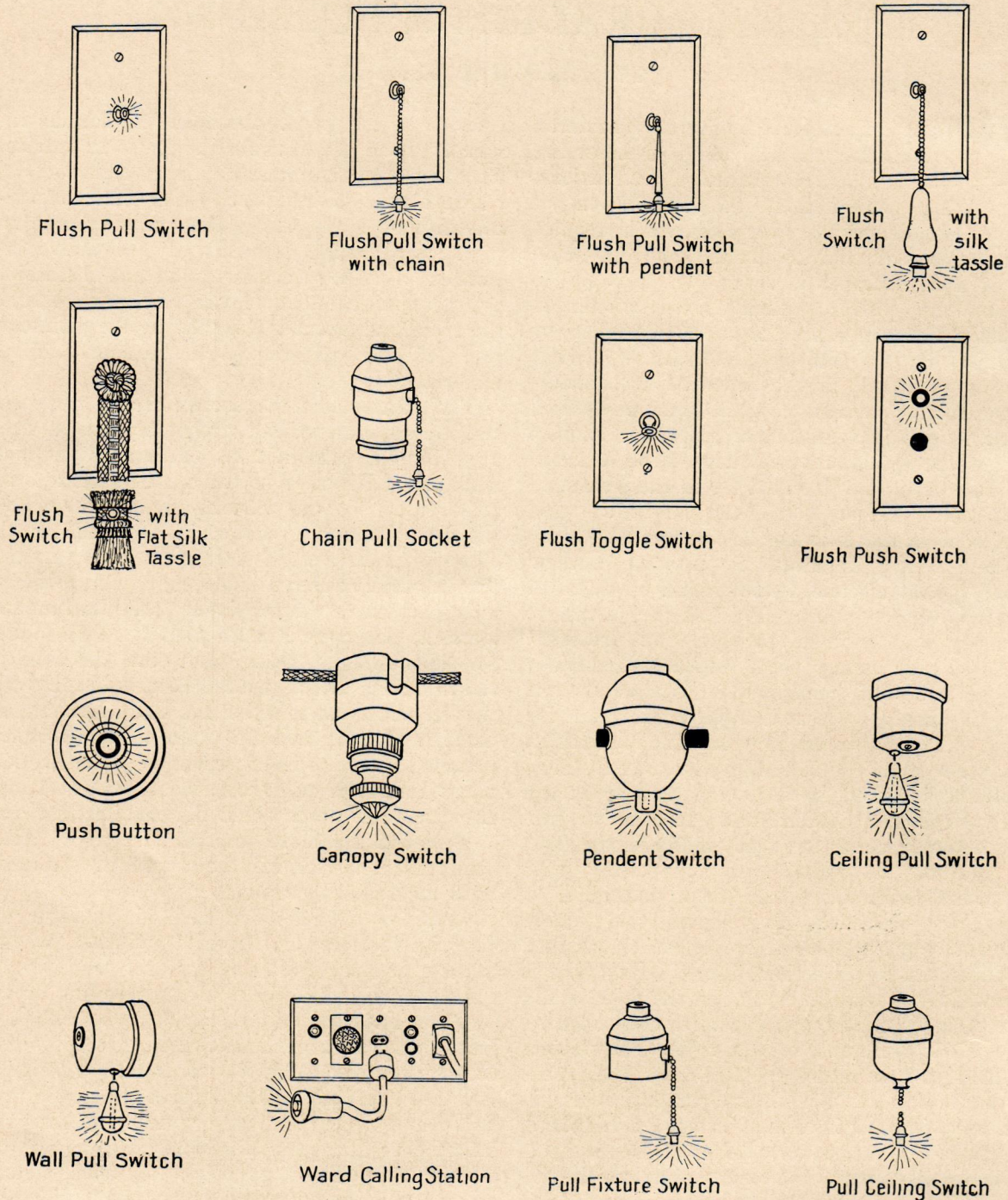
Some of the more important uses of radium luminous material will be found in connection with the following things:

Luminous wall switches, including push buttons, tumbler and rotary switches, whether surface or flush; pull chain sockets and switches operated by a pull chain or cord; ceiling or wall switches operated by either pull cord or chain or in the form of a pendant switch; fixture switches of the type frequently known as canopy switches; bell centers, both of the flush and surface type; locks and other hardware items, and luminous street door and room numbers.

The methods of applying luminous material to these different devices vary considerably. Switches are usually made with a small luminous insert pressed or moulded into the handle. Sockets and pull cord or chain devices have a luminous pendant. House numbers are a complete item and are made up in various ways to protect the luminous material from mechanical or chemical injury. In the surface type of bell button, the

centers are made of glass and filled with luminous material instead of the usual composition, porcelain or wood center,—or they can be purchased separately. In the flush type of bell button the

Boston, has been completely equipped with them and although the pendant strikes against the steel filing cases, it is so substantially made as to remain uninjured. The purpose of using the



THE APPLICATION OF RADIOACTIVE MATERIAL TO HARDWARE

luminous material is inserted by the manufacturer. Special pendants, of somewhat heavier construction, are used with ceiling switches where the cord hangs down in such a way as to strike against walls or other objects. The filing department of the John Hancock Life Insurance Company in

luminous pendant, in this particular case, is to save electric current. It was found that the clerks, after taking papers from a file drawer, usually left the light (a 100 watt bulb) burning. The excuse was invariably made that inasmuch as they were going right back to replace the

papers (which was not always the case), it was more convenient to leave the light burning than to grope around for the switch cord. The use of the luminous pendant overcame the difficulty of

them for the pull cord on the "calling" switch, both for the convenience of the patient in finding the cord and because of the destruction of the usual composition of wood pendants when steril-



THE APPLICATION OF RADIOACTIVE MATERIAL TO HARDWARE

locating the switch and made possible the enforcement of the rule that lights should be promptly turned off.

This particular pendant, made of heavy glass with a hermetically sealed cap, appealed to the manufacturers of the several manually operated hospital signal systems. It has been utilized by

ized in boiling water. The expense of this constant replacement soon exceeded the cost of the luminous glass pendant.

Luminous switches possess many advantages. In a dark room their location is readily apparent and they can be operated without loss of time or hesitancy. Another advantage is that the wall

surface around the switch is not soiled by those seeking to find it. In seeking a dark switch persons sometimes resort to lighting matches, which often results in fire. This occurs more often in places where inflammable materials are stored. The use of luminous switches would be a protection against such fire loss.

Luminous material, however used, is always of assistance in orienting one's self upon entering a dark room, and often enables a person to pass through a room without turning on a light. This is in itself a distinct advantage. The use of a luminous switch justifies its placement in unusual locations. The customary location has become somewhat standardized and to comply with that condition it sometimes involves an extra cost, which can be avoided by installing a luminous switch in the unusual location. The convenient location of switches tends to effect economies in lighting.

The high intensity of illumination required to read the ordinary kind of numbers on hotel guest room doors, is obviated by the use of luminous door numbers.

By casual observation it is seen that during the clean-up period in office buildings, offices are left lighted for as much as an hour or more, of which time but a few minutes are consumed in the

actual cleaning operation. This work is conducted by two or more persons each of whom does different things. As they do not work together, or one immediately follow the other, the lights are left burning until the last operation is completed. In order to obviate this waste of electric current, the owner of a large office building gave strict orders that lights should be extinguished as soon as each operation was completed. In a short time the walls about the switches became very much soiled and the cost of repainting the walls amounted to \$600.00. By the installation of luminous switches this soiling of the walls was eliminated and the lighting expense greatly reduced.

The leading manufacturers of electric devices are supplying them with luminous material. In the specification it should be stated that certain devices should have luminous indicators or add the word "luminous" to the individual device specified. There is no difficulty in obtaining devices so treated, as they are carried in stock by jobbers of electrical equipment.

The range of the electrical devices to which luminous material has already been applied, is so comprehensive that there is an acceptable device for practically every possible use.

WATERPROOFING OF GYPSUM BLOCKS

CYLINDERS of neat gypsum and sanded gypsum treated with various waterproofing materials and exposed to the weather for from two to three years have been tested at the U. S. Bureau of Standards, for loss or gain in weight and absorption. Cylinders of neat gypsum and those treated with barium hydroxide exposed to the weather for six months have been tested for the same properties together with compressive strength. Cylinders treated with barium hydroxide show considerably less erosion than those of neat gypsum. They appear much harder, have gained considerably in weight, and decreased in absorption, but the compressive strength has fallen off.

WEATHERING TESTS OF BUILDING STONE

THE investigation of the weathering properties of building stone, consisting of actual freezing and salt crystallization tests, has been continued by the U. S. Bureau of Standards. Although the process of comparing the resistance of stone to actual freezing is very slow and laborious,

it is believed that considerable information as to weathering qualities has been secured. The series of exposure tests to determine the disintegrating effects of efflorescence under actual conditions of exposure has begun to yield some interesting results. It has been shown that excessive amounts of rain water leaching through limestone masonry can produce disintegration in as short a time as one year. The tests were designed to determine whether a surface treatment of colorless waterproofing will prevent efflorescence under severe conditions of leaching. Some waterproofing materials appear to be beneficial in this respect.

WORKABILITY OF CONCRETE INFLUENCED BY HYDRATED LIME

THE mixture of hydrated lime in concrete produces several results which have been studied by the U. S. Bureau of Standards and other authoritative investigators. These data have been collected and published in Bulletin 311, National Lime Association, Washington, D. C. The subject is of such importance that architects and engineers should give it careful consideration.



WASHING STREETS CLEAN

Water contained in the tank seen behind the driver is forced by a pump through special nozzles set at such angle as would most effectively remove all dirt from the entire width of a 60-ft. street to the gutters, where the water flows into the sewer, leaving the dirt behind

MUNICIPAL HOUSE CLEANING—Part II

BY A. PRESCOTT FOLWELL, Sc. D.*

STREET CLEANING

NEXT to its architecture, cleanliness and neatness of its streets are undoubtedly the characteristics of a city most effective in arousing admiration in visitors and civic pride in its citizens. Clean streets result from street cleaning, combined with non-littering habits cultivated in the citizens.

Street dust and litter may be swept off by hand brooms or machine brooms, or may be washed off by hose or flushing wagons.

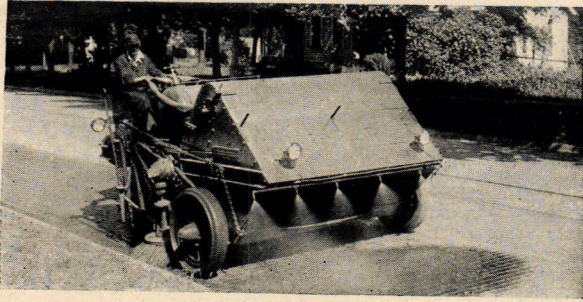
Hand sweeping is, in this country and day of high wages, the most expensive method, but is necessary for adequately cleaning rough pavements and also for business streets when filled with vehicular traffic. Most large cities and many small ones employ hand brooms in the business sections, each of the "white wings" being assigned a certain length of street to patrol. He collects the sweepings in a barrel or bag mounted on wheels, which are deposited at fixed points along the street and removed daily by wagons.

*M. Am. Soc. C. E., P. P. Am. Soc. for Municipal Improvements. Author of "Sewerage," "Municipal Engineering Practice," etc. Editor of Public Works.

The common machine sweeper consists of a revolving broom about 8 feet long mounted on wheels and set at an angle with the street so as to throw the dirt in a windrow along the gutter. Two or three brooms travel together, or one broom makes two or three trips, up one side and down the other so as to cover the full width of the street. These brooms raise a dust in dry weather unless the street be lightly sprinkled beforehand. They, of course, cannot clean where vehicles are parked, wherefor machine sweeping of business streets is generally done by night or early morning.

The windrows of dirt are swept into piles by hand and shovelled into carts; and inaccessible spots also are hand broomed. To minimize this hand work, pickup sweepers are used operating on the general principle of a carpet sweeper. When the sweeper bin is full, it is dumped and the dirt shovelled into carts. These piles, and the windrows left by the ordinary machine brooms, should be immediately removed; otherwise they are scattered again by wind and traffic.

A water tank mounted on a motor chassis, the water being forced through nozzles onto the street with some velocity, or hose attached to fire

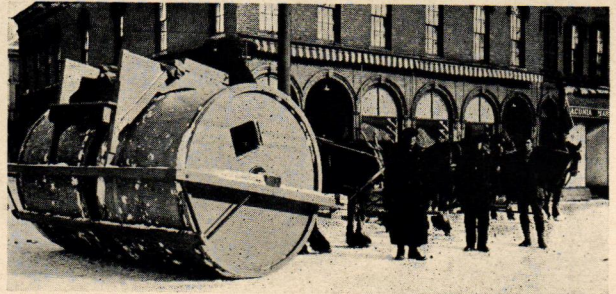


A PICKUP STREET SWEEPER

A large, revolving broom (under the driver) sweeps the dirt into the bin (shown at the right), after the manner of a carpet sweeper. A small revolving brush throws in front of the broom the dirt from the gutter, while the sprays lay the dust

addition, rain flowing from roofs, yards and street surfaces must be removed to some watercourse. The former is called "sanitary sewage," the latter "storm sewage."

Both may be removed in the same sewers—the "combined system"—or there may be a "separate system" for each.



A SNOW ROLLER IN NEW HAMPSHIRE

Large Eastern cities spend millions every year in removing snow from their streets. In some New England cities the snowfall is so great and continuous as to make removal from the business streets impracticable. Here sleighs are still in use, and this roller is used to keep the snow packed hard and smooth for them

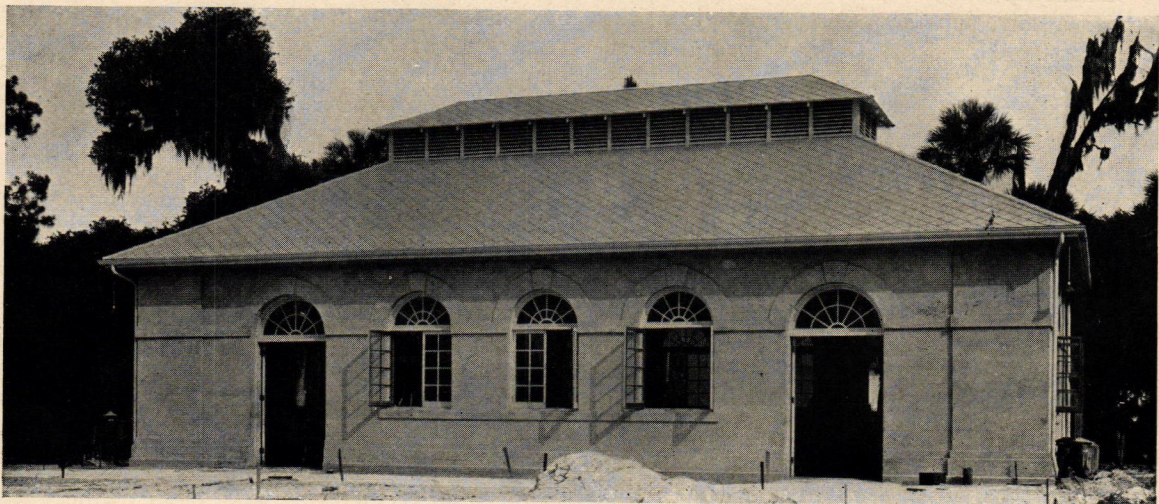
hydrants, is used for washing the streets. These produce a cleaner surface than sweeping. The dirt is washed into the gutter and the water, carrying with it some fine dust, enters the sewers. The dirt is shovelled into carts as in the case of broom sweeping. If the street is steep or too much water used, so much dirt may be carried into the sewer as to cause objectionable deposits therein. Besides greater cleanliness, an advantage of flushing is that surfaces are cleaned under vehicles standing along the curb.

SEWERS

The above methods dispose of solid wastes only. It is equally necessary to remove the water—generally more or less foul—that has been used in residences, factories and other buildings. In general, all the water brought into a city by the water mains must be removed by sewers. In

Where a stream flows through a city, unless its banks are parked and regulated, it is sure to become an eyesore, receiving all sorts of rubbish as well as liquid wastes that should be removed as sewage. Such a stream should be enclosed and then becomes in effect a large sewer. Such a sewer, even in a small city, may be 10 feet or more in diameter.

Each of the several surface water or storm sewers in a city of 25,000 to 50,000 population



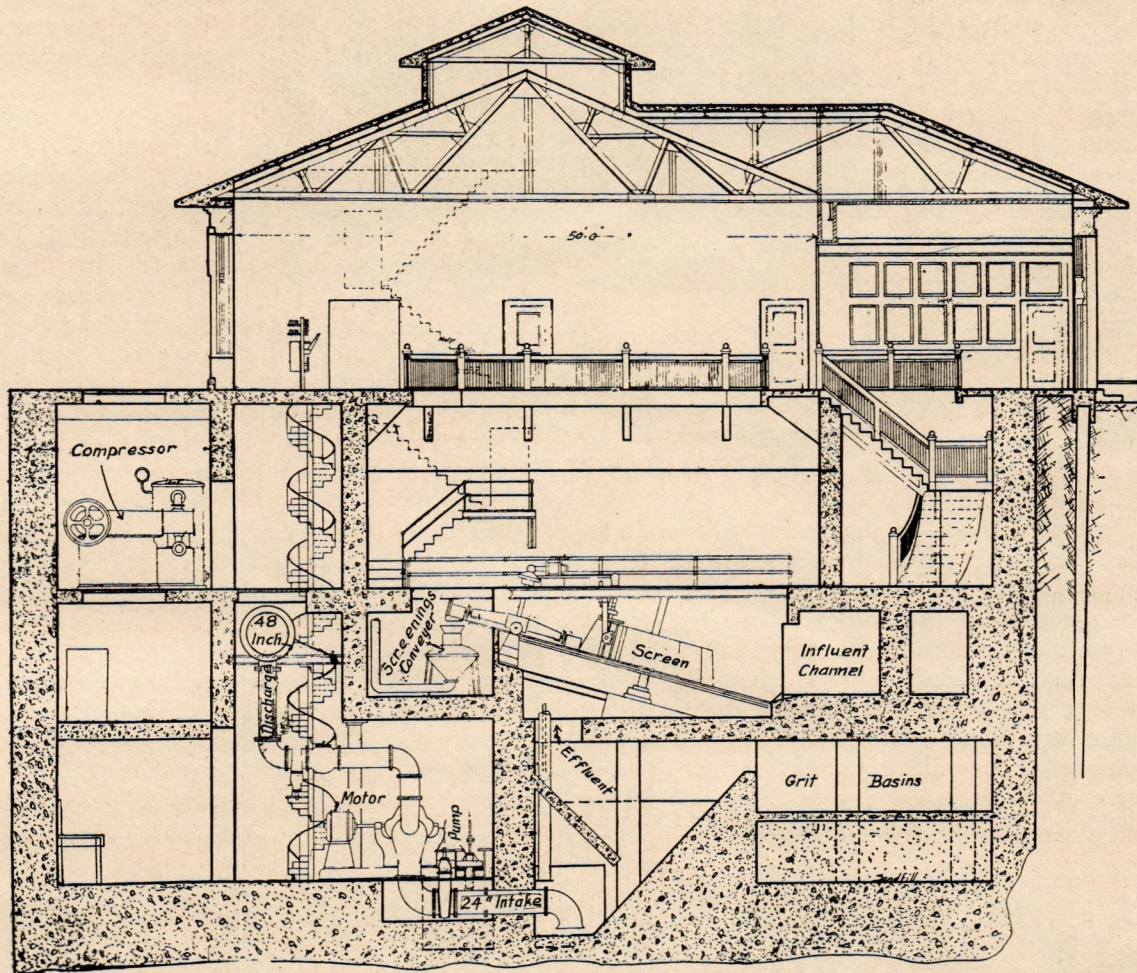
SEWAGE TREATMENT BUILDING AT DAYTONA, FLA.

This building houses sewage screens, but this was considered no reason why it should not be given a pleasing appearance. After completion, the grounds were improved and planted, and visitors to the plant are welcomed

is generally between 3 and 10 feet diameter at the outlet. A sanitary sewer for the entire city need not exceed three feet. A combined sewer need not be much larger than a storm sewer and is much cheaper to build than both storm and sanitary sewers. But if the sanitary sewage must be purified, it is desirable to keep it separate from

to that of the water reaching the sewer is so small and it is so free from qualities making it a nuisance or danger to health, that it is seldom treated in any way before being discharged into a stream or other body of water.

Sanitary sewage, however, contains grease and putrescible food matters from kitchen sinks, dirty



A COMPLETE SEWAGE SCREENING PLANT

Sewage enters through the "influent channel" (at the right), passes through the "screen" and down through the "effluent" opening to the "24-inch intake" of the pump, operated by an electric motor, which discharges it through a 48-inch pipe into the harbor. The screen is a flat disk built up of bronze plates containing thousands of very fine slots, on which the suspended solids collect. The disk is set at an angle of twenty degrees with the horizontal, about two-thirds submerged in sewage, and revolves slowly, bringing the intercepted solids above the surface, where revolving brushes remove them to a pneumatic conveyor, by which they are carried to a furnace for incineration

the storm sewage, and most state boards of health require that this be done. (There are various modifications and qualifications of the above general statements that cannot be gone into within the limits of this article.)

SEWAGE TREATMENT

Storm sewage contains dirt washed from the roofs and streets, but the amount of this relative

water from laundries, and—most objectionable of all—excreta from the toilets with the possibility of disease germs contained therein. Sanitary sewage should always be treated to minimize the danger and nuisance before it is discharged into any body of water. Most of the states have empowered State Boards of Health to require municipalities to treat their sewage where this is necessary to prevent undue pollution of streams.

A city of 25,000 will contribute about 2½ million gallons of sewage a day. This is more than 99 per cent water, which cannot be evaporated but must be discharged into a nearby stream, lake or ocean. The problem of sewage treatment is to remove or reduce to a minimum the objectionable contents.

Polluting matter in sewage is mostly in suspension (this including pathogenic bacteria). Although the water takes some matters into solution, these of themselves are not dangerous to health, or likely to produce a nuisance if the sewage be discharged into several times its volume of unpolluted water. Some of the suspended matter, however, is very finely comminuted or even in the form of colloids—a physical condition intermediate between suspension and solution.

By passing the sewage through screens, from 20 to 50 per cent of the suspended matter can be removed, the balance being very fine particles. Screens used in this country are generally in the form of drums covered with wire cloth screens, or large flat bronze plates containing thousands of narrow slots. These do not remove disease bacteria except such as may be imbedded in the removed solids. In some cases screening alone

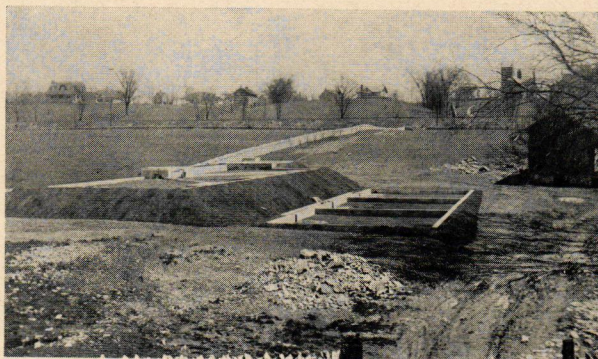
is considered sufficient treatment, as greatly reducing the danger of nuisance.

By passing sewage slowly through tanks, the solids settle to the bottom forming “sludge” or float on the top as “scum.” In this way 50 to 75 per cent of the solids, including all but the very finest, and an equal percentage of bacteria, may separate from the sewage, giving an effluent only slightly cloudy in appearance.

If the sludge be allowed to remain in the tank, it is worked over by bacteria, which change a considerable part of it to gaseous or liquid form. (The gas is inflammable and has been used for light and power.) A tank so operated is called a

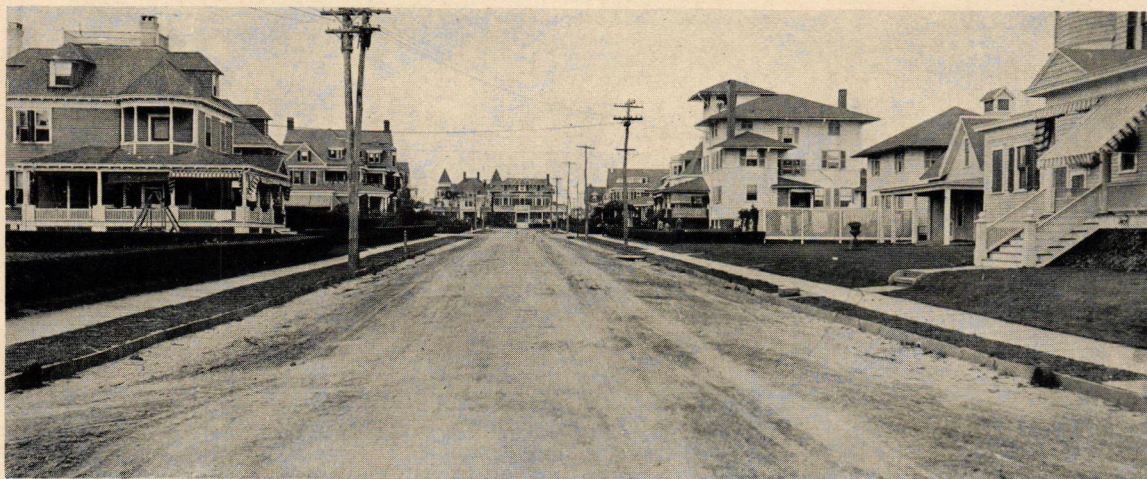
“septic tank.” The gases in rising from the sludge set up vertical currents that interfere with the sedimentation and the effluent is apt to be cloudy and contain a large amount of liquefied sludge and is far from pure.

An Imhoff tank, the most commonly used design of two story tanks, consists of two tanks, one above the other, a slot in the upper one allowing the settling solids to drop into the lower or sludge compartment but preventing the sludge gases from rising into the upper tank. The sedi-



A SMALL, COMPLETE, SEWAGE TREATMENT PLANT

The sewage first passes through a tank (the top is seen just behind the embankment); then into contact filters of broken stone retained by the embankment; and from these to sand beds, at the right of the embankment



THERE IS A SEWAGE TREATMENT PLANT UNDER THIS STREET

But the only evidence of it is the two ventilators in the gutters. This is a septic tank. New York is just completing a sewage screening plant under the surface of Canal Street. Where no other site is available or entire concealment is desired, this is practicable, but not convenient for accessibility or lighting and ventilation

mentation is, therefore, more complete, the effluent less odorous and other advantages are found. Such a tank must be 25 or 30 feet deep and the construction is much more costly than that of a plain sedimentation or septic tank.

The effluent from a tank contains considerable putrescible matter in solution or very finely divided. If further purification is desired, it is obtained by oxidizing the organic matter, generally in beds of stone or sand. In passing through sand, oxidation is effected by the air and oxidizing bacteria in its interstices, rendering the organic matter non-offensive. Most of the suspended solids and bacteria are left on and in the sand. If broken stone is used in place of sand, a much smaller area is possible, but some method is required for distributing the sewage over the entire area. The most common one is that of spraying it on from a number of sprinklers similar to lawn sprinklers. Or the stone may be placed in a watertight tank, the tank filled with sewage, and the outlet then opened and the bed allowed to drain out slowly. The former is called a "sprinkling" or "percolating filter;" the latter a "contact bed."

Either of these may still leave thousands of bacteria in the effluent, some possibly pathogenic; and if thought necessary, these are destroyed by use of chlorine, as is done in treating most public water supplies.

The latest development to be adopted in practice is the "activated sludge" tank. Here air is forced in minute particles into sewage as it flows through a tank, and some sludge from sewage previously so treated is introduced. This induces rapid and intense oxidation and sedimentation and produces a better effluent than other types of tank. It requires air compressors, pumps and other machin-

ery, and more expert operation than other types of plant.

A few cities have used other processes, among them the "direct oxidation" in which the sewage passes through an enclosed flume, where, after first receiving lime, it is subjected to electrolytic action. Rapid sedimentation and freedom from later putrefaction are claimed.

In all the above, there are still the removed solids—screenings and sludge—to be disposed of. This problem has not been solved satisfactorily. Sludge is 85 per cent to 95 per cent water and its nature is such that reducing the water content is very difficult. The most common method is to draw it off onto sludge beds of underdrained sand, where the water slowly drains off and evaporates for two weeks or more, when the sludge can be handled with forks. It has some fertilizing properties but it is generally found difficult to persuade farmers to use it, although a few cities are able to sell it at 50c or so a load. If not so taken, it is used to fill in low land or dumped at sea. Imhoff tank sludge is found easiest to handle and septic tank sludge next. Activated sludge surpasses the others as a fertilizer.

Too many sewage treatment plants are themselves nuisances, generally because not faithfully operated by intelligent men. Some towns place an ignorant street foreman in charge of a plant, the operation of which involves chemical, biological and engineering principles. New Jersey requires a sewage plant operator to qualify as to his technical knowledge of the subject, and this should be the law in all states. It avails little if a town spends tens of thousands in building a plant to prevent its sewage from creating a nuisance and then permits that plant not only to fail of its purpose but even to become itself a nuisance.

WATER POWER

NEW YORK State leads all the others in the amount of water power development, having 1,300,000 horsepower, with the largest single development at Niagara Falls. The second State is California, with more than 1,100,000 horsepower. Washington is third with 454,000. Maine has a few horsepower less and Montana is fifth.

MOISTURE ABSORPTION OF TERRA COTTA

THE Bureau of Standards recently made some tests to determine whether the percentage of absorption of a small specimen of terra cotta could be taken as representative of the absorption of the remaining sections of the piece. One coping block from each of four commercial companies was

sawed into 18 sections and an absorption test made on each section. It was found that in a large terra cotta block the percentage of absorption may vary two per cent. Balusters corresponding to the copings have been sawed in half and will also be tested for absorption.

AMERICAN CERAMIC SOCIETY TO HOLD MEETING

THE American Ceramic Society announces that it will hold its Summer meeting at the Hotel Biltmore, Los Angeles, Cal., October 6 and 7. For further information communicate with either Fred B. Ortman, chairman of the Summer meeting, Tropico Potteries, Inc., Glendale, Cal., or with the General Secretary, Lord Hall, Ohio State University, Columbus, Ohio.

BEAUX-ARTS INSTITUTE of DESIGN

ACTING DIRECTOR OF THE INSTITUTE—WHITNEY WARREN

ARCHITECTURE—RAYMOND M. HOOD, DIRECTOR

SCULPTURE—EDWARD FIELD SANFORD, JR., DIRECTOR INTERIOR DECORATION—FRANCIS H. LENYGNON, DIRECTOR

MURAL PAINTING—ERNEST C. PEIXOTTO, DIRECTOR

OFFICIAL NOTIFICATION OF AWARDS

JUDGMENT OF JULY 15, 1924

FINAL COMPETITION FOR THE 17TH PARIS PRIZE
OF THE

SOCIETY OF BEAUX-ARTS ARCHITECTS

“A TRANSPORTATION INSTITUTE”

A capitalist who has amassed a large fortune in the manufacture of machinery used in transportation has always had more than a monetary interest in the subject. He believes that quick transport is a civilizing influence and also that it is possible that important advances made in the means of intercommunication between the peoples of the world may lessen the likelihood of great conflicts. He has seen the immense advance made in certain branches of science during the late war, which was due to the disinterested co-operation of scientists.

With all this in mind he wishes to assemble a representative group of inventors and scientists including chemists, physicians, engineers, electrical experts and others and furnish them with sufficient money to pursue their research uninterruptedly. He wishes also to furnish them with grounds, buildings, workshops and laboratories in which their inventions may be tried out under the most favorable circumstances and with the assistance of a staff of highly trained mechanics and workmen.

He has therefore established a foundation to be known as the INSTITUTE FOR THE ADVANCEMENT OF THE SCIENCE OF TRANSPORTATION and has issued this program for the purpose of securing a set of plans for these buildings which are open to the public.

The buildings will be:

A HALL OF HONOR AND OF ASSEMBLY

A HALL OF PAST ACHIEVEMENTS

A HALL OF CURRENT INVENTIONS

The site chosen for the group is on a small portion of the broad meadows owned by the foundation, stretching between a wide boulevard and the waterfront, and giving great spaces for physical and chemical laboratories, and their necessary buildings; airplane and dirigible hangars, rail sidings and their experimental fields; and piers, dry docks and their adjacent experimental basins to which the public is only admitted at times of demonstration of perfected inventions. The site of the public group is 1100'-0" x 800'-0", bounded on one long side by the Avenue, and on the others by laboratories, hangars, etc., and their fields. The entrance is from the Avenue, and pedestrian entrances from the site to the remainder of the property are to be provided at convenient points on the other three sides.

The buildings of the public group may themselves form the barrier between this portion of the grounds and the experimental portion, or an architectural wall, colonnade or similar treatment may be used, to mask the experimental buildings.

The detailed requirements for the buildings are as follows:

(1) THE HALL OF ASSEMBLY AND OF HONOR

This may be one building or may be composed of several units closely related.

(a) A monumental gallery, rotunda, or pantheon, honoring great achievements in transportation, with statues and memorials, mural paintings, etc.

(b) An assembly hall for scientific gatherings seating about 3000 people.

(c) Two smaller lecture halls, seating 300 each.

(d) A library of scientific research, patent documents and files, and ample alcoves for study.

(e) Small suite of rooms for the administration, trustees, etc.

(f) Ample circulations, toilets, etc.

(2) THE HALL OF PAST ACHIEVEMENTS

This includes:

(a) A great hall, very high in the center, for models of sailing ships, steamboats, locomotive engines, airplanes, etc. Many of these may be full size.

(b) Small exhibition rooms or alcoves for minor exhibits such as paintings and drawings of transportation devices, working drawings or models, maps, instruments used in navigation, etc.

(c) Office of curator, toilets, coat rooms, etc.

(d) Space outside the building for figureheads, anchors, and other objects not easily damaged by exposure.

(3) THE HALL OF CURRENT INVENTIONS

This includes:

(a) A great hall, very high in the center, corresponding roughly to the transportation building of a World's Fair, where exhibitions of all branches of transportation may be held periodically.

(b) Exhibition rooms or alcoves for smaller exhibits which would show to advantage such complex inventions as steering devices, gyroscope compass, radio eyes and new radio devices.

(c) Office of curator, toilets, coat rooms, etc.

(d) Space outside the building for objects not injured by exposure.

NOTE:—Each of the Exhibition Halls (2a and 3a) mentioned may either be great single spaces simply roofed, or combinations of large spaces roofed separately but opening freely one into another, in such manner as to preserve a unity of composition.

The composition will be completed by a court of honor and by ample circulations, possibly by covered galleries, by pools and fountains. The great development given to this public group indicates the fact that the donor wishes to impress the public with what he believes is the huge importance of this branch of human endeavor and he spares no expense to honor achievement or to give the widest publicity to new advances.

JURY OF AWARDS:—H. O. Milliken, W. A. Delano, R. M. Hood, B. W. Morris, E. S. Hewitt, E. F. Sanford, Jr., W. M. Kendall, G. Lowell, H. Van B. Magonigle, D. E. Waid, A. L. Harmon, and R. H. Pearce.

NUMBER OF DRAWINGS SUBMITTED:—5

AWARDS:—

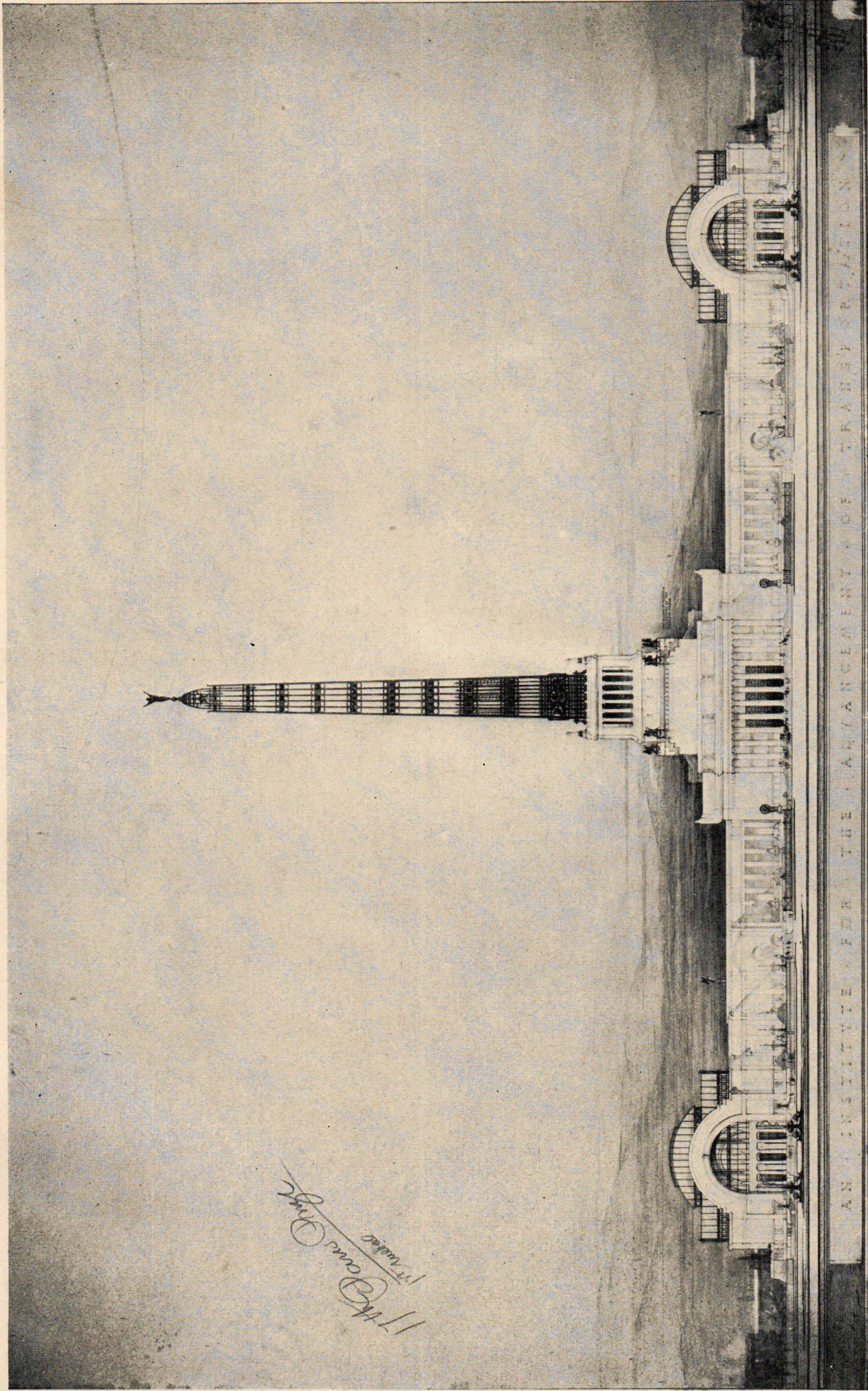
WINNER AND FIRST MEDAL:—Harry Kurt Bieg, Patron, Edmund S. Campbell, Armour Institute of Technology and Chicago Atelier, Chicago, Ill.

PLACED SECOND AND SECOND MEDAL:—Samuel R. Moore, Columbia University and Atelier Hiron, N. Y. C.

PLACED THIRD AND SECOND MEDAL:—Percival Goodman, Atelier Licht, N. Y. C.

PLACED FOURTH AND SECOND MEDAL:—Elmer L. Babitsky, Atelier Wynkoop-Seymour, N. Y. C.

HORS CONCOURS:—Andrew F. Euston, Atelier Hiron, N. Y. C.

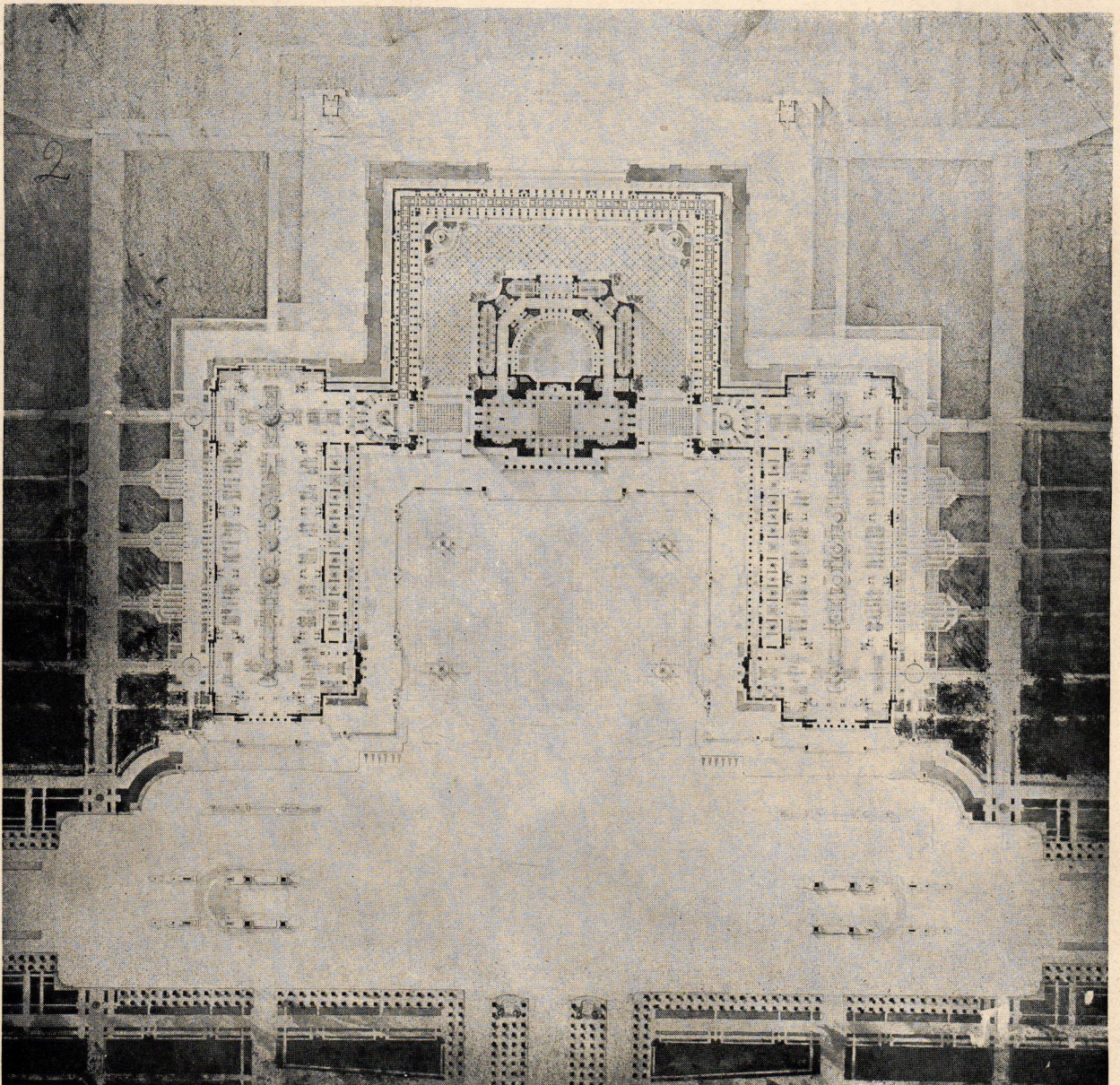
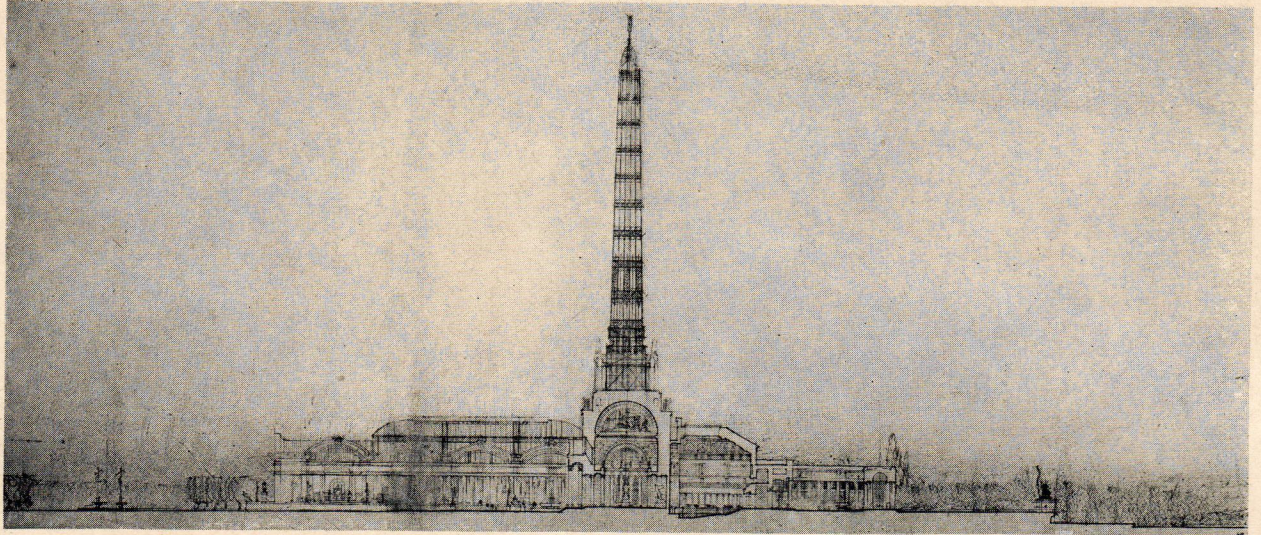


PATRON, EDMUND S. CAMPBELL
ARMOUR INST. OF TECH. AND CHICAGO ATELIER

WINNER AND FIRST MEDAL

FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS
A TRANSPORTATION INSTITUTE

H. K. BIEG



H. K. BIEG

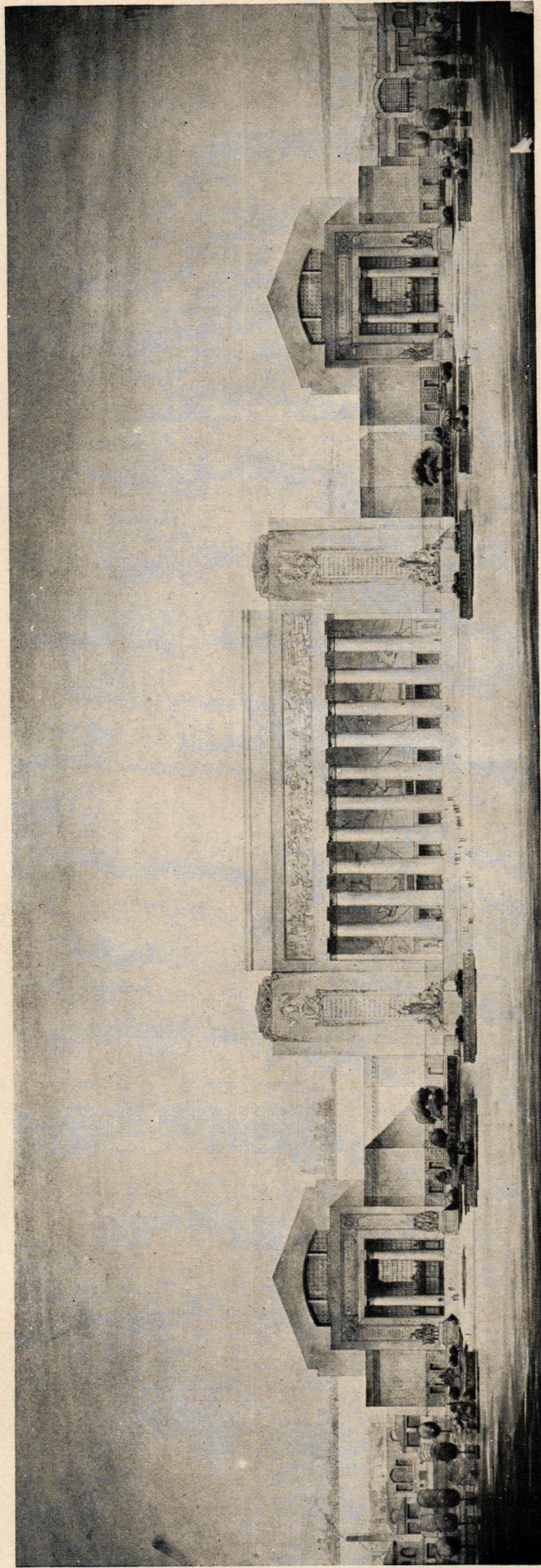
WINNER AND FIRST MEDAL

PATRON, EDMUND S. CAMPBELL

ARMOUR INST. OF TECH. AND CHICAGO ATELIER

FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS

A TRANSPORTATION INSTITUTE



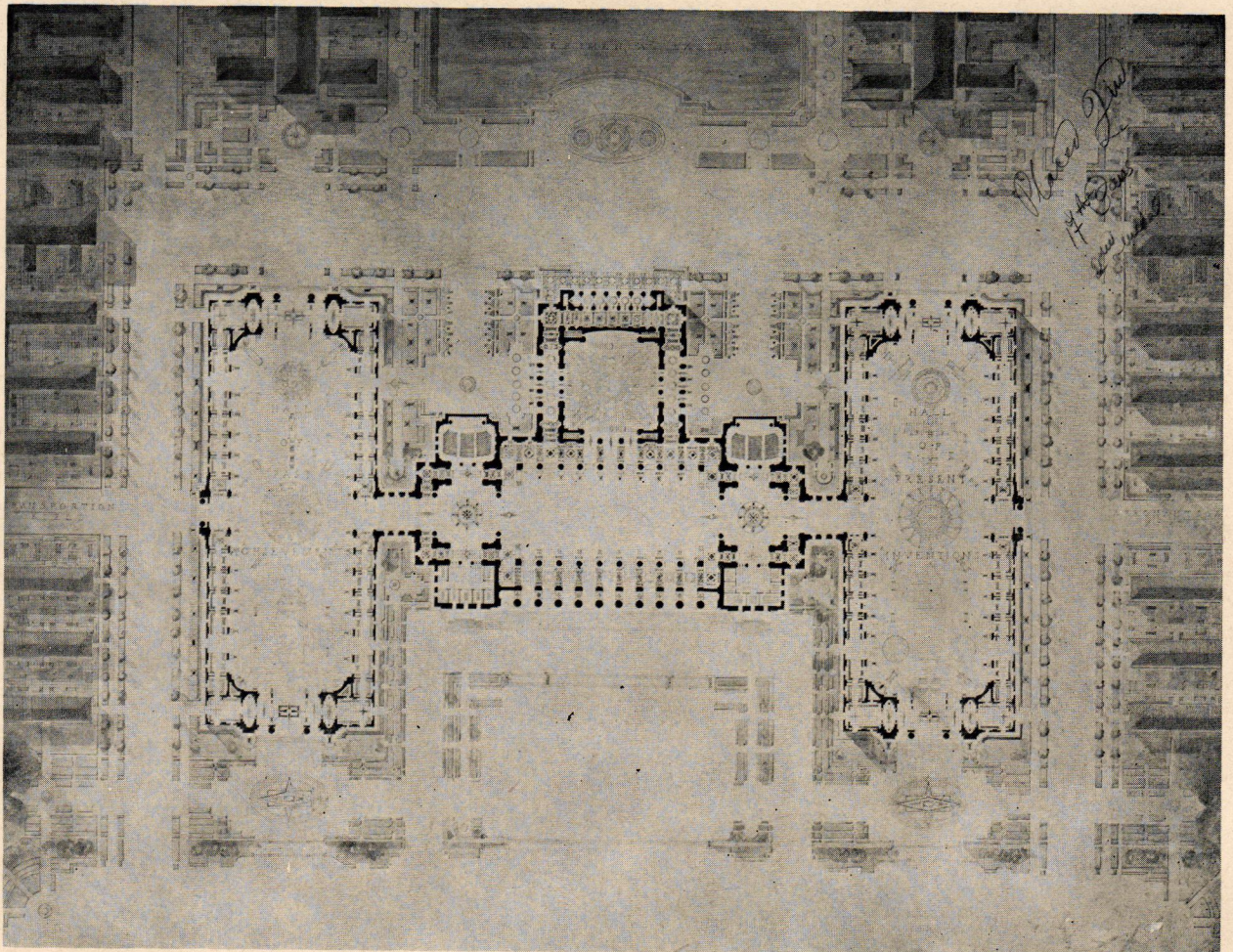
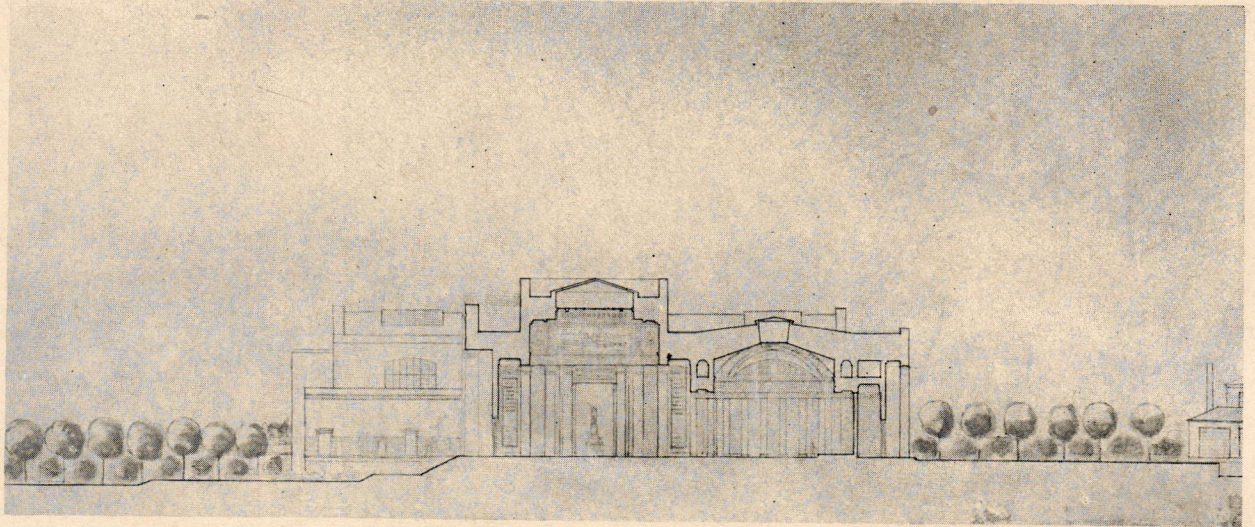
S. R. MOORE

PLACED SECOND AND SECOND MEDAL

COLUMBIA UNIV. AND ATELIER HIRONS

FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS

A TRANSPORTATION INSTITUTE

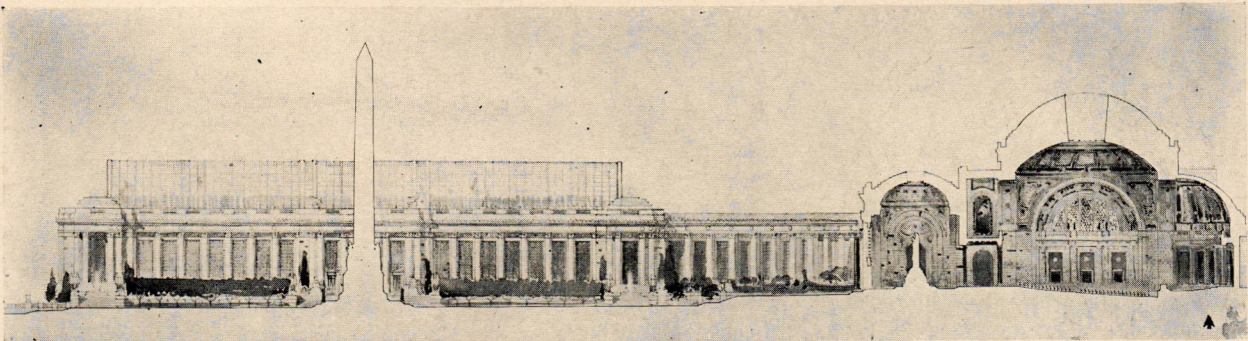
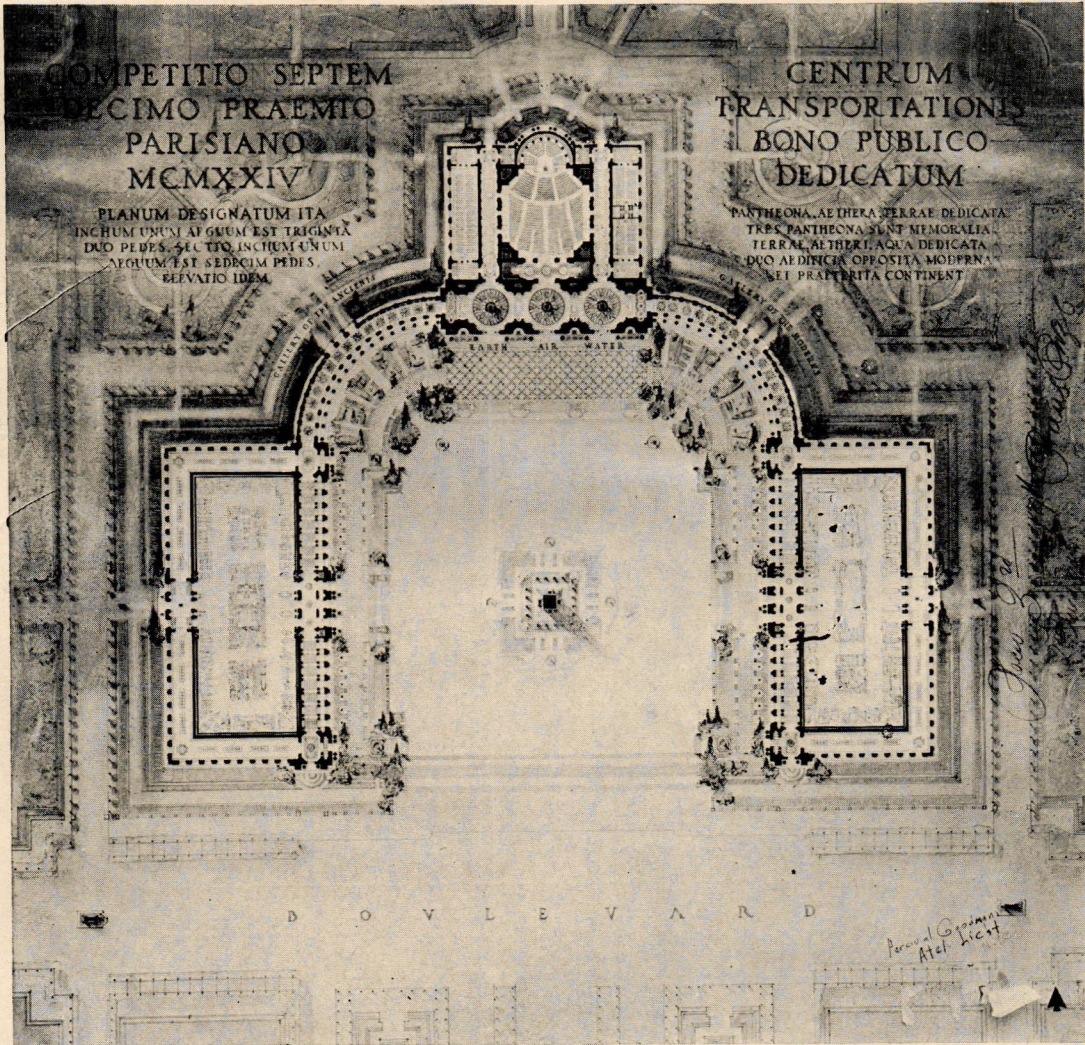
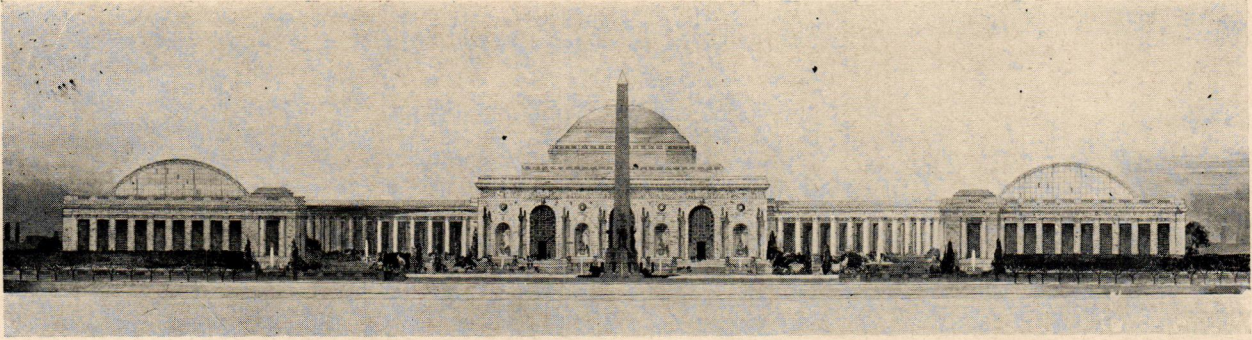


S. R. MOORE

COLUMBIA UNIV. AND ATELIER HIRONS

PLACED SECOND AND SECOND MEDAL

FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS
A TRANSPORTATION INSTITUTE

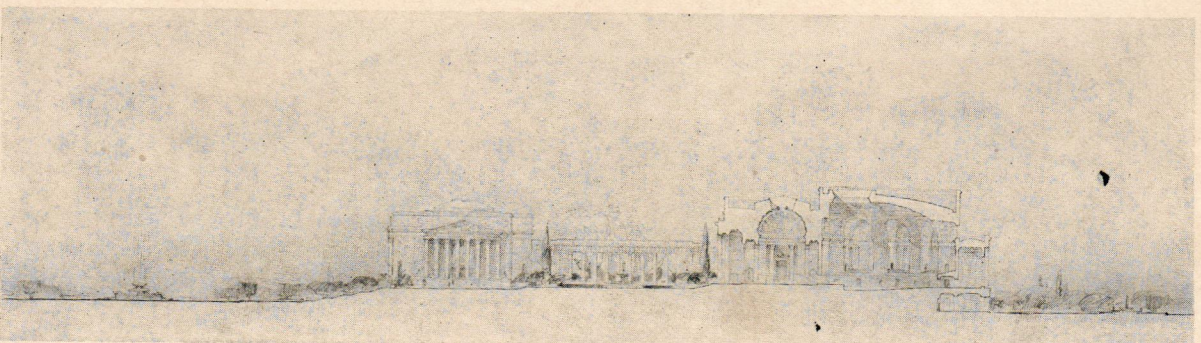
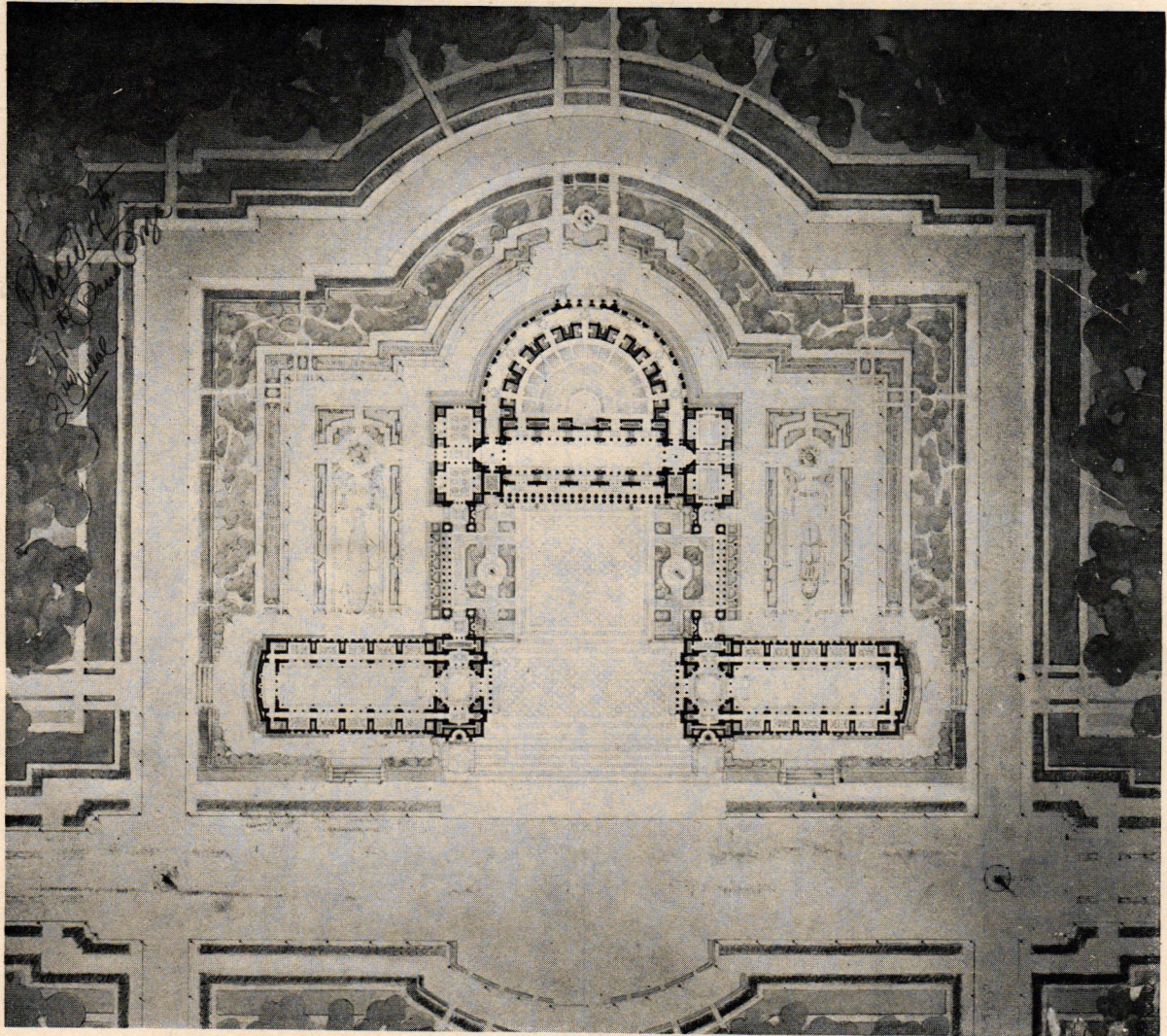
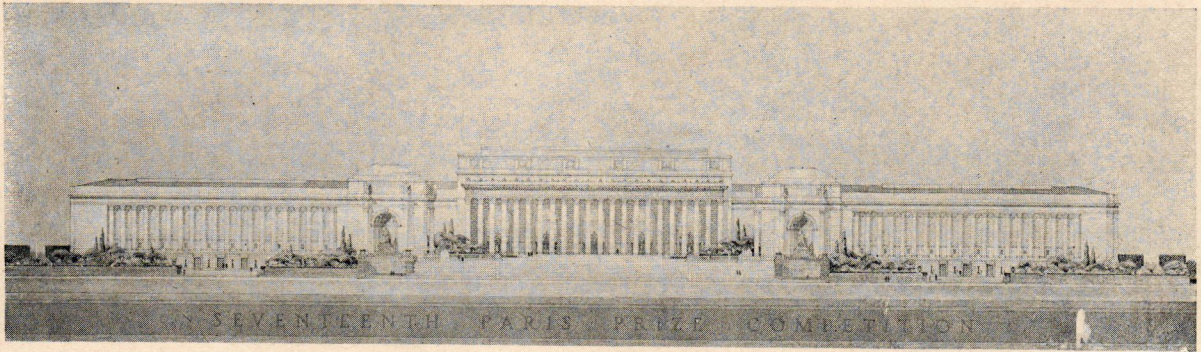


P. GOODMAN

PLACED THIRD AND SECOND MEDAL

ATELIER LIGHT

FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS
A TRANSPORTATION INSTITUTE



E. L. BABITSKY

PLACED FOURTH AND SECOND MEDAL
FINAL COMPETITION FOR 17TH PARIS PRIZE, SOCIETY OF BEAUX-ARTS ARCHITECTS
A TRANSPORTATION INSTITUTE

ATELIER WYNKOOP—SEYMOUR

The LAW as to ARCHITECTURE

BY CLINTON H. BLAKE, Jr., of the New York Bar

A SUBSCRIBER has submitted to the Legal Department a question of a claim by the general contractor in connection with the construction of a concrete building. The contract did not make any provision for the installation of temporary lighting, but it was necessary that such lighting be arranged for, in order that the contractor could properly construct the work. No mention of the item of temporary lighting was made by the architect or the owner or contractor during the progress of the work. The general contractor, without any order from the architect or owner, proceeded to set up and furnish temporary wiring and lights throughout the building, and later submitted to the owner a claim for this work, as an extra. He claimed that the temporary wiring work was used solely by the other trades working on the building, and that the owner was obligated to pay the extra and could pro-rate the amount among the other contractors who were engaged in installing machinery, piping work and the like.

The contractor should not be entitled to sustain his claim for this extra. He proceeded to put in the temporary lighting layout entirely on his own responsibility and without any agreement, express or implied, on the part of the owner, that he would reimburse him for it. The installation of the temporary lighting was necessary to the work which the contractor was obligated to perform under the contract. He knew when he entered into the contract, or should have known, that, in order to perform his work as agreed, it would be necessary for him to provide temporary lighting, just as it would be necessary for him to provide tools, scaffolding and similar equipment. In the absence of a special agreement to the contrary, a contractor cannot claim an extra for work which it is necessary for him to perform as an incident of the work which he agrees to carry out under his construction contract.

The contract might provide that the contractor be paid for temporary lighting installation just as it is customary in some cases to provide that he shall be paid for the temporary heat which he furnishes during the construction of the building. It is incumbent on him, however, to see that the contract so provides. The contract governs the respective rights and liabilities of the parties. Their duties must be governed by its terms and extras cannot be claimed for work which, under the contract, is not to be classified as an extra.

The claim of the contractor that the owner could pro-rate the amount of the extra among the

other contractors on the work is similarly without any sound basis. It may be true, as he urged, that the other contractors had the use of the temporary installation which he put in. The fact remains, however, that the other contractors made no agreement to reimburse him or the owner for the cost of this installation, and that the installation was primarily put in by the contractor to enable him to carry out his part of the work and not at the request or for the convenience of the other contractors. If the owner were to pay the extra demanded, he would have no legal right to turn about and recover the amount so paid from the other contractors. He has no contract, express or implied, with them which would enable him to do this, and they could quite properly maintain that they were under no obligation to reimburse him for this expense. It is possible, of course, that the contractor might be able to hold the other contractors for a portion of the lighting disbursement, if it could be shown that he had installed it, impliedly or directly, at their request. There might then arise an implied obligation on their part to pay to them the reasonable value of their proportionate benefit. Unless, however, there exists some such fact, which will vary the ordinary rule, neither they nor the owner can be held responsible, and the contractor must be the one to bear the expense of this item.

That no question of this character may arise, it is desirable that the construction contract contain a sufficiently broad provision requiring the contractor to furnish all incidental installations of this character, so that there may be no difficulty or ambiguity such as that which has arisen in the case referred to. If it is the intention of the owner that the contractor shall bear this expense, it is only fair to the contractor that the contract should so provide, so that he may thoroughly understand his position. If it is the intention of the contractor that the owner shall pay the amount, it is but fair to the owner, and it is necessary for the protection of the contractor, that the contract should so provide. Otherwise, the rule which I have outlined must apply.

LEGAL DECISIONS

A CONTRACT between the contractor and his sub-contractor contained a provision to the effect that no change made in the plans of the building should release the sub-contractor. There was delay by the sub-contractor in the performance of his work. In his defense, he urged that the plan for the building had been changed and

that, as a result, he should not be held responsible for the delay. It appeared also that the contractor required the sub-contractor to divide with him a commission received from a third party for work which was preliminary to the performance of the contract, and that the contractor charged the sub-contractor a certain percentage for financing the latter's payrolls. It further appeared that, when half of the time given for the performance of the work by the sub-contractor had expired, he had only completed one-tenth of the work. The court held that the change in the plan was, under the conditions of the agreement, no excuse for the sub-contractor's delay in performance; that the requirement by the contractor that the sub-contractor divide the commissions for the preliminary work and the fact that the contractor charged the sub-contractor for the financing of the payrolls was likewise no defense, and that the contractor was justified under the circumstances in re-letting the contract when half the time for the performance thereof had expired and the sub-contractor was in default in performance.

Jacob A. Zimmerman & Son, Inc. v. Fidelity, etc. Co.,
90 S. 647.

THE contract between the general contractor and a sub-contractor provided that payment should be made as the work progressed, upon legal proof that the work and materials for which payment was claimed had been performed and supplied. The general contractor asked the sub-contractor to take care of the former's business during his absence, and stated to him that he was to take charge of the construction of the building and that whatever he did would be satisfactory. The sub-contractor performed various items of extra work not referred to in the contract and without the scope of its terms and various extra work also which was approved by the general contractor. The contract called for a payment of \$18,200. The sub-contractor failed to perform certain portions of the work for which a credit was allowed the general contractor of \$508.00. It appeared, also, that the general contractor had furnished the sub-contractor with certain materials which the latter should have furnished under his contract, and that credit for these was allowed the general contractor.

The sub-contractor agreed to burn the brick to be used in the building, and that in this connection he would furnish the labor only and the principal contractor would furnish the plant. The contract further provided that the sub-contractor should furnish lime, sand and mortar and do his work according to the specifications. The specifications required the use of the cement. The

contract itself made no mention of cement as such.

In an action by the sub-contractor against the contractor, the court held that the provision requiring legal proof of performance, as a condition precedent to payment referred only to the payments made during the progress of the work and not to the recovery of the balance due after the work had been completed; that the extra items claimed by the sub-contractor were proper charges; that the failure by the sub-contractor to perform work of the value of \$508.00 did not disprove his substantial performance of the contract and that substantial performance was all that was required to enable a recovery by the sub-contractor to be had; that the fact that the contractor had furnished the sub-contractor with materials did not disprove substantial performance, and that in effect these advances were similar to advances of money for which the general contractor received credit; that the sub-contractor under his agreement to burn the brick and furnish the labor in this connection was not required to furnish the repairs necessary to put the plant for this purpose in operating condition or to furnish the fuel for the operation of the plant; that it was not important whether the term "cement" was covered by the words "lime, sand and mortar;" that, inasmuch as the sub-contractor was required to do his work according to the specifications and the specifications required the use of cement, he was required to furnish the cement notwithstanding the fact that it was not specifically mentioned in the contract.

Finley v. Pew, 205 Pacific 310.

A CONTRACT called for the completion of a building in accordance with the specifications. In an action to recover for the work done, the defendant claimed that he did not like the way the work was performed. The court held that the agreement was to be construed as an agreement to furnish work which should reasonably satisfy the other party, and that the latter could not express dissatisfaction with the way in which the work was done, merely for the purpose of repudiating his contract.

Alfred v. Sheehan, 202 Pacific 681.

(EDITOR'S NOTE: The above decision should be read with certain reservations. In the usual case, it will be the contract which will govern, and if the work has not been performed in accordance with the contract, the contractor will not be allowed to recover on the ground that the work done ought reasonably to satisfy his employer. The question ordinarily is not what should satisfy one of the parties to a contract, but rather what the contract terms provide.)

SPECIFICATIONS

DURING a recent discussion of specifications the matter of standardizing certain elements or processes in building construction was suggested as one factor that should be given more serious consideration. Reference was made to the invaluable service being rendered owners of certain American motor cars through standardization of all parts and the maintenance of service stations for supply to car owners. Stocks of some parts are also maintained in retail stores and through such services there is no difficulty in replacing broken parts. On the other hand, owners of other cars, of American and foreign manufacture, do not have such service available and in some instances must have parts machined to order at great expense and much greater annoyance. Could not a similar service be developed for building construction?

Considerable effort is being put forth by the Federal Specifications Board to formulate standard specifications for the use of Government departments, each one of which has, heretofore, prepared its own specifications with diverse standards of workmanship and materials. Designs, of course, have varied considerably, even in cases where identical articles should have been used if for no purpose other than similarity in appearance and uses.

The Bureau of Standards of the Department of Commerce has done quite a bit of investigation work and has issued numerous bulletins and circulars which present facts that can be used as a basis of standardization.

The American Society for Testing Materials has adopted specifications that are intended to foster standard methods of use and manufacture of many items used in building construction.

The American Specification Institute has made some progress in the development of standard specifications for the utilization and installation of materials and in the determination of some sort of standard method of specification writing in its mechanical phases.

Certain of the trade associations and a number of individual manufacturing concerns have developed standard materials and methods that are commendable, especially to one who wishes quality goods at economical prices and at a reasonable delivery time.

So it may be assumed that much in the way of standardization already has been accomplished. The Department of Commerce and all other organizations mentioned above are continuing their efforts along these lines, thus assuring additional items of a standard class.

Nevertheless, one may naturally ask why the necessity for any standardization at all? There are some who consider building construction (note that architecture is not spoken of here) too individual and specifications too intimate an expression of one's own character and ability to suffer any semblance of standardization. Others will say that building construction should be made subject to the most earnest efforts toward standardization. Somewhere there surely is a middle course which may be followed with safety—and with due caution.

Hardware manufacturers have accomplished quite a bit in the elimination of obsolete designs and of items that are so rarely called for that they are practically useless. Yet, in the case of a simple cylinder keyed night latch, it is impossible to use a cylinder from one lock in the lock of an identical product of a different manufacture. This is a small item but it was a source of a great deal of annoyance to one client.

Manufacturers of steel stair construction have succeeded in building very good types of stairs that may be bought much more cheaply than if made to the architect's special design, which probably would not produce any better stair construction for the intended purpose. These stair manufacturers are endeavoring to furnish their work installed in the building under a separate contract or at least under a specific sub-division of the specifications and not as a sub-contractor. This is one effort leading to standardization.

One manufacturer of elevator fronts presents a similar argument, on the basis that since his work means so much to the successful operation of the building and to the elimination of accident-causing features he should be allowed the privilege of dealing direct with the architect.

A tilting flag pole of considerable merit comes to the front with a plausible argument that its especial features of economy and good use merit individual consideration. This article is made by a manufacturer who produces no other article.

In many branches of construction work there must be one best way of finishing or installing a certain material. Practices in various sections of the country may differ slightly, but the major operations usually are nearly parallel and the results quite similar. If this is so there already has been adopted some sort of a standard method for the particular result. The unfortunate phase of this matter is that there is no agency which will co-ordinate these activities except the American Specification Institute, which already has accomplished something along these lines.

Architects who specialize in one or two classes of building or who find a great similarity in the majority of their work have many opportunities to develop some standards of merit. This is especially true of the items that are constantly repeated in building after building with the exception of slight changes in profiles or ornament as the design of the structure may require.

Among such items may be found elevator fronts, public entrance doors, trim for office buildings, marble stall partitions, wood windows, and sidewalk doors, any one of which items may be standardized for use in practically all structures. It would be expected, of course, that variations as regards design, dimensions or shape would occur at times but normally it would be found that the method of construction of marble toilet stall partitions, for instance, need not vary in any important characteristic. If this is so, why could not there be developed some standard of construction of this work so that any architect could refer to the agreed upon method and know that the results would not fail to be good?

It is not to be understood that this advocacy of standardization contemplates casting all items of one character in the same mould. Individuality is always to be desired in building construction but, on the other hand, if there be one best way, why in the world should most of us insist on inferior methods of accomplishment? Take, for instance, the marble stall partitions mentioned above. It is a fact that the narrow piece between the doors, called by some the front and by others the jamb, should be not less than a certain width and thickness for strength. The partition separating two stalls likewise should be not less than a certain thickness. The front or jamb and the partition must be joined together and this joint must be strong enough to withstand ordinary and some extraordinary use. There must be some preferred way to make this joint. A number of joints that have been examined look weaker than others. Then why could not the method of making this joint be standardized?

Similarly, in thousands of cases methods can be determined that excel all others in strength, durability, ease of fabrication and economy. Elevator doors in office buildings have one use only. They are necessary to give access to the elevator and at the same time they must be fire retarders and must be substantial and equipped with substantial hardware. At the same time they should be easy to operate and should afford protection, through special equipment, to the operating parts of the elevator machinery and to the elevator passengers. Design or exterior appearance have nothing to do with any one of these elements except in those cases where a particular design precludes the use of necessary operating and protective devices, in which case, of course, the design must be changed.

This advocacy of standardization, then, has to do only with those items or parts of items that are necessary to use and do not become involved in the matter of external appearances.

Readers are asked to give consideration to this subject and submit their views and suggestions, with the hope that a start toward a desirable goal may be made in the near future.

STONE MASONRY

Stone Masonry, in the usual sense, will consist of granite, limestone, sandstone, marble or any of the other stones that are used in building construction with the exception of rubble stone which already has been discussed in previous issues of *THE AMERICAN ARCHITECT*.

Specifications for the furnishing and installation of granite and limestone have been prepared and given wide circulation by the National Building Granite Quarries Association, Inc., and the Indiana Limestone Quarrymen's Association. These specifications have informative and explanatory data accompanying them and can be used for any building construction. Their use is recommended if only for the reason that they are the result of some years of careful study and are the result of standardization efforts that are of great assistance to specification writers. In using these specifications, however, the architect should recognize whatever local customs, local weather conditions or individual idiosyncrasies will govern the work.

Some architects have adopted the commendable practice of draining all cornices or other projecting surfaces that are over eight inches wide. The prime purpose of this is to eliminate the streaking of stone if dirt accumulates and the secondary purpose is to prevent the rain from dripping onto the ground, causing annoyance to sidewalk pedestrians below. The lining is done with zinc or lead while copper sometimes is used. The two former metals will not stain the stone while copper has been known to transmit a slight green discoloration which may or may not be objectionable. To give proper drainage these lined surfaces must be formed like gutters and given sufficient pitch to prevent overflow during heavy rains. If the drainage surfaces are above a roof level the water may be drained through scuppers onto the roof; otherwise standard drains must be provided.

In cold climates and in warm climates where exceptionally heavy rains may occur it is not unusual to make some effort to produce joints that have an upper surface exposed to the weather, such as vertical joints in stone copings, that will be tighter than could be obtained by the usual setting mortar. Similar joints occur in wide cornices, window sills, belt course or other projecting surfaces. These joints may be made fairly tight by using an elastic cement made for such purposes which can be obtained in colors match-