

THE AMERICAN ARCHITECT

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EXECUTED BY SAMUEL YELLIN

DEVELOPMENT OF MODERN CRAFTSMANSHIP

By HENRY W. ROWE

THERE is something about the working of metals that arouses in most of us a feeling of respect for him who can so deftly turn meaningless masses of material into graceful forms, a something that is interesting in that it records so definitely the nature of the artist. If one were to seek among the many accessories of the architectural world, bringing to the foreground now and then the works of our skilled artisans, he would come so often upon the ripples of the metal worker that he would directly find himself following a stream of pursuit from the fascinating realms of which he could, if he chose, derive a wealth of study inexhaustible in its scope. Here he might find wayward impulses, hammered into grotesque and odd

shapes, while there find traced the delicate lines of graceful inspiration. Now and then he would meet a happy accident, its charm being that it cannot be corrected; or again perceive the recorded enthusiasm of one whose cup of joy has been hammered full to overflowing. Such is the fate of the iron worker—a hardened record of personality, and for this reason individuality is a most necessary trait in the offices of the iron worker. Originality, or whatever you wish to call it, is in truth the heart and soul of anything esthetic. How satisfying, for instance, is the skilled metal worker who will take our designs and warp them with a fashion of execution that is entirely his own; how pleasing is his result contrasted with the weak product of the copyist whose aim is

THE AMERICAN ARCHITECT

merely a replica, which is always found lacking in the enthusiasm of the original.

In the early days of our country, when the use of wrought iron was strictly utilitarian, and when the artisans even followed only the lines of necessity, it was individuality that gave the work its character. That wrought iron played an important part in the attractiveness of

phere of distinction to a home. The contribution of charm supplied by iron may be made, as of old, through its use in accessories such as hinges, foot scrapers, door knockers, hanging lanterns and bracketed lamps. It may also be employed with good effect in hinge plates, blind fasteners, railings and balconies.

Carrying its use still further, as, for



MR. CHARLES S. SCHNEIDER, *ARCHITECT*

many quaint old houses and gardens is a fact which will be made clear to any one who cares to give the matter even passing consideration. It might be thought by some that the various small incidentals which involve the use of iron would be too trivial to have much effect on the general result, but on reflection it will be seen that such details properly handled are of importance in giving an atmos-

instance, into the garden, quaint well arches and well sweep pivots may be artistically wrought in this interesting material. In its application in the rooms of the house the value of its contribution in the way of andirons, wood baskets, fire screens and fireplace implements will be easily recognized. Wrought iron may even be used with fine effect in delicately executed candlesticks, of which many of



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the fine examples have come down from the olden times.

No house of importance in the early Colonial days was complete without its touch of wrought iron. In the old brick or stone houses odd shapes and designs of wrought iron were decoratively used as heads for bracing rods of chimneys and also in the termination of supporting rods for the main walls of the house. The interesting appearance of shields in the form of bolt plates in the walls of the Dutch houses, particularly around Philadelphia, is accountable for a great deal of the charm in the wall treatment of these houses.

Many doors, particularly those finished in natural wood, would receive an added charm from the application of artistically wrought hinges. Where a strong effect is

desired it is interesting to use long strap hinges extending well across the door. Iron latches and latch plates suggesting the graceful handles of the early houses will produce a striking effect. In these days of the improved designing of hardware these accessories, together with door knockers, may be purchased in stock and will add much charm to the cottage door.

On the exterior of the house, iron brackets supporting an overhanging roof are sometimes an interesting departure from the more common use of wood for this purpose. Where it is desired to have the strong shadow of the projection without making too much of its support, simply constructed pieces with perhaps a limited amount of decoration will be found to be a pleasing adaptation of this method of support.

In these days when striking innovations for the tastefully presented cottages are so much in demand it will be found that the many uses of wrought iron will contribute largely to the effectiveness of the suburban home.

There is, however, a lamentable lack of



IRON LATCH

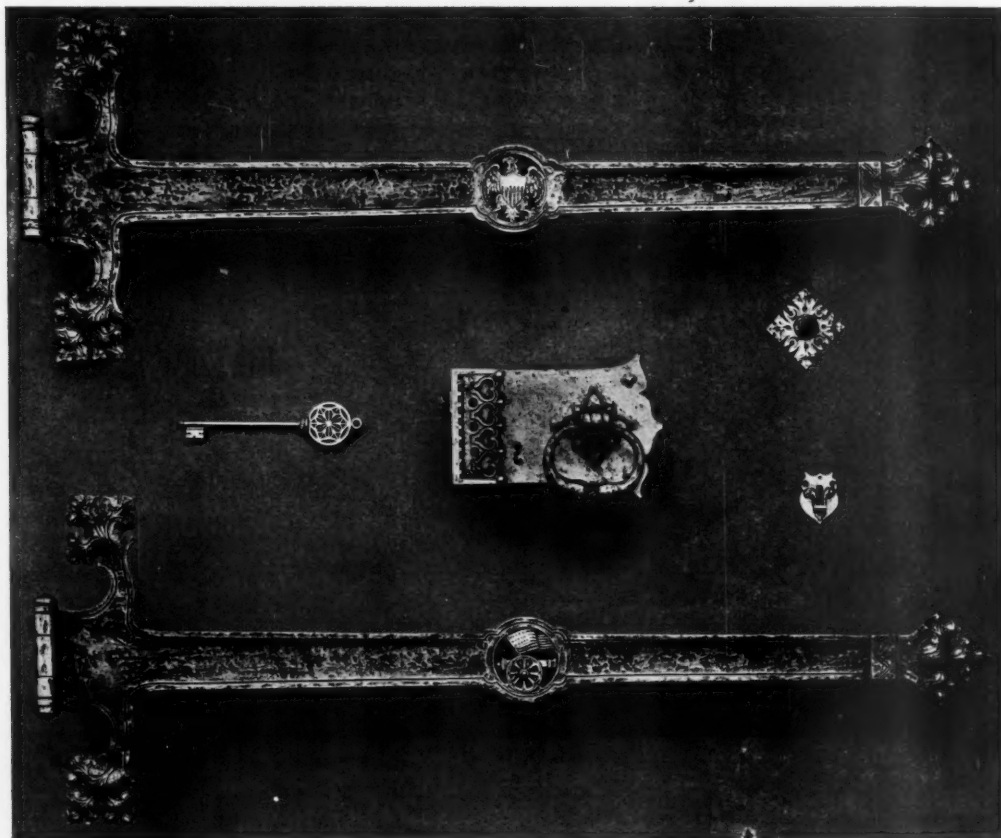
MR. CHARLES S. SCHNEIDER, ARCHITECT

THE AMERICAN ARCHITECT

craftsmen in this country, the reason no doubt being that the architects have neglected to encourage sufficiently this most interesting branch of our profession. Boys in our manual training schools whose inclinations are in the direction of ornamental iron work should be encouraged to continue in this pursuit

about him a school which stands quite alone in this country. His flattering success should serve as a most promising inducement for those who are in any way inclined in the direction of the metal working industry.

Speaking directly of the work of Mr. Yellin, it might be said that it is most



WROUGHT-IRON LOCK, HINGES, ETC., FOR WASHINGTON MEMORIAL, VALLEY FORGE

MESSRS. ZANTZINGER, BORIE & MEDARY, ARCHITECTS

and not allowed to be deflected by clerical opportunities, as is so often the case.

Around Philadelphia, through the brilliant efforts of Mr. Samuel Yellin, has centered a most interesting school of wrought iron workers. Mr. Yellin began his life's work at the age of 12, serving an apprenticeship in Europe. He came to this country self-equipped, with a most enviable technical education, and created

gracefully executed, and approaches more nearly the freedom and flowing beauty of Nature's curves than much of the work that we have seen. He appears to have recognized the fact that "bluntness" is not the first quality of iron work as some architects would have him do, but rather that the tenacity of iron is a virtue which lends a hand in quite the other direction—that of attenuation. It is quite true



ENTRANCE TO SHOP OF SAMUEL YELLIN
MESSRS. MELLOR & MEIGS, ARCHITECTS

THE AMERICAN ARCHITECT

that the craftsmen who have made the most of iron work in any country are those who have recognized this principle of the individuality of iron. Swift, graceful curves in contrast to short blunt

their own. In contrast we find in Mr. Yellin's work a refreshing regard for a studied technique, a refinement, so to speak, that will play no small part in the field of graceful delicacies that should be found more plentifully in the wrought work of our country. There is a satisfaction in examining beautifully executed hardware that is akin to the enjoyment of scrutinizing a well designed coin, and there is a demand among our clients of to-day who have discriminating tastes, and who are well versed in the study of periods, for a careful consideration of this accessory. They are quick to grasp



MESSRS. FURNESS, EVANS & CO., ARCHITECTS

ones will win the verdict in any jury of laymen on any trial of wrought iron work. It is a fleet material and should be recognized as such. A heavy mass of iron-work which has no work to do is not interesting, except in designs of a formidable nature. It has been quite the fashion of late to copy the humorous grotesques of much of the early English work. This is a crude pastime and reflects no great amount of credit upon the effort which might otherwise be expended upon more worthy inspiration. These grotesques, and other burdened inspirations have never been the last word in any art. They are historic and interesting, but many things are interesting which the well-trained esthetic mind will not sanction copying. The rough, bungling strokes that appear in this early work are not by the hands of skilled iron workers but rather the crude attempts of inferior workmen, and replicas of these oddities are in many cases weak admissions of those who have no power of conception of



WROUGHT-IRON LIGHTING FIXTURE
MESSRS. WILSON, EYRE & McILVAINE, ARCHITECTS

THE AMERICAN ARCHITECT

well defined twistings and turnings of the classic, Gothic, Tudor or any other motives into original forms; and from the illustrations herewith presented it might be truly said that another chapter has been added to our book of architectural accessories. There is no story that cannot be told in iron, but it should be told gracefully and with no excessive material. Classic and renaissance motives, for instance, should be freely penetrated and gracefully knitted together with an interesting fabric, and it is this sensitive operation that is so dependent upon the free play and imaginative genius of the designer and craftsman.

In conclusion it might be said that it is most gratifying to find how appreciative those of the lay world have been in connection with the successful results in this country of the wrought iron world. They are as ready to perceive good taste in de-



WROUGHT-IRON LAMP AND BRACKET
MR. JAMES P. JAMIESON, ARCHITECT

sign in this material as they have been in the recent sweeping advancement of others, the continued strength of all giving a genuine impetus to our true American architecture.

The Future of Artistic Design in the United States

Necessity is not only "the mother of invention," it also acts as an incentive to latent talent and develops in a surpris-



WROUGHT-IRON SCREEN IN HOUSE OF HENRY
CLAY FRICK, ESQ., NEW YORK
MESSRS. CARRERE & HASTINGS, ARCHITECTS

ingly rapid way lines of endeavor long neglected.

The European war has caused a cessation of work in many branches of art, and some of the crafts. In technical manufactures we in this country have either had to do without certain things or else make them as best we could. Perhaps the most often cited instance is dyes. While we have not as yet been able to equal the foreign product, we have gone a long way in the direction of ultimate success.

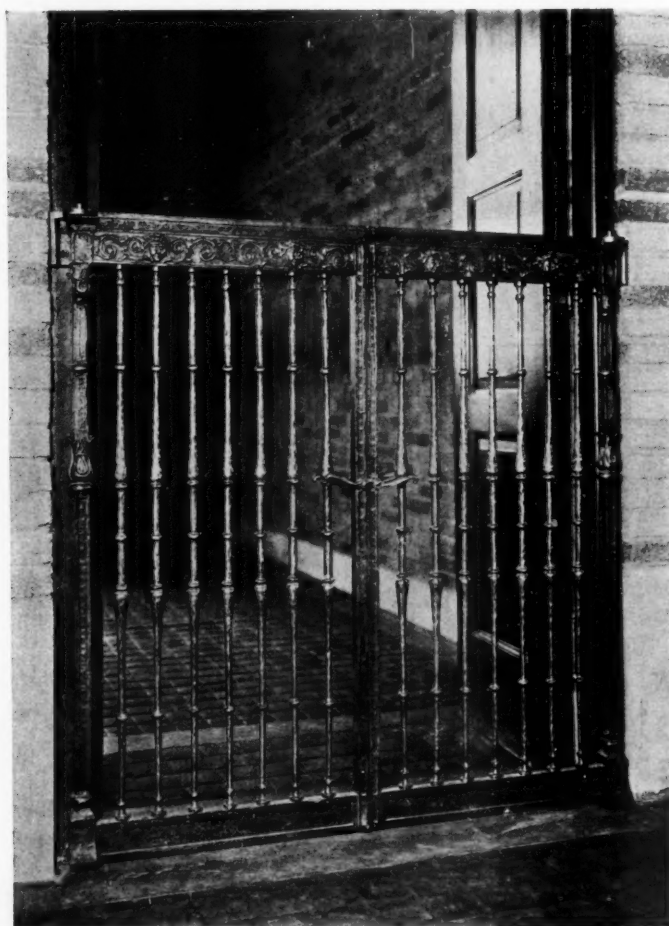
Toy making is another line of manufacture but very little followed heretofore in the United States owing to the

THE AMERICAN ARCHITECT

competition of toys imported from Europe, principally Germany, in large quantities. Toy making is rapidly becoming an important industry in the United States, and the toys are fast assuming excellence, due to the fact that makers are calling on men and women of artistic ability to supply the designs.

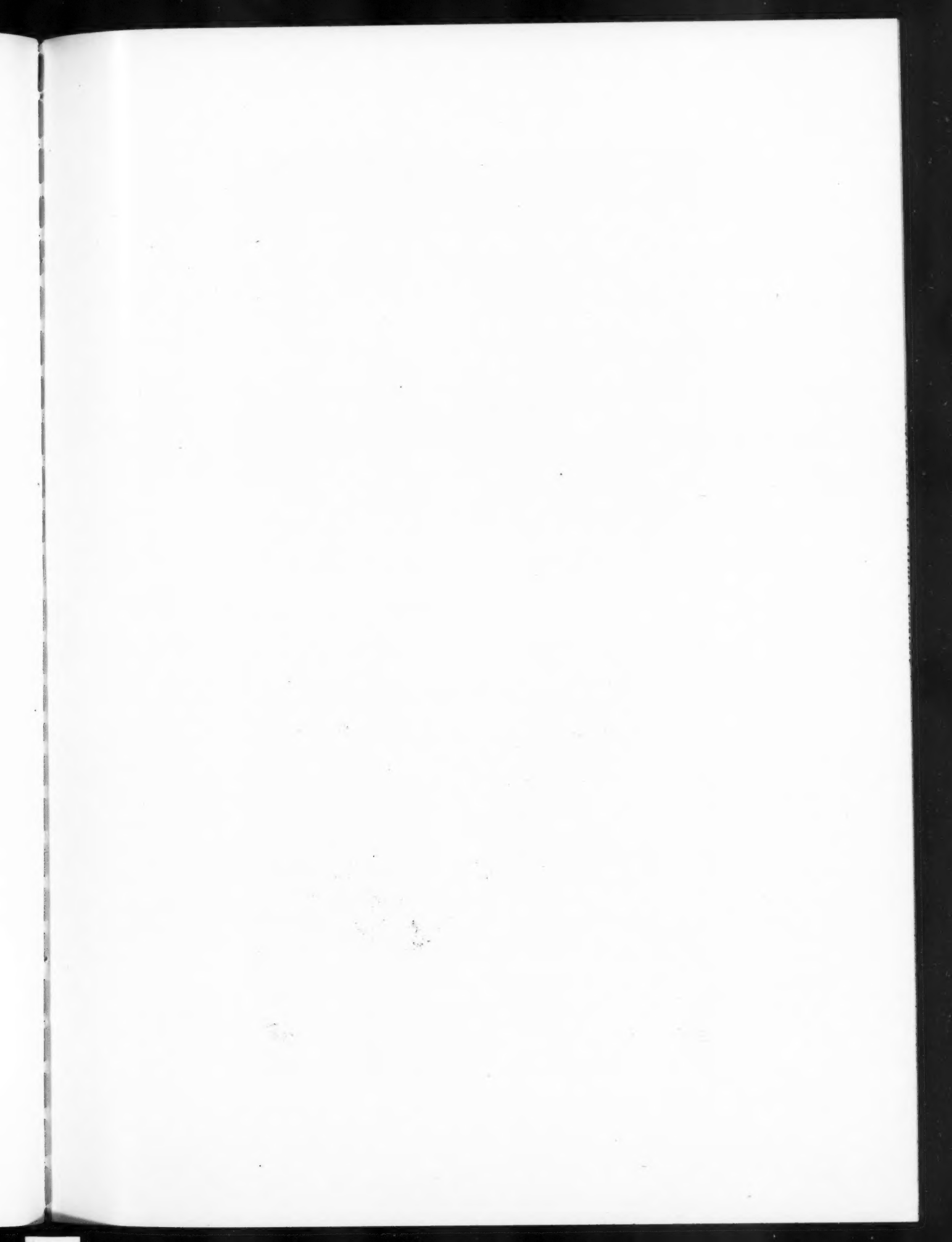
Many fields now feel this impetus and fabrics never before designed are made in this country.

It is not probable that with the end of the war there will be a cessation of these industries in this country. In fact, there appears to be a pronounced awakening in fields that depend largely on the artistic phases of craftsmanship. Within the next few years there will probably be presented many opportunities for the exploitation of American art in all its aspects such as have never heretofore existed in the United States.



WROUGHT-IRON GATE

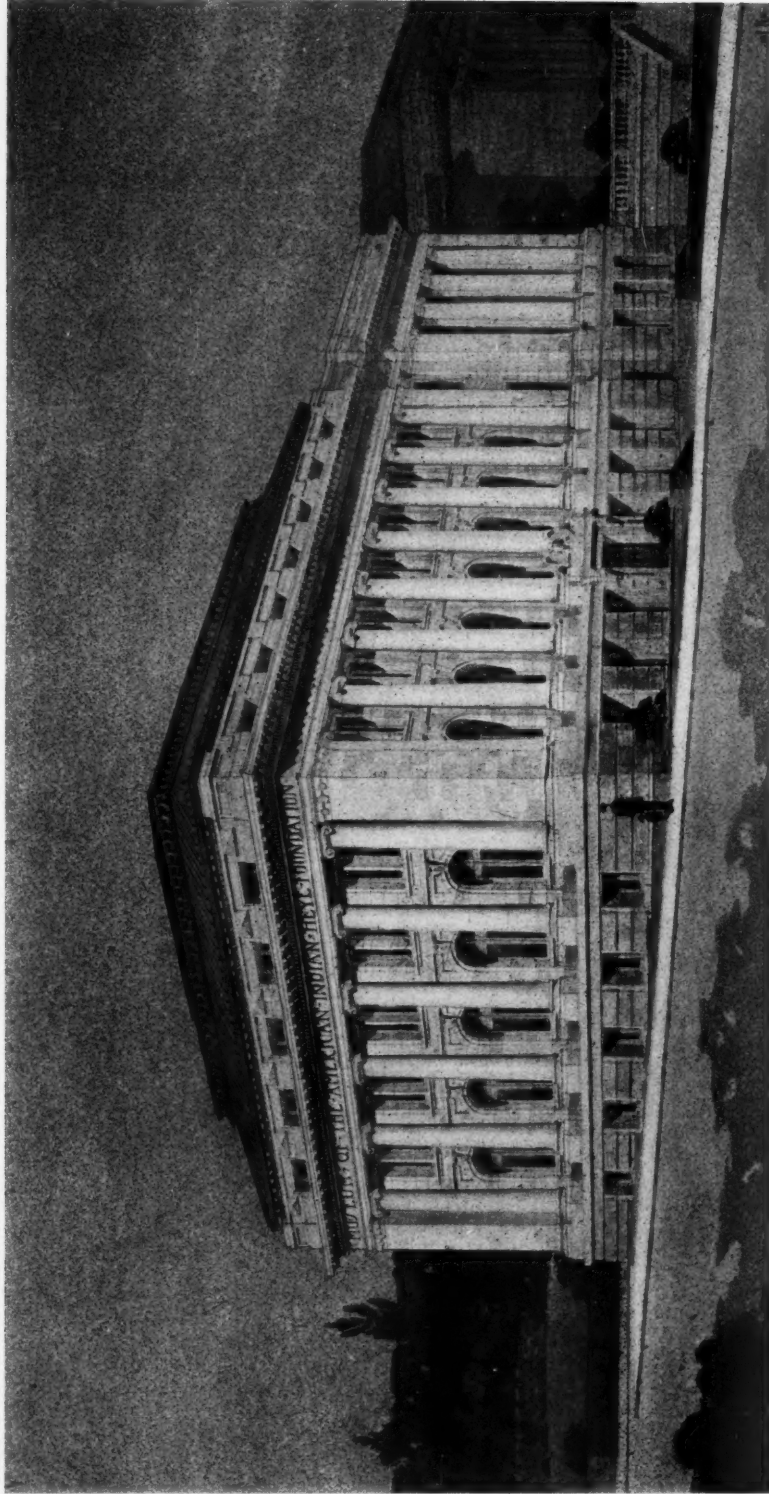
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VOL. CX, NO. 2128

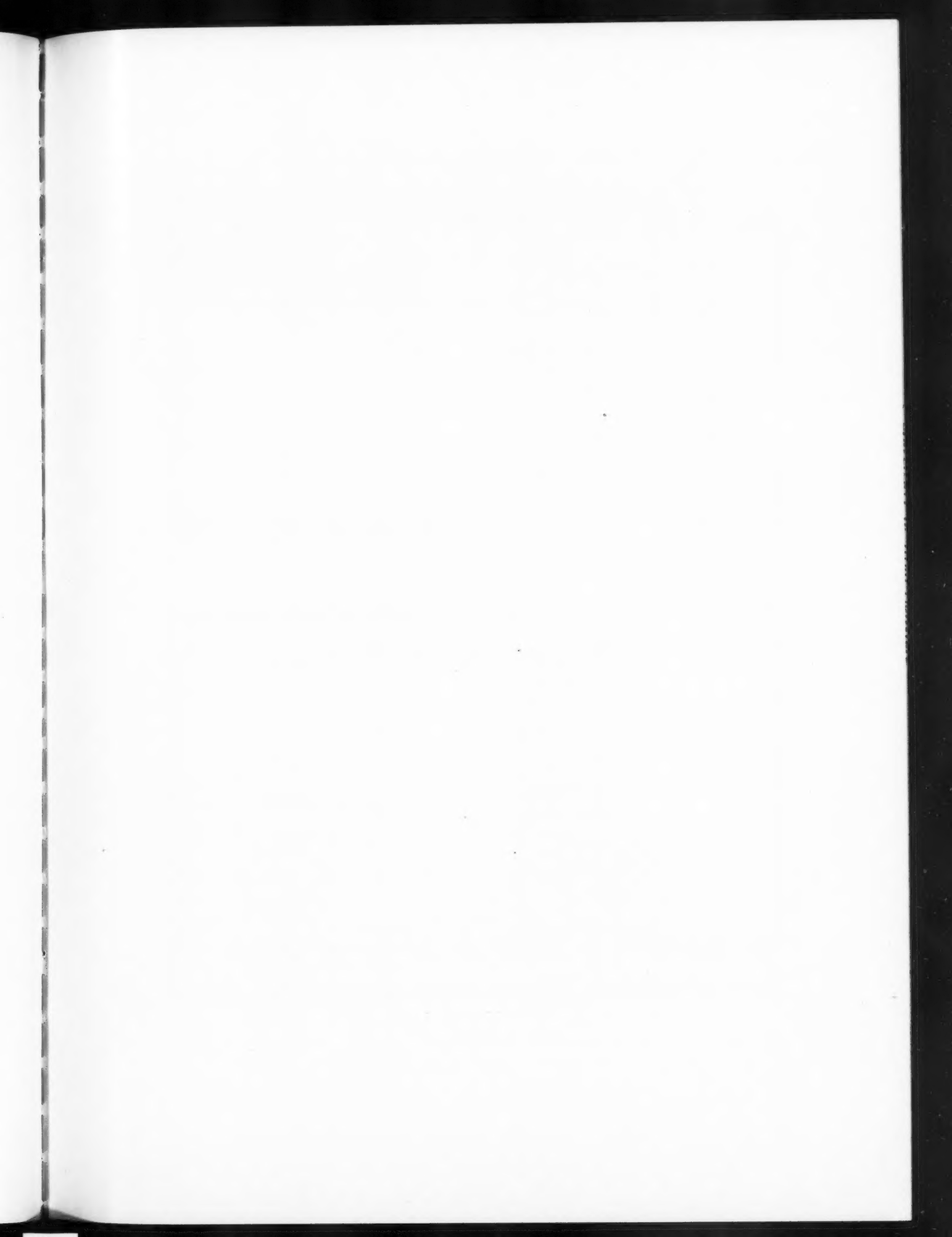
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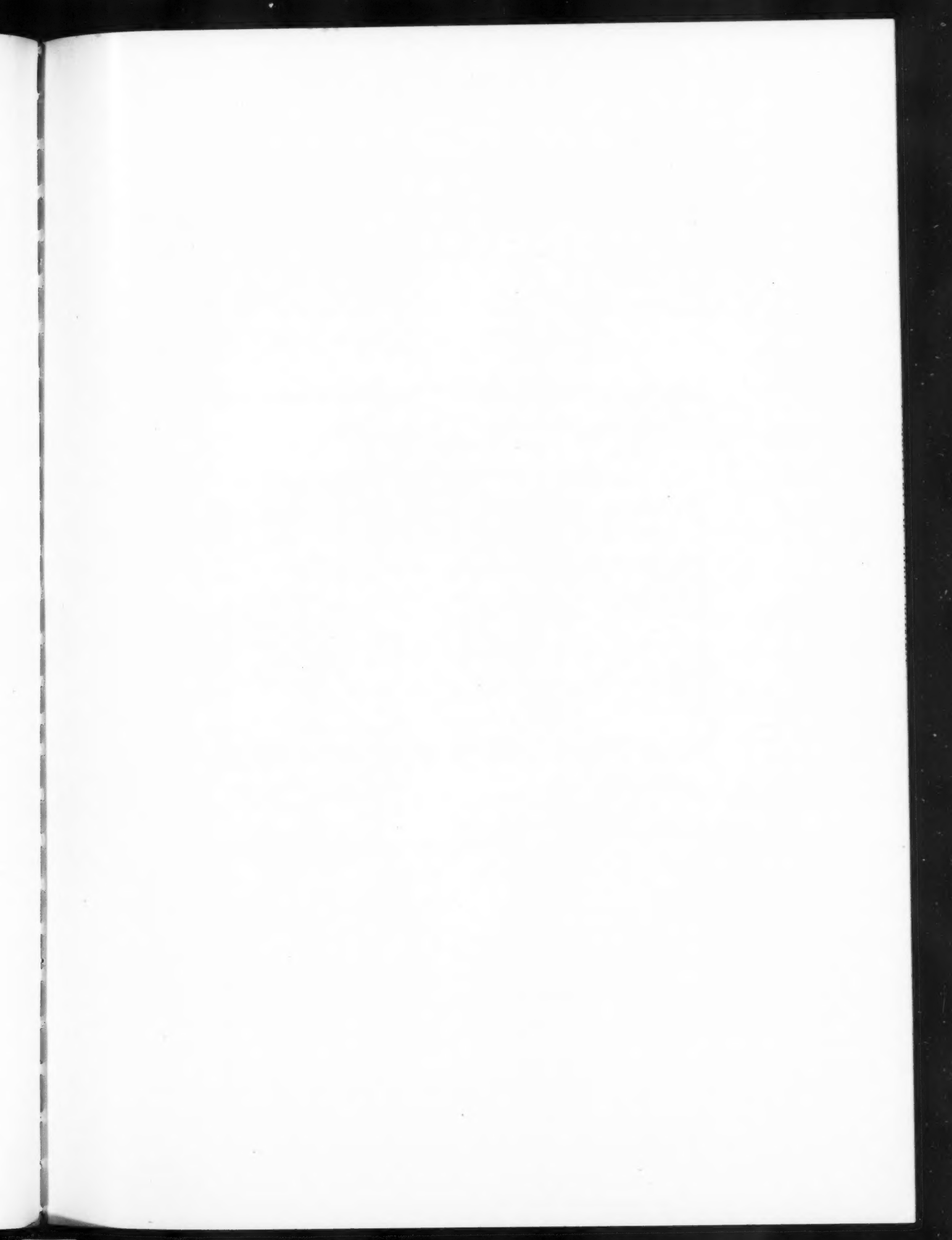
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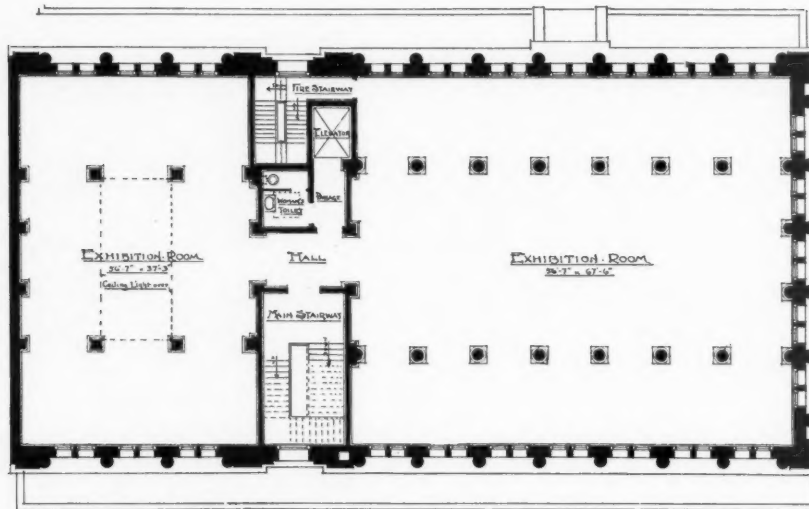


MUSEUM OF THE AMERICAN INDIAN, HEYE FOUNDATION, NEW YORK

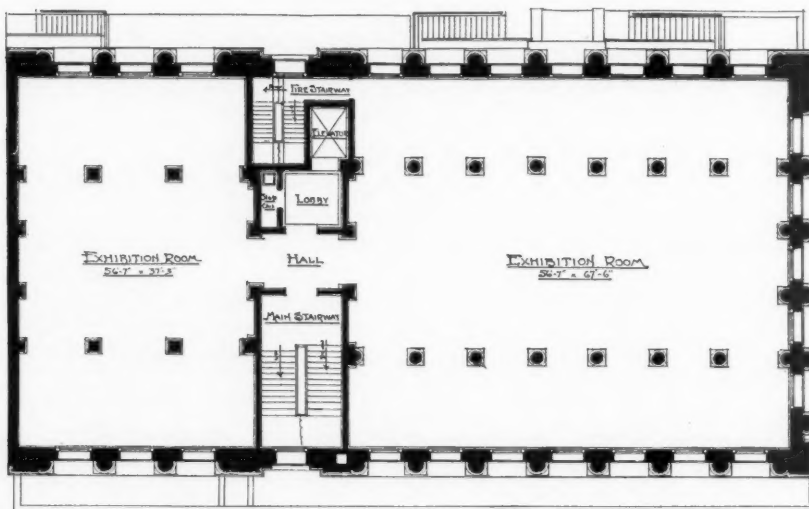
MR. CHARLES F. HUNTINGTON, ARCHITECT.



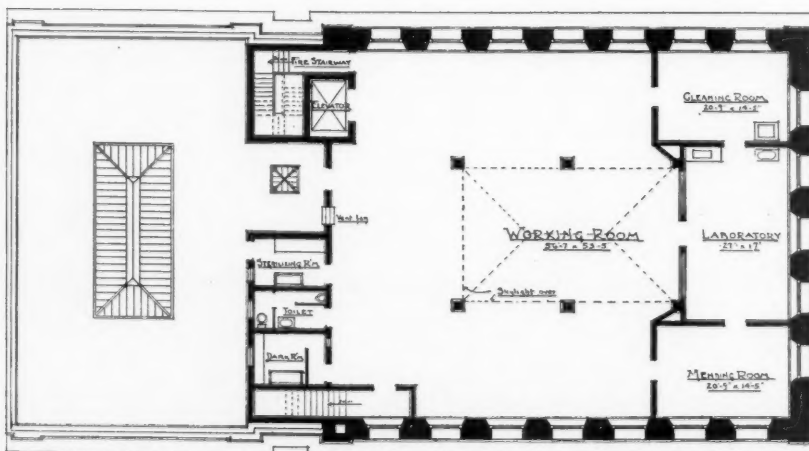




THIRD FLOOR PLAN



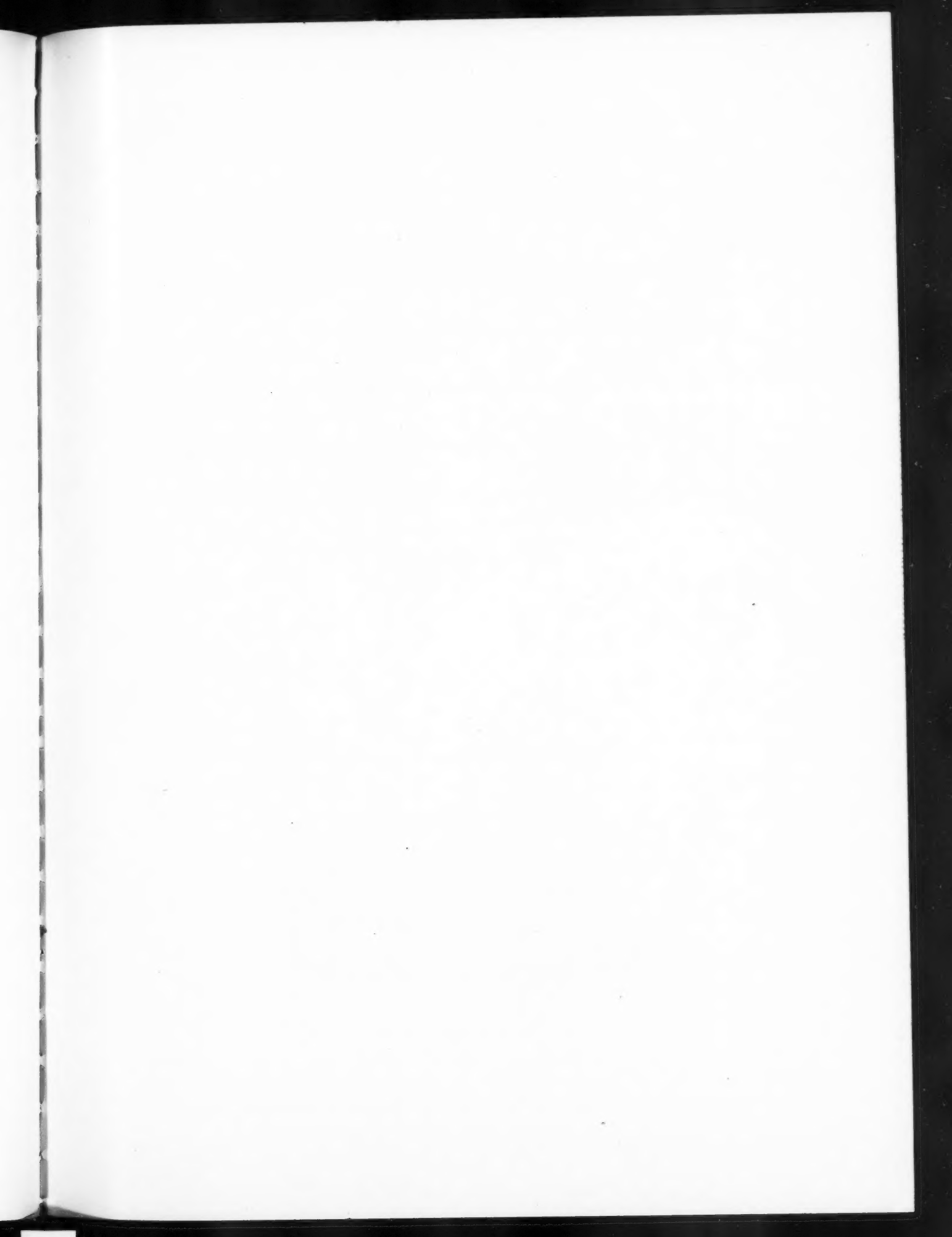
SECOND FLOOR PLAN

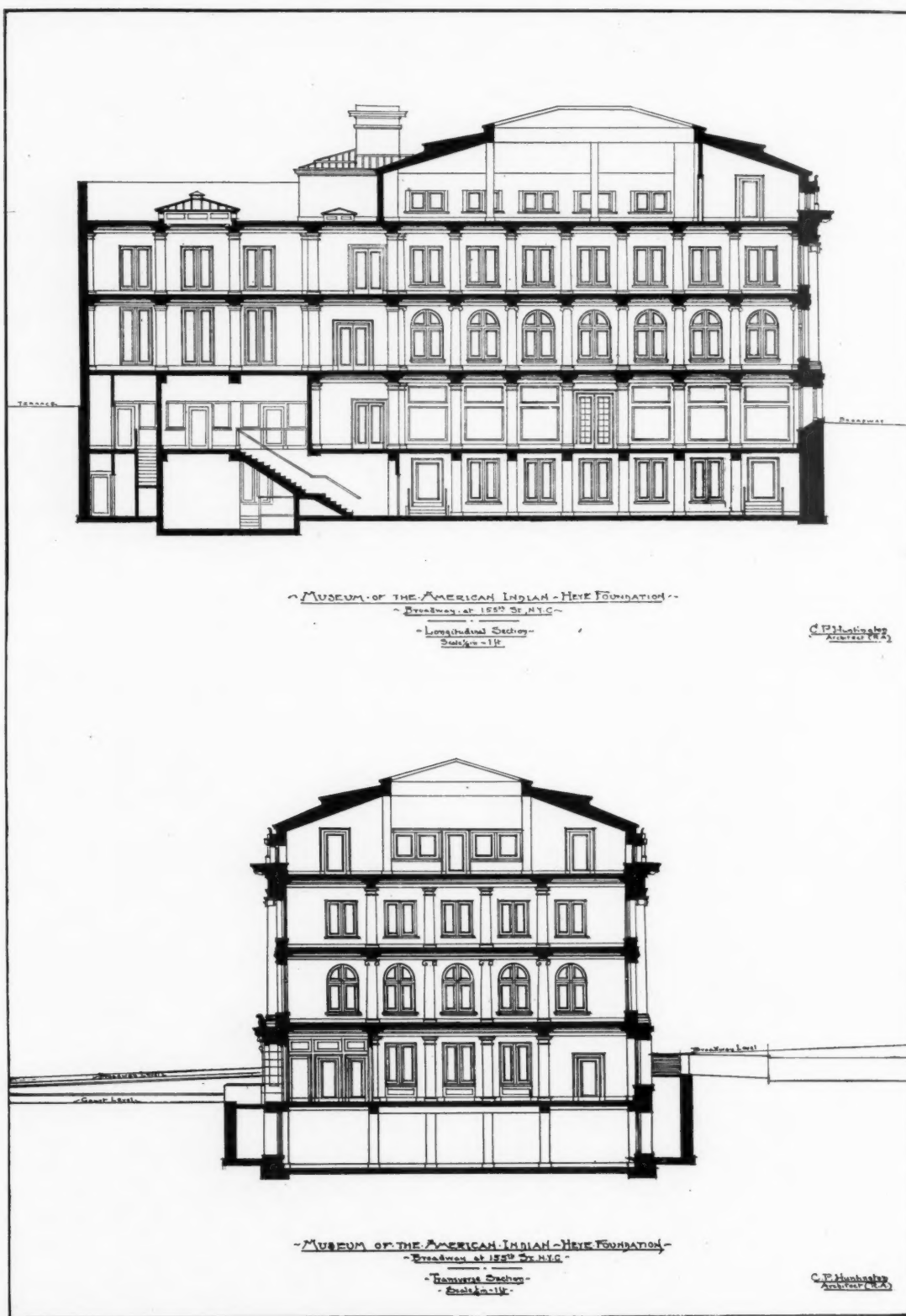


FOURTH FLOOR PLAN

MUSEUM OF THE AMERICAN INDIAN, HEYE FOUNDATION,
NEW YORK

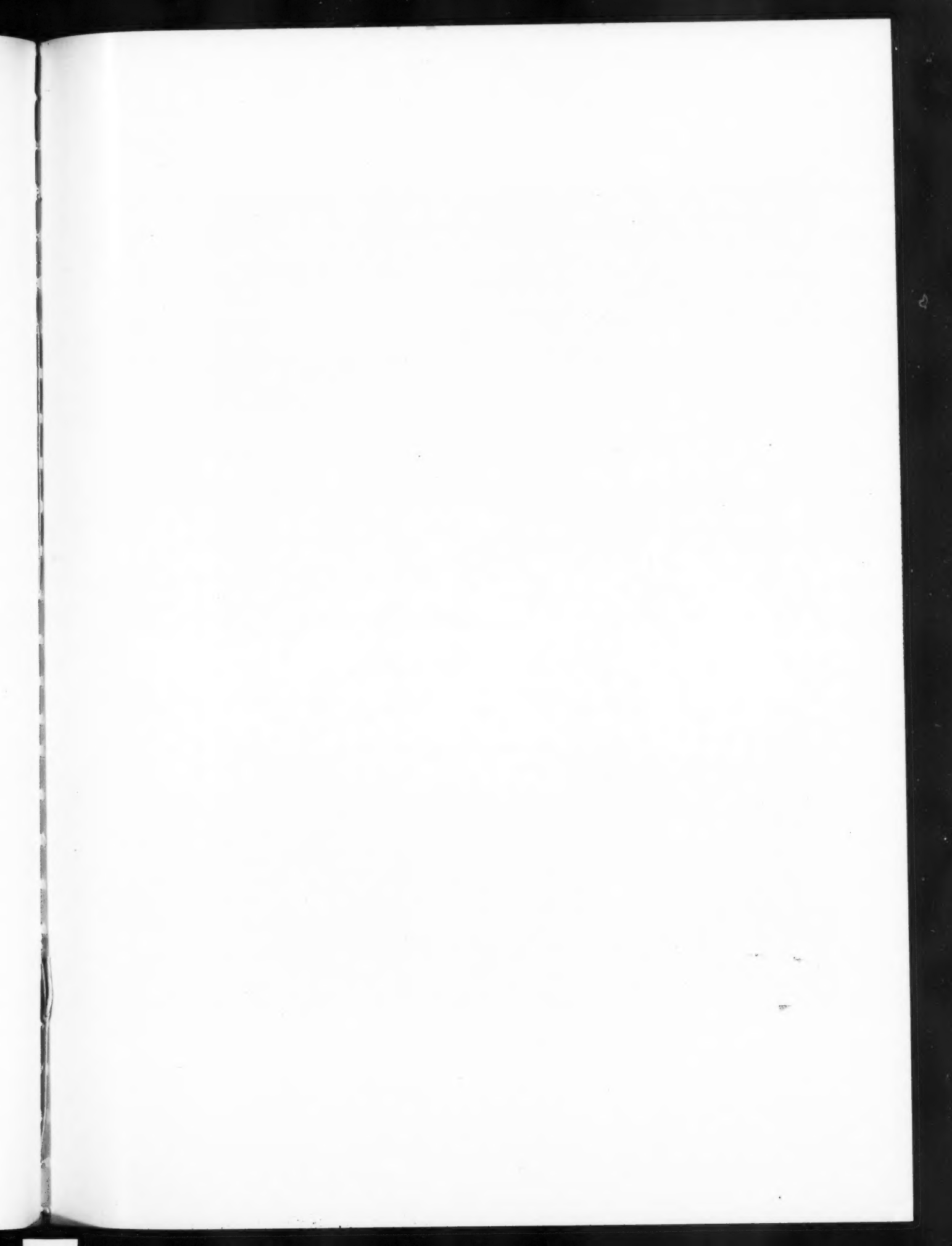
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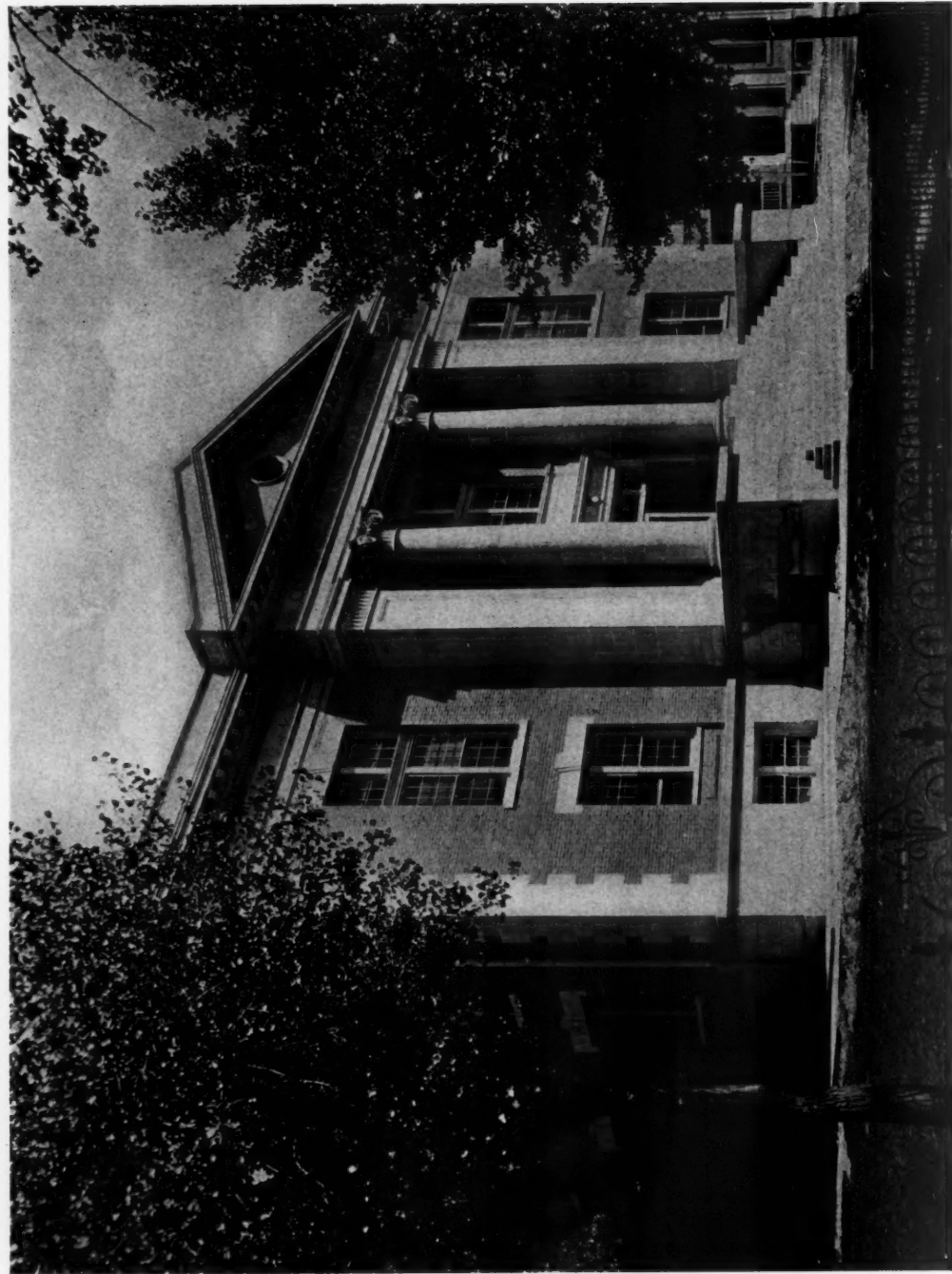




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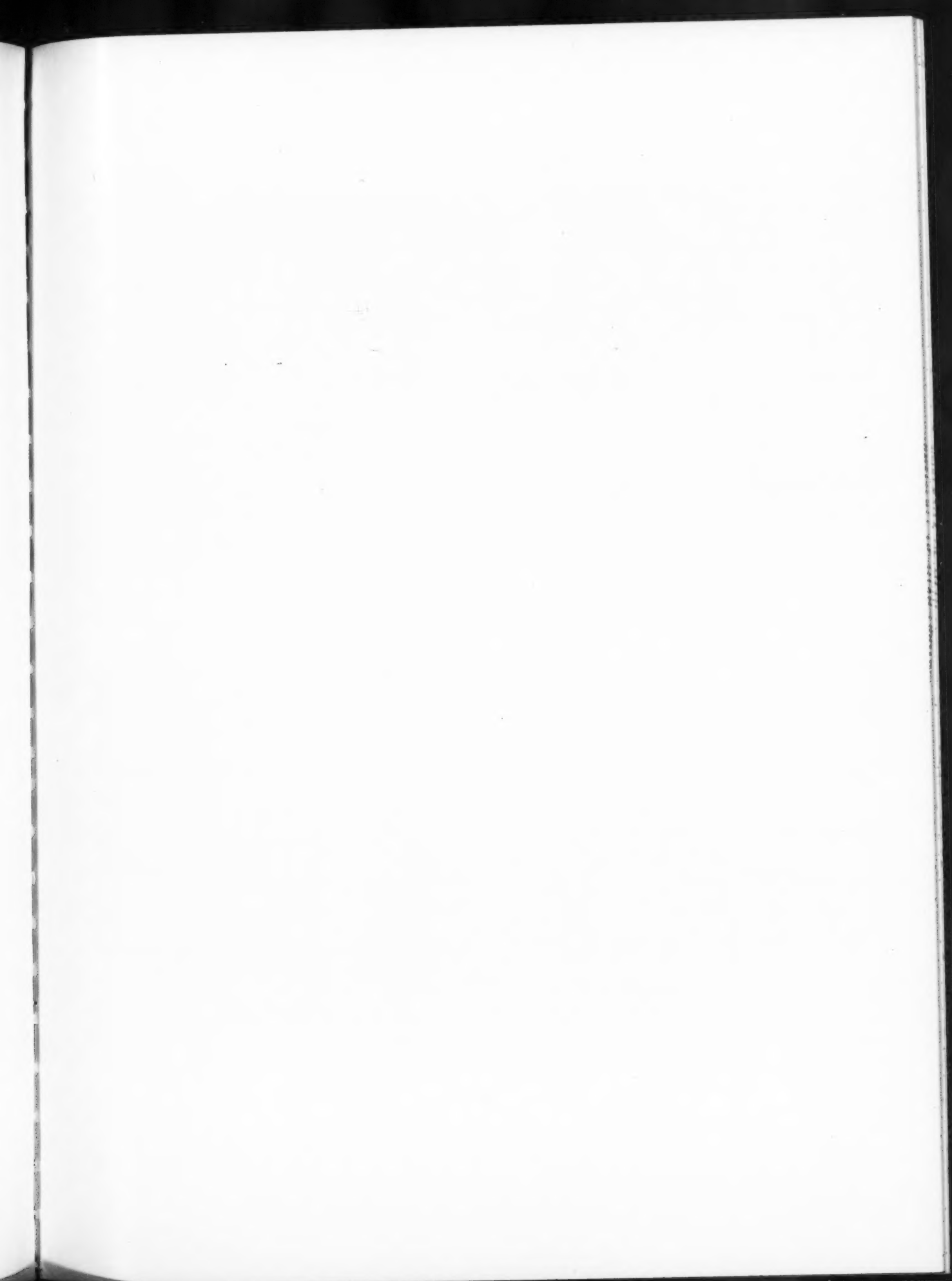


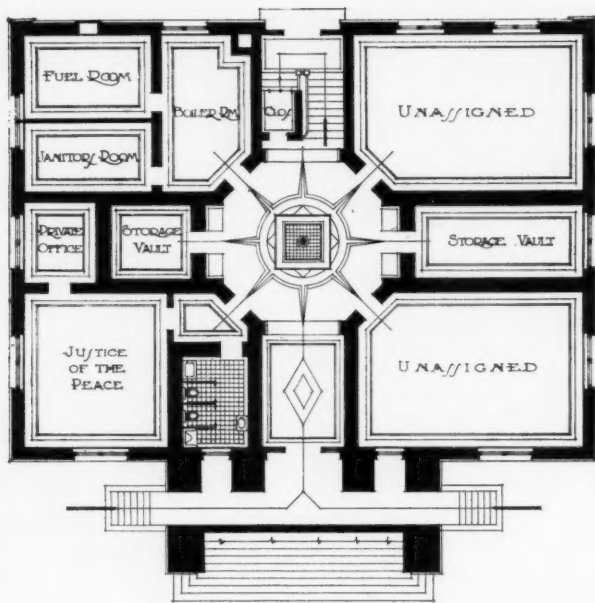


CONVERSE COUNTY COURT HOUSE, DOUGLAS, WYO.

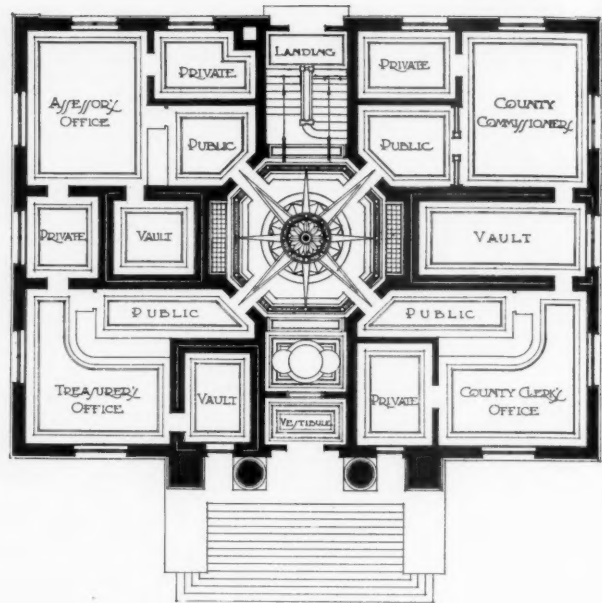
MR. W. N. BOWMAN, ARCHITECT.

Concrete foundation walls with exterior above the basement of red pressed brick with terra cotta trim. The columns, pilasters and the cornice are terra cotta. The building has fireproof vaults. The corridor floor construction of the court house is reinforced concrete with finished tile floors. The stairway is iron with rubber tile treads and landings.

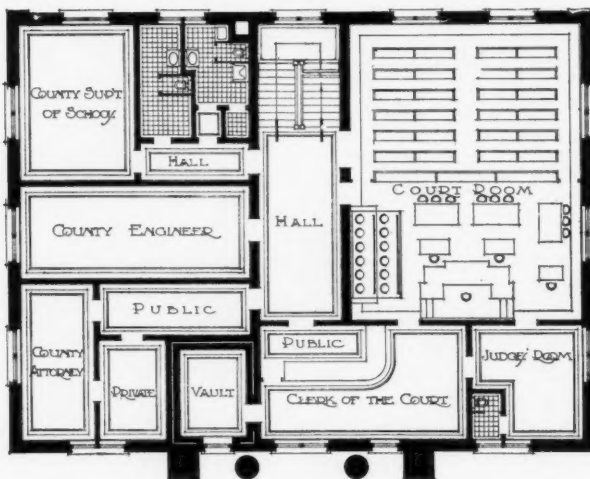




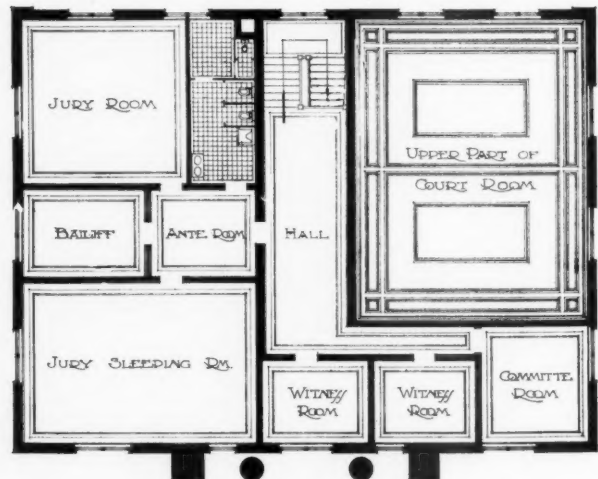
BASEMENT PLAN



FIRST FLOOR PLAN



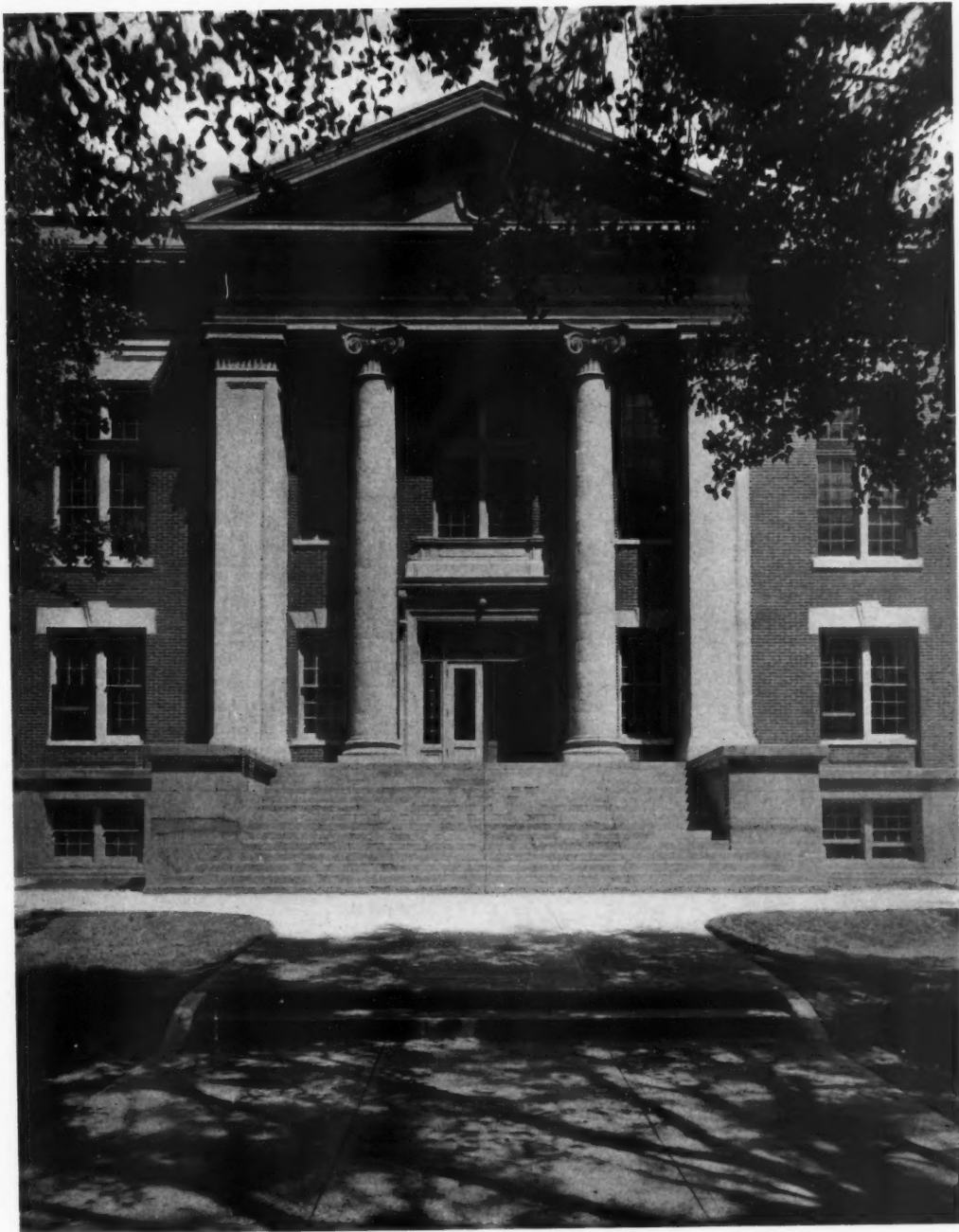
SECOND FLOOR PLAN



THIRD FLOOR PLAN

CONVERSE COUNTY COURT HOUSE, DOUGLAS, WYO.

MR. W. N. BOWMAN, ARCHITECT.



CONVERSE COUNTY COURT HOUSE, DOUGLAS, WYO.

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COURT ROOM

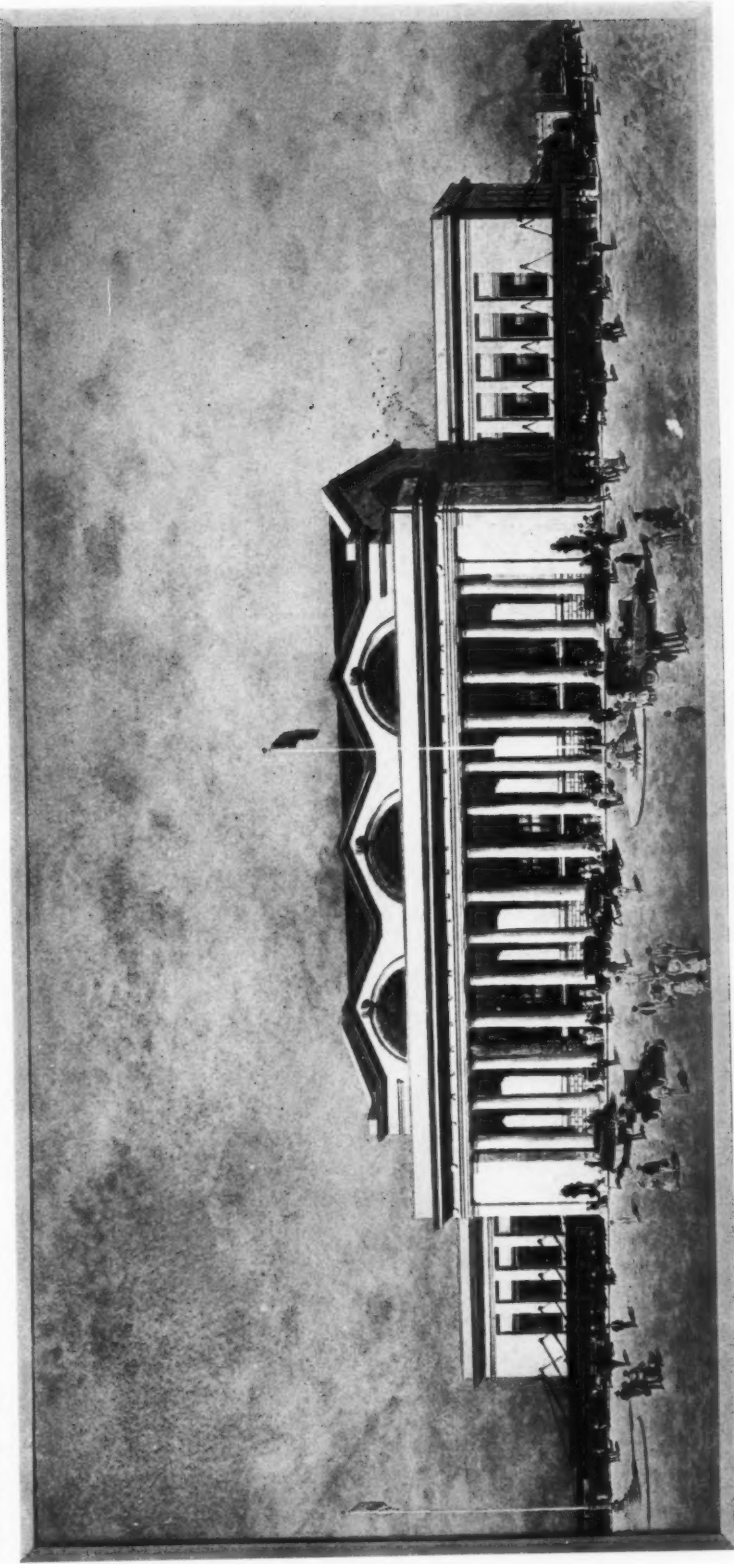


MAIN CORRIDOR

CONVERSE COUNTY COURT HOUSE, DOUGLAS, WYO.

MR. W. N. BOWMAN, ARCHITECT.



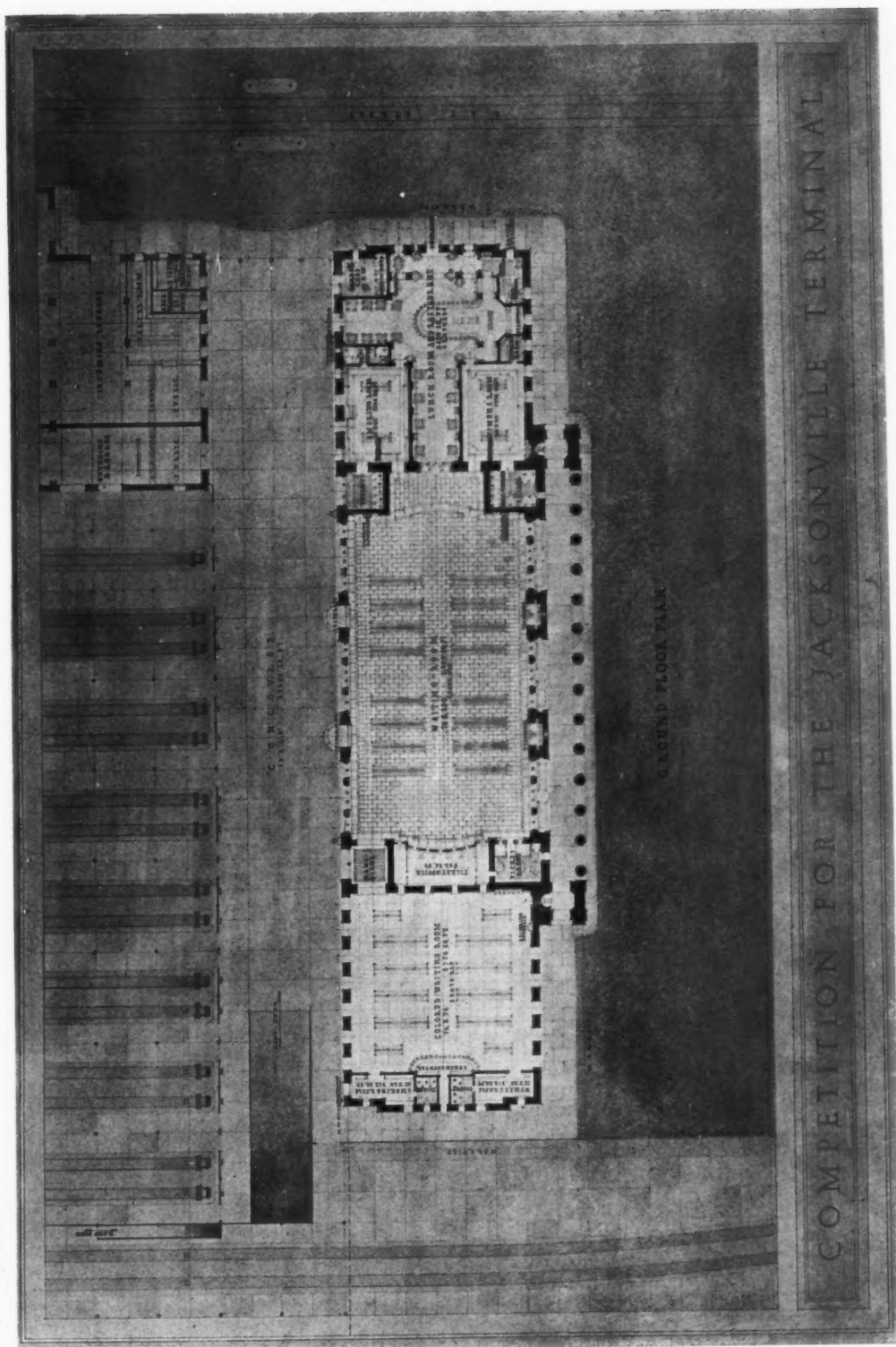


WINNING DESIGN

JACKSONVILLE TERMINAL COMPETITION

MR. KENNETH M. MURCHISON, ARCHITECT.



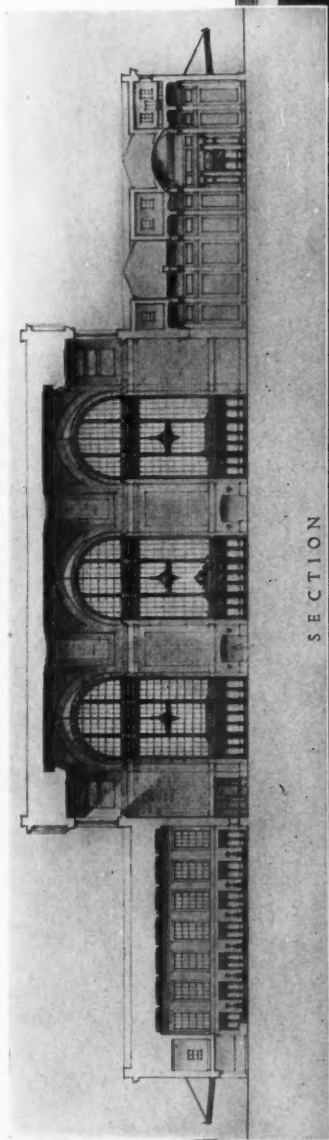


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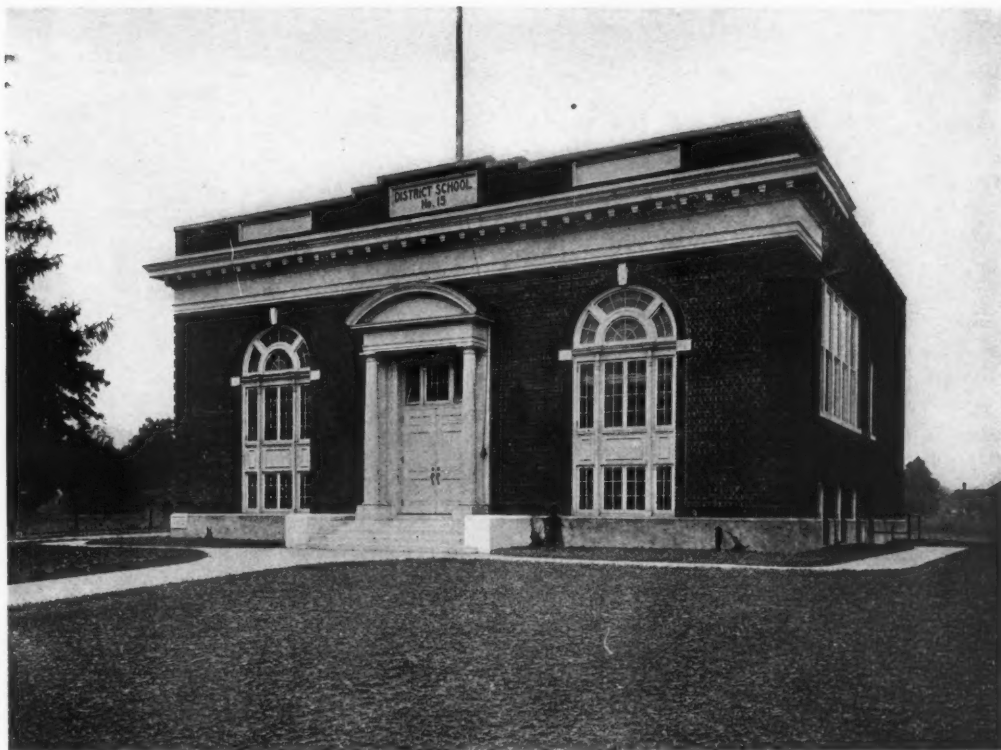
COMPETITION FOR THE JACKSONVILLE TERMINAL

WINNING DESIGN

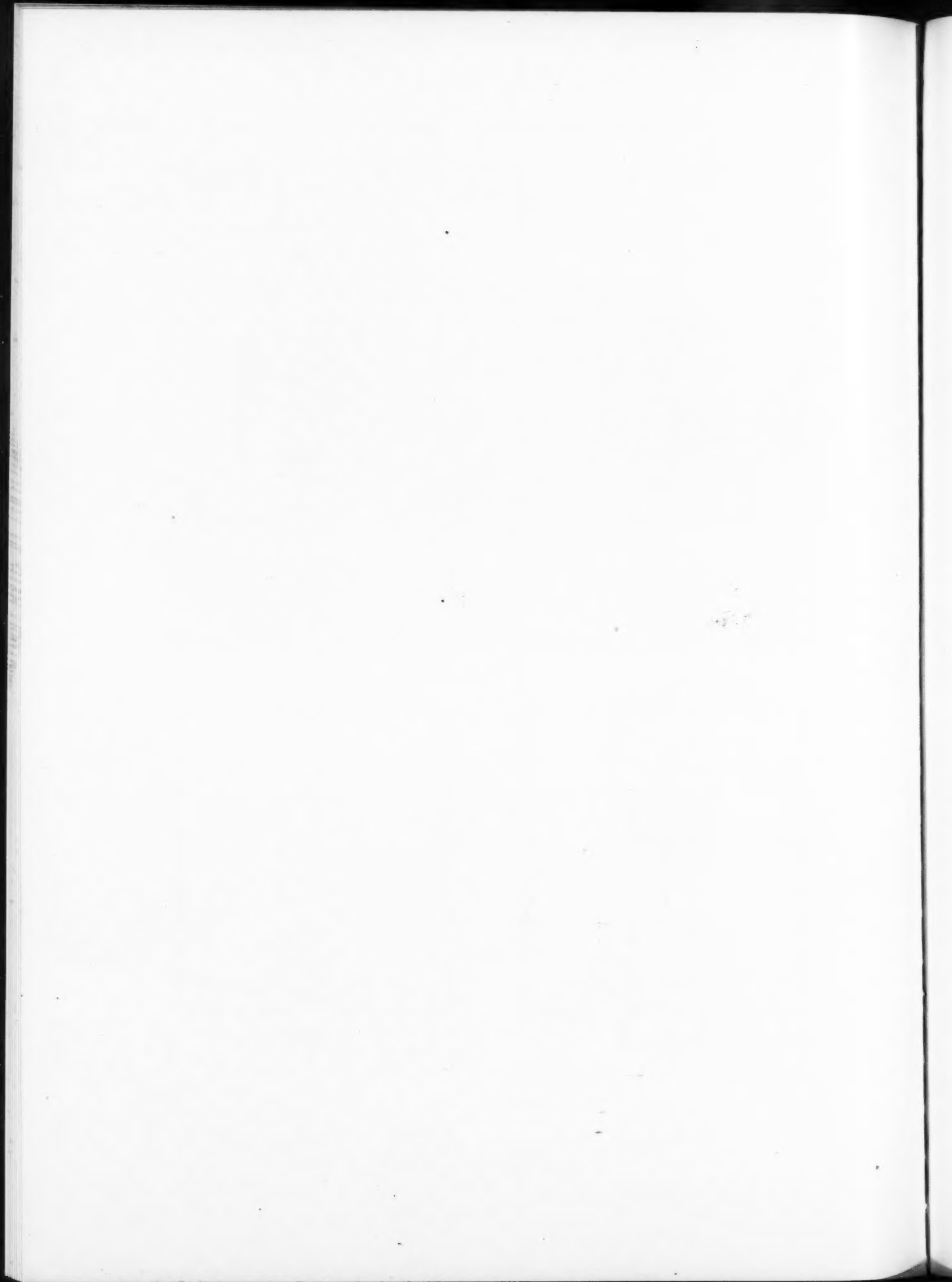
JACKSONVILLE TERMINAL COMPETITION

MR. KENNETH M. MURCHISON, ARCHITECT.





DISTRICT SCHOOL, MENANDO, N. Y.
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MR. GILBERT'S RESIGNATION

ON ANOTHER page of this issue will be found a letter addressed by Mr. Cass Gilbert to President Wilson, in which he tenders his resignation as a member of the National Fine Arts Commission, and following it is printed the President's letter written in reply.

Mr. Gilbert has served the cause of art well and faithfully as a member of this commission for the past six years. In retiring, he undoubtedly has the grateful thanks of every member of the profession he honors and the traditions of which he has at all times effectively upheld. While the reason for this retirement is stated to be the demands made upon his time by a large and exacting practice, the suspicion is strong that even the obligation felt toward clients who had placed their work in his care would scarcely have been sufficient to cause a severance of Mr. Gilbert's relations with the Fine Arts Commission, where the opportunity for service in a field to which his life has been devoted should, in the nature of things, be unequaled, if greater co-operation with

and appreciation of the Commission's efforts had been shown on the part of the various departments of Government with which it came in contact. In other words, is it not possible that owing to the supine attitude of Congress and of responsible officers of the Government, men of high standing in the arts find it impossible to secure the co-operation and encouragement that are obviously necessary to any material progress in the conservation of the nation's possibilities for artistic development, and for that reason withdraw from a service in which they would gladly continue, irrespective of any sacrifice of private or personal interests, if that co-operation were forthcoming? Instances in which the recommendations and advice of the Fine Arts Commission have been totally disregarded have been numerous within the past few years. A notable case still fresh in the mind of the public is that of the power plant in Washington which has been located in a position at variance with the plans already adopted for the artistic development of the nation's capital. The site chosen has not been changed in spite of the vigorous protest of practically every organization in this country making pretense of special knowledge or ability in artistic matters. It has more recently been reported that plans are under consideration for the construction of greenhouses in a position that will seriously interfere with the development of the grounds in the vicinity of the capitol, and constitute an obstruction to the vista that would otherwise be obtainable in the direction of the mall. Objections and protests from a body chosen by reason of the fitness of its members to advise in just such an emergency have apparently failed to halt the project.

Where a commission is not permitted to perform the functions for which it was created; where its recommendations and suggestions are either overridden or ignored, and where no respect is shown for the special knowledge which it is supposed to possess, its usefulness is obviously so small as to be negligible, and the action taken by Mr. Gilbert becomes almost necessary in order to avoid humiliation and retain a measure of self-respect. It would not be surprising indeed if the

example set by him were generally followed by members who are becoming weary of putting forth their best efforts only to have them contemptuously rejected, and in some instances even their motives impugned.

When all things are considered, the fact seems to have been definitely established that the responsible heads of this government at the present time possess little or no appreciation of art or of its value in connection with city development, and, moreover, lack any proper realization of their own vast ignorance regarding the subject. Fortunately, the public, which has had its wishes in connection with the power-house site so utterly disregarded, has the remedy for the situation in its own hands. That it will be applied in good time there is little room for doubt.

FIRE PREVENTION

IN THE general agitation for the prevention of fires which is increasing in this country annually, there is promise of a time when our fire losses will more nearly correspond with those sustained under normal conditions by the countries of Europe. The growth of the movement to reduce the number of preventable fires which occur each year has been little short of phenomenal during the

last decade. On all sides we now find effective measures being adopted to safeguard both property and lives from the ravages of fire. Construction of buildings belonging to all classes has been improved, and fire prevention apparatus ranging from the hand grenade to the automatic sprinkler is being installed to greater extent than ever before.

The causes leading to this changed attitude toward the subject of fire prevention are many, but chief among them is the campaign of publicity which has been waged for some years against the needless sacrifice of life and property. So strongly has the subject taken hold of the public mind that we now have a National Fire Prevention Day observed in practically all cities and community centers of the country, upon which various means are employed and steps taken to reduce fire risks. These take the form of clearing up rubbish, inspecting fire apparatus, delivering addresses on the general topic of fire prevention, and many other activities, all designed with the same object in view. October 9, the anniversary of the great Chicago fire, has been designated for these services and there can be little doubt that its general observance this year will result in further progress in the nation-wide campaign for the reduction of fire losses.



Lamps of All Ages

DR. WALTER HOUGH, of the National Museum in Washington, D. C., has, it is stated, prepared for exhibition a collection of illuminating devices from the earliest known forms to the present highly developed electric lamp. Frederic J. Haskins, writing from Washington to his paper, the *Cleveland Plaindealer*, comments on this unusual collection in the following interesting manner:—

According to the Museum authorities, it was some time before men began to pay any attention to fire at all. It was all about them—in the volcanoes, in the lightning and in the friction of the tree branches—but they took no more account of it than did the animals.

Then some man, a little more intelligent than the rest, recognizing its power, undertook to conserve a supply of fire from one of these sources, and finally distributed it by firebrands throughout the land. Thus began the campfire age, which is represented in the museum collection by a picture, and by firebrands of every description belonging to every period.

Toward the end of this campfire period, man began to display ingenuity. He tried dipping the sticks in resin and fat, which made them burn longer, but even this was unsatisfactory. The age demanded an invention and it came at last. Some ancient Edison discovered that by putting a lot of fat in a hollow stone or sea shell or animal's skull and placing a wick in it he had a device which would burn for a long time. This was the primitive beginning of the lamp.

The next step in man's development is represented in the collection by a number of curiously curved stone slabs supposed to be lamps which were used in the stone age. Fat or grease was poured into these stone dishes and a circle of moss strewn around the edge to act as a wick. Lamps of this kind are still found in use among primitive peoples.

By this time men had become familiar with fire, and had even tried a few experiments with it. One of these resulted in

pottery and lamps. At first they were simple little bowls with a slight twist in the edge to hold the wick, but gradually they developed elaborate patterns, with the growing talent of the potters. The Museum's specimens of this type of lamp are especially remarkable, many having been sent in from all parts of Europe and Asia, displaying the most ancient craftsmanship and design.

A hundred or more such lamps were sometimes required to light one room. A dilapidated old lamp containing some early perfumed oils is one of the most prized specimens in the Museum's collection.

Then came copper and bronze, and the lamps assumed a new symmetry and design as civilization and the mechanical arts progressed.

The next step in lamp architecture was iron. But all the time, although various metals had been discovered and applied to lamps, there was no improvement whatever in the mechanism itself.

The glass age had superseded iron for some time before Argand discovered the method of putting oil in a small reservoir and forcing it up through a wick and then covering it with a chimney. This, which was the first real lamp as we know it today, made its appearance about 1784.

Following this invention came the discovery of kerosene and gas, and new fixtures were developed along new lines. So far the collection ends with the Welsbach burner, which is the most recent improvement for gas illumination, and the tungsten filament for electricity. In the one case now on exhibition in the Museum there are twenty-four specimens of lamps representing the various stages of civilization, but these are only the beginning of a collection which is to be one of the most extensive in the world. The number of candles and candlesticks alone would probably fill five or six cases, for there were improvements in this type of illumination throughout the ages the same as in lamps. The origin of the word candlestick is shown in two or three of these specimens which are carved sticks of wood with a small brass dish at the top.

INSTRUCTIONS TO STEEL INSPECTORS IN THE FIELD

BY ELWYN E. SEELYE

THE purpose of this article is to bring out the essential points to look for when inspecting a steel frame.

It is assumed that the structure has been properly designed and that the shop work has been properly executed. It should be emphasized at this point that shop inspection and mill inspection are very important. The reasons for that are numerous. Some of the most important of them are as follows: Where steel is being rolled and some orders are being inspected the rejected material is apt to be unloaded on the purchaser who does not have inspection. In fabricating, if there is no inspection, the plans may not be followed accurately, causing delay and expensive field changes at the site, also, as will be noted later in the article, certain errors of fabrication are not apparent after the fabrication is complete.

Now presupposing the steel has been shipped in perfect order and is arriving on the site, the inspector should first look it over for damages, due to shipment. These will generally appear as bent plates or members. All these damages should be rectified by straightening, and, if necessary, by reinforcing, before the erection is allowed to proceed. If damage is serious an expert should be called in to pass on it. Where no shop inspection has been made, the field inspector should go over the riveting and see that surfaces in direct bearing are milled and in contact.

The important thing in the erection of bases, either grillages, steel plates or cast iron, is to see that they are properly grouted. This can best be done by pouring the grout into a funnel raised high enough to produce a hydraulic pressure. The space between the concrete foundation and the iron should also be rodded to eliminate voids. It is very important that the bases be set level, faced on the top and that the column be faced to provide a full and even bearing between the bottom of the column and the base. In unimportant columns a discrepancy may be wedged with thin steel wedges, but in

important work the full bearing without wedging should be insisted upon. This facing or milling can be done with great accuracy and its omission on bearing surfaces is cause for rejection of the member.

When the erection starts the inspector should keep in mind the functions of the connections and the way the stress is carried from one member into another. This will put him in a position to check the work up in a practical manner. For instance, he will notice that some steel beams rest upon seats which were riveted up in the shop. The additional rivets are really for the purpose of holding the beam in place and not to take a load. Other connections will be directly from the beam through the connecting angles to the column or girder by means of rivets. It will readily be seen that the rivets in this last connection are very much more important and should be more carefully inspected than the field rivets in a seat connection.

The inspector should bear in mind that a rivet is supposed to hold by its shearing and bearing values, but that it also performs a very important function if tight, by holding the two surfaces together and producing a large frictional resistance between the plates. He should also remember that the process of riveting induces a certain amount of internal tension in the shank of the rivet and thereby renders the rivet unreliable for additional tensile strains, and, therefore, bolts with lock nuts should always be substituted for any rivets that are supposed to act in tension.

Having pointed out the essentials of having a tight rivet, the question is how to get it. It is absolutely necessary to inspect steel work before riveting and see that the holes in the plates are concentric, for if a rivet be driven with $\frac{1}{8}$ " eccentricity, it may be a very poor rivet, but it may be tight, and therefore impossible to detect after the riveting is complete. I would say that all differences of eccentricity of over $\frac{1}{64}$ of an inch should be reamed, although this practice might

THE AMERICAN ARCHITECT

be made less rigorous on unimportant rivets. The use of a drift pin to make the holes concentric by forcing action is to be condemned. In the same way the cutting of extra holes by means of an electric or other torch is to be severely condemned. Having inspected the joint and found the holes concentric, the riveting may proceed. If the rivet is tight and the head full, it should be passed, but if it is loose it should be cut out. Here again, the riveting should be closely watched, as a rivet may be inadequately tightened up by what is known as calking, which consists of the use of a hammer and chisel, wedging the rivet head. The rivet may have the fault of too short a stock and the heads will be flat. This should not be confused with heads which are purposely flattened or countersunk for clearance. Another method of ineffectually tightening the rivet head consists of raising the plate surface under the rivet by driving the rivet snap sideways against the plate. Hence where the plate has been injured or shows a ridge around the rivet the rivet should be cut out.

Cold-hammering of heads should never be allowed. It is easy to detect this because a smaller snap is used on a head when cold-hammered.

The testing of a loose rivet can best be done with a small hammer. Place the finger on the opposite head while striking. Also strike the rivet head up and then down and note if there is any vibration.

A small tile hammer with a personal die cut in the head by annealing it soft and hard again will serve the purpose of surely marking defective rivets.

Another duty of an inspector is to see that the size and weights of beams called for on the plans are furnished. Owing to the Bethlehem and standard shapes having a number of different weights, the flanges should be carefully scaled to detect any substitutes. Where a beam or girder rests upon a wall, care should be taken to see that it is amply supported by the masonry and anchored thereto.

Painting is a very important matter in the preservation of steel work, and all portions where paint has been removed by shipment should be repainted before

erection. The field coat should be of different color than the shop coat.

Cast iron members should be carefully inspected for visible defects.

All cast iron columns should have at least two holes drilled in the column for the purpose of checking the thickness of the column. Often the core is displaced in pouring, rendering the column thinner on one side than the other. A discrepancy of more than twenty-five per cent should be cause for rejection.

All bearing surfaces in cast iron should be milled. Columns which are crooked should be rejected.

The cast iron beam seats should slope down outwards to make the beam bear as close as possible to the column and eliminate flexure in the seat.

A double lug generally engages the web of a beam through which a single bolt is passed. On one job these bolts held the beams up off the seat and necessitated field changes.

All steel should be marked for identification in the field and the shop inspector's mark should also appear. The most intelligent field inspection can be made by a representative from the designer's office, as he will be able to follow the designer's intent.

The inspector should co-operate with the erector in safeguarding the structure from accidents during erection. He should see that the derrick base is secured from the horizontal kick of the boom in any direction. The steel carrying the derrick should be strong enough and have sufficient connections for the erection stresses involved. He should exert a check on dangerous practices, such as lifting too heavy a load for the strength or counter-ties of the derrick, booming out too far or the splicing of booms.

Guying and bracing of steel in the process of erection against wind-bracing is important. In this case it is well to remember that serious accidents have occurred through the shrinkage of guy ropes when wet. To sum up:

1. See that your steel is inspected by a competent bureau in the mill and shop.
2. See that your bases have a proper masonry contact.
3. See that columns bear directly on

THE AMERICAN ARCHITECT

bases with full bearing; that columns bear directly on columns with full bearing and that all stiffeners are milled to bear.

4. See that the steel is repaired and straightened where injured during shipment.

5. See that no rivets are in tension.

6. See that all rivets are tight and driven in concentric holes.

7. Look out for a good two-coat paint job.

8. Be sure that beams have proper wall bearing.

9. Inspect cast iron for workmanship and flaws.

10. Safeguard the erection against accidents.

Cass Gilbert Resigns As Member National Fine Arts Commission

Mr. Cass Gilbert's letter, addressed to President Wilson, in which he resigns as a member of the National Fine Arts Commission, and the President's reply, are printed herewith:

New York City, August 1, 1916.

Mr. President:

In tendering to you herewith my resignation as a member of the National Commission of Fine Arts I do so with feelings of sincere regret.

I appreciated greatly the honor of my reappointment by you two years ago, and I have endeavored conscientiously to respond to the confidence which that reappointment implied. It has been a very real pleasure to serve with the Commission and to have the experience of meeting their many and varied problems in close conference with such an able and conscientious group of men. After more than six years of continuous public service on the Commission I find, however, that I must either neglect the professional duties which I have assumed toward my clients or neglect the work of the Commission; and I feel that I cannot continue a member of the Commission without

sacrifices which I am not justified in making. I am therefore constrained to relinquish my place on the Commission.

Very respectfully,
(Signed) CASS GILBERT.

The President.

THE WHITE HOUSE

Washington

September 7, 1916.

My dear Mr. Gilbert:

Your resignation as a member of the Commission of Fine Arts has just been handed to me.

I recall that you are one of the original members of the Fine Arts Commission. During your service of more than six years the policies of the Commission have taken shape and very high standards have been maintained, with the result that artists of a high class and excellence have had their interest in Government work stimulated and have been generous in rendering assistance.

Your own contribution to these results has been of the highest value. Furthermore, I feel that the intelligent interest that you have shown during the past fifteen years in the development of the City of Washington has been of great benefit to the Commission in connection with its efforts to secure a harmonious architectural development. Your high position in your profession and your wide experience have been of inestimable value and have contributed to give authority to the Commission's decisions.

I am sincerely sorry that you cannot serve out the remainder of the period for which you were appointed, but I realize what the demands of your private practice must be. I, therefore, accept your resignation with great reluctance, and in doing so wish to express my warm appreciation of the services you have always so willingly and generously rendered the Government.

Cordially and sincerely yours,

(Signed) WOODROW WILSON.

Mr. Cass Gilbert.

THE AMERICAN ARCHITECT

San Francisco State Building

The program for the State building to be erected in San Francisco's civic center has been issued from the office of the California State Architect. A building to cost not to exceed \$1,000,000, 70 feet in height and containing 80,000 square feet is called for. A general invitation to compete has been extended. No date has yet been set for submission of drawings.

A Correction

Through error an item appeared in our issue of August 2, 1916, to the effect that William C. Taylor of Louisville, Ky., had removed his offices to the Lincoln Building in that city. The name should have been printed Wm. C. Tyler.

INDUSTRIAL INFORMATION

Sirocco Service

The American Blower Company, Detroit, Mich., has issued a bulletin devoted entirely to the subject of Sirocco Service on the Pacific coast. In this bulletin are illustrated many of the most prominent buildings of a public and semi-public character erected in the West, in which it is stated American Blower Company's product has been installed. A short description is given of each building illustrated, which makes the bulletin of more than usual interest. Copy may be had upon request.

California Red Wood

The California Red Wood Association, San Francisco, Cal., has issued a booklet illustrating and describing interior trim made of genuine California red wood for either modest or elaborate homes and for use in public buildings.

The book represents a masterpiece of the printing art, as it portrays with unusual accuracy the appearance of red wood treated with various finishes and

exhibiting various grain effects. It is claimed that California red wood can be made to harmonize with any type of interior; that it is unequaled for its freedom from the warping and shrinking tendencies of many woods; that it possesses excellent "workability" and is comparable in every way, excepting in cost, with rare foreign woods used for trim. Numerous interiors finished in red wood are shown, illustrating a great variety of architectural treatments and effects that can be produced by the use of this wood. The size of red wood trees is shown graphically by the illustration of a church in this book, which, it is stated, is constructed from sill to spire, including panels, pulpit and seating, of lumber taken from a single red wood tree. It supplied 78,000 board-feet in addition to the shingles used. Another instance is given of a house at Eureka, Cal., hollowed from a single red wood log. It contains two rooms, each 10 feet square, with ceilings 14 feet high.

Added to a general description and many illustrations of this lumber are a number of pages of directions for rare finishes which can be produced upon it. The final pages are given to the reproduction of several letters from users who express satisfaction with the results which have been obtained. Copy of this interesting book, which contains, besides actual information, a great deal of material of suggestive value to the designer, may be had by architects upon request.

Swimming and Wading Pools

The Portland Cement Association, 111 West Washington Street, Chicago, Ill., has issued an instructive and valuable booklet on concrete swimming and wading pools and how to build them. This is a problem confronting many architects engaged in both urban and country work, and it would seem that an authoritative treatise of the subject would be received with satisfaction.

Copy will be sent free to those making application.

THE AMERICAN ARCHITECT

Mississippi Wire Glass

A pamphlet issued by the Mississippi Wire Glass Company, 220 Fifth Avenue, New York City, is designed to impress the reader with the value of wire glass as a safeguard against loss or accident in case of concussion caused by an explosion. It is stated that damage to polished plate and window glass from the Black Tom explosion which occurred on July 30, 1916, will amount to \$1,000,000, while wire glass stood the concussion with little or no damage. Aside from this, attention is called to the fact that had the explosion occurred in the middle of the day instead of the middle of the night, thousands of lives would have been in danger from the shower of glass which fell to the sidewalks in lower Manhattan.

Photographs are presented in this pamphlet showing the damage done to buildings containing ordinary plate and window glass, while others in a no less exposed position in which wire glass was used appear from the pictures shown to be comparatively unharmed. A number of letters from owners of buildings expressing their satisfaction with the manner in which wire glass withstood the explosion are printed. Copy of this pamphlet can be secured upon request.

Dependable Concrete

The Hydrated Lime Bureau of the National Lime Manufacturers' Association, Arrott Building, Pittsburgh, Pa., has issued Bulletin A-2 on Dependable Concrete in which the effect of hydrated lime on the workability, segregation, uniformity, strength and permeability of concrete is considered. It is claimed that the addition of small percentages of hydrated lime to concrete mixtures results in the following:

1. Increases the slipperiness of concrete so that it flows freely without the use of excess water.
2. Minimizes the tendency of sand and stone to separate from the cement, preventing the formation of stone pockets and honeycombing.
3. Produces a freer moving concrete in the forms, making spading easier and re-

sulting in more nearly perfect exterior and better embedment of reinforcing steel.

4. Results in homogeneous concrete of maximum strength.

5. Renders the concrete less porous and more nearly impermeable, minimizing alternate expansion and contraction due to moisture changes.

6. Acts as added protection against corrosion of reinforcing steel.

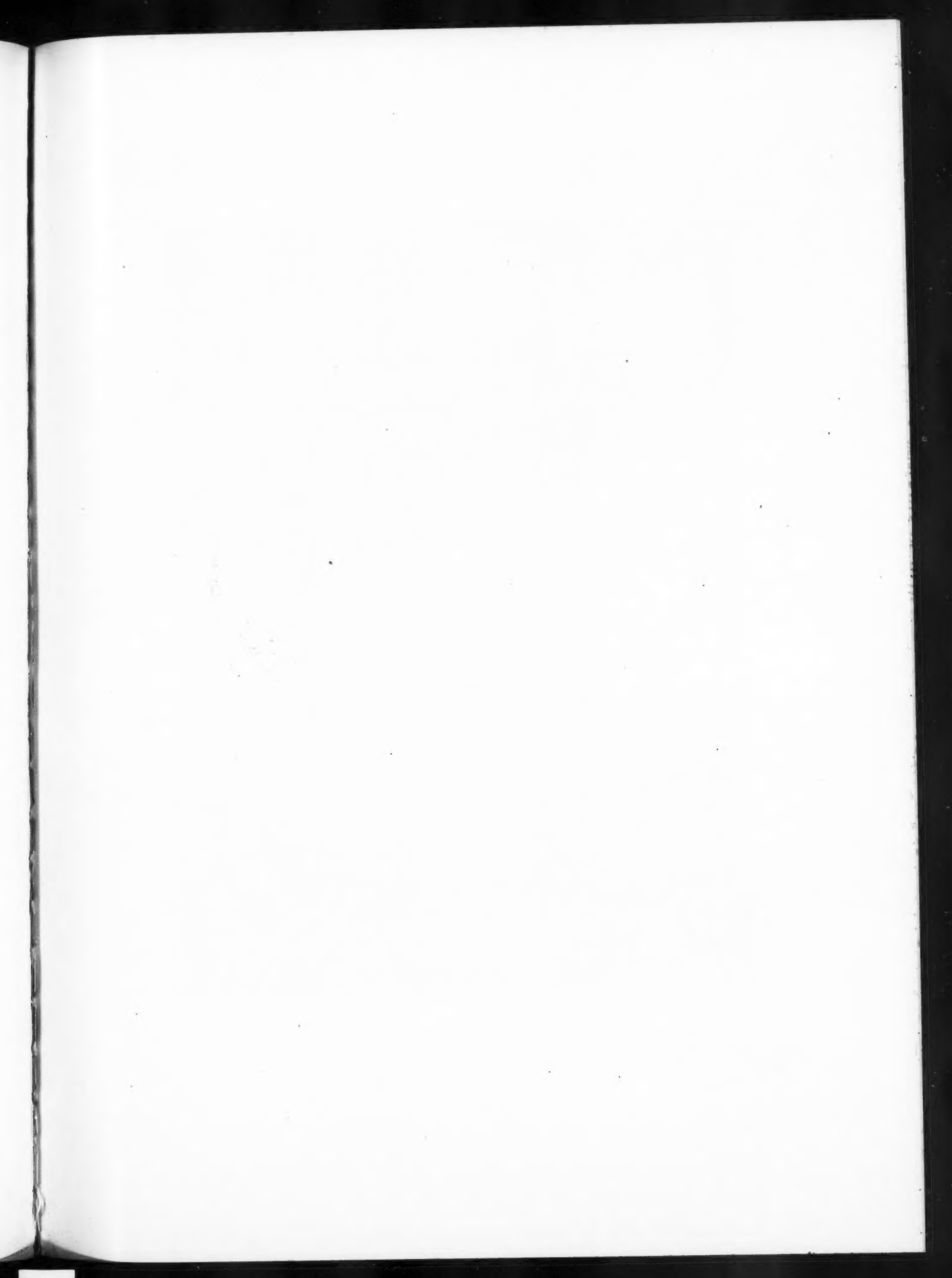
How, in the opinion of the author, these various results are obtained is indicated in detail in this bulletin, which will be furnished upon request.

Galvanized Sheets

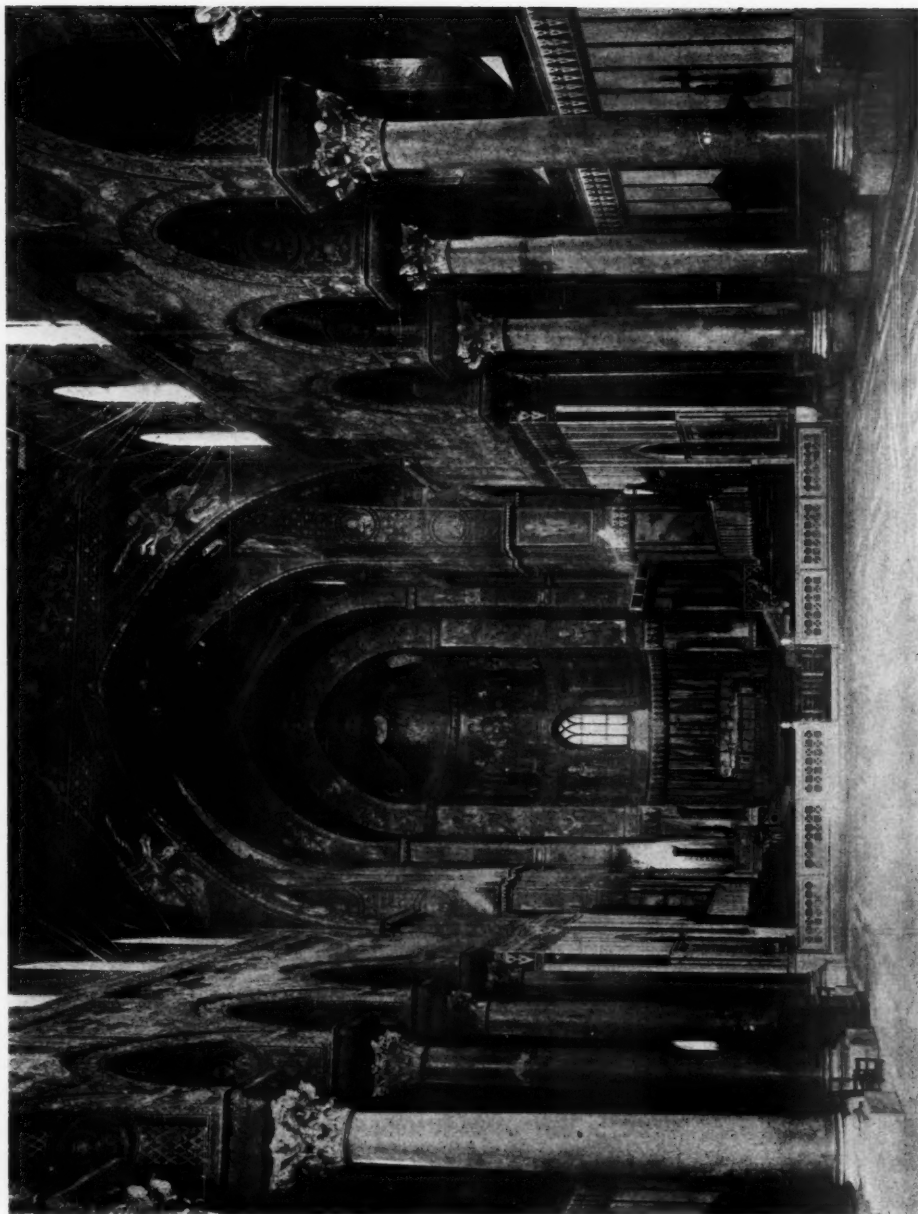
American Sheet and Tin Plate Company, Pittsburgh, Pa., has issued a booklet on Apollo Best Bloom and Apollo-Keystone copper steel galvanized sheets. It is stated that Apollo Best Bloom sheets are universally recognized for their uniformity, fine working qualities, and good galvanizing; that they are produced under the best conditions and are manufactured from the best materials obtainable; that the coating is uniform, thoroughly protecting the base sheet: hence a substantial, satisfactory service results which it is claimed has always been characteristic of this product.

Apollo-Keystone Copper Steel galvanized sheets possess, it is stated, an added degree of durability through the use of an alloy known as Keystone Copper Steel. It is claimed that the rust-resisting properties of this alloy have been thoroughly established by actual service and exposure tests extending over a period of years. By reason of its durability, Keystone Copper Steel is used for the base of Apollo-Keystone galvanized sheets, which are recommended by the manufacturers unreservedly for culverts, tanks, flumes, roofing, siding, and all similar uses.

Examples of various structures in which these materials have been employed are given. Capacities for various sized culverts are printed and tables of standard sizes, weights, etc., are appended. Copy of the booklet may be had upon request.



THE AMERICAN ARCHITECT



INTERIOR OF CATHEDRAL, MONREALE, ITALY (1174-1189)