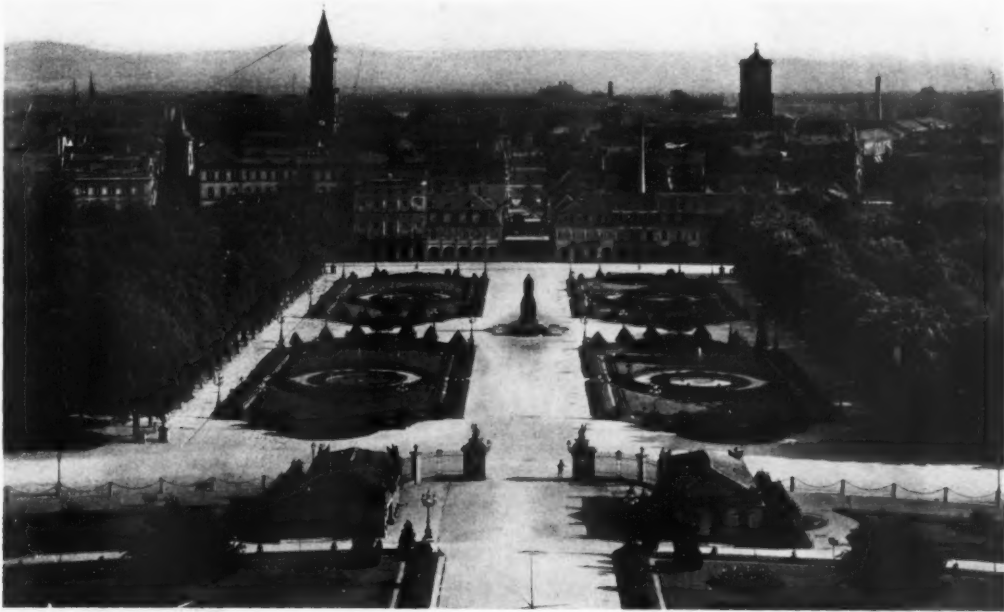


THE AMERICAN ARCHITECT

VOLUME CIII.

WEDNESDAY, APRIL 23, 1913

NUMBER 1948



CASTLE SQUARE, KARLSRUHE

AMERICAN CITY PLANNING—PART V

By FRANK KOESTER, *Consulting Engineer*

ZONE AND BLOCK SYSTEMS



TO obtain the best results in city planning, it is necessary to have a rigid system of regulation, which is best effected by the establishment of classified districts. Suitable laws must be enacted under which the necessary regulations can be carried out, and through which citizens will be protected in their rights and prevented from interfering with the rights of others.

Objectors to such regulations will be numerous, but it is only necessary to recall

that in sporadic cases, such systems of regulation exist and are carried out with even greater severity than may often be necessary. On certain streets, for example, no commercial traffic is allowed, while on others no peddlers can sell goods. On the other hand, a millinery or similar establishment, is at liberty at any time, to move in and spoil a whole residential block, to be followed shortly by laundries and bootmakers.

In European cities, the classes of districts are often a dozen or more in number. The city of Karlsruhe, with a population of 135,000, has as many as sixteen classifica-



FRIEDERICH'S PLAZA, MANNHEIM. SHOWING ORNAMENTAL WATER TOWER AND FOUNTAINS

tions, ranging from high class residential to detached suburban houses, and civic center to factory districts.

Owing to the hitherto unregulated conditions, it would not now be practicable in most American cities to establish as many districts or as close a classification.

A workable classification for the average American city might be as follows:

Residential District No. 1: Light traffic, no stores.

Residential District No. 2: Medium traffic, stores.

Business District No. 1: Medium traffic.

Business District No. 2: Heavy traffic.

Industrial District No. 1: 25 to 100 employees per establishment.

Industrial District No. 2: Over 100 employees per establishment.

Tenement District: Stores and heavy traffic.

Warehousing District: Heavy traffic.

In making such classifications, however, the city should not be divided in such a manner as to confine the poorer classes in the parts of the city remote from those in which the better classes are housed, as such residential restrictions would prove unpopular.

The better plan is to have a gradual improvement of the residential sections, from the extremity of tenements or low priced cottages on one side to private residences with extensive grounds on the other; the

poorer citizens not thus being compelled to live in a section of the city of a fixed character, but being able to move into better quarters from time to time as their means improved, forming new acquaintanceships and gradually getting out of the reach of others, as by means of successive moves, they came to occupy better quarters.

In such an arrangement of the sections of a city, into graded zones, the differences between one zone and the next would not be great in degree. They should, nevertheless, be strictly adhered to, in order to preserve the character of the different portions of the city, and prevent undesirable changes, mostly attributable to the efforts of real estate speculators.

In Germany where city planning has developed into a science of the first importance, such regulations provide that in certain zones, only buildings conforming to certain standards shall be erected. Such regulations apply not only to residence but also to business buildings, and the business streets conform to their standards just as do the residential streets.

In the laying out of German cities, a spirit of adaptability prevails, which gives the cities variety and at the same time effects the necessary regulation.

Thus, for example, if there are a dozen kinds of classifications prescribed, the city is not laid out rigidly into twelve parts and each part given a certain character,

THE AMERICAN ARCHITECT

but each group of blocks of the city is considered and its future character determined, it being set apart in accordance with the characteristics of one of the twelve kinds of classifications, which may cause it to differ to a considerable extent from the adjoining group of blocks. The dividing lines however, between classifications, may occur even in a block, one side or end being developed in one way and the other in another way. Thus though there may be but twelve kinds of classifications, there will be many hundreds of small zones, arranged to the best possible advantage but in all of only twelve kinds. The gradation of zones is consequently such that sharp lines of demarcation do not occur.

It is of the utmost importance, once regulations are determined upon that they be followed implicitly, as otherwise factory districts will invade residential districts and other encroachments of the classes on each other will occur, making the whole plan of the city abortive.

Washington, for example, has not developed as was the intention of the planners, and no city will, unless compelled to do so. While numerous objections are likely to be raised to the enforcement of such regula-

tions, they will be trivial beside the benefits to be gained. Such objections prove of little weight when regulations are finally put in practice, and as a matter of fact, far more drastic ones are constantly being carried out.

In New York, for example, in the cases of Fifth Avenue and Riverside Drive and in similar streets in other cities, heavy traffic and pushcart peddling is prohibited. On West End avenue, business and traffic are halted at 70th Street, and above that point a most remarkable transformation occurs. It is as though a Chinese wall had been erected for to the southward, where the thoroughfare is called Eleventh Avenue, are tenements and factories, railroad yards, slaughter houses and storage yards of the most unsightly character, it being the base of the San Juan hill section, inhabited by negroes. Above the dividing line, however, is one of the finest and quietest residential districts of the city, the houses being surrounded by lawns, a most unusual circumstance on Manhattan Island. No more striking effect of regulation could be found than that at this point.

The stricter the regulations in practice, the greater will be the degree of real per-



THE MARKET PLACE, LEIPSIK. BUILDINGS AND SQUARE WELL PROPORTIONED TO EACH OTHER



PUBLIC MARKET PLACE, HALLE

sonal liberty enjoyed by the whole public, for lack of regulation with consequent private license, is always destructive of the interests of all except those who wish to encroach upon the rights of others.

In fact the desirability of building regulations is always so great that it is often carried out by private initiative, as for example in the suburbs of American cities in which the land is sold with certain restrictions, as to the minimum cost of buildings to be erected. Often, also there is a prohibition of the use of property for certain purposes, such as for the sale of intoxicants and for the building of lower grades of structures than a certain limit.

There are, in fact, a far greater number of regulations in effect than is generally recalled. In many cities saloons are forbidden in certain neighborhoods and within certain distances of schools or churches, while the social evil is often confined to a certain district or districts, as in Washington, where a large section near the White House is devoted to it and in Baltimore where a number of small sections are set apart.

Traffic is also forbidden in hospital streets and on school streets during the hours

children are going to and from school. Smoke nuisances are prohibited and various kinds of noises are illegal. In some cities, already, the height of buildings is controlled, as will be indicated later, and more and more we are beginning to realize that true freedom is found in proper regulation.

In planning a city, the purposes for which it exists should be kept in view, among the most important of which is the furnishing of the readiest possible means of communication between the greatest number of persons.

The arrangement of highways in a city must be such that the citizens who traverse them in great numbers may be enabled to reach their destinations with the greatest possible dispatch, for a large part of the time of the public is consumed in merely going from place to place. The daily movements of the population should thus be studied with the utmost thoroughness, and the streets laid out so that access to the different parts of the city may be had from all the other parts in the most direct manner possible.

There is no great need for important streets between the various residential dis-

THE AMERICAN ARCHITECT

tricts of a city, as the traffic between them is light. Through such districts, however, a driveway or boulevard may be run. A pleasing drive is thus afforded adding greatly to the attractiveness of the city, and such drives should be developed into a system of parkways reaching all the important parks.

In order to afford ample facilities for traffic and at the same time to avoid unnecessary outlays, streets in varying widths should be provided. It will usually be found that streets of three different widths will suffice for practically all purposes; that is to say, main thoroughfares, secondary thoroughfares and local streets.

As a rule it is better to err on the side of having streets too wide than too narrow. A city should have as a minimum, twenty per cent of its area devoted to streets, while forty per cent is a better allowance. The streets of the city of Washington, which are unusually wide and imposing, occupy fifty-four per cent of the city's total area.

A Prussian law of 1875, enacted to cover the streets of Berlin, prescribed that the main streets should be ninety-five feet or

more in width, secondary thoroughfares from sixty-five to ninety-five feet and the local streets from forty to sixty-five feet. Another standard for secondary German cities, such as Düsseldorf, Cologne and Frankfort, etc., is: main thoroughfares eighty-five to one hundred and twenty feet, secondary thoroughfares, fifty to eighty feet and local streets, thirty-five to forty-eight feet.

The Royal Commission on London Traffic in the report of 1905 states:

"The chief difficulty that stands in the way of improving the means of locomotion in London is the narrowness of the streets, and the fact that they were not originally laid out on any general plan."

The Commission recommended the following widths: Main avenues, one hundred and forty feet; first class arterial streets, one hundred feet; second class arterial streets, eighty feet; third class, sixty feet and fourth class, forty to fifty feet; the width in each case to include the footways on either side, and no street to be less than forty feet in width.



MAXIMILIAN STREET, MUNICH. NOTE THE MONUMENT PLACED ON INTERSECTING STREET TO BREAK UP MONOTONY OF VISTA



FRANZEN RING, VIENNA

The widths of the more prominent avenues in European cities are as follows:

	Feet
Avenue des Champs Elysees, Paris.....	250
Reeperbahn, Hamburg.....	210
Unter den Linden, Berlin.....	190
Ring-Strasse, Vienna.....	185
Whitehall, London.....	120-145
Victoria Embankment, London.....	120
Avenue de l'Opera, Paris.....	98
Piccadilly, London.....	75

The first consideration in determining the width of streets should be the volume of traffic which they will be called upon to accommodate. After making allowance for street car lines, of some twenty feet for a double track system, the next consideration is whether the street is to be wide enough for one line of vehicles on each side of the car tracks or more than one.

All streets, however, on which car lines are run, should be of such width that a delivery wagon may be backed up to the curb and room be still left, when the horse is turned parallel with the street, for the street car to pass. In figuring the width of the street necessary to accommodate two lines of vehicles on either side of the car track, allowance should be made of from seven to nine feet per line of vehicle, depending on the nature of the vehicular traffic, the figure

of nine feet being for the purpose of accommodating the large motor trucks which are coming into use in many cities.

The width of sidewalks is generally placed at one-third of the width of the whole street, that is one-sixth on either side, though it may be greater when pedestrian traffic is above the normal.

That streets should be of ample width cannot too strongly be insisted. It is, indeed, one of the cardinal principles of modern city planning. In Berlin, where street widening is constantly being carried on and new streets constructed, a great deal of attention is being given to the subject and a competition was recently held in which large prizes were offered for the best projects for improving and enlarging the city's plan. In the plans accepted, the principal streets were sixty, seventy and seventy-two meters in widths, or 186.8 feet, 229.6 feet and 236.1 feet respectively.

Boulevards should always be limited in some manner in length, if not by terminals, then by changes in direction, since too long a stretch of straight street degenerates into a blurred and characterless horizon, monotonous and uninteresting.

Street and avenues too long and too straight are an evil, as has been pointed out,

(Continued on page 208)

THE AMERICAN ARCHITECT

Founded 1876

PUBLISHED EVERY WEDNESDAY BY

THE AMERICAN ARCHITECT (INC.)

No. 50 Union Square, New York
(Fourth Avenue and 17th Street)

G. E. SLY, PRESIDENT

E. J. ROSENCRANS, SECRETARY AND TREASURER

Address all communications to "THE AMERICAN ARCHITECT"

SUBSCRIBERS' RATES:

In the United States and Possessions (Porto Rico, Hawaii,
Philippine Islands and Canal Zone),
Mexico and Cuba

TEN DOLLARS PER YEAR, POSTAGE PAID
ALL OTHER COUNTRIES . . . \$12.00 PER YEAR
SINGLE COPIES (Regular Issues), 25 CENTS

CHICAGO OFFICE, Hearst Building
Page A. Robinson, *Western Manager*

Entered at the Post-office, New York, as Second-class Matter

VOL. CIII

APRIL 23, 1913

No. 1948

PUBLIC INFORMATION CONCERN- ING THE PRACTICE OF ARCHI- TECTURE STILL LACKING

EVIDENCE that a great deal of educational work still remains to be done before the public will understand and appreciate either the architect's function and relation to building in general, or the value of his services, is again given by the wholesale publication in the popular press of articles, anent the award of the new courthouse competition in New York. A feature which appears to be particularly disturbing to the lay-mind is the fact that according to general impression, the architect will eventually receive a fee of more than a half million dollars for his services. To many writers, whose opinions have found expression in the daily press, this fact in itself indicates the existence of an architectural combination designed to oppress the public to the very great and unreasonable financial benefit of the profession.

It is a little difficult to understand the attitude of mind which arrives at such conclusions without knowing or undertaking to ascertain in the slightest degree, what services are rendered or returns of various kinds are to be made for this sum, but it is evident that the situation is one demanding activity on the part of every member of the profession in an effort to correct erroneous impressions by imparting accurate in-

formation concerning matters pertaining to the practice of architecture, about which the public is apparently still woefully ignorant.

CENTRAL PARK AGAIN THREAT- ENED

IT became perfectly apparent to a majority of the citizens of New York interested in the preservation of her parks, before the present Park Commissioner had been in office six months, that eternal vigilance during his term of office would be required to prevent some grave invasion of park areas, the effect of which years of effort would not overcome. The exercise of this vigilance has thus far been sufficient to preserve Manhattan's parks from serious injury, but that the danger is in no wise abated is evident from the latest proposal, said to emanate from the Park Commissioner's office. It consists, as reported, in granting a permit to ten thousand public school children to conduct athletic games in Central Park on a day to be fixed some time in June, and to provide seats for some forty thousand persons to witness the exhibitions.

Of course, it is obvious that such a performance would practically ruin a considerable section of the park, and it is equally obvious that unless the scheme fails through popular protest steps must be taken to prevent anything of this kind taking place. Probably, there need be after all little fear of the project ever receiving the approvals that would be necessary before it could be accomplished, but the fact that it is proposed and that it is the latest of a long series of equally objectionable schemes for diverting the property under his care, proposed by the Park Commissioner, seems to call for some sort of positive action designed to prevent the periodic recurrence of even the smallest degree of danger to our parks from a source that would under proper conditions furnish them protection.

ARCHITECTS' LICENSE LAW FOR NEW YORK STATE

AFTER a number of years of agitation, a bill providing for the registration of architects in New York State has finally been drafted and is now in the hands of the Senate's Judiciary Committee. The

THE AMERICAN ARCHITECT

measure was prepared by a joint committee of the various architectural societies in this state and is said to have received the general approval of the profession. By its terms, the Board of Regents of the State University is vested with the power to appoint examiners and issue certificates. The proposed Board of Examiners will consist of five architects who have been in active practice in New York State for a period of at least ten years.

The qualifications which a candidate must possess in order to be in position to secure a certificate entitling him to practice architecture are indicated as follows: A diploma issued by any recognized architectural school, together with proof of three years of practical experience, after graduation, in the office of a reputable architect, will be considered sufficient evidence of fitness; or the Board at its discretion may accept a certificate of registration as an architect in another state where standards of requirements are equal to those prescribed in the proposed law.

Probably the majority of architects of standing are interested in securing the passage of this bill, believing that it will

serve to establish the dignity of the profession and restrain incompetent and unscrupulous practitioners. The penalty clause provided in the act for violation of its provisions, however, may be by some considered unduly harsh. In accordance with its terms, a person practicing architecture without a certificate of registration may be fined not less than \$50 nor more than \$100 for the first offense, while for a repetition the fine may be as high as \$500, with the alternative of imprisonment for one year. Of course, when a law is enacted adequate provision should be made insuring compliance with it, but since the greatest justification for the law must be the protection of the public, and the qualifications prescribed for license are so extremely moderate, it would seem that the penalty for infringement might in this case be somewhat out of proportion to the possible danger to which the public would be subjected, or to reverse the proposition, out of proportion to the amount of protection which the employment of a licensed practitioner would afford over that ordinarily furnished by one not possessing a certificate of registration.

AMERICAN CITY PLANNING—PART V

(Continued from page 206)

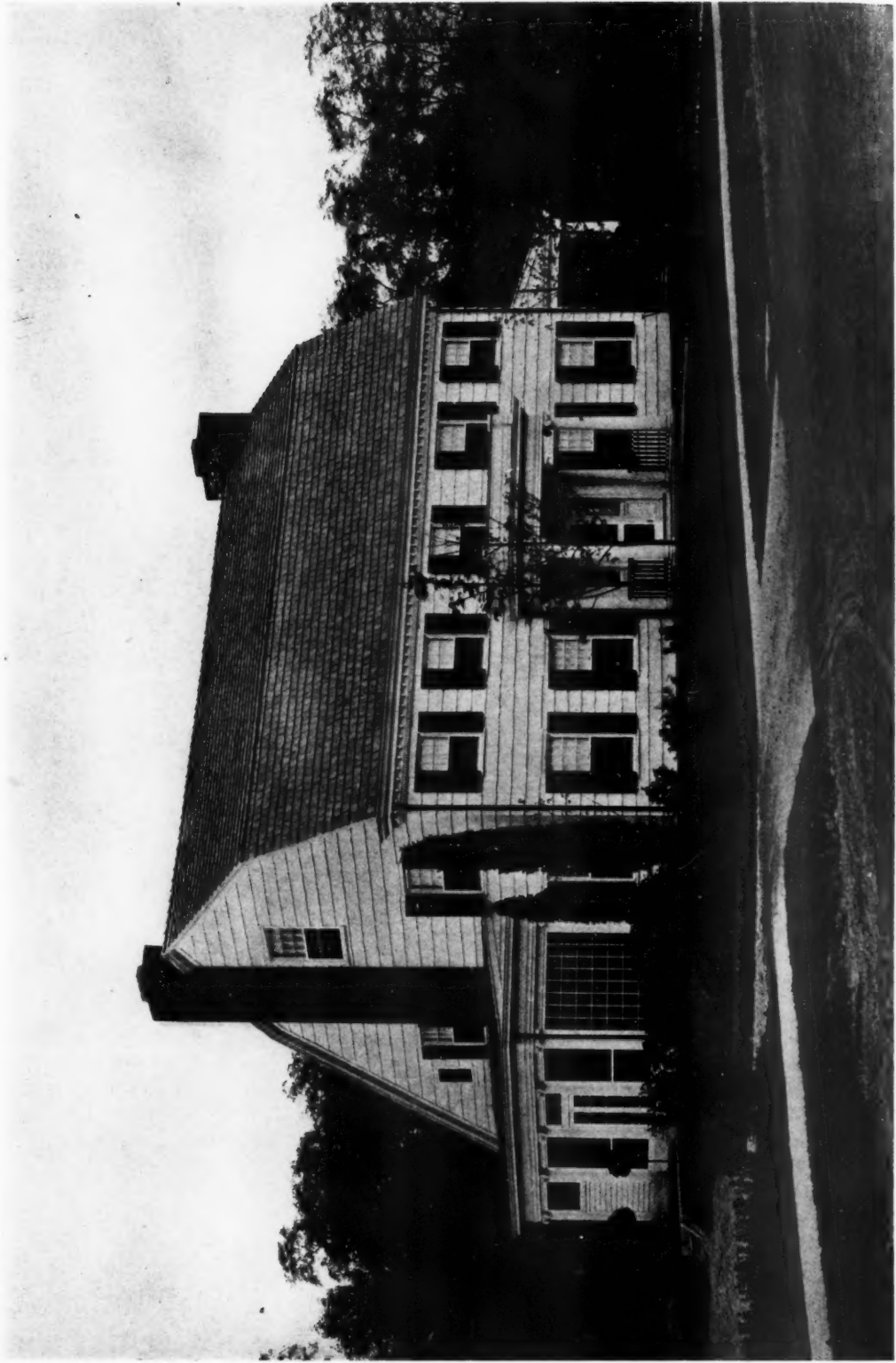
and one suffered even by cities famous for their city planning. Paris, for example, has too many streets with vistas dwindling into nothingness. The world-famous Champs Elysées is of such a character. New York is almost wholly composed of such streets. Broadway from Bowling Green to Grace Church is an uninterrupted line, while even longer stretches characterize this street, which extends through a number of towns to the north, continuing to bear the name of Broadway long after it has left New York.

Fifth Avenue and other New York streets, in fact streets in almost all American cities are ruined by their inordinate lengths in straight lines. The principle of variety, one of the cardinal principles of design, is thus disregarded.

In the modern science of city planning, streets are of definite lengths, properly terminated, or curved or otherwise changed in direction, and by no means necessarily

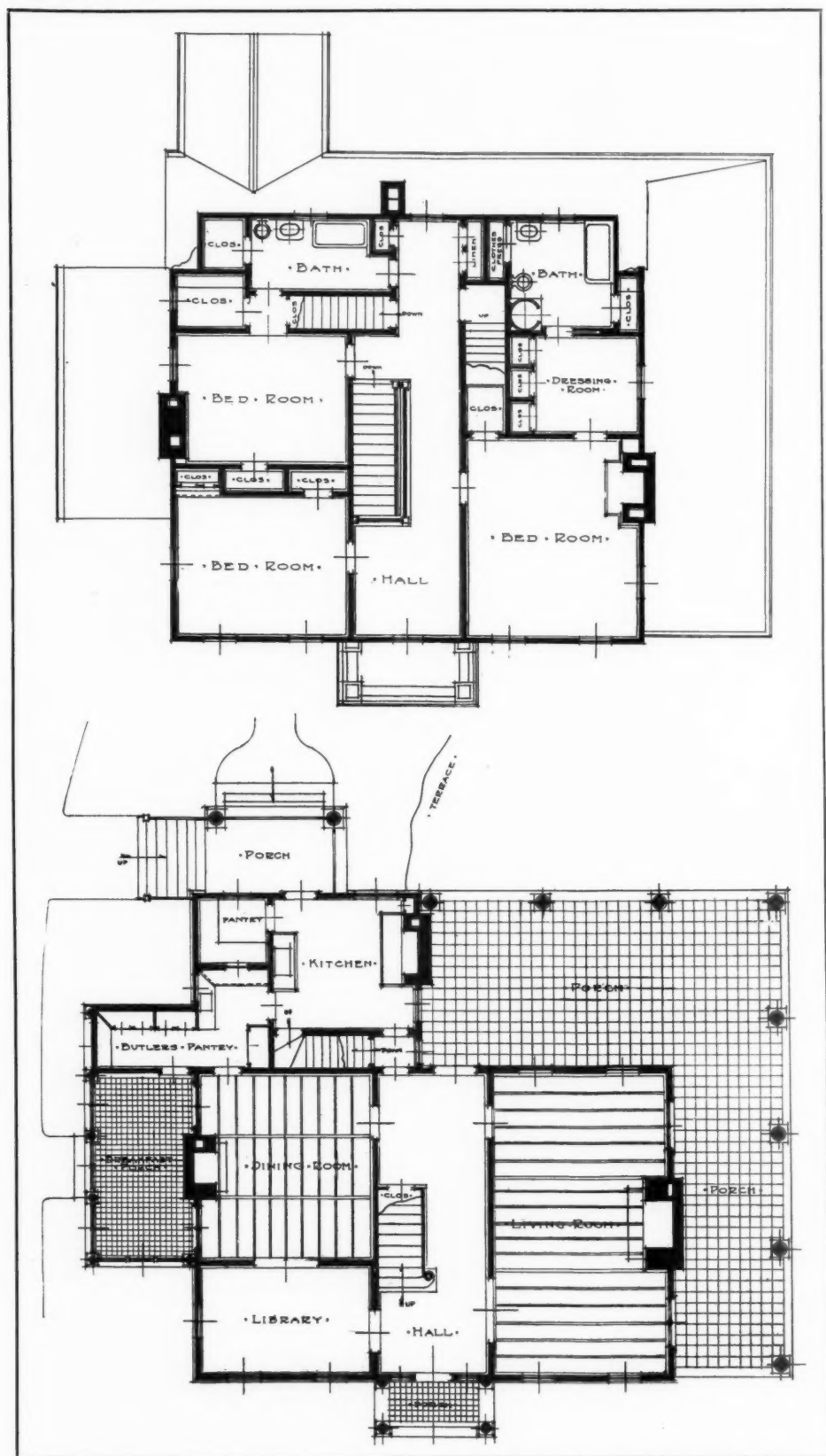
of the same width throughout. The eye should rest at easy distances upon columns, arches, statues, fountains, façades or other suitable objectives, and the quality of unity thus be gained. Without a terminal, a vista is meaningless. What, for example, would the Avenue de l'Opera be without the closure of the Grand Opera House, Rue Royale without the Madeleine, Avenue Victoria without the Hôtel de Ville, the Vienna Burggring without the Parliament building, the Reichrathsstrasse without the Votiv Kirche and Unter den Linden without the Brandenburg Tor?

An interesting feature of modern city planning abroad is the constantly progressing reorganization of focal points. Thus where a number of streets join, a study is made of the conditions and the juncture, if necessary, is entirely replatted and a suitable structure erected in such a position as to be seen to the best effect on the axis, or main street, leading to it. In this way, the center is unified and given a new individuality.



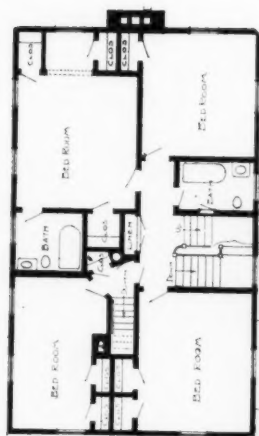
HOUSE OF CUSHING ADAMS, ESQ., PLANDOME, LONG ISLAND, NEW YORK
MR. WILLIAM ALBERT SWASEY, ARCHITECT



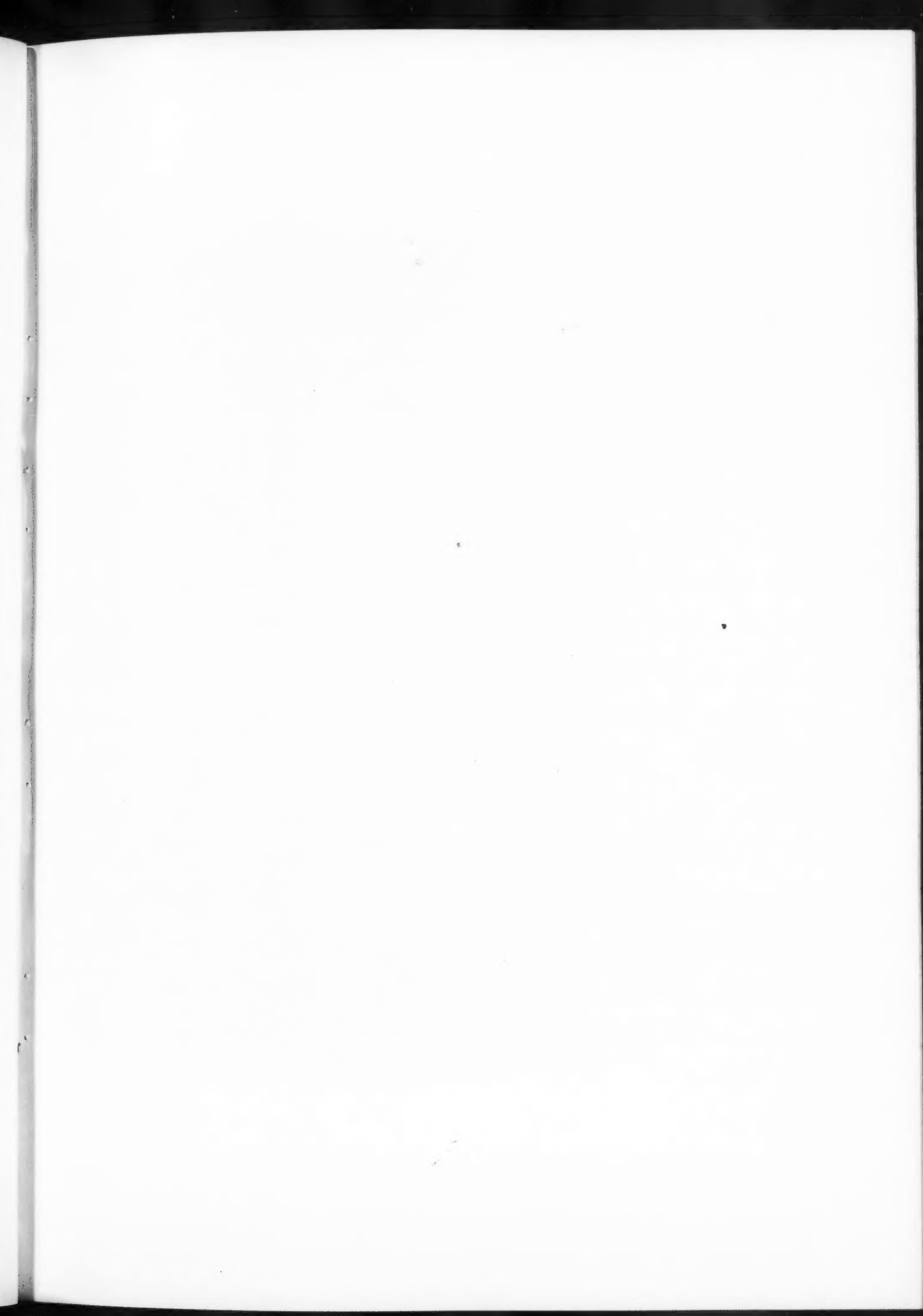


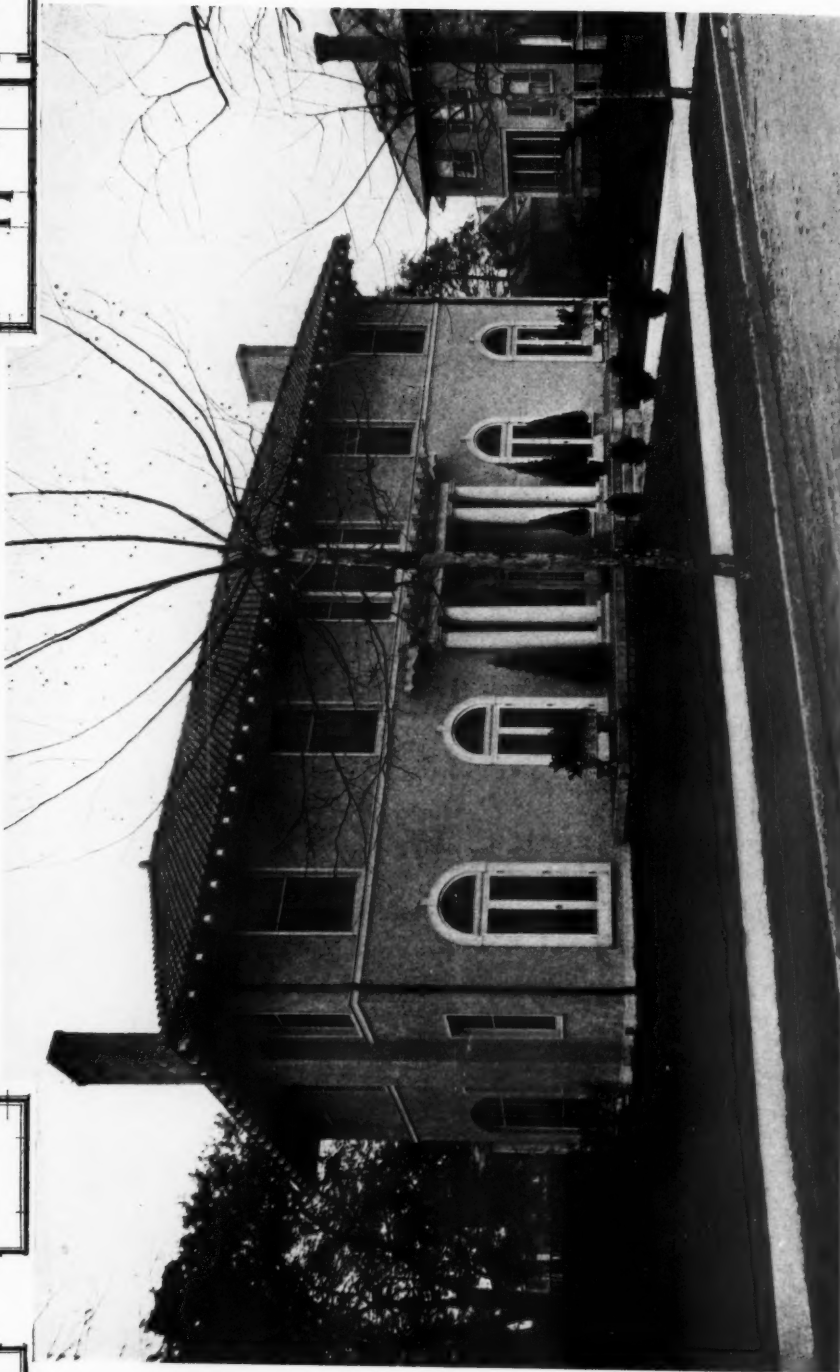
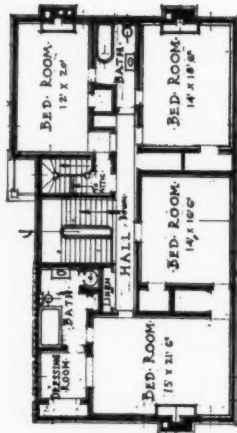
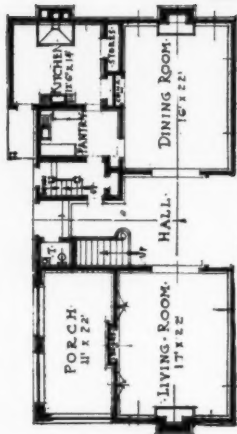
HOUSE OF CUSHING ADAMS, ESQ., PLANDOME, LONG ISLAND, N. Y.
MR. WILLIAM ALBERT SWASEY, ARCHITECT.



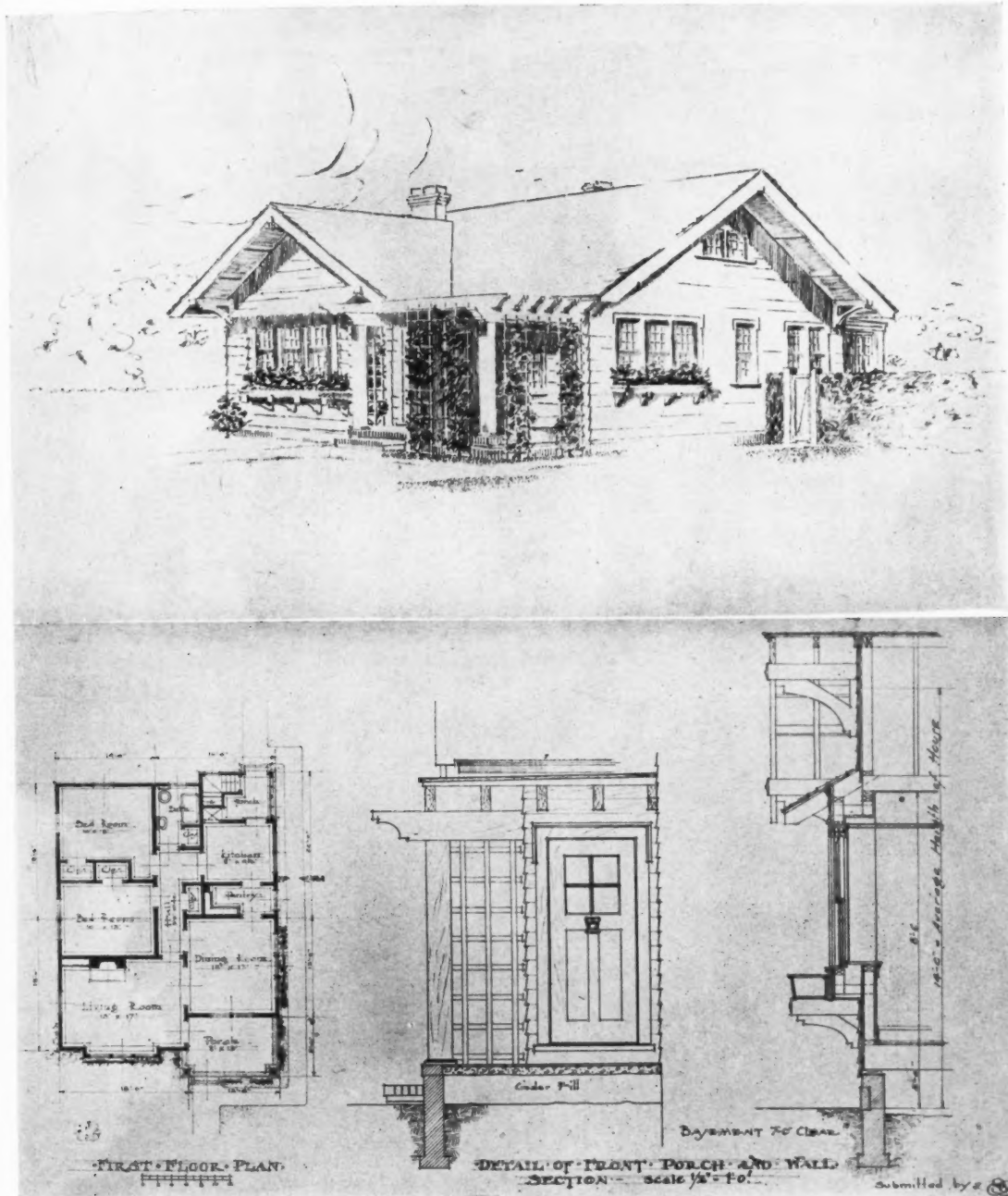


HOUSE OF W. F. SMITH, ESQ., CLINTON ROAD, BROOKLINE, MASS.
MR. ROBERT COIT, ARCHITECT





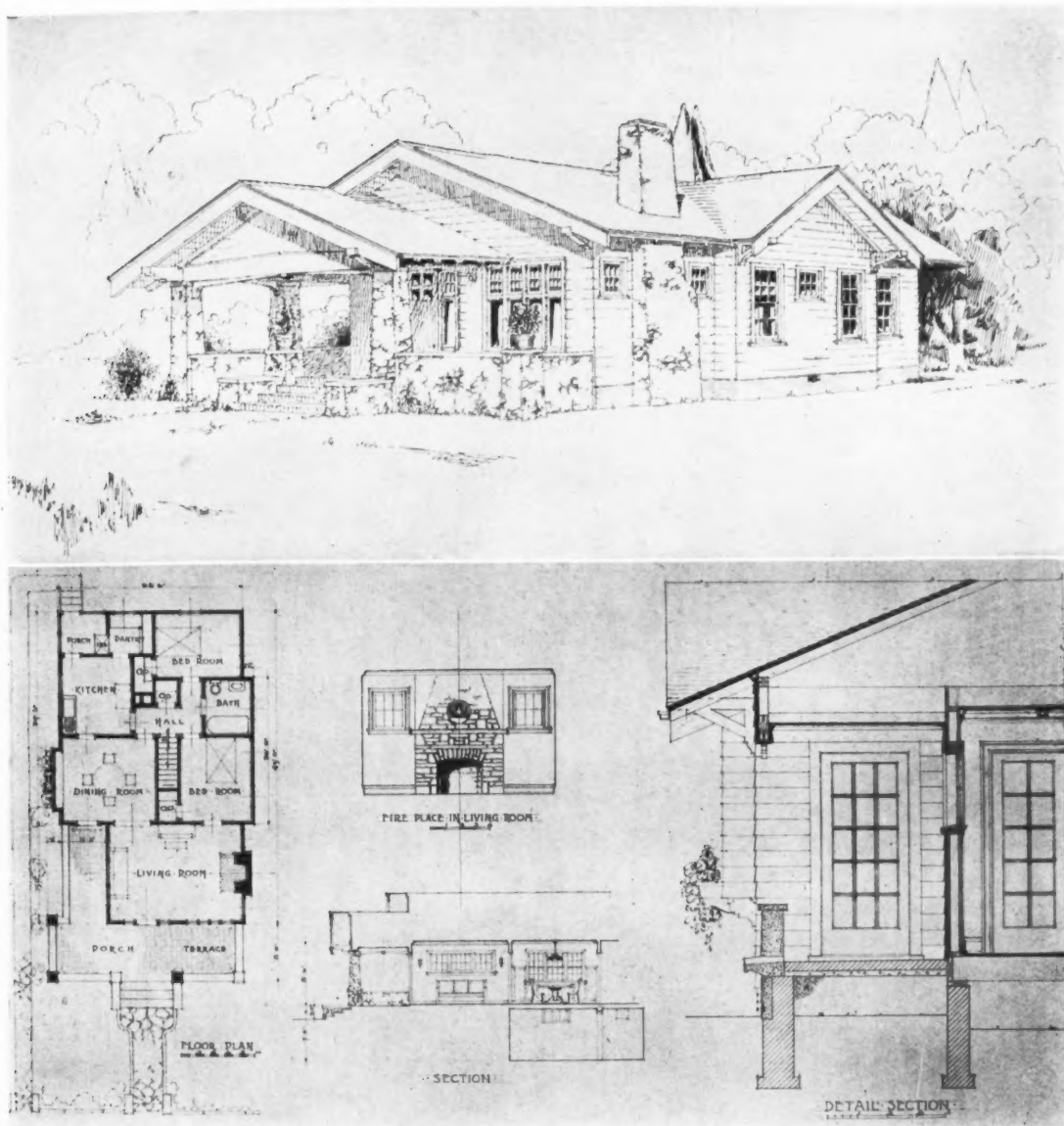
HOUSE OF C. P. ELLIS, JR., NEW ORLEANS, LA.
MR. SAM STONE JR., ARCHITECT



FIRST PRIZE—WALTER D. LEONARD

COMPETITION FOR A \$3,000 BUNGALOW

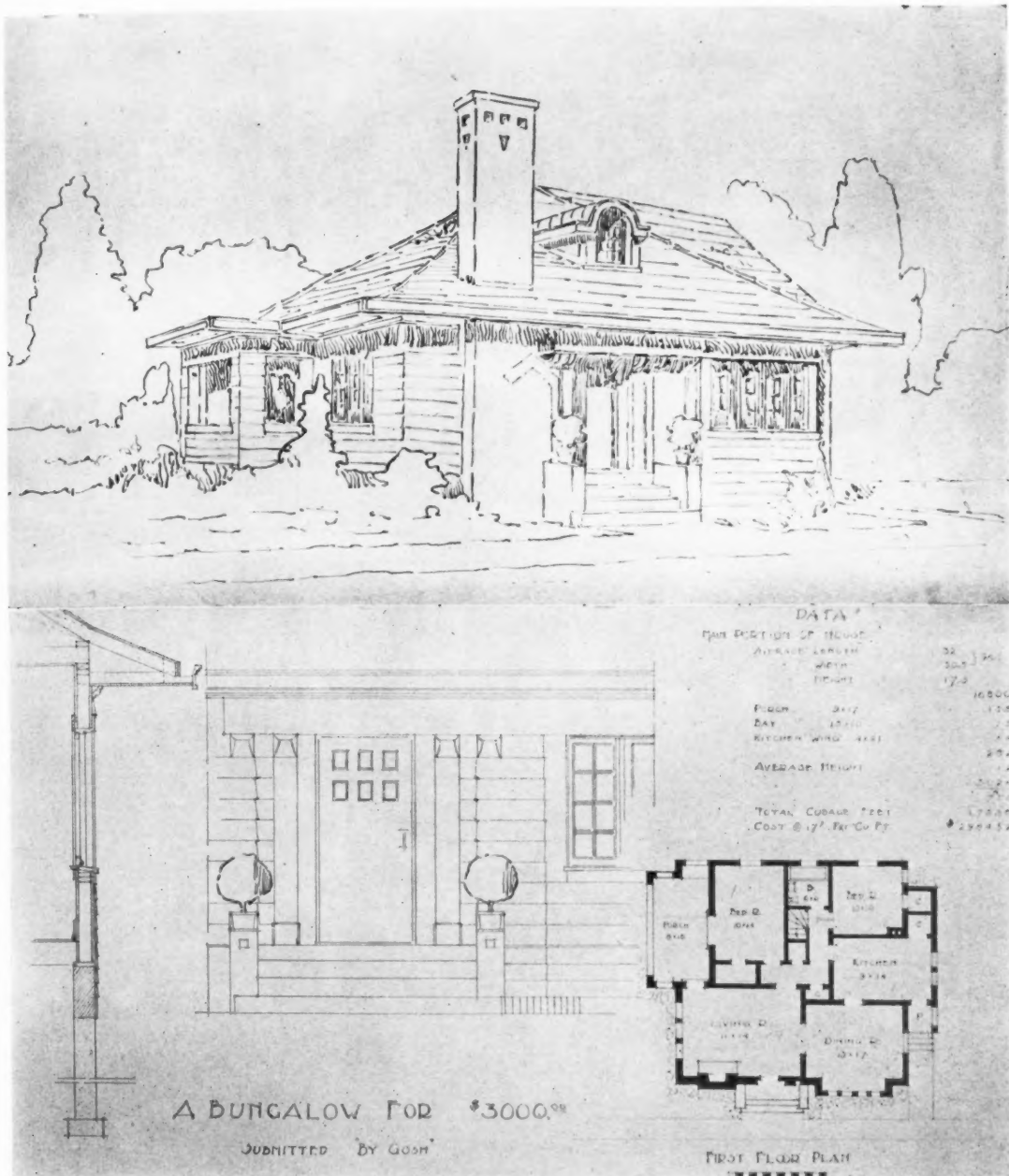
Under auspices of Indianapolis Architectural Club, for prizes awarded by Indianapolis Exhibit Co.



SECOND PRIZE—A. F. BARNARD

COMPETITION FOR A \$3,000 BUNGALOW

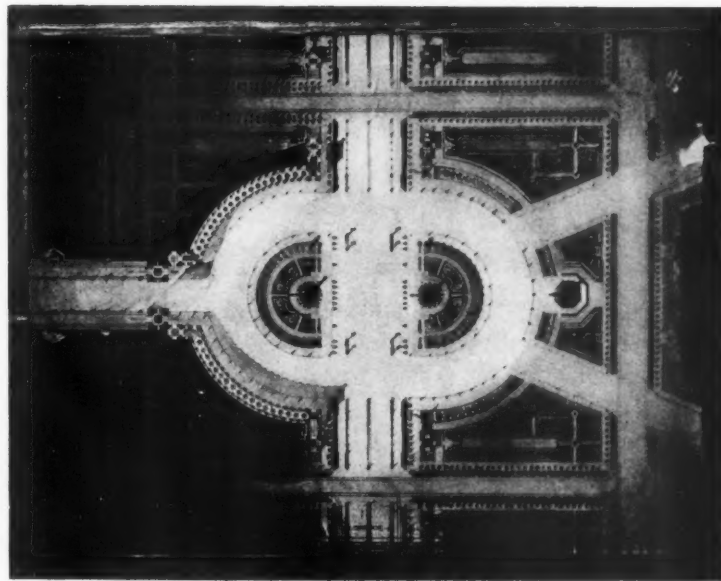
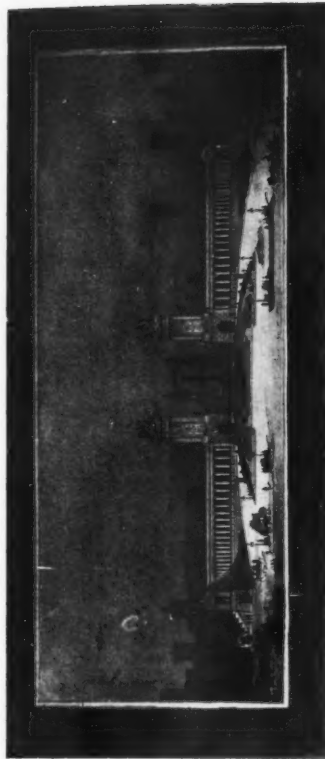
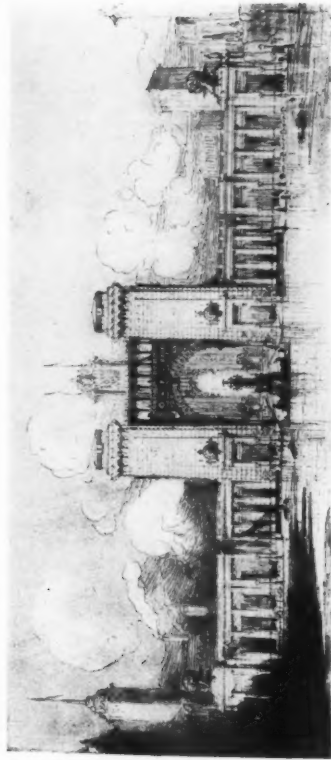
Under auspices of Indianapolis Architectural Club, for prizes awarded by Indianapolis Exhibit Co.



THIRD PRIZE—J. BECKETT

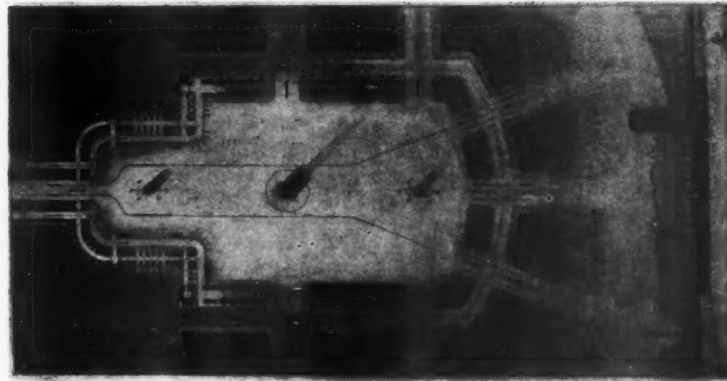
COMPETITION FOR A \$3,000 BUNGALOW

Under auspices of Indianapolis Architectural Club, for prizes awarded by Indianapolis Exhibit Co.



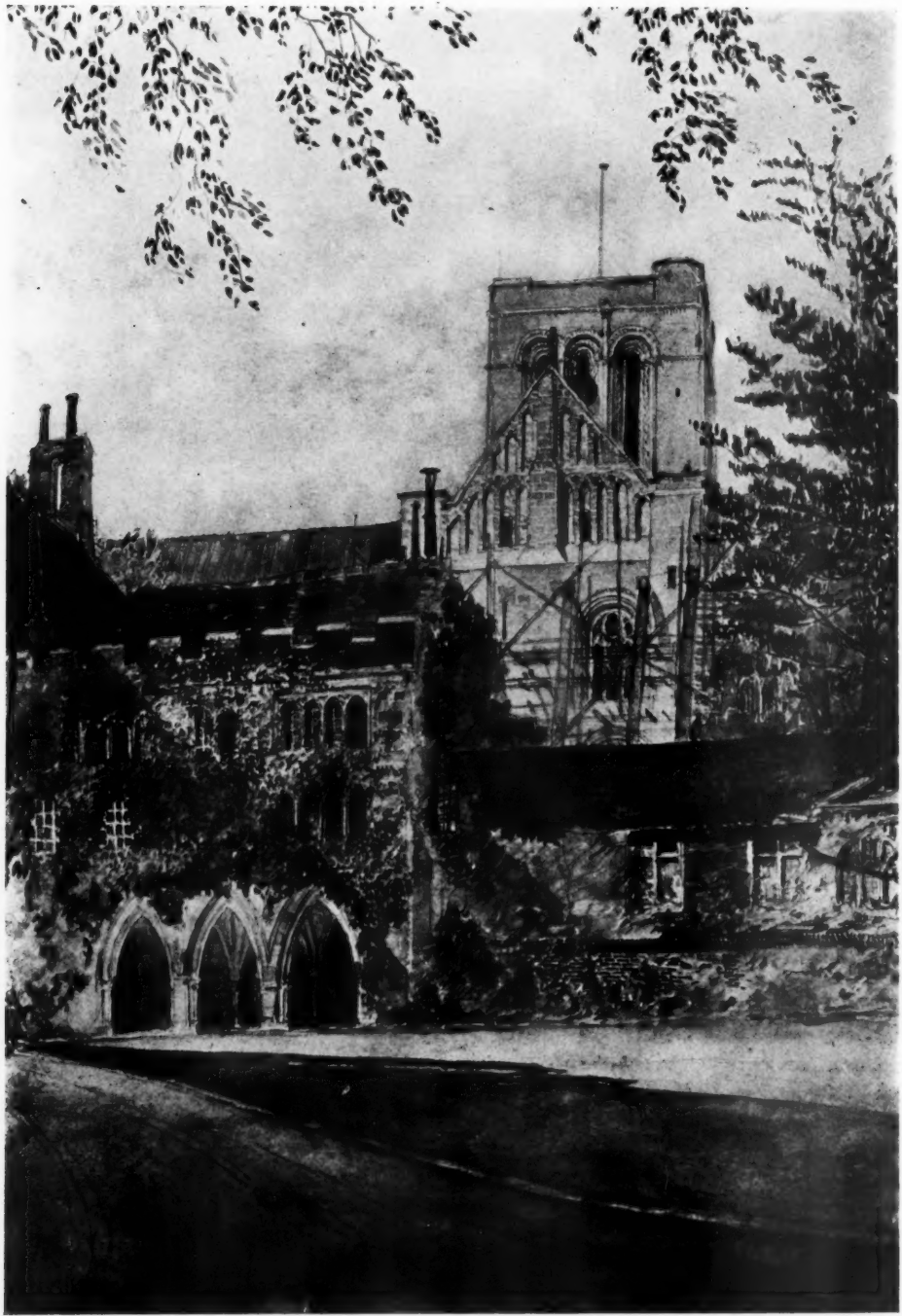
E. J. BAUM. FIRST MEDAL, ATELIER WARE-WAGNER

CLASS "A"—IV PROJET (PROBLEM IN DESIGN)—A BRIDGE TERMINAL
STUDENT WORK—SOCIETY OF BEAUX-ARTS ARCHITECTS



P. T. SCHUTZE. FIRST MEDAL, ATELIER COLUMBIA UNIV.

THE AMERICAN ARCHITECT



THE DEAN'S HOUSE, WINCHESTER CATHEDRAL

(From the original water color by Cass Gilbert, F.A.I.A.)