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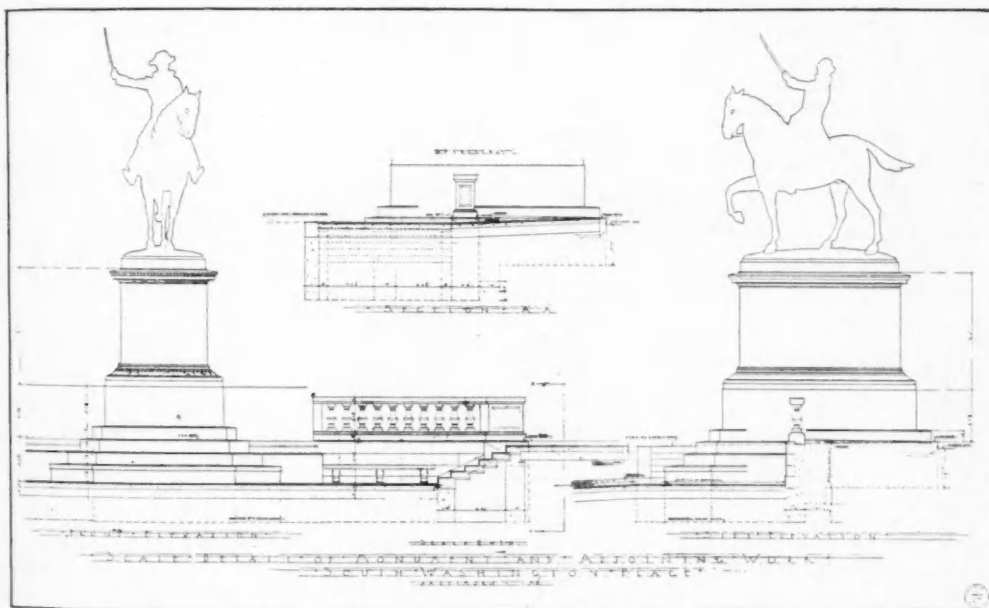
The Baltimore Civic Improvement

CARRERE & HASTINGS, *Architects*

BALTIMORE, "The Monumental City," was not so designated because of its numerous monuments, but because the Washington Monument, a marble shaft rising 164 ft. from Mount Vernon Square, dominated the entire city.

When this square was originally designed by Robert Mills it presented all the attributes of good

The present accessories in Mount Vernon Square consist of the work of even a later date, some time in the 70's, being principally of polished granite with much pretended ornamentation of poorly designed Gothic iron. But among all this nondescript material there may be found some bronzes that are equal to any, anywhere, and these will in the proposed



ELEVATION OF LAFAYETTE MONUMENT

planning, and the accompanying accessories to make a well-balanced and artistic *ensemble* were representative of the period of its inception. But we have made much progress in these matters since 1820 and are now able to study with a better artistic perception the shortcomings of a plan and design that, while regarded with favor a century ago, is in the light of our civic progress not a fitting accompaniment to the modern type of buildings that surround it.

readjustment find a place and setting worthy of their great artistic value.

These are the wonderful bronzes by Barye and DuBois, now in a sense neglected by reason of improper placing. Their relocation in their new setting will awaken the people of Baltimore to a realization of a long unappreciated artistic heritage.

To make a start in the artistic rehabilitation of this section of the city, the problem became one of reducing all the surrounding elements that had been

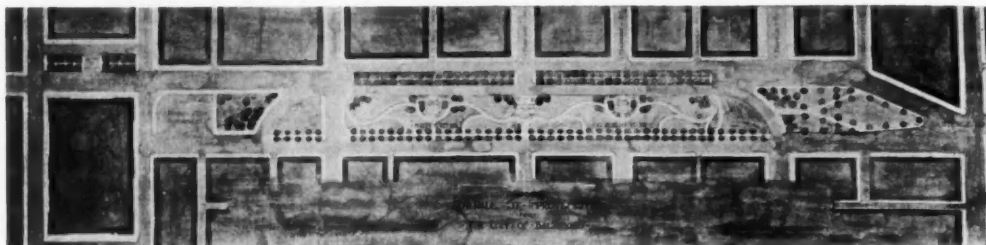
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THE AMERICAN ARCHITECT

assembled with much inconsistency to a better coordination with the original design by Mills and the plan by L'Enfant. It was therefore decided at the outset to retrace, as it were, the steps already taken, and in doing so to eliminate every detail which marred the original composition. It took a certain amount of courage to even suggest such a course,

then, with a wonderful unanimity enthusiastically indorsed the plan. They found it good. Mr. Hastings' plan for the proposed improvements of Mount Vernon and St. Paul Squares has been approved and will be carried to completion.

As may be seen by reference to the accompanying illustrations, the chief element in Mr. Hastings'

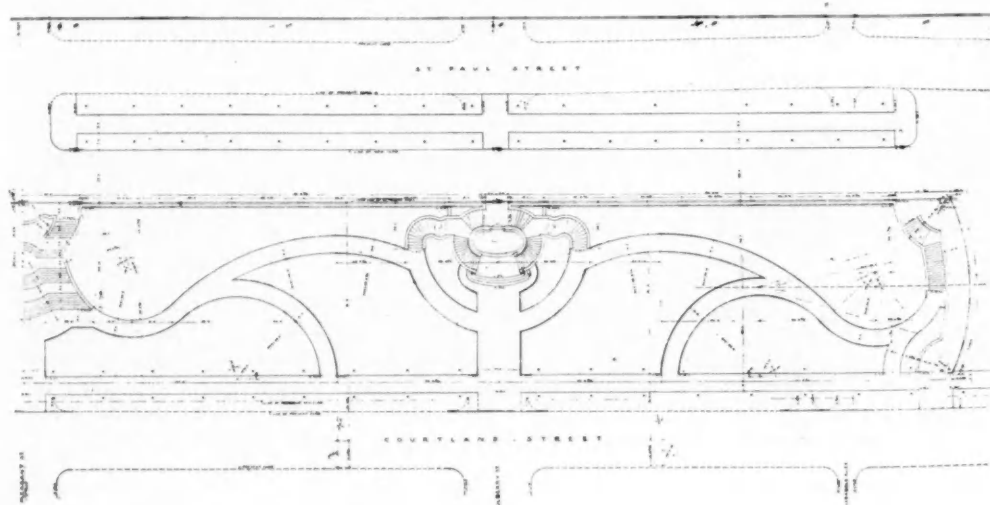


PLAN—ST. PAUL AND COURTLAND STREETS

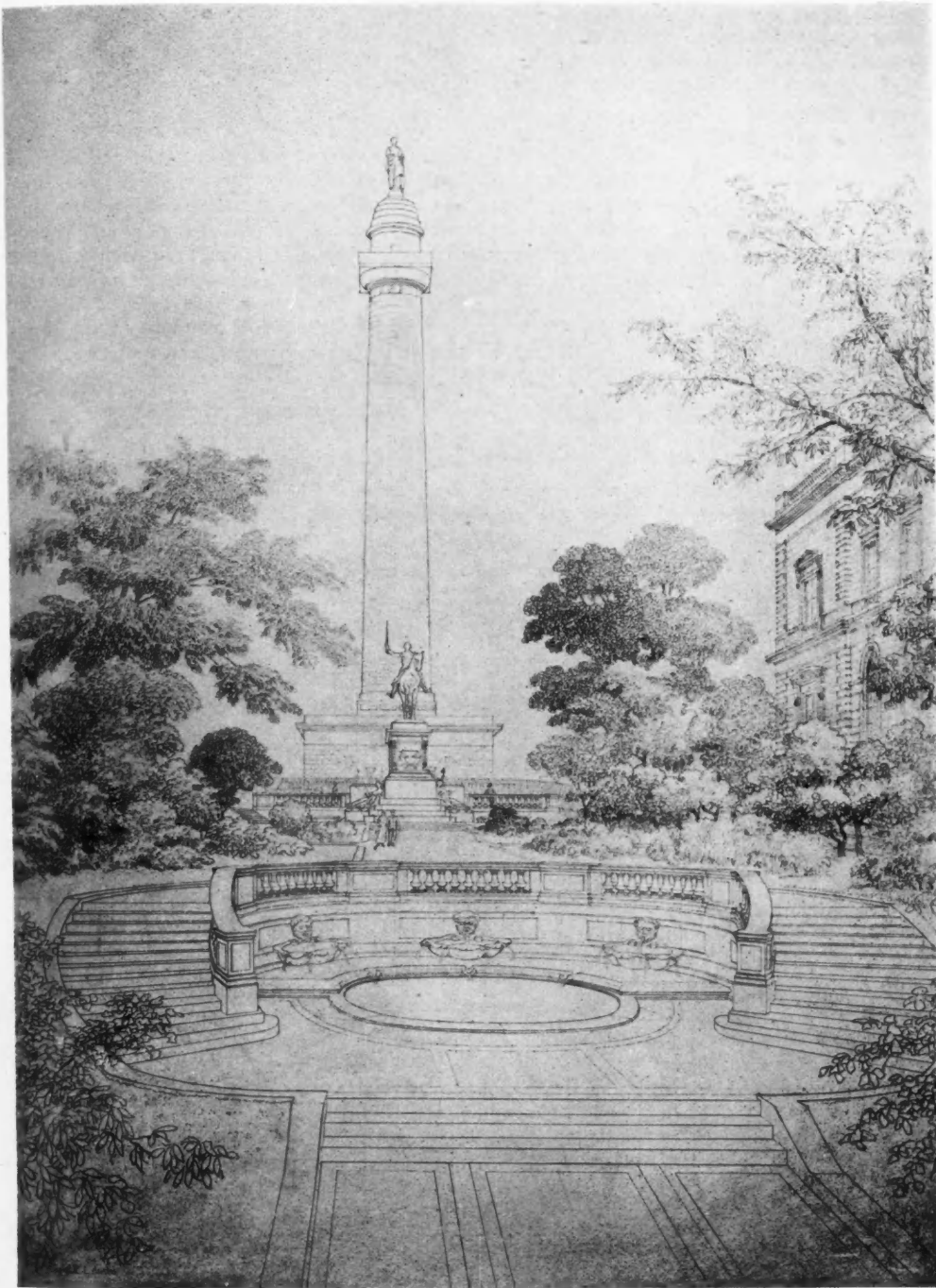
for the people of Baltimore, by long association, had acquired a certain reverence for this section, and would be apt to regard with a certain amount of dissatisfaction the iconoclastic tearing down of so many supposedly permanent features. Particularly among the majority, always less well educated as to the value of esthetics, would this objection be raised. But fortunately the people of Baltimore have a very large amount of confidence in their Mayor and those who are in charge of their esthetic well-being. When Thomas Hastings outlined his scheme for the rehabilitation of this section the people first hesitated in the contemplation of an improvement so radical in its purpose, and,

plan is the introduction of a monument to the Marquis de Lafayette. This equestrian figure will be heroic in size, and will be located on the south side of the Washington Monument, looking down Charles Street. It is proposed to have this monument executed by Paul Bartlett, the sculptor of the Lafayette Monument that was presented a few years ago by American school children to the city of Paris.

Accenting the placing of this statue will be a balustrade on the west and east sides of the circle surrounding the monument. The bronze figures by Barye and DuBois will then have a fitting setting, as four of them will be placed on the balustrade.



ST. PAUL AND COURTLAND STREETS, NORTH OF PLEASANT STREET



PERSPECTIVE LOOKING TOWARD WASHINGTON MONUMENT, WASHINGTON PLACE SOUTH
IMPROVEMENTS FOR CITY OF BALTIMORE, MD.
CARRERE & HASTINGS, ARCHITECTS

THE AMERICAN ARCHITECT

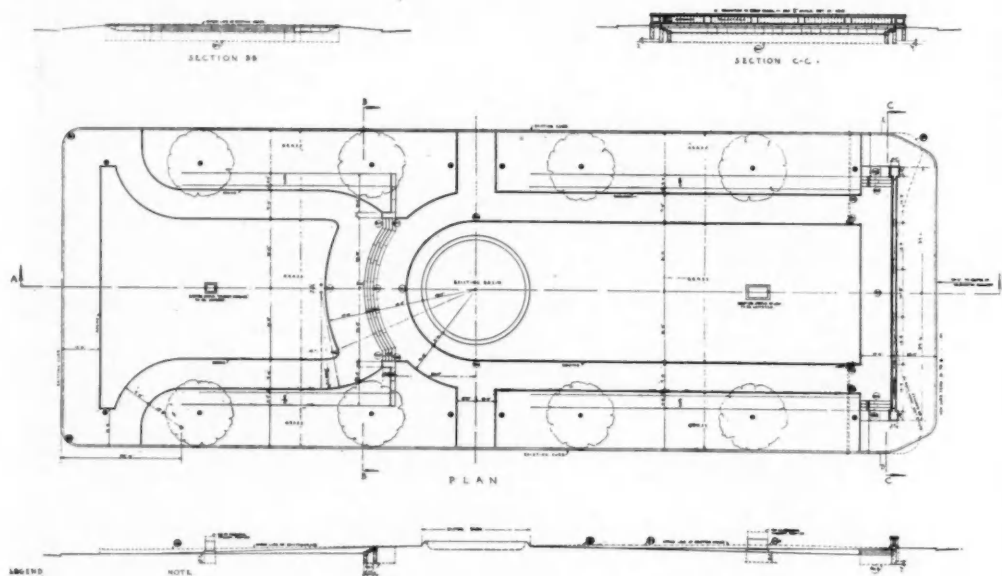
The architectural interest in this detail will center in the beautifully designed details of moldings and accessories, all in keeping with the exact period of Mills' design and the plan originated by L'Enfant.

Seldom has a scheme of this nature had more careful thought, more scholarly study. Its enthusiastic indorsement by the National Art Commission and the various art bodies who have been asked to pass on the details is evidence that the architect has evolved a design so very meritorious as to place it among the most satisfactory interpretations of modern architecture.

The ground for this statue of Lafayette was broken by Marshal Joffre, when he and the other

long where, with a view to improving a locality which appears to have halted in its development, the city has already razed some eight or ten blocks of buildings. This will comprise the area of the proposed St. Paul Square improvement.

On the lower side of this square is Courtland Street, located twenty feet below the level of St. Paul Street, which bounds the upper side. The plan as outlined is to eliminate the roadways crossing this section, because of this steepness and consequent impracticability, and to substitute well-designed and dignified stairways from the upper level on St. Paul Street down to a park on a level with Courtland Street. The general effect to be imparted will be that of the better type of Roman stairways, such as



MOUNT VERNON PLACE WEST

members of the French Commission visited Baltimore last autumn. Commenting on this plan, the *Baltimore American* states editorially:

"Mr. Hastings' plans are so completely in harmony with the present spirit of our famous monument and its surroundings that not even the most conservative Baltimorean need fear that the changes will do anything but accentuate the existing atmosphere. And, since the cost to the city will be so relatively insignificant, there is no reason for any feeling that the changes should not be made at this time."

The St. Paul Square improvement in the very heart of Baltimore, lying between Mount Vernon Square and the City Hall and Courthouse buildings, is a section about three-eighths of a mile

are to be found, for example, in the Scala d'Es-pagna.

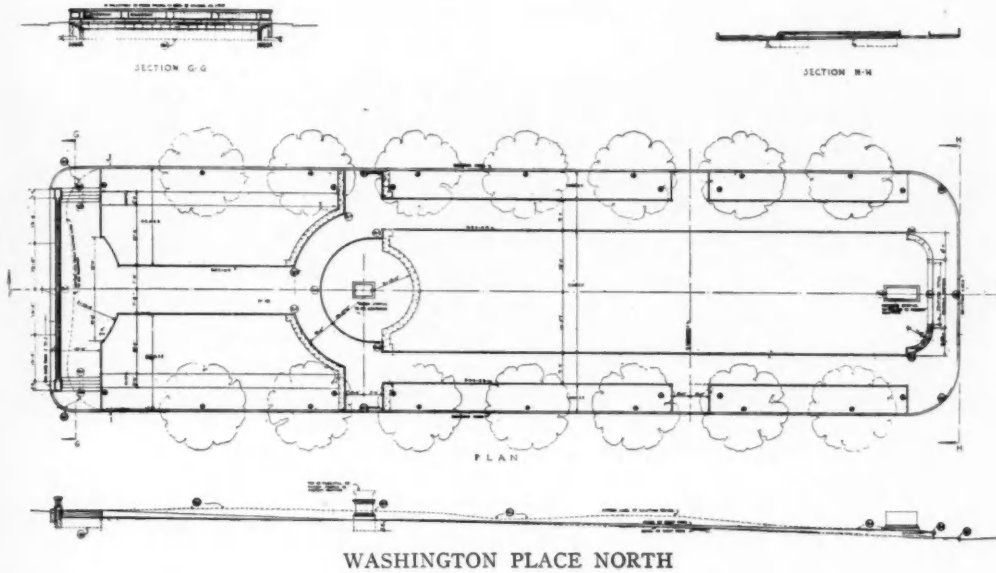
The question of circulation has apparently been very carefully considered, and the planning contemplates the widening of certain parts so as to facilitate easy access to this square, based on known present conditions and the inevitable future expansion of the neighborhood.

The economic advantages of this improvement, the inception of which is due to Mayor Preston's wise foresight and initiative, are so very marked as to bring home forcibly to the entire citizenry the value to be gained by the completion at one time of both projects as outlined. By this very wise plan there will be created a most beautiful addition to Baltimore, a regeneration of a tract sunk to

THE AMERICAN ARCHITECT

somnolency, and a consequent impetus to the entire section in which it is located. The Courtland Street area has, as stated, halted in its progress. The retardance of its development for a considerable period has, of course, reacted on the contiguous neighborhood.

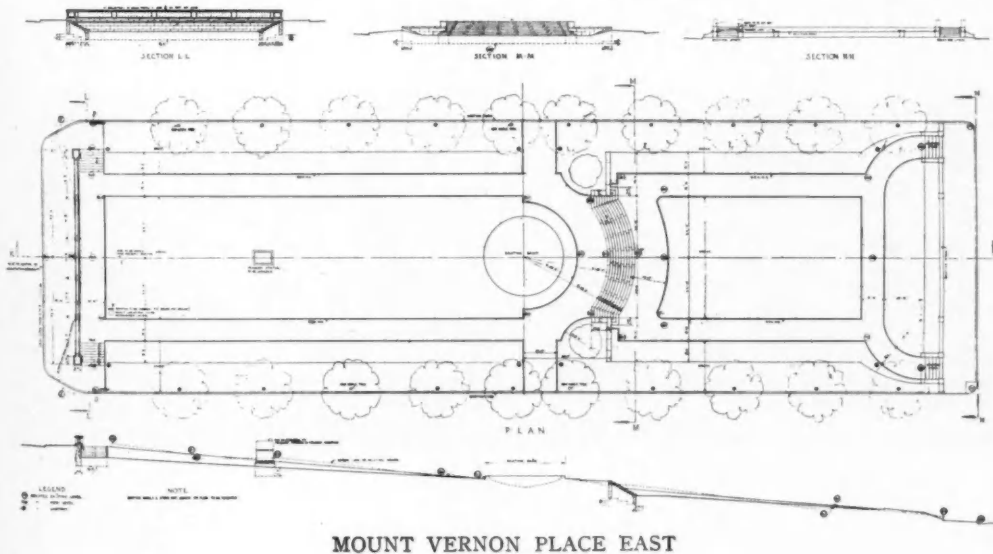
This parkway will be equivalent to about two square city blocks. Later it is proposed to build a large municipal building on the side of this square, opposite the City Hall, with an auditorium to seat fifteen thousand people. While this scheme is one for future consideration and may take time for its



Another proposition now under consideration, which will probably be approved, is the plan for a civic center east of the City Hall with an *ensemble* wide and generous in its dimensions for municipal and national assemblages or reviews.

fruition, the Mount Vernon Square and St. Paul Square schemes are now assured, and they have already been started on their way to completion.

Improvements such as have been described conserve many ends that are of the first importance in



THE AMERICAN ARCHITECT

the civic development of every city in the United States, and particularly of those where there are artistic and historic features that should be conserved.

In the Mount Vernon Square improvement there is the conservation of a plan and a monument that reflects the highest expression of our civic progress up to a certain time. Mr. Hastings has, with com-

which the propaganda of civic development has been urged, find their best development. As a rule, early errors in civic development have been so costly as to prevent their correction. In the present instances we find that errors of the past have been corrected in a way so economical as to receive the approval of all the people of Baltimore, who see beyond the comparatively small expense to be in-



ELEVATION OF WALL ALONG ST. PAUL STREET

mendable artistic perception, retained every good element as he found it, and these elements he has surrounded with a dignified, well-balanced improvement.

This combines not only an artistic conception of a certain duty, but also shows a patriotic impulse to preserve traditions that in other cities have not always been so reverently handled.

In the St. Paul improvement elements of city planning, urged by architects in past years, during

curred a result so very favorable to the city as to silence every objector.

Mayor Preston's attitude toward this scheme has been one of broadminded constructive citizenship and Mr. Hastings' admirable plans have doubtless been evolved with the enthusiasm that is always the result of co-operation with associates in civic work who are sufficiently progressive as to regard these matters with an eye to something more than political expediency.



Digest of Commercial and Financial News

Affecting the Practice of Architecture

THE war has forced us to think in terms infinitely larger than any we have ever used before, comments *American Industries*. We speak of men, money and materials in terms of millions and billions, formerly we used tens and hundreds.

Few of us, indeed, have any idea of what these numbers actually mean; our feeble imaginations struggle bravely to picture dollar upon dollar to the sum of several billions, rank after rank of men to the number of a million. The exercise, while doubtless beneficial to the imagination, has a tendency to lead us to think of money, materials and men merely as so many units of power to carry out our purpose. The dangerous effect of this in the case of our men is that we would lose the most valuable element in industrial relations—the personal equation.

In dealing with men, either as individuals or in the mass, to disregard this matter of the personal element means that all individuality is taken from the worker, and he is reduced to the level of a mere machine. Sometimes, it is true, this is necessary and even desirable. How easily it can be accomplished is illustrated by the military procedure in which a man dons a uniform, rises, eats, works, and sleeps as a unit in a group—never as an individual. The result of a year or two of such life is illustrated by the returned soldiers which Canada and Europe are striving to readjust to industrial conditions. We will have enough men of this type to care for, without increasing the number by reducing our industrial workers to the same mechanical plane.

We will have need of thousands of workers, for foundry, factory, shipyard and store. Let us remember that we are placing an order, not for an insensible commodity like materials, but for men. The large quantity in which they are called for must not blind us to the fact that each individual in that mass is, in the final analysis, an individual problem. Our success in handling men in such numbers depends primarily upon our ability to remember the personal equation—and to preserve it.

How, it may be asked, can this be done under the new conditions? The problem is not, we admit, a simple one, but neither is it impossible. All our welfare work for many years past has been carried on for just this purpose—to convince the worker that

his personal happiness is of vital importance. Keep up the welfare work then, and keep it up to meet the increasing demands. Next, let each worker realize that his highest productivity depends upon the amount of personal interest and personal power which he puts into his work. Make each realize that his value increases in direct proportion to the amount of *personality* he gives to his work; that, after all, every product of our industries is nothing more than raw material blended with the power and personality of men.

JAMES A. FARRELL, chairman of the National Foreign Trade Council, has issued the formal call for the Fifth National Foreign Trade Convention to meet at the Gibson Hotel, Cincinnati, Ohio, Thursday, Friday and Saturday, Feb. 7, 8 and 9, 1918. The theme of the convention will be "The Part of Foreign Trade in Winning the War."

"American participation in the war against Germany," says Chairman Farrell in his call, "has laid a new obligation upon the foreign trade enterprise of the United States, and at the same time presented it a new opportunity. To consider that obligation and that opportunity; to discuss what has been done by the different elements of foreign trade, and to give serious thought to the demands and the problems of the future, delegates from every part of the United States, representing all phases of commercial and civic development, will assemble for the three days' sessions at Cincinnati.

"All Americans engaged in, or desirous of entering overseas commerce, and especially all Chambers of Commerce, Boards of Trade, and other commercial and industrial organizations, as well as firms and individuals, are invited to take part in the convention, individually or by appointment of delegates. The discussion will be led by men foremost in foreign trade experience of the United States.

"Approximately one-half of the time of the convention will be given to the presentation of prepared papers and reports dealing with one or another of the numerous phases of this great convention theme. The remainder will be devoted to group sessions for the intensive discussion of single problems under the leadership of experts."

Meeting of Building Trades Employers' Association

A country-wide association of building and allied industries is to be organized to render war service, according to plans made at the recent conference of these industries held in the Assembly Room at the Building Trades Employers' Association, at 30 West Thirty-third Street.

This national association will be in a position to expedite such matters as the Government may desire in regard to building and to the shifting and housing of laborers. A committee of fifty has been working for three months on plans for the organization and the problems which confront the builders and the Government under war conditions. At the meeting yesterday the following was read from the report of the committee:

First, organize locally and co-operate in the formation of a national war service committee for the whole building industry. A local organization of building and civic interests in New York can best understand and state the needs of this great industrial center to a national war service committee or directly to the Government. Problems of far-reaching magnitude present themselves to this centralized organization of New York City. Among the important ones for immediate attention are:

1. Housing and other building urgently needed to keep pace with the growth of the city, especially the increase due to war industries and the shifting of labor resulting therefrom.
2. Municipal development of such sections of the city as are needed for housing extension.
3. Harbor and shipping improvements for present and future industrial development and extension of foreign commerce.
4. Transportation, rail and water, with special reference to freight terminals, intensified use of railroad lines, and the fullest development of the New York Barge Canal.
5. Improvement of the mortgage situation with a Government loaning system for housing development along lines similar to that in use in European countries. Also measures looking to the adoption of long-term amortized mortgages.
6. Educational campaign for the larger use of women in work for which they are adapted and for men in the manual trades.
7. The organization of the building industry to render greater service in war and peace to the nation, State and city.

Ernest R. Ackerman, former president of the New Jersey State Senate, declared that the prime

object of the organization should be the abolition of profiteering.

"The best blood of the country is preparing to make the great sacrifice and we must do likewise," he said. "Primarily our actions are liable to influence the sixteen thousand architects in the country—then the 173,000 building contractors who are anxious to prove their usefulness; then the 169,000 brick and stone masons, and finally the 934,000 laborers—to say nothing of the vast number of artisans whose indisputable services demand adequate recognition. If we can impress this vast army of industrial workers, through our association, that we are striving to aid the Government along the lines described we will be performing a service almost beyond comprehension."

Former Public Service Commissioner Edward M. Bassett and others went on record as being in favor of the Government loaning money to builders so that they may erect houses for workers employed in work essential to the prosecution of the war.

Extreme Measures to be Taken to Save Venice?

According to word from a certain London paper the city of Venice will never, during the war, or afterward, be delivered intact into the hands of the Germans. If destruction becomes necessary it will be at the hands of the Venetians themselves. It is said that the inhabitants of the famous city have made this resolution after hearing the advice of their poet, D'Annunzio: "Let Venice perish a prey to flames rather than surrender its artistic glories to the Teutons."

However, the utmost precautions are being taken to prevent this great catastrophe. Food is said to be plentiful, reports to the contrary notwithstanding. The war secretary, General Alfieri, accompanied by the secretary for the navy, Vice Admiral Del Bono, have been in Venice surveying the military situation, inspecting the forts, the arsenal and the navy, and all the necessary arrangements have been perfected to insure protection.

Unity of feeling is being manifested by all classes, but the people can scarcely be blamed for their skepticism in regard to the results of the various conferences of the Allies, especially as to conditions in Italy. The people are looking to the United States to do its share in relieving conditions. "It was on the plains of Italy that Napoleon curbed the power of Hapsburg. The way to Vienna was laid at Marengo. The way to Berlin may be laid on the Piave, the opinion of some military experts to the contrary notwithstanding."

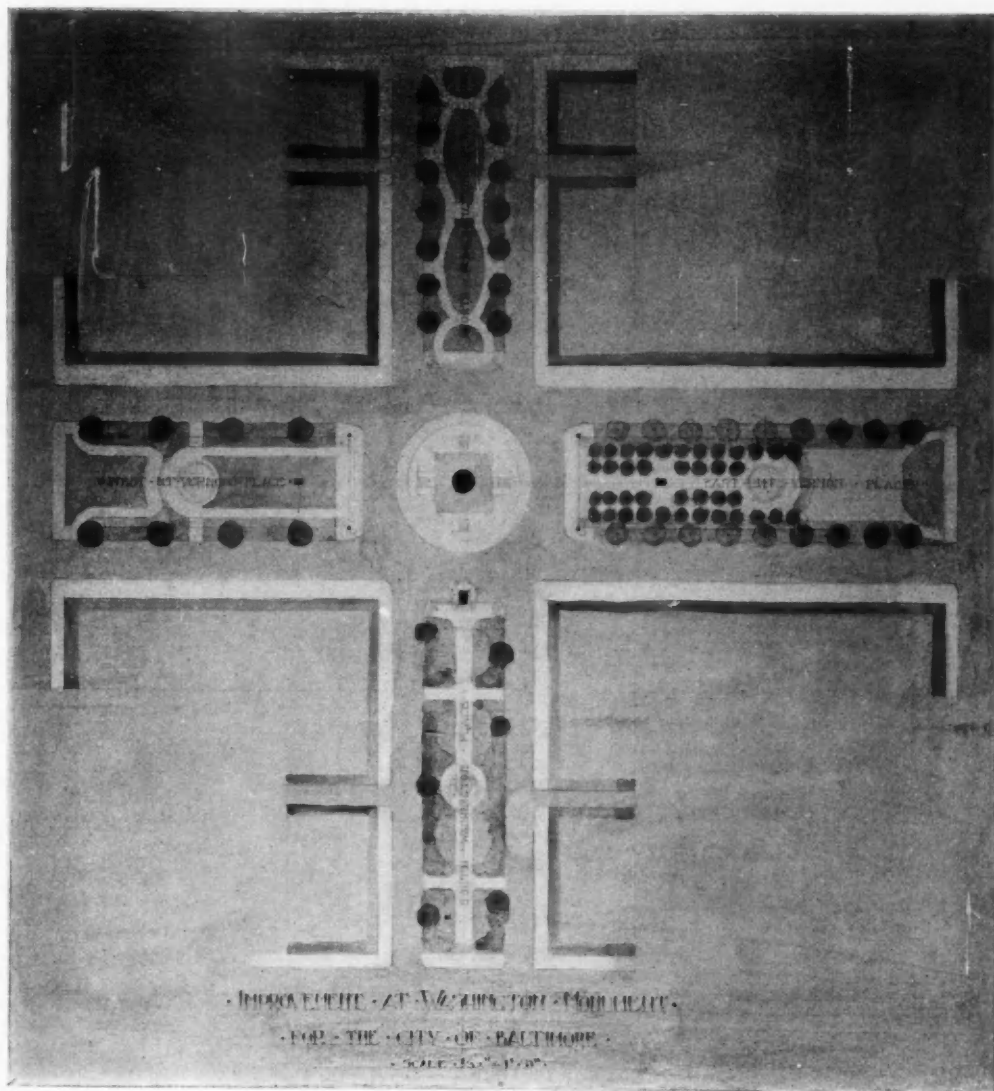


PLATE 28

KEY PLAN, WASHINGTON MONUMENT SECTION

IMPROVEMENTS FOR CITY OF BALTIMORE, MD.

CARRERE & HASTINGS, ARCHITECTS

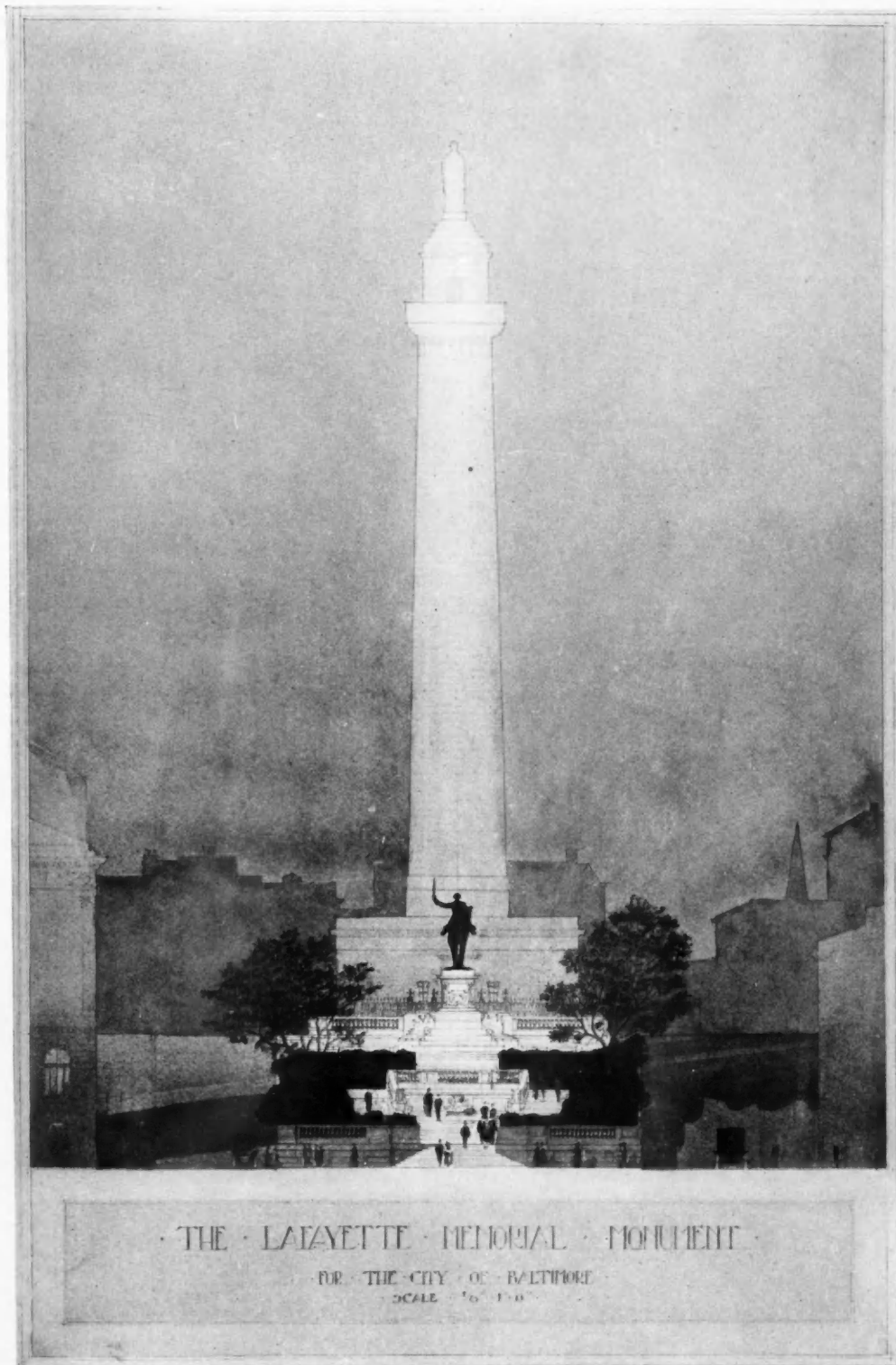


PLATE 29

LAFAYETTE MONUMENT IN WASHINGTON PLACE SOUTH

IMPROVEMENTS FOR CITY OF BALTIMORE, MD.

CARRERE & HASTINGS, ARCHITECTS

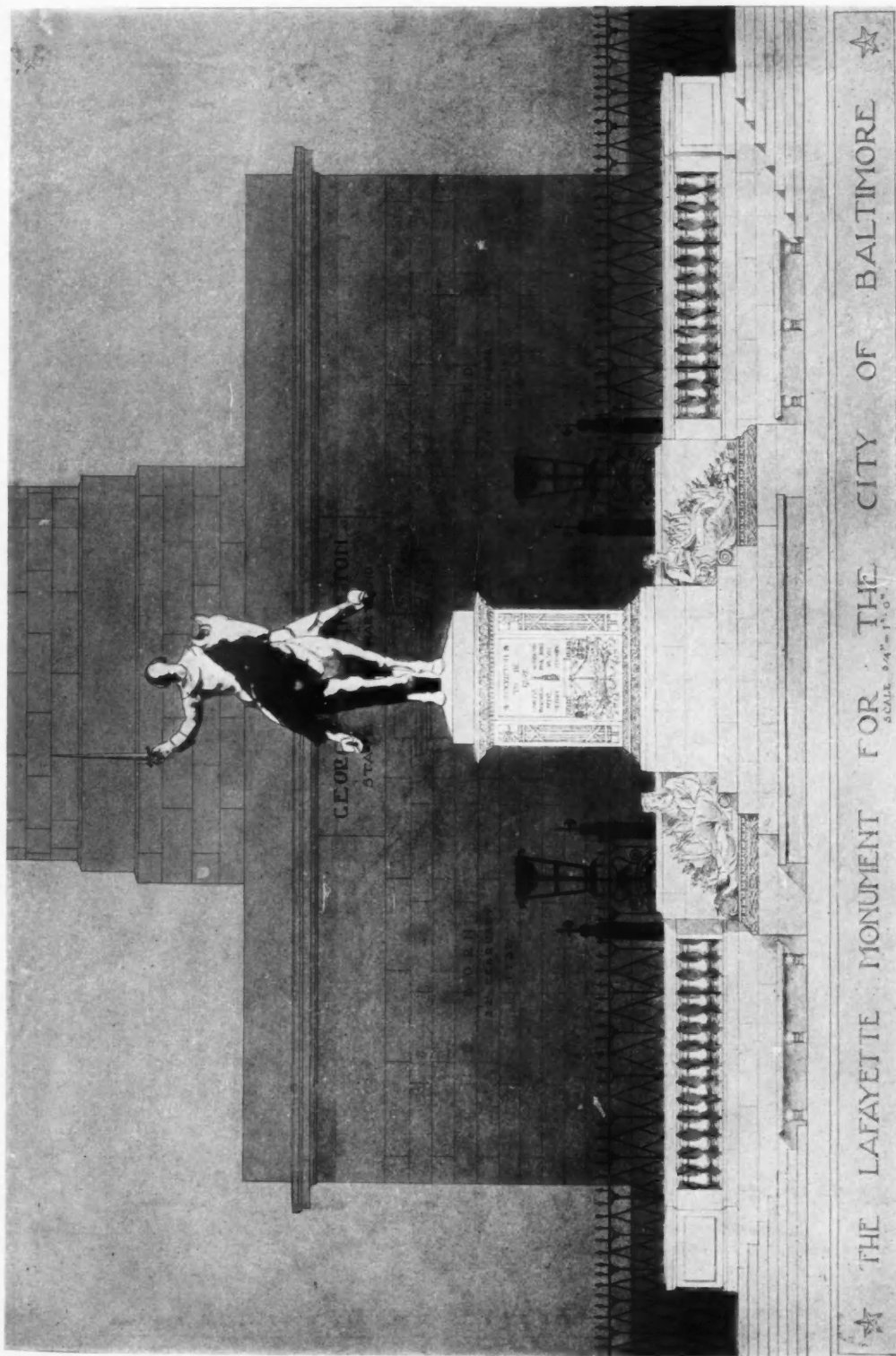


PLATE 30

LAFAYETTE MONUMENT IN WASHINGTON PLACE SOUTH

IMPROVEMENTS FOR CITY OF BALTIMORE, Md.

CARRERE & HASTINGS, ARCHITECTS

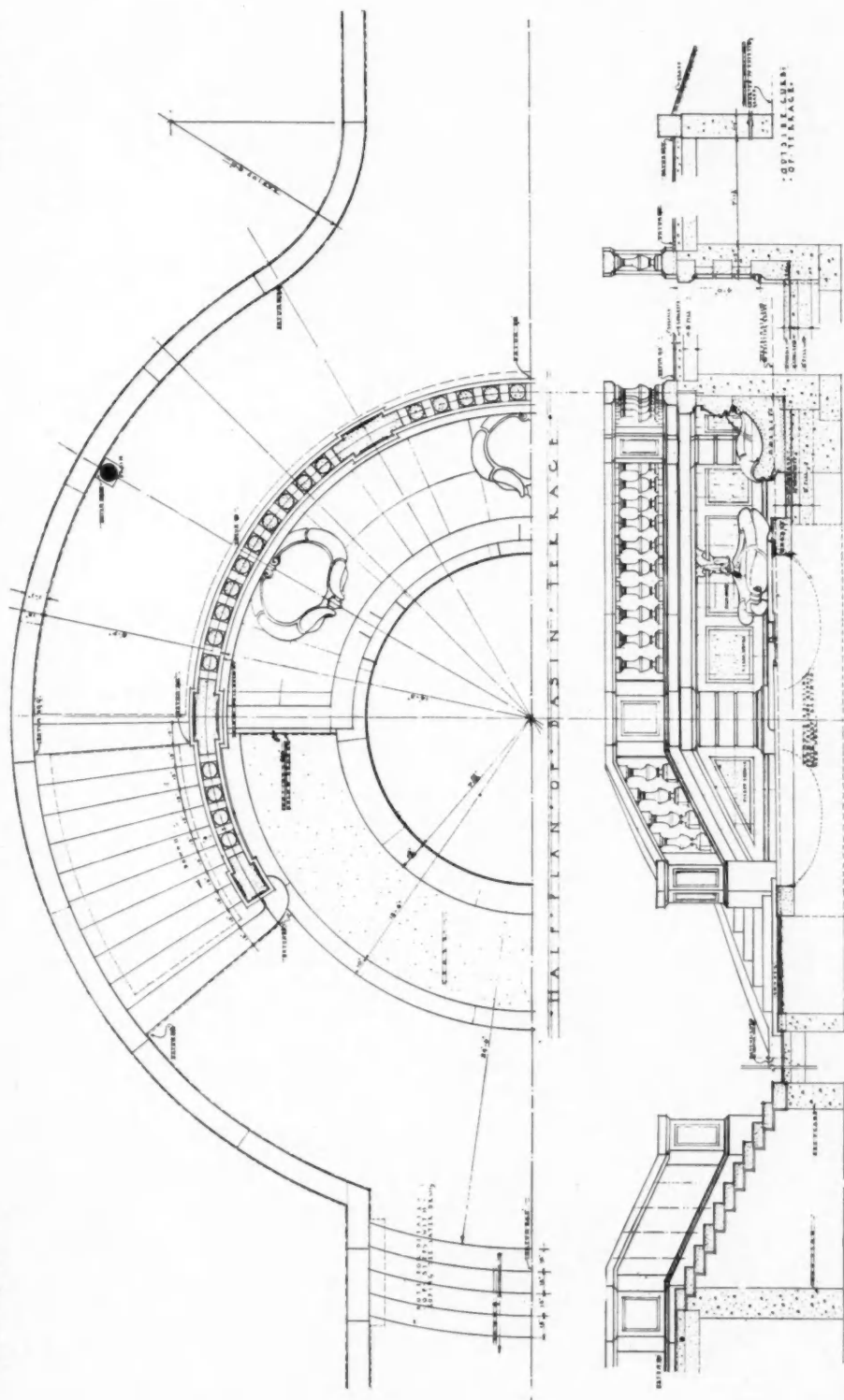
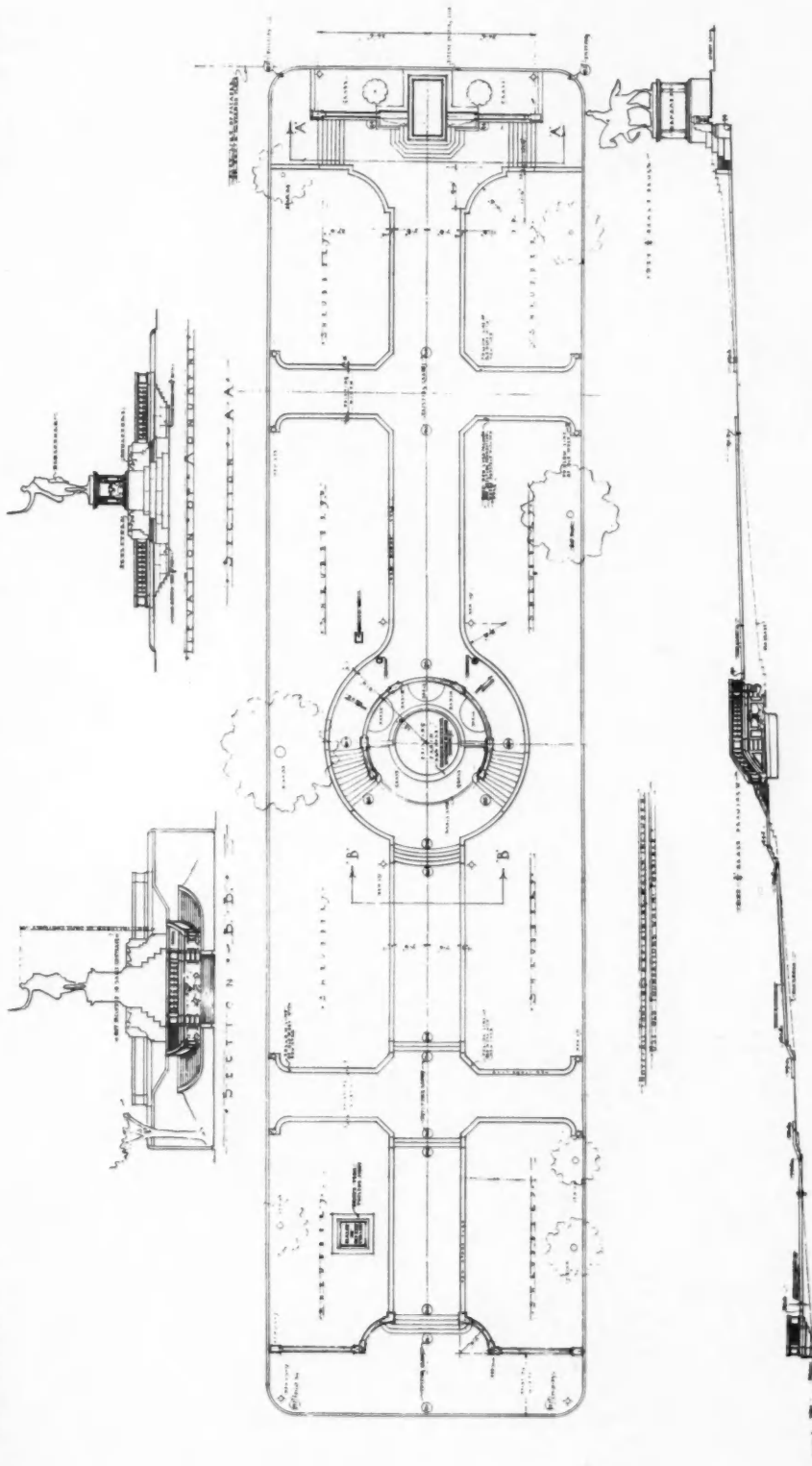


PLATE 31

STAIRWAY AND FOUNTAIN, WASHINGTON PLACE SOUTH

IMPROVEMENTS FOR CITY OF BALTIMORE, MD.

CARRERE & HASTINGS, ARCHITECTS



WASHINGTON PLACE SOUTH
IMPROVEMENTS FOR CITY OF BALTIMORE, MD.
CARRERE & HASTINGS, ARCHITECTS

THE AMERICAN ARCHITECT

JANUARY 16, 1918

VOL. CXIII, NO. 2195



PLATE 33

BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.

LORING & LELAND, ARCHITECTS

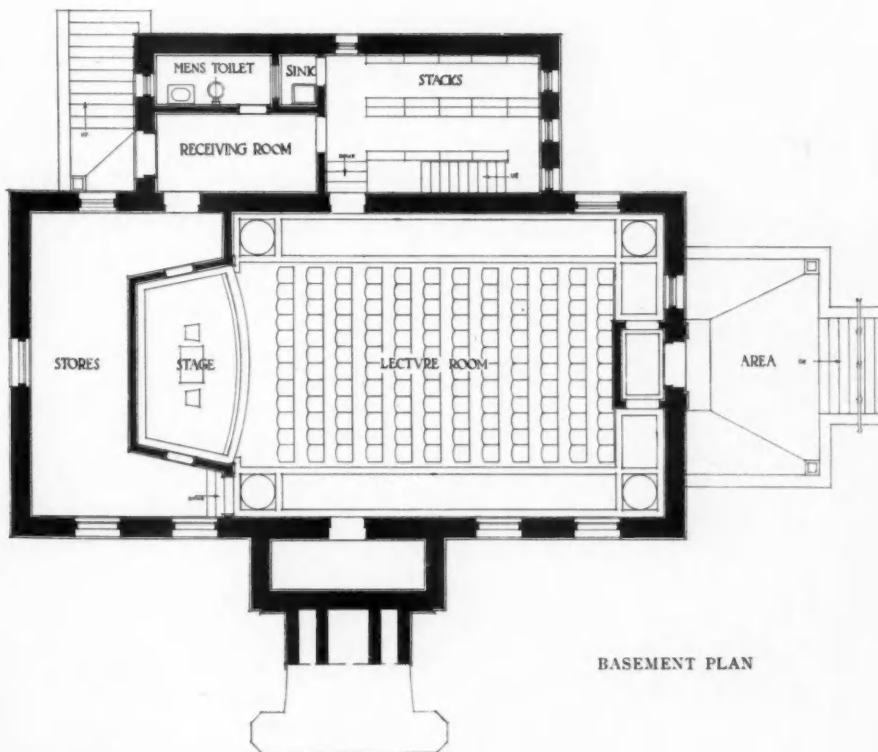
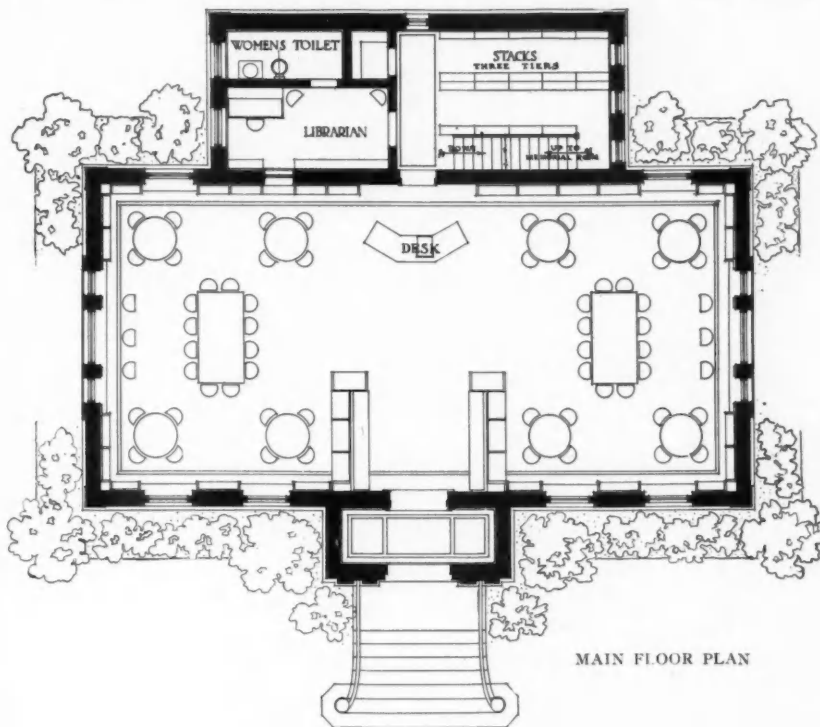


PLATE 34

BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.

LORING & LELAND, ARCHITECTS



PLATE 35

DETAIL OF MAIN ENTRANCE

BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.

LORING & LELAND, ARCHITECTS

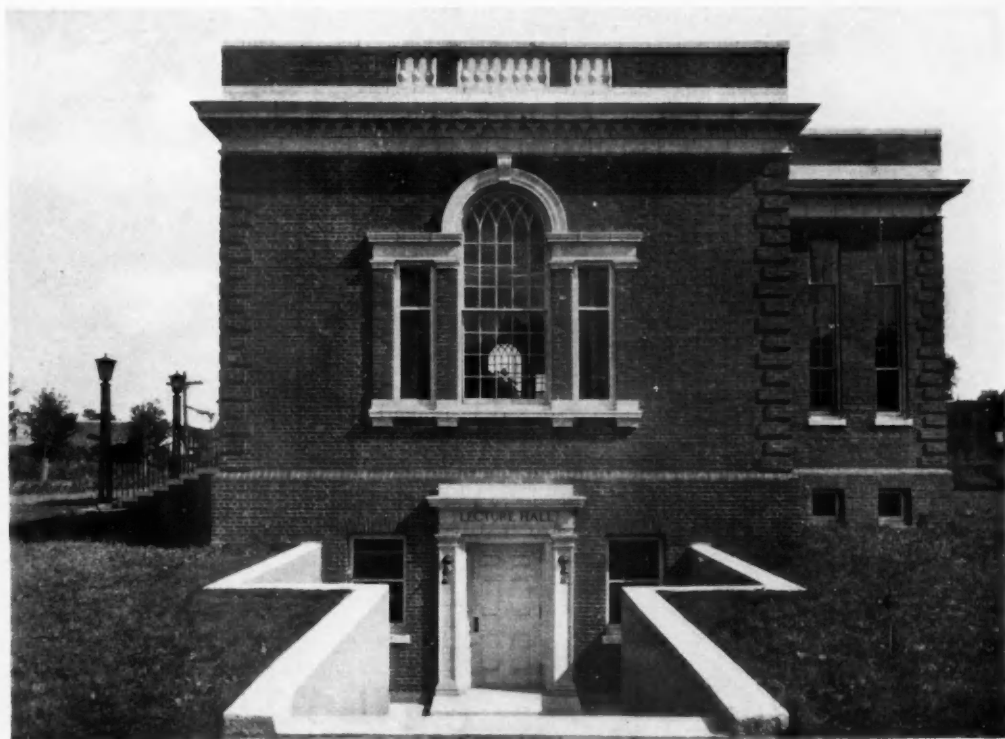
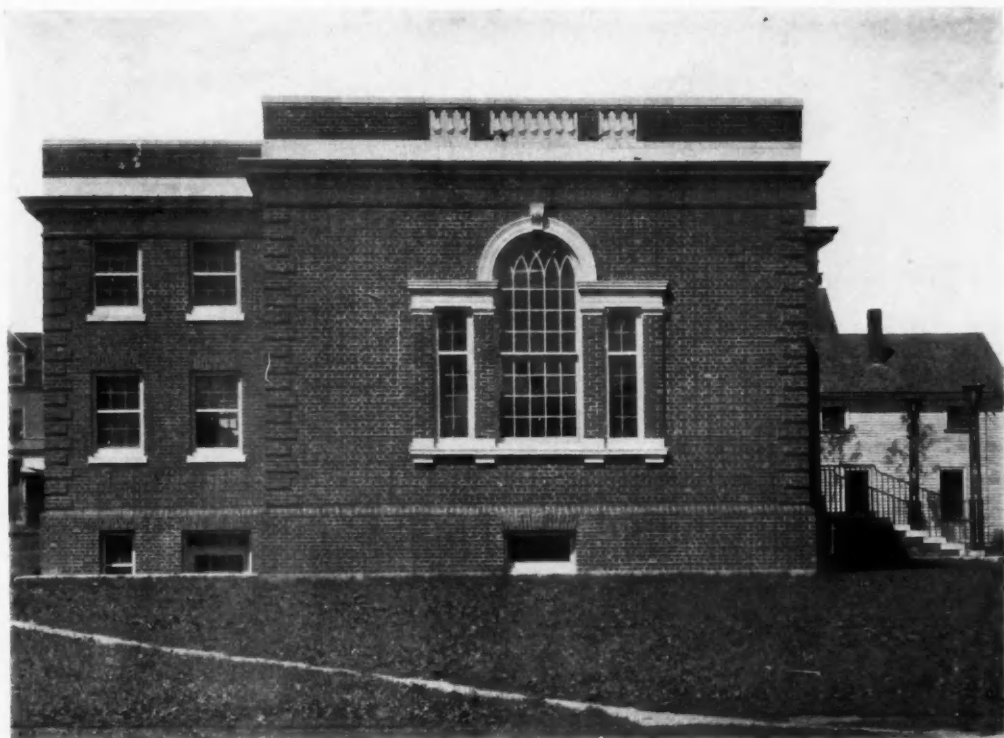


PLATE 36

EXTERIOR DETAILS

BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.

LORING & LELAND, ARCHITECTS

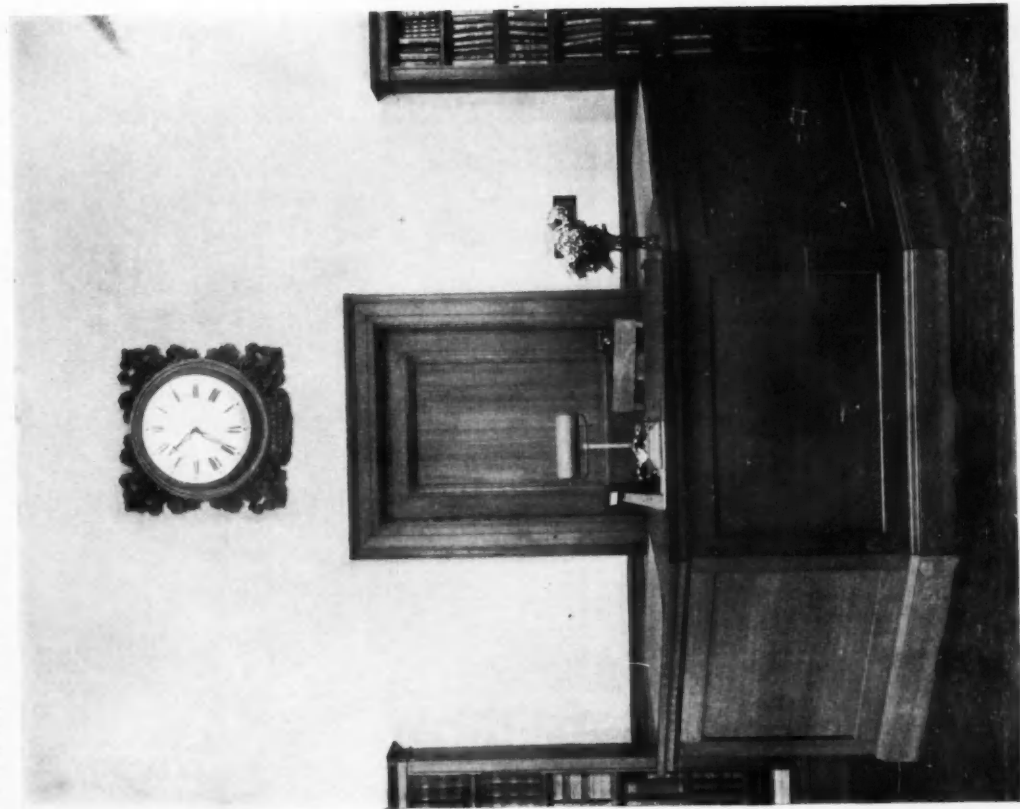
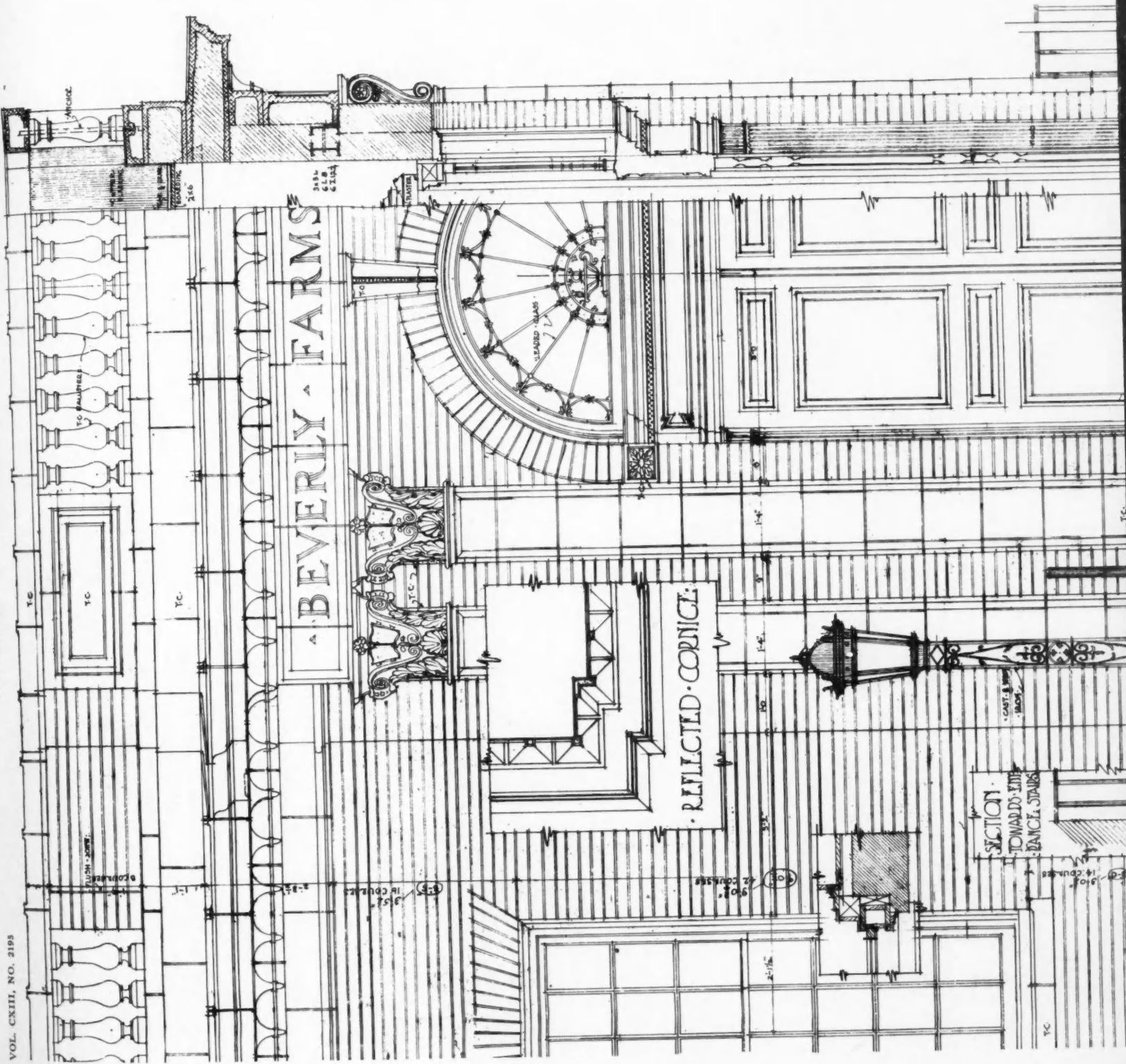


PLATE 37



BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.

LORING & LELAND, ARCHITECTS



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THE AMERICAN ARCHITECT

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National Capital Building Commission Report

AS far as can be determined from the somewhat incomplete information that has been given to the public with reference to the report of the National Capital Building Commission features both good and bad, and recommendations wise and unwise would seem to be combined. These apparent inconsistencies make it impossible to forecast what the effect will be in carrying out the plans of the commission.

In the recommendations as to location of various important buildings the report apparently follows the suggestions made a number of years ago by the Senate Park Committee. As these suggestions were admirably conceived and have received general indorsement, they will naturally be equally well approved now. For example, the location of the State Department Building across Pennsylvania Avenue, opposite the present State, War and Navy Building, is eminently fitting and is in keeping with former recommendations. The same applies to the proposed site for a Navy Department Building, and these well considered locations lead to the inquiry why the good judgment shown was not extended to the relocation of the Department of Justice

Building on the square adjoining it. Such a location would complete the circle of buildings around Jackson Square and constitute a very well balanced *ensemble*. With the State Building on the west, Justice and Navy on the north, the Treasury on the east, and the White House on the south, a group of buildings not surpassed in the world would have been located.

The advantage of the suggested locations would be to free the Fifteenth Street frontage of Pennsylvania Avenue for the Department of Commerce and for a building for another department later.

It is, however, with the recommendation by the commission of certain types of buildings that we mainly disagree. It is difficult to understand how a five-story building above a basement could be satisfactorily designed on the lines of the Treasury Building, or the reason for the placing of a modern office building type of structure, such as is understood the new Department of Interior Building will be, in any scheme for the Capital City's civic improvement.

When it has become possible to study this report in its entirety some revision of these opinions may be necessary. But, as far as the matter has been given publicity, there is a feeling of strong objection to many of its recommendations. We may take consolation in the statement of Senator Martin that there is little possibility of any immediate action by Congress toward putting into effect the recommendations of this commission, and it is hoped that mature consideration may effect changes that will overcome many of the objections to this report that are now so apparent.

Housing for Government Clerks

AMONG the many complex problems considered at the National Capital since our entry into the war is that of providing housing for a large number of extra clerks, numbering into thousands, who have become a necessary force in the rapidly increasing work of war preparation.

Even in normal times there has been a dangerously small margin of unoccupied quarters where Government employees might find suitable housing. The influx of large numbers has created conditions that are daily becoming more difficult to overcome.

With a view to a thorough investigation of all possibilities as to housing, to care for the present need and to provide for permanent future extension, a Citizens Committee has been organized. It has promptly begun its labors.

The first results are the establishment of four community houses. Five additional houses will be opened soon. These community dwellings will not be operated as boarding houses, but as clubs, each

THE AMERICAN ARCHITECT

with a competent person in charge, directly responsible to the committee.

The question of financing these operations is at once the main difficulty, as it is not to be expected that they will become self supporting at the outset. But, if the plans of the committee do not miscarry, they will ultimately pay for themselves and perhaps a moderate percentage on the investment.

To provide for the initial expense of fitting up these houses, and as a guarantee for the first few months' operation, it is the committee's purpose to raise a fund by subscriptions, which would be in the nature of loans. It is believed that such loans can be paid off gradually as the various units become going projects. The whole matter is to be placed on a thorough business basis.

At present the committee is confining itself to the utilization of buildings already in existence, but should the demand increase it has in mind a plan that has been adopted in a certain large munition plant where similar conditions arose. The question was solved by the erection of two-story permanent brick structures with apartments on both floors, each having separate entrances. Buildings of this character, it is believed, are bringing a fair return on the investment necessary to construct them.

The decision to erect such permanent buildings has not yet been reached. It is by no means an impossible supposition that Government aid will be extended to the promoters of this housing scheme along the same lines as loans made to agricultural workers.

Again, Who Were the Architects?

The jury of medal awards of the Chamber of Commerce yesterday awarded to the Rohrheimer-Brooks studios, 2232 Euclid Avenue, the bronze tablet indicating that it is the best building of its type erected in 1916.

The studio building came under the classification of commercial buildings, of which 180 were passed upon by the jury.

In making its report, the jury finds that although with a commercial building located next to a great cathedral, Trinity, there is no clash

in style of architecture or color, and that the two widely different buildings blend harmoniously. Members of the award jury were: Lee Hillman, M. R. Powell, W. B. McAllister and Ernest McGeorge.

Completion of the judging of the small commercial building marks the second award made by the committee. Richman Bros.' clothing factory, in E. Fifty-fifth Street, obtained the medal for the best large factory.

THE above is reprinted from a recent issue of the *Cleveland Plaindealer*. The submergence of the identity of the architects appears to be complete.

The present lethargy in the profession can lead to but one result. Is it not time to become more assertive and less esthetic? Would it not be better to use similar methods to those employed by other representative associations and secure "a place in the sun" or shall we rest in the shadow?

It is certain that unless more practical and aggressive methods are pursued by the governing bodies of architectural associations, to quote again the remarks of Professor Lethaby, "the new buildings, national housing and other improvements will be done in the main without us."

The failure of a local newspaper to mention the architect's name when referring to a very important public improvement for which he was solely responsible is conclusive evidence of lack of proper methods to preserve the rights and dignities of the profession of architecture. The present instance is but one of perhaps hundreds which are to be found each week among clippings that cover the entire country.

As the bulk of the people are largely led by the daily press in the formation of their opinions on all topics, it would seem that the habit of editors to ignore the rights of authorship on the part of architects is to a great extent the result of apathy on the part of architects themselves, and to the failure of their representative bodies to demand recognition in a direction that could be economically and thoroughly effected by properly conducted press associations.



THE AMERICAN ARCHITECT

Illinois Architects Recently Commissioned

Charles Herrick Hammond, Captain, Aviation Section, U. S. Signal Corps. Captain Hammond is located at St. Louis.

Francis H. Beaumont, son of George Beaumont, is a Lieutenant, Aviation Section, U. S. Signal Corps, and is located at Garden City, Long Island.

George S. Beaumont, son of George Beaumont, Lieutenant, Ninth Battalion, 155th Depot Brigade, Camp Lee, Petersburg, Virginia.

To Open a School in Shipbuilding

"The first school for the training of shipbuilders to aid in the construction of the great shipping fleet now under construction or authorized," says the *New York Times*, "will open on the last day of December in the Richmond High School Building, Staten Island. The schools for training shipbuilders will be directed by the Department of Education of the State of New York, and the Merchants' Association has asked all of its members and the business men of the city to co-operate in every way possible in making these schools a success."

About 6,000 men are now employed in shipbuilding yards on Staten Island, and the number will soon be doubled. Other schools will be opened in Manhattan and Brooklyn soon. The United States Shipping Board estimates that 400,000 workmen will be needed.

"Restoration" of Europe's Ruined Buildings

It has been recently stated, and the statement will bear repetition, that measures should be taken, at the close of the war, to prevent the wholesale "rebuilding" of certain priceless architectural treasures which have fallen a prey to German "Kultur."

These edifices, in many cases representing the toil of generations of builders who gloried in their work, can never be replaced by modern methods of construction. Far better, as the unknown writer referred to stated, that the desecrated buildings should stand in majestic ruins, mute testimonials to future ages of the barbarism of war.

Sacramento's Building Projects

It is interesting to note that the city of Sacramento, Cal., is planning constructions which, including two buildings just finished and four in process of erection, will amount to \$7,401,000. The most

important of the new structures contemplated are: State Capitol extension (two buildings), \$3,000,000; enlargement of Southern Pacific plant, \$600,000; Commercial Cars Construction Company building, \$400,000; Cronan building, \$300,000; Henderson bank and office building, \$275,000; extension of Libby, McNeil & Libby plant, \$140,000, and State Printing Office, \$100,000.

The finished structures are: Scottish Rite Temple, \$100,000, and the Hall of Justice, \$219,000. The buildings in course of construction are: Masonic Temple, \$300,000; the Washington School, \$237,000; the Native Sons' Hall, \$175,000, and the Carnegie Library, \$130,000.

Kansas State Architect Dies

Charles H. Chandler, architect for the State of Kansas, died at his home in Topeka Dec. 18. Pneumonia was the cause of his death.

Mr. Chandler was appointed State architect eight years ago by Governor Stubbs, and has served through three administrations since that time. Under his supervision numerous important public buildings have been erected, including the Administration Building at the State University, the Plumb Memorial Hall at Emporia, State Insane Hospital at Larned, Tuberculosis Sanitarium at Norton and many others.

New Code for Concrete

In the annual report of Building Inspector Tulloch Townsend of Schenectady, N. Y., new regulations for reinforced concrete and cement block construction are recommended. Cement blocks should be made of uniform material, Mr. Townsend says, with the date of manufacture stamped upon them, and no concrete or cement blocks for foundations should be used which are less than 28 days old and which have not an average ultimate compressive strength of 1000 lb. per square inch and a minimum of 800 lb. He suggests the licensing of the manufacture of such blocks.

City-Planning Commission Report

The final report of the City Planning Commission of Minneapolis, Minn., is being prepared in book form. Copies will be distributed to city officials and the various civic organizations which have participated with the commission in its activities, and may be had by addressing the secretary of the commission.

THE AMERICAN ARCHITECT

A Recent Book

AN INTRODUCTION TO THE STUDY OF LANDSCAPE DESIGN, by Henry Vincent Hubbard and Theodora Kimball. Full cloth, 380 pp., size 8 x 11 in., price \$6. New York: The Macmillan Company.

This book deals with the subject of landscape architecture in a different way from that usually pursued by writers on this subject. It takes up the definite esthetics of landscape architecture, setting forth an interesting and sound esthetic theory, upon which the whole structure of this art is based. The authors very properly treat the topic primarily as a Fine Art. They apply art principles to its design—composition, line and form, color harmonies—and find an "art expression" in the arrangement of forms and colors through the medium of outdoor objects.

The practical, business note has, however, been sounded sufficiently to make the book an extremely useful text, which should be of value to those interested in landscape design.

As the authors state in their preface, the book is not a compendium of useful information. Nor yet is it a book of completed works to which the designer can refer for the solution of his own problems, but a presentation, upon which the entire fabric can be developed, of sound esthetic principles, as concrete and specific as those governing the allied art of architecture.

The practical experience of the authors as assistant professor of landscape architecture, and librarian of the School of Landscape Architecture, respectively, at Harvard University makes them particularly well fitted to handle the subject in a broad and authoritative manner.

City Ordinance Regulating Use of Building Material

The scarcity of certain building materials and consequent higher prices have resulted in various attempts to regulate construction. The mayor of Philadelphia has recently issued an ordinance as to the use of terra cotta in detached and semi-detached buildings, and also a stipulation in regard to the use of wooden shingle roofs for suburban dwellings. Penalties are provided for the violation of, or non-compliance with, the provisions of this ordinance.

New \$800,000 Clubhouse

A proposed structure, to house three civic societies, will be built in the vicinity of Times Square, as the result of a recent sale. The site has been

acquired by the Societies Realty Company, of which Frank A. Vanderlip is president, and will be utilized for the erection of a five-story structure, designed to house the activities of the League for Political Education, the Civic Forum, and the Economic Club, now at 15 West Forty-fourth Street. The new building is being designed by McKim, Mead & White, Architects.

A Plant for Duplicate Records

After three years of agitation, New York will finally have a storage house, in an isolated building far away from the city, for a duplicate set of the records of the Register's Office. The Board of Estimate has set aside the building known as the Triangulation Monument Building, in the Ashokan watershed, for the housing of the duplicate record plant.

Building Uses

The Board of Standards and Appeals of New York has announced that information with respect to a change of use in any building in a restricted zone should be obtained from either the Superintendent of Buildings or the Fire Commissioner.

It is only when either of these officials has rendered a decision with respect to such use that the question, if there is any doubt, can be put to the Board of Appeals in the form of an appeal from such decision.

If the change is such that it would affect the use classification of the building under the Building Code, the Superintendent of Buildings is the official who must pass on the change, since, in such case, a certificate of occupancy as prescribed in Section 411a of the Charter and Section 5 of the Building Code must be secured. If no such change of classification under the Building Code is involved and no structural alterations are contemplated, the approval of the change of use rests with the Fire Commissioner.

Brooklyn Skyscraper Rapidly Built

The explanation of the rapid construction of the twenty-four-story office building at the corner of Remsen and Court Streets, Brooklyn, is thus stated by the architects, Starrett & Van Vleck:

"It was due to organization, efficiency and foresight. The steel was ordered three or four months before the United States entered the war and we followed up the signing of the contract with hurry orders and saw that it was delivered at points avail-

THE AMERICAN ARCHITECT

able for use long before we began the work. We foresaw the contingencies likely to arise. We saw our brick stored and ready for our use several months before we needed it. The same way with our cement, hardware and other materials. We had to see that the material was transported promptly. Military organization and methods of operation had to be followed." The building covers nearly two acres, and nearly a million bricks were used in its construction.

Triumphal Arch Planned for New York State Building

ALBANY, Dec. 19.—A massive triumphal arch in memorial to the soldiers of New York State who see service abroad in the present war is included in the plans for the New York State office building which were approved by the board of trustees of public properties. The plans were drawn by Louis F. Pilcher, the State Architect.

The specifications call for an eight-story structure which will be built on the land west of the capitol. There will be three large ell's with a park between the new buildings and the capitol. The triumphal arch will face the rear of the capitol.

The new State Department will provide quarters for all state departments not now located in the capitol. The kind of material has not been decided upon yet and no appropriation has yet been named for the construction work.

Monument in Rockies to be Moved

An interesting and unique feat of engineering is contemplated in the removal of the huge granite pyramid at the top of Sherman Pass in the Rocky Mountains to a point five miles from its present location. The pyramid is 60 ft. high and 60 ft. square at the base. It was erected 40 years ago to commemorate the names of Oliver, Oakes and Ames, the men whose constructive genius made possible the first railroad across the Rocky Mountains.

American Base Hospitals in France

Organization of American base hospitals in France has been commenced. Sites for four of them have been selected and work on several more will begin in a few weeks. Where new buildings are to be erected the unit system is being used, which makes possible indefinite expansion. In a number of instances, however, existing buildings will be remodeled for this purpose.

New York's First Zone Law Hotel

The first hotel to be erected since the passage of the zone law, and in compliance with its restrictions, is the Hotel Hamilton, on West Seventy-third Street. Plans for this building were prepared by Schwartz & Gross, Architects, 347 Fifth Avenue.

City-Planning Ordinances

Spokane has followed the example of several other Western cities in making plans for its future development. A recent ordinance provides for the appointment of a city planning commission of ten men, including the city engineer, the mayor, and head of the park board.

Camp Libraries

The interest manifested in this country in the attempt to provide libraries for our soldiers has resulted in the construction of library buildings themselves.

At Camp McClellan, near Anniston, Ala., accommodations will be furnished for the many books to be housed in the proposed \$10,000 library.

Fewer Shades of Paint

Paint manufacturers met on Jan. 3 at Washington, D. C., to discuss with A. W. Shaw, Chairman of the Commercial Economy Board, how to eliminate waste in their industry. Only about forty shades will be produced hereafter, and odd sizes of containers will be discontinued.

Using Exhaust Steam

More attention than ever before is being paid this winter to careful use of exhaust steam in power plants. It may be applied to innumerable purposes, such as heating feed water for the steam boiler, for many washing purposes, heating buildings, pasteurizing and sterilizing, and the like. A small investment in additional boiler-room equipment, such as an exhaust-steam heater, will effect savings of several hundred dollars a year in the coal bill of even a moderate-sized plant. It would seem important just at this time that the various types of fuel economizers for use in factories and large buildings should be carefully considered.

Personal

Mr. George E. Kessler, landscape architect, has been engaged to plan certain civic improvements for the city of Dallas, Tex.

DEPARTMENT OF ARCHITECTURAL ENGINEERING

Church Lighting

By F. LAURENT GODINEZ

IN the past, light in the church has been a medium of spiritual or symbolic expression.

The light kindled in the Temple of Solomon was mute testimony of God's presence in the midst of Israel, and the narrowing (from without) of the temple windows was to signify that light streamed out not in from the symbolic source. In the dark ages the "dim religious light" which Milton speaks of, refined by the exquisite coloring of the wonderful stained glass windows of the great cathedrals, intensified the feeling of religious awe inspired by the infinite mystery of the surroundings. It was Napoleon, the atheist, who remarked in the cathedral of Amiens, "ne doit pas se sentir à son aise ici," but we need not dwell upon the medieval customs, myths and superstitions which have impressed modern

civilization with the weight of centuries, except *en passant* to recall the Candlemas Day of the Catholic Church, the Festum Candelarum of the Romans in honor of Flora, the Mother of Mars, or of Proserpine, which Pope Sergius adopted and perpetuated as the actual allegorical significance of light in the church. The allegory of the thirteen candles, where twelve candles are extinguished at intervals during the service until only one, signifying Christ deserted by his disciples, is left, to be extinguished in proclamation of His death, is but another example of the symbolic meaning of light, interpreted by mystical darkness and the solemn peals of the organ reverberating through the aisle and transepts of the church. The Jewish women of old excluded the mild rays of the Sabbath lights from their faces



Fig. 1.—This picture and its prototype (Fig. 2) illustrate the effect of technique in the utilization of artificial light. Probably no "fixture" in the conventional interpretation of a dependent mass of brass and glass could be properly subordinated to architecture. Owing to a slight "over-exposure" the camera has exaggerated slightly the brightness of the source and its locale. In effect, one is not conscious of these ceiling lights, and the glass plates which conceal the powerful reflectors and ventilator combined convert the harsh white glare of the Mazda lamp to a soft, mellow radiance.



Fig. 2.—The "quantity" of light and the "efficiency" of obtaining it from ceiling reflection are insignificant details compared with the individual opinion of the architect regarding the effectiveness of ceiling brightness as a revealing agent. In Fig. 1 the ceiling is revealed by light directed upward from the floor. In this picture supplemental cove lighting discloses one phase of detail and ornament, evidently in accord with the architect's sentiment. The ceiling diffusing plate has been used here as in Fig. 1, and that sufficient light obtains is evidenced by the brightness of the top of the pew-backs.

THE AMERICAN ARCHITECT

with both hands, yet modern religious cults tolerate the blinding glare of illuminants which annihilate picturesque and protective lighting customs and defile architectural expression of all its imagery and psychologic charm. Possibly the systems of Inigo Jones, Christopher Wren, Vanbrugh, or the Byzantine Basilica, or Renaissance style might suffer less in a revealing light, provided it be of hygienic quality, but one must admit that the adaptation of modern illuminants to church lighting involves much more than the extremely superficial consideration which the lighting engineer has bestowed upon the subject—if we are to be guided by the effect of his work. Mystery and imagination are the two great-

est aids to architectural effect, and modern "illumination" is possibly their greatest enemy. Even the wonderful mystery of Westminster Cathedral—where even plain stock brick-work looks well in a light leaving something to the imagination, would be dispelled by the glare of the Mazda lamp, and the typical gin-mill-blaze-of-glory effect which seems to represent the climax of engineering idealism in lighting. Granted that certain styles of the Italian—in the Georgian era—possess advantages over the Tudor Gothic, or that the cathedrals of Milan, Burgos, and

Leon require a different mode of lighting expression than those of St. Paul's or St. Martin's-in-the-fields, where architects in the south were naturally less prolific in window placement, yet we are inevitably confronted with the blatant effrontery of the devastating theatricalism of "modern lighting" in the place of worship. Dante tells us (*Paradiso XXXI*). "I looked, And in the likeness of a River, I saw Light flowing." Just as plainly the Italian style proclaims in miraculous tongue the history of the Papacy from the Middle Ages of Thomas Aquinas, through the scholastic theology of the past, and the English Gothic of Langton, DeMontfort, Lewis and Evesham to the remnants of esthetic culture of the past, and its first beginnings, even to the age of Tertullian Christianity where lights were banished

from the church. Lactantius reproaches the heathen for the use of lights, and we are familiar with opinions of Athanasius and Hieronymus within the annals of the first three centuries. Finally candles were admitted but solely: "*ad significandum lumine fidei illustratos sanctos decessissa et modo in supérna patria lumine gloriæ splendere.*" Then only wax candles were allowed, fat being forbidden by the *Congregatio Rituum*. The odoriferous fat was regarded as a product of the bee, which dies after the accomplishment of her work. This was symbolism but there is no beauty without symbolism, and no symbolism without beauty—and Divine service is beauty. Spon, after visiting the famous Temple of

Minerva at Athens, the Parthenon which the Mahometans had converted into a Mosque, described it thus: "When I entered the mosque I was not surprised, as others have been at its darkness. The little light it had came from the back part, which the Christians opened when they made use of it as a choir. In the ages of Paganism, this temple had no light but that which entered at the door, and which gradually faded away when you entered the pro-naos, which was only faintly lighted through the first portal. I should rather have wondered at seeing

windows here, as they are very seldom found in ancient temples. The Temple of Thesus at Athens also has no light, but what is received from two or three openings, which the Greeks have made without any symmetry in the roof, because they wanted to use this temple as a church; and it is easy to see that in ancient times no light could enter, except through the portal. It was doubtless imagined that the darkness prevailing in the temples struck those who entered with reverential awe. Hence, too, we may derive the use of lamps in sanctuaries." Similarly in the inside of the Temple of Jerusalem, to which the daylight was not admitted, a solemn darkness always prevailed revealed only by the faint light of some of the lamps and the candlesticks, five on the right side and five on the left, before the oracle of

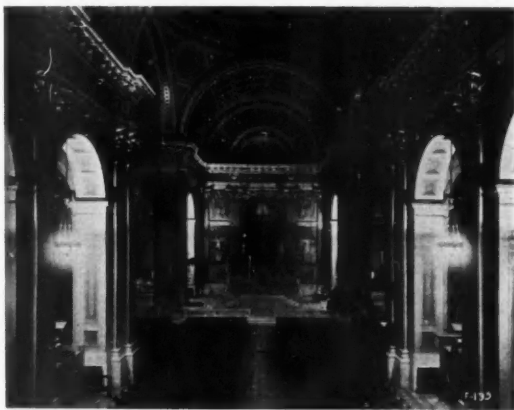


Fig. 3.—Modern gas lighting is becoming an important factor in architectural work owing to the extraordinary developments which have recently occurred in the achievement of refinements which has invested gas as an illuminant, with all the flexibility of electric light. This notable example of modern gas lighting depicts the lighting of a church, where the mode of lighting illustrated (gas) supplanted the most modern type of electric illuminants—the Nitrogen lamp. A decision in favor of modern gas lighting was reached after a careful analysis of both systems, first, regarding their effectiveness from the architect's viewpoint, and second, upon their efficiency or economic aspect. Not only was the quality or color value of the new lighting improved, but also great reduction in operation and maintenance was effected.

THE AMERICAN ARCHITECT

pure gold; and the flowers, and the lamps (1 Kings vii 49; 2 Chron. iv 7). In the Temple of Herodes the religious awe was irresistible. A dim light of infinite mystery fell from the seven-branched candlestick. It is not strange that the Samaritans who have retained all the ancient practices and beliefs which they held before the rise of Christianity have a place of worship Kenisat-as-Samira, or Bit Allah, the interior of which is illumined solely from two primeval chandeliers and one small oil lamp—yet there is something grand and sublime in the dark silence of this place. In the Buddhist temples, where the brightest colors prevail, the effect is toned and softened by the deep gloom of the temple which is relieved only through the entrance. In the cathedral of Lhāsa, the

light comes from immediately above the middle or broadest aisle, where a transparent oilcloth serves as a diffusing medium instead of glassware. By this means the whole temple is lighted, there being no side windows, and only upon the altar itself stands the temple lamp, *mch'od-skön'*—a short pedestalled bowl, containing a cotton wick, fed by melted butter, emerging from the center of the vessel, which on account of the solidification of the mass and the disintegration of the particle, becomes in fact a candle. Yet it is the sole illuminant of this cathedral! During all ages, places of religious worship, temples and synagogues, cathedrals, convents and mosques, churches, chapels and monasteries, in the caverns dug by saints of old like the Holy Grotto at Subiaco, or the "ocean cave" of St. Rule at St. Andrews—and the buildings of architectural distinction such as the work of San Galla, Brunelleschi, or Bramante, all without exception have retained the mysticism of gloom in all the rude realism of its symbolical form, and we should not forget these teachings in view of specialized modern commercialism. In attempting to turn night into day, as a prolific commercial expedient, the lighting engineer has assumed his prerogative as a re-creator in endeavoring to "improve up-

on" Nature's work. We are told that a lamp which approximates actual daylight (for a few seconds only) is, and must be the universal panacea for all lighting ailments. By one sweep of this clumsily contrived torch or makeshift for natural light, these utilitarians would incinerate every tradition of architectural ethics. The engineer does not understand that Nature has provided a period for work and one for rest, nor does the pictorial beauty of the setting Sun, in color psychologically expressive of repose, convey any message to his "practical" mind. He is blind to the fact that, as the Sun moves across the horizon, the expression of an interior is constantly changing, and as one mood gives way to another of perhaps rarer charm, his sense of balance,

proportion and symmetry has been shattered by that Frankenstein he has reared—the Mazda lamp. By this time the reader may have surmised my belief that church lighting, like any other form of applied illumination which involves the unveiling of architecture to our perverted visual organs, is really not a problem at all, but a matter of innate personality on the part of the architect and his work, or in other words the emphasis of his individualism on the expression of his art. We find the utilitarian eager to supply a "formula" by which

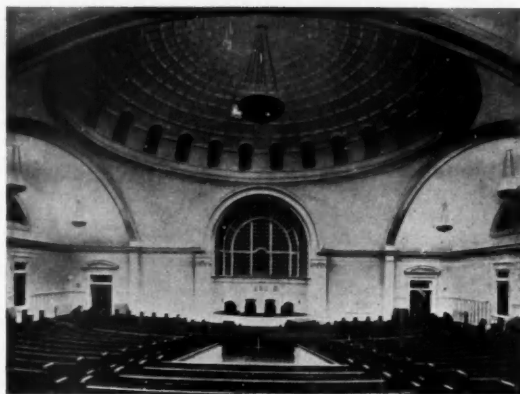


Fig. 4.—All reasoning is by comparison. Here is an interior illumined, indirectly by the conventional "bowl and chain" idea, which of late has been much overdone. Probably no two architects could agree on a method of lighting this interior, providing each method would create an approximation of individualism. Would you prefer the elimination of the fixture and the substitution of cove lights? Or would a circular skylight in conformity with the dome treatment be more suitable in your opinion? How about placing lamps in continuous reflectors without, so that the effect be similar, night or day? The diffusion ceiling plate would be the most economic solution, but would it be the most effective architecturally? Would you prefer luminous bowls to these dark suspended masses?

church lighting, and every other kind of lighting can be "solved." The lighting specialist is more reticent, for he knows that all he can hope to do is to assist the architect in his supreme and difficult function as a realist. This assistance takes the form of constructive criticism of a mildly humoresque tendency directed at those offenders, or rather say, *chevaliers des industrie*, who pose as unaffiliated lighting experts and impose upon the architect's courteous credulity and *bonhomie*. Religion as it is known today includes two major divisions, evangelical and ritualistic. But church lighting of either kind includes a subordination of the utilitarian function of light to that of religious symbolism. The key note of the evangelical church is its adherence to the Scriptures, exemplified by the

THE AMERICAN ARCHITECT

spoken word of the expounder of the Holy Book, who becomes *per se* a symbol of religion, and in the light of such, he must stand revealed to his congregation. In more than one instance has this practice of illuminating the preacher resulted fatefully in imposing too great a burden upon his visual organs, and the result has been measured by a long sequence of mental and moral lesions which a facetious press has invariably attributed to plausible rather than logical causes. I have established the fact with the medical profession from the result of clinical and experimental research that constant overstimulation of the retina, coupled with a diet



Fig. 5.—It is an occasional glimpse of such attainment of idealism in lighting which enthuses and inspires. Here is that most stubborn of public servants, artificial light, obedient to the will of the architect in revealing the beauty of architecture. The mechanical difficulties encountered in such lighting are stupendous. Arrangements for raising and lowering the equipment for lamp renewals must be entirely concealed from view, yet readily accessible. As to cost, such an end justifies any means.

of artificial light rich in ultra violet radiation will result in complete atrophy of the optic nerve with attendant nervous lesions. It is here, then, that we encounter the real cause of those apparently inexplicable moral digressions which have precipitated some of the most exalted exponents of Christianity from grace, causing them to exhibit the characteristic phenomena of a Jekyll and Hyde dual personality with incipient prodigality. Carefully analyzed there will be found no muscle in the body which can endure continuous contraction except for a short

interval, and the ciliary muscle of the eye is no exception to this fixed rule. The eye responds to a stimulus many millions of millions times more slight than the ear, and the entire defects of the eye, upon which eye-strain from artificial light depends, concern only 1/200 to 1/300 of an inch in the measurement of diameters and curves; the evolution of the organ of vision being such that civilization through the medium of artificial light puts it to a new function for which it was not created or habited. Dr. Gould, a leading ophthalmologist, states: "Another law of ocular tire and resensitization is outraged by the lighting of most of our churches, and all of our theatres, public halls and private houses, indicating that the millions of dollars spent each year in illumination are wasted and misspent, and by the methods used all the harm is done to the eye that is possible. American oculists have so many patients, who, even with the best of spectacles can not escape acute suffering when they go to the theatre, or church, that the term 'panorama headache' has come into general use. As much as to the character of the sermon, or of the worshipper, the famous sleepiness of the churchgoer is caused by ocular fatigue from the harsh lights in front." The significance of this is that just so long as "fixtures" are selected because of a design of strong appeal, and installed by those who, aside from the question of design, know nothing about the equally important functions of illumination, no one need expect to obtain lighting which reflects the image of its objective in desirable perspective. I have presented, in conjunction with this monograph at least one example of intelligence in applied lighting which will be recognized by every architect as in accord with precepts thoroughly in accord with his personal sentiment and individual discretion. As we mentally compare examples of recent church lighting we search in vain for a *raison d'être* justifying this theatrical burst of light which is so prevalent and ruinous to eyesight. Are the interiors so illuminated improved by the scathing penetrating exposition of every crack and cranny? Does the accentuation of a ceiling in seething blaze of light contribute to the symmetrical balance of an interior irrespective of its architecture? If artificial light is but a substitute for daylight, why impose upon it the impossible condition of creating comfortable lighting effects which are hideously unlike natural or artificial light? Why not employ the tremendous flexibility of our modern artificial illuminants distinctively instead of distortively? Let us select a moment when the effect of the church during daylight is inspirational, and then let us imprison and hold captive this mood through the agency of artificial light. It is merely a question of applying light so that the stained glass

THE AMERICAN ARCHITECT

window becomes subservient to the will of the manipulator, and we have accomplished that miracle of the twentieth century—lighting which assists architectural expression! This, of course, refers to some sympathetic case, for I do not believe in pre-conceived methods formulated and standardized for "general application." I might suggest an avoidance of the "fixture" as such whenever and wherever it can be dispensed with. To my mind the diffusing ceiling plate is infinitely preferable when it can be inconspicuous. The suspended "wash-basin" and "soup bowl" propaganda has become too obnoxious through the insidious force of associated ideas to be tolerated in the temple of worship, even in em-

bellished form. Why insult the worshipper with the insignia of the bar room? Why introduce its symbol in the home? Why, indeed? If the architect would take a decided stand in the case of Lighting vs. Architecture modern civilization would be greatly benefited. His position is particularly unfortunate, since he knows exactly what he wants but can find no one capable of appreciating his ideals and assisting him in their realization. That is because lighting technique has become so involved that those interested commercially in its exploitation have neglected to keep step with Science and Art—a difficult, though by no means impossible desideratum.

Fire Tests of Building Columns

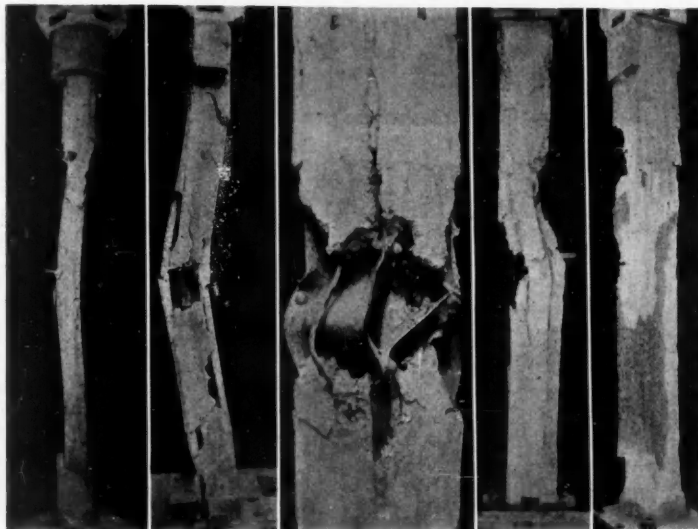
THOSE who have made designs for buildings in different cities must have been impressed with the great diversity of requirements for the same thing. This is noticeable in the design of structural columns but not to such an extent as in other things. The design of columns is based on one of several well-known formulæ, and the fibre stresses are fairly similar. This is due to the fact that the steel manufacturers made certain recommendations in their handbooks before such matters were incorporated in building codes, and in fact before codes, as now made, were in existence. As codes were formulated these recommendations were very naturally adopted.

With the advent of the fire-proofing of structural parts there were no dominant or controlling corporations in that industry. It is largely due to that fact that the requirements for such work often vary as much as 100 per cent. Investigation and tests have been made along individual lines, and the results are not comparative.

In order to arrive at some rational conclusions the Associated Factory Mutual Fire Insurance Companies, the National Board of Fire Underwriters and the U. S. Bureau of Standards jointly are conducting tests on columns and column covering at the Underwriters' Laboratories, Inc., at Chicago.

The program includes the testing of 100 columns, two columns being tested each week, and the work will be completed during this year. All of the test columns are 12 feet 8 inches in length and of various steel sections, protected by different forms of fire-resisting coverings. One column of each section is tested without any covering. Several reinforced concrete columns of standard design have been introduced.

The test is a combined fire and load test. The specimen is placed in a gas furnace under a temperature control conforming to a specified standard



EFFECT OF LOAD AND FIRE ON BUILDING COLUMNS

THE AMERICAN ARCHITECT

curve, reaching a maximum of 2300 degrees Fahr. at the end of an eight-hour test. Concurrently a load is applied by means of a hydraulic ram, an average load of 100,000 pounds being maintained during the test, this being calculated for the various sections according to accepted formulæ.

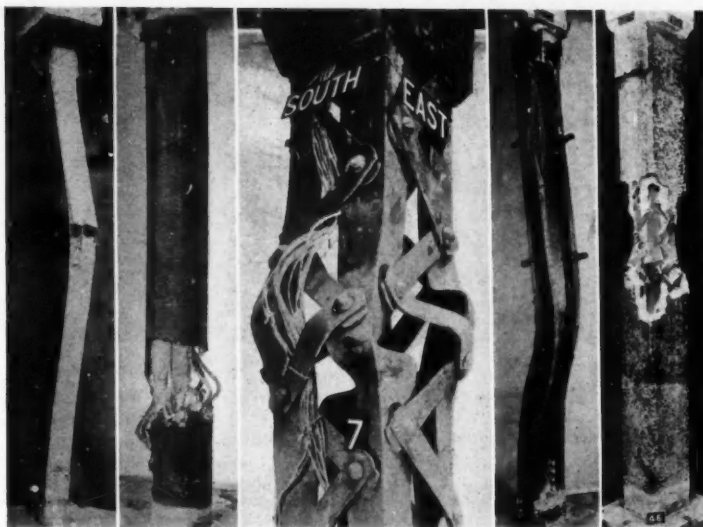
The temperature of the furnace is measured by means of thermocouples at two elevations and that of the metal in the columns at four elevations and at different points in the section. The vertical compression and expansion of the column is measured by a gauge apparatus, as is the lateral deflection.

The tests are continued to a breakdown of the sample, hence no inferences as to the comparative merits of the various column designs and protection should be made from the illustrations, which show simply the effect of load and fire on a number of samples which have been tested. The time required to obtain failure varies with the kind of material and the thickness of the protection, the periods for columns so far tested ranging from seventeen minutes for the unprotected columns to over eight hours for the heavier types of covering.

It is expected that the tests will give information as to the relative fire-resistive value of the different coverings employed. Differences in point of effectiveness of over 100 per cent have already been found as between concretes made from different aggregates. This fact has been apparent to some investigators, through the medium of tests and inspection of buildings damaged by fire.

The program of tests and the apparatus used is the result of several years' work, and the outcome will be of the utmost importance to the building industry and is awaited with great interest. We venture to predict that the contention of a well-known Western fireproofing expert, made several years ago, will be justified. It was claimed that reinforced concrete columns must be protected by another medium, preferably tile, in order to prevent destruction under a severe test.

The results of these tests might very properly be a basis for uniform requirements in municipal and state building codes.



EFFECT OF LOAD AND FIRE ON BUILDING COLUMNS



PARTIAL VIEW OF TESTING FURNACE



Illuminating Theater Aisles

The Brookins Company, Euclid Avenue and East Eighteenth Street, Cleveland, Ohio, in putting forward its "Aislelite" for illuminating the aisles of darkened theaters, claims for the product a great increase in safety and convenience. In motion-picture theaters particularly, it is stated, a system of lighting is necessary which will do away with stumbling or possible accidents.

The "Aislelite," the Brookins Company claims, is easily installed, has no complicated wiring, can be turned off when necessary, and throws a strong light only where it is needed—on the floor. This invention also complies with all insurance requirements, and is indorsed by insurance underwriters as the safest kind of lighting. It would seem that the advantage of such a device might well repay the small cost of installation and add much to the comfort and safety of theater patrons. A feature that would also seem to commend to owners the installation of the "Aislelite" is that it would tend to eliminate many accidents and the often costly attendant damage suits.

Salt Glazed Brick

The Hocking Valley Fire Clay Company, with sales agencies in principal American cities, claim that especial advantages may be gained by the use of their particular product, Salt Glazed Brick. This material, its manufacturers state, surpasses ordinary enamel brick in that the former does not peel off or chip, and is also more permanent and less costly. It is also claimed that the Salt Glazed Brick is not affected by acids or the elements, being suitable for either interior or exterior work. The brick can be furnished in light, medium, or dark shades.

The Hocking Valley Fire Clay Company make a specialty also of Encaustic Paving Tile, which they recommend for the basement floors of school buildings, for use in industrial plants, and similar struc-

tures. This material also is claimed to be acid proof. The catalog issued by this company makes mention of many buildings where their products have been used during their quarter of a century of experience.

Safety Electrical Switches

The Square D Company is the new name of the Detroit Fuse & Mfg. Company, of 1405 Rivard Street, Detroit, Mich. The fuse business of this company has been sold to the Economy Fuse & Mfg. Company, of Chicago, who will continue the manufacture of high-grade fuses for all classes of service.

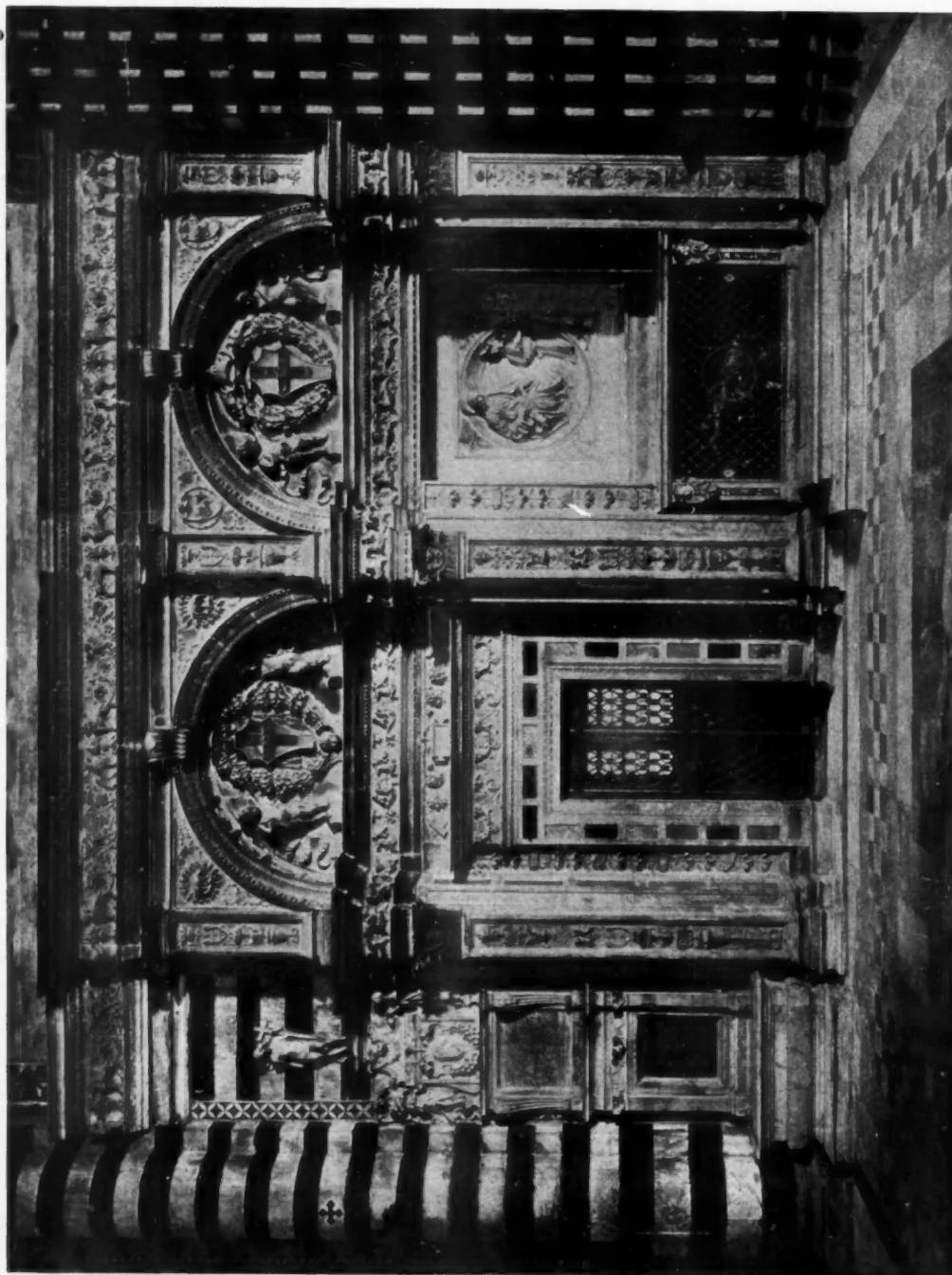
The Square D Company will continue the manufacture of enclosed switches. These switches are specially designed to insure safety to operators in all places where there might be danger of contact with open switches. These are, it is stated, designed to meet requirements of the several states that have passed laws demanding safety installations.

Lighting Improvements

The National X-Ray Reflector Company, of Chicago and New York City, in a recent bulletin call attention to their lighting systems as they have been made available in large buildings and industrial plants. This company also refers to their Curtis Portable Art Lamp, and point out its advantages over the ordinary methods of house illumination.

Electric Switches

In a bulletin issued monthly by the Trumbull Electric Manufacturing Company, of Plainville, Conn., with offices in American and European cities, attention is called to types of knife and motor-starting switches manufactured by this firm. Mention is also made of the new building now being erected to complete this company's equipment.



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The monument at left has been attributed to Michelangelo (C. 1497)