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IT may be questioned whether so much building business was ever held in suspense as now awaits the result of the election next Tuesday. Judging from the unanimous testimony of architects, who naturally know more than any other persons in regard to the early stages of building projects, the work which will, in all probability, be put into the market within the next few months, if Mr. McKinley should be elected, amounts to many millions of dollars. Of course, we have no opinion to express on political questions, but the effect of the present contest on financial and business affairs is a matter of fact, not of opinion. To take one or two examples: the City of Cambridge has had plans made and accepted for two important public buildings, and has authorized the issue of bonds to raise the money to pay for their construction. The bonds cannot be sold, for the simple reason that bankers and other people who would ordinarily buy them are calling in their resources, so as to have plenty of cash in hand to meet a possible season of panic in case of the election of Mr. Bryan, or are lending money on call, at eight or ten per cent interest, on stock collateral, in such a way that they can get it back into their cash-drawers at a day's notice. They cannot be blamed for this, for it is practically certain, as Mr. Bryan himself is said to concede, that his election would be followed by sufficient financial agitation to make it necessary to close the stock exchanges; and the bankers, whose standing depends on the fidelity with which they meet their obligations in cash, and who might be unable to raise money later by the sale of securities, must make provision now for possible contingencies.

IN the same way, the construction of the enormous South Union Station, in Boston, the largest railway station in the world, the plans for which have long been ready, has been postponed. In order to provide funds to build it, the various railroads composing the Terminal Company, which is to own it, had arranged for an issue of bonds, to the amount of six million dollars. The bonds have for some time been ready, the land for the station has been purchased, and mostly cleared, and it was expected that the building would be completed and occupied within a year; but the bonds cannot be sold, for the reason, as before, that the people who have money to buy them are bound in honor to keep it in their cash-drawers, ready to meet the demands of panic-stricken creditors in case of Mr. Bryan's election. It is hardly necessary to point out that the expenditure of six or seven million dollars, within twelve months, on the new South Union Station, the new Cambridge Latin School and the new Cambridge Hospital, would alone be sufficient to make building tolerably active in that vicinity;

but there are many more large projects of the same sort, not only in and about Boston, but in Worcester, Springfield and other towns, which are held in suspense in the same way, and for exactly the same reason,—the unwillingness of people who have, together with property, obligations to other people, to run the risk of injury to the latter by locking up cash in enterprises where it will not be available to meet a sudden call. If Mr. McKinley should be elected, and assurance thus given of the maintenance of the present standard of value, and the stability of property, the prospect seems to be that not only the undertakings which have already reached the first stages would be pushed rapidly through, but that many new ones would be brought forward. There is certainly in this neighborhood, and, so far as we can ascertain, at all the other great centres of building industry, work enough waiting for the favorable result of the election to cause a demand for materials and labor which will come very near to exceeding the supply. The inevitable result of this will be to raise prices, and, in building matters, a rise in the prices of materials is generally followed by an increase of building. Just now, particularly, the prices of nearly all materials are unreasonably low, so near the cost of production, in fact, as to afford the dealers little or no profit; and the appearance of a return to a healthier condition of the market is likely to be the signal for a multitude of contracts with buyers anxious to purchase before a greater advance.

THE Chanler Paris Scholarship has been awarded this year to Mr. Lawton Parker, of New York. There were twenty-seven competitors, and the jury compliments the general character of the work submitted, saying, however, that most of the competitors were weak in composition, as is natural enough, this being an accomplishment the very existence of which is suspected by few of our self-taught artists. Mr. Parker received his early training in Chicago, but has been three years in New York, and, before that, is said to have studied two years in Paris, under good masters. With this for a starting-point, his five years' scholarship work in Paris ought to be very profitable, and we may hope to welcome him back as one of the people who are some day to place their country at the head of the artistic world.

SPEAKING of the highest class of American artists, it seems to us that it would be an excellent thing for some one who was not afraid of personal violence, or the oburgations of the newspapers, to get together a collection of works by the real painters of America, such as Charles Sprague Pearce, Picknell, La Farge, and a score of others, whom we will not attempt to name, and show them to people in their own country. It is not creditable that the painters of the "Route de Concarneau," or the "Paradise Meadow," should be better known, and more honored, in Paris than in New York or Boston, but there is a certain excuse for it in the fact that the works of our best painters are almost always shown either in connection with first-rate pictures of the French school, among which their identity is to a certain extent lost, or as solitary gems in a mass of auction-room trash. Many an American tourist in Paris has observed with satisfaction the interest which one of Mr. Weeks's, or Mr. Gay's, or Mr. Pearce's pictures excites at the *Salon* in the most cultivated public in the world, and a half-hundred of really great American works would be a revelation, and an inspiration, to the art-students of this country. It would be said, of course, that artists of French training would have an unjust preference; but if artists of French training paint the best pictures, they ought to be preferred; and, in point of fact, La Farge owes nothing to French training, and Picknell very little, and the French themselves have been the first to accord these two men places in the very front rank among the landscape-painters of all countries.

WE hope that some of our readers, who may happen to be in Boston, will take the trouble to study the spire of the Park-Street Church from the window of some office in the upper stories of the new Tremont Building. From these offices the spire is seen almost in elevation, and it is extremely instructive to note the way in which the pilasters of the upper stories are inclined backward, and to observe the part which this inclination has in the general effect of the spire and tower. By using the edge of the window-opening as a plumb-line, it will be seen that the corners of the lower story of the spire,

together with the pilasters carrying the pediments on its four faces, are vertical, or nearly so; but the lines of the two stories above, and of the short attic just under the pyramid, all lean inward. The angle with the vertical is nearly the same in all the stories, and, roughly speaking, the horizontal deviation amounts, apparently, to about one-fifteenth the height of the line. It is curious that the surfaces of the friezes follow very evidently the same inclination as the pilasters. According to Vitruvius, the ancients were accustomed, where the columns of a peristyle leaned inward, to give the frieze of the entablature an inclination outward, to prevent it from being in appearance cut off by the projection of the architrave mouldings; but the designer of the Park-Street Church probably felt that the delicacy of the outline would be interfered with by such a change. However that may be, he succeeded in producing a beautiful spire, which well repays close study. As the old Renaissance church towers of this country and England are usually shown in drawings with vertical outlines, it would be interesting to know how many of them are really built with inclined lines, and how far they owe their remarkable beauty to this circumstance; and a party of conscientious students, armed with a transit, might easily collect information on this point, which would be extremely valuable to themselves and the profession. Although Park-Street Church is not very old, it was designed in accordance with the principles of what we call the Colonial Renaissance, and every architect will admit that those principles, as exemplified in the best works in the style, deserve deeper study than they have yet received.

THE *Revue Industrielle* tells an interesting story of the ingenuity of some workmen in the Krupp works at Essen.

In order to make a place for the passage of some pipes, it was necessary to drill holes in the web of a steel plate girder, already set in place. Every one who understands building-operations knows that this is a long and tiresome undertaking, and the men, after drilling awhile, set their heads at work to save their hands, as has been the habit of intelligent human beings since the creation. This time, the workmen, who were familiar with the characteristics of modern military arms, be thought themselves of the enormous penetrative power of the jacketed bullets now used with the modern military rifles. It is well known to ordinary readers that these jacketed bullets, which are covered with a strong and hard casing, to prevent them from flattening out, or "mushrooming," when they strike any object, will go completely through a file of five men, or will penetrate the trunk of a tree three feet thick, with force enough to kill a man behind the tree; and the Essen workmen thought that perhaps a bullet which could go through three feet of green wood might penetrate a thin steel plate. They resolved to try the experiment; and, procuring a naval rifle, which carries steel-jacketed bullets, and is designed for penetrating the light plates of torpedo-boats, they loaded it carefully, took aim at the spots where the drill-holes were intended to be, and fired. The effect was all that they anticipated. Every bullet pierced a hole in the web of the girder, as round and smooth as could have been made with a punching-machine, and nothing more was required to complete the job but a few minutes' work with the reamer. Although the indiscriminate firing of steel-cased bullets, from rifles with a range of three miles, is not a thing to be encouraged, it is quite possible that this quick and ready mode of perforating plates, which cannot be brought to the punching-machine, may prove useful.

THE periodical discussion about the surreptitious gains which architects and engineers make by taking commissions, or, in other words, bribes, from contractors, is going on just now in England. As usual, some one writes to the daily papers, to say that all architects and engineers earn a large part of their income in this way, and all the people who envy them the opportunities which the practice of their profession affords for filling their pockets secretly at some one else's expense think that the story must be true. Of course, there may be some persons who practise thieving under the pretence of being architects or engineers, just as there are lawyers who rob their clients, or help them to rob other people, but it ought not to be necessary to say that to the great mass of the two professions such conduct is totally unknown. Both architects and engineers undoubtedly find in the importance of the interests confided to them an incentive to scrupulous integrity. A man is much more likely to be careless, with the carelessness which is too apt to develop into dishonesty, in regard to small sums, than in the handling of large amounts, and the very

facility with which an architect or engineer, disposed to abuse his trust, could filch larger sums with impunity, although it makes the mouths of people water who have no such opportunities, probably makes him more strict in his fidelity to his duty.

SO far as the facts are concerned, authenticated instances of the acceptance of illicit commissions, or the misappropriation of funds in any other way, by architects or engineers, are, we need hardly say, extremely rare. Disappointed contractors are very fond of attributing acts of this sort to professional men against whom they have a grudge; but their stories, when sifted down, usually leave no residue. In reply to a letter to the *London Times*, by some one styling himself a "Civil Engineer," and asserting that contractors frequently pay commissions to engineers, Mr. A. M. Rendel, for twenty-five years the engineer to the India Office, who in the last forty years has, as engineer to various corporations, been responsible, as he says, for the carrying out of contracts to the amount of at least three hundred million dollars, writes that in the whole course of his professional life he has only three times been offered a commission by contractors, and in only one case were the contractors English. He goes on to call attention, in a most convincing manner, to the inherent improbability of such an account of engineering practice as that given by "Civil Engineer." "An engineer," he says, "who has taken a commission from a contractor can at any moment be exposed and ruined by him. Do you suppose that a material percentage of the engineers of this country,—that any one who counts,—is in this position?" This is very well put, and it applies to architects quite as much as to engineers. What the nameless beings who condescend to wallow in the mire of certain kinds of public building work may do, we would not undertake to say; but the men who earn their living by designing and carrying out buildings, not by bribing janitors, or getting political "pulls" on Boards of Trustees, are no more likely to sacrifice the interests of their employer for the sake of pocketing a few dollars than a member of the Bar Association would be to "sell out" a client to the opposing party.

THE Government Printing-office has issued in pamphlet form an extract from the Section on the Mineral Resources of the United States, from the Annual Report of the Geological Survey. This pamphlet, prepared by Mr. William C. Day, relates to the stone industry of the United States in 1895, and is of the highest interest and value. The stone industry, like all others in the United States, declined in 1894-1895, but the relative position of the various States does not seem to have changed materially in this respect, except that certain of the Southern States are gradually coming into prominence as extensive producers of stone, and that the sorts of stone quarried have been modified of late years. An instance of this is to be found in Alabama, which furnished in 1895 more than a quarter of a million dollars' worth of stone, mostly limestone, although some sandstone is quarried there. In a similar way, Connecticut, which once divided the sandstone trade with New Jersey, produced last year very little more sandstone than Massachusetts; while New Jersey furnished only one-third as much as Connecticut, and but little more than Kansas or Michigan; and Pennsylvania, which, a few years ago, was unknown as a producer of sandstone, supplied in 1895 about as much of it as Connecticut and New Jersey together, and more than any other State except Ohio. In the production of granite, Massachusetts keeps the first place, with Maine not far off; while Vermont is rapidly overtaking Maine, and Rhode Island keeps up the output from its splendid quarries in and about Westerly to nearly a million dollars' worth a year; and New Hampshire comes fifth on the list, with about half as much. In marble, Vermont, as usual, leads all the other States, its output being about double that of Georgia, which is second in importance. Tennessee comes third with about a thousand dollars' worth a day; and New York fourth, with two-thirds as much; and Maryland, California, Iowa and Massachusetts are producing a little marble. Limestone is quarried in nearly all the States, Pennsylvania producing the most, about three million dollars' worth, while Illinois and Indiana each furnish about half as much. Pennsylvania also produces nearly twice as much slate as all the other States put together, Vermont coming next, and Maine far in the rear, her output being just about one-twelfth that of Pennsylvania.

THIRTIETH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE more than ordinarily meagre attendance at the Thirtieth Annual Convention of the American Institute of Architects, at Nashville, last week, calls attention once more, and in a very marked manner, to the illogical and unscientific manner in which this body attempts to carry out the trust it has assumed to take under its charge. That the interests of an important profession and of the fairly large number of men who belong to it should be put, even for a twelvemonth, largely at the discretion of a body of men — of which the fewness is not to be predetermined — drawn together absolutely by chance, is possibly democratic, but it is extraordinarily silly. At any moment the architects of the country may find their interests absolutely in the hands of a small group of convention rounders — men to whom the annual convention, with its opportunity for posing and speech-making, is the great event of the year. We do not say that such men now exist in the profession, but they do exist in other walks of life, and, sooner or later, under the present construction and constitution of the Institute, they may find both a being and an opportunity to do great mischief.

It is puerile in the extreme that the guidance and control — even though limited and not wholly acknowledged by the majority of architects in the country — of professional matters should in any degree be subjected to the chance whims of a primary caucus.

The simple and equitable cure for this really somewhat dangerous condition of affairs lies in vesting the law-making power in delegates appointed by and receiving their instructions from the several Chapters. In this way the attendance of representatives from every Chapter would be secured at every annual convention, whereas now it is not uncommon to have some Chapters wholly unrepresented. It would not preclude the attendance at conventions of non-delegate members, nor debar them from expressing their opinions or using their eloquence in the attempt to influence the action of the voting delegates. On the contrary, it would tend to increase interest in and enlarge the attendance at conventions, since it would give proof that whatever action should be taken would be in the interest of the profession as a whole and not carried out by a small interested portion or clique who had arranged to attend a given annual meeting and "put through" some measure which was of local value and interest for some, while it was equally disadvantageous for others. It would assure, too, a more considerate discussion of the measures brought forward, and would, we believe, prevent the adoption — without intelligent discussion and by a meeting temporarily decimated — of such a measure as the schedule of charges with its fanciful reference to a square root that was adopted at the Convention in New York.

Another practice of the Institute's, it seems to us, should be changed — and the experience at Nashville points this moral, too.

If the Institute is unwilling to abandon annual in favor of biennial or triennial conventions, it seems to us that it is about time that it ceased to be a peripatetic body. Its past and present practice of holding its annual meetings now in this city, then in that, has a specious appearance of fair play, and as one of the reasons for the practice — the fact that it gives architects an opportunity and a reason for visiting different cities — will always hold good, it is a practice that it would be unwise to abandon wholly; but it would be wise to modify it to such an extent that the alternate annual conventions should always be held in the same city, while the miscellaneous wanderings, with their uncertainties of cost and attendance, should come about only half as often as now. There are many reasons why Washington should be selected as the place for the regular biennial attendance we suggest, and as the Nashville Convention has expressed itself in favor of building — some time or another — at Washington a permanent home for the Institute, there could be no better way of bringing this about and no better way of helping to effect those changes in the designing of Government buildings which the Institute is working to bring about, than to now adopt Washington as the place for regularly holding the annual convention on alternate years. Some of the reasons why Washington should become the permanent home of the Institute were presented by a communication formally presented by the Washington Chapter.

As to the efforts the Institute has made to effect a change in the designing of Government buildings, Mr. Post, Chairman of the Legislative Committee on Government Architecture, called on Mr. Carrère to read the report. This report gave a history of the effort to secure the passage of a bill to change the present method of securing designs and awarding contracts for the construction of Government buildings. A bill is now ready for passage in both Houses of Congress, changing the entire system by opening the competition to all architects of a certain age and experience.

Mr. Post spoke of the effort to improve Government architecture and to make the construction of public buildings a reward of merit. He said that the desired legislation was sure to come in this Congress or the next, if the proper exertion should be made to secure a hearing in both Houses of Congress.

Mr. Carrère also spoke to the report. The bill was in many ways imperfect, but it accomplished the purpose of employing the best talent this country could produce to design the public buildings of the country. He moved the appointment of a committee to formulate a circular or address to every member of the Institute, urging their influence with the press and with Congressmen for the passage of the bill.

Mr. Post said that he was informed that the passage of the bill would be followed by a bill creating a Department of Architecture. No one man could do the work devolving on the Supervising Architect of the Treasury, and do it well.

Mr. O'Rourke, formerly Supervising Architect of the Treasury, spoke of the need of diplomacy in not antagonizing influences in Washington. The Supervising Architect's office gave the Secretary of the Treasury three or four hundred appointments. The only time to move for the creation of a Bureau of Architecture was at the beginning of a new administration, before the Secretary of the Treasury was settled in his place.

In pursuance of the same theme, Mr. Aiken, Supervising Architect of the Treasury Department, read a paper on "National Architecture."

ANNUAL ADDRESS OF THE PRESIDENT OF THE A. I. A.

IN calling to order this the Thirtieth Convention of the American Institute of Architects, I am profoundly impressed by the phenomenal development of the art of architecture in our land as shown by the history of the Institute itself.

In the year 1857 a few architects, some of them, fortunately, men of great force of character, brilliant ability and profound devotion to art, held a series of meetings in the City of New York and effected the first practical organization of this association.

The architects of the country were then few in number, almost all of foreign birth and education, and concentrated in three or four of our principal cities.

They neither had a status in the community as men of business or science, far less as artists; it seems to have been the popular opinion that their sole claim to merit was what was supposed to be an intuitive perception of the beautiful, which was characterized as "taste," combined with a certain facility in drawing, and the sole necessary preparation for practise of their art, the possession of a copy of Vignola, and a few engravings of houses, parish churches and cathedrals. In fact, they appear to have been considered in America as a useless and expensive luxury.

How marvellous the change! Four hundred and sixty architects are now Fellows of the Institute — they are spread north and south, east and west throughout the land, and students and architects trained in the best schools of Europe and America who have not yet reached the dignity of Fellows of the Institute are numbered by the thousands.

Throughout the greater part of the country the architect is the accepted arbiter in all matters connected with the building art.

He is recognized as the acute man of business, without whose aid no structure, from the laborer's cottage to the palace of the merchant prince, from the wooden chapel to the stately cathedral, can be judiciously or economically constructed.

He is respected as the man of science, whose ingenuity and trained skill in construction is furnishing models for the imitation of the world.

Last, slowly and grudgingly has come his appreciation as an artist, and the recognition of architecture as the most enduring, exacting and comprehensive of the fine arts.

The influence on painting and sculpture has been great. I may state without fear of contradiction that not only does the architect furnish to the painter and sculptor now, as always, his noblest opportunities (and the benefit is mutual, for without the aid of the painter and sculptor no complete work of architecture is possible), but that hardly a movement for the advancement of art in any of its branches is successfully made throughout the land in which the architects of this Institute are not the moving spirits.

Thus, in little more than one generation a glorious art has been born in the land and has reached a vigorous manhood.

Never before in the history of the world has there been the opportunity offered by our times and in this great and growing country for the rapid and successful development of architectural art.

Our profession imbued with the vigorous enthusiasm of youth in arts; less trammelled than in older countries by the exacting control of long-established conventional methods of design, but fully appreciating the absolute necessity of a training in such conventional methods; stimulated by the demands of a people as liberal in their expenditures as they are practical in their requirements; the successes and failures of the past and present clearly indicated by a cheap, voluminous and comprehensive literature; the methods and teachings of the great foreign schools constantly before us for guidance and instruction, the schools themselves open to our students; the examples of the Old World brought daily nearer by increased facilities for economic travel; a thorough knowledge of its art treasures within the reach of all through the inexpensive photograph; encouraged by the achievements of the past, are not we justified in the hope that the next generation will see American architecture advance toward perfection with strides unprecedented in the history of art?

A phenomenally rapid growth must be always fraught with danger and this Institute should remember that, as the guardian of our art, it is under grave responsibility.

By precept and example its members should ever guide the student; should heartily support our schools, which are numerous and excellent; and should demand that without undue sacrifice of practical instruction they should be, first and foremost, artistic in their teaching.

They should be insistent in their assertion of professional dignity should direct and control each forward movement, and if anything should seem to menace the healthy development of our art, they should be prompt to sound a note of warning.

They should never forget that the principles of their art are as controlling and immutable as the law of gravitation; that that which was great in design and construction in the days of the Ptolomies or Cæsars, at the time of the mediæval cathedral or of the Renaissance, now is and always will be great, and that it is not great because it was designed in exact conformity with current fashion or professional dogma, but because it conformed to the inherent principles of art.

In the facility for construction offered by modern engineering and cheap steel, I see a most formidable menace to the rapid and healthy progress of American architecture.

Let us ever remember that no body can be beautiful if its skeleton be ill-proportioned: that to achieve artistic success the exterior and interior, both in motif and design, must conform to and be the result of the exigencies of the plan. No sham can stand the crucial test, the criticism of coming ages.

It has been the proud boast of the architect that his work formed the almost imperishable record of the civilization and art of his age and generation. Let us so build that our important works will stand for ages.

Steel should be our most profitable and efficient servant, if legitimately used, to secure stability and strength, but if used as a means of deceptive construction, all art in the work must die, for the fundamental principle of art is truth.

In this connection the papers to be read before us, upon "The Influence of Steel and Plate-glass in the Development of a Style of Architecture," will be heard with interest, and incidentally I believe that the hearing of papers and discussions which they elicit may with profit in the future occupy relatively a larger part of the time of the Institute when in Convention, and that debates on the Constitution and By-laws may be made more brief.

I am happy to be able to state that the persistent and reasonable demand of the profession, that the buildings hereafter to be erected by the Federal Government should be, at least, as good in design and as economic in construction as the work done by the architects in private practice for States, corporations and individuals, is likely to receive its reward in the near future in the passage of a measure which will result in proper competition for such work, rather than requiring, as now, that the designs should be made in the Treasury Department under conditions which render good, artistic and economic work a physical impossibility. The report of the Committee on the United States Federal Buildings is of the utmost importance.

My predecessor in office last year directed your attention to the need of a permanent home for the Institute. The matter is one seriously affecting our possibilities for exerting the most useful influence. The subject of this report is worthy of most careful and mature consideration.

During the past year we have been called upon to mourn the loss of five Fellows: Joseph Lederle, of New York; A. M. F. Colton and W. J. Edbrooke, of Chicago; A. P. Cutting, of Worcester; A. Page Brown, of San Francisco. And three Honorary Members: The Rev. W. H. Furness, of Philadelphia; Martin Brimmer, of Boston; and the Chevalier J. Da Silva, of Portugal. Also one Corresponding Member: G. Brown Goode, of the Smithsonian Institution.

By the Order of Proceedings of the Convention, the address of the President forms the first subject of debate.

He has preferred to make but slight reference to matters of its material interests, knowing that they would be fully and ably treated in the reports of your officers and of standing committees.

He has preferred rather to tax your patience by a review of the state of the art of architecture in America, and its present possibilities of development, and to ask in view of their achievements in the past, and the promise of the future, if the architects of this Institute are not justified in the hope that, if true to themselves and true to their art, the time may come when the world may look to this country for its great examples of modern architecture, when the American School of Art will be the first and greatest in the world?

REPORT OF THE BOARD OF DIRECTORS OF THE A. I. A.

NOTWITHSTANDING the depressed condition of business in the country, the affairs of the Institute have enlisted the uniform and sustained interest of the Fellows, and the correspondence of the Secretary with the Fellows of the Institute has never been greater than during the past year.

The membership has increased by the election of Leopold Eidlitz, of New York and George Keller, of Hartford, by the Board of Directors, in accordance with the power given it by an amendment to the By-laws passed at the St. Louis Convention, and by the election by letter-ballot of fifteen Fellows.

Mr. Dankmar Adler's return to the practice of his profession has also restored him to full Fellowship with the Institute, making a total addition of eighteen Fellows.

The loss by death has been five, and by dropping from the rolls, thirty-three, leaving a total membership of four hundred and sixty-one (461) Fellows. The statement of the loss by dropping from the list of Fellows of the Institute thirty-three names would be misleading, if it were not explained that some have been carried on the rolls for a long time with the hope that many, if not most of

them, might find themselves able to continue with the Institute: some have given up the practice of architecture, and some have moved from their former residences to places unknown to the officers of the Institute, making it necessary for the Board of Directors to formally recognize the existing condition and vote to drop the names from the rolls.

The death of Mr. Joseph Lederle, of New York, occurred on March 21, 1895, but was not known to the Secretary until too late to report to the St. Louis Convention.

The death of A. M. F. Colton, of Chicago, occurred March 13, 1896, at the age of seventy-one.

Mr. A. P. Cutting, of Worcester, Mass., a former member of the Western Association, died February 6, 1896, in Los Angeles, Cal., where he had gone in search of renewed health.

Mr. A. Page Brown died at San Francisco, January 21, 1896, as the result of an accident which happened to him several months before. Although among the younger men of the profession, he left behind him many evidences of his professional skill and taste, especially in works produced in the characteristic style of the Spanish architecture, which had grown up in the Spanish and Mexican colonies on the Pacific coast.

W. J. Edbrooke died in Chicago, March 25, 1896. He was Supervising Architect of the U. S. Treasury Department during the administration of President Harrison and won many friends during his residence in Washington.

Of the deceased Honorary Members, Rev. W. H. Furness, D.D., the distinguished Unitarian divine of Philadelphia, where he had resided during the whole of a long and most memorable pastorate was a lover of the fine arts and of architecture, and those who attended the Annual Convention held in Philadelphia, in 1871, will remember with pleasure the address he delivered before the Convention on that occasion. He was the father of Mr. Frank Furness, the well-known and distinguished architect of Philadelphia.

Mr. Martin Brimmer, of Boston, a discriminating patron of art and liberal contributor of both money and time to its promotion, was also an author of recognized ability and broad culture. His writings upon Egypt have been recognized as authority on this subject, and are noted for beauty of diction and graphic description.

Chevalier Da Silva, Court Architect of Portugal, for nearly thirty years an Honorary Member of the Institute, died on March 24, 1896, at the age of 89, full of years and honors, distinguished at home and abroad as an architect and archaeologist.

Of the Corresponding Members, the Institute loses Prof. G. Brown Goode, the well-known Assistant Secretary of the Smithsonian Institution and Curator of the National Museum, who brought out of a chaos of inaccessible treasures the orderly, well-arranged, enjoyable and instructive collection which makes the Smithsonian Institution take rank with the finest museums in the world.

Your Directors have considered the various questions which have been brought to their attention, and have endeavored to promote the best good of the Institute and to assist in every movement to elevate the tone of the profession.

The question of establishing permanent headquarters for the Institute was referred to a Committee, which will present a partial report to the Convention for your consideration.

The Committee appointed to consider the questions in connection with designing buildings for the U. S. Government will also present a report of its doings, which will show that much progress has been made, and with the hearty cooperation of Mr. William Martin Aiken, a Fellow of the Institute and the present incumbent of the office of Supervising Architect, it is confidently expected that the movement will result in legislation tending to place the whole matter on a more satisfactory basis than it has been since the creation of the office.

The publication of Professor Johnson's papers on "Timber Trusses and Flitched Beams" has been received with much interest, and your Secretary has had requests for the same and for the reports of the tests of the United States Government from the most distant quarters, the latest being from South Africa, where the subject engaged the attention of a meeting of the South African Architectural and Engineering Association, Mr. Johnson's and Mr. Bullard's papers giving occasion for the discussion, and forming the basis of the evening's debate.

The proposed destruction of the Bulfinch portion of the Massachusetts State-house did not formally come before the Board for consideration, but the officers of the Institute, as individuals, gave expression to their opposition to the proposal, and it is believed not without effect—at any rate, the destruction of the building has been, it is hoped, permanently averted.

The want of uniformity in the rules for installing electrical work has been a fertile field for discussion and censure in the architectural profession, and the President readily embraced the opportunity offered to send your Secretary as a delegate to a Conference held in New York last spring on "Standard Electric Rules," and the Board of Directors voted that the Treasurer of the Institute should pay \$25 towards the expenses of printing, etc. Your Secretary was appointed a member of a Committee of the Conference, for the proper formulating of rules to be submitted to the Conference. This sub-committee met in New York on Friday and Saturday of last week and made good progress, will hold another meeting in November, and hope to report the result of their deliberations to the Conference in December. There is little doubt that, as a result of the Conference, more uniform and consistent rules will be adopted

and promulgated, and the Institute will probably be asked to endorse and recommend them.

It is therefore desired that the Institute consider at this meeting whether it wishes to give the Board of Directors authority so to do, in case the rules meet with their approbation, and that the endorsement asked for properly comes within the province of the Institute.

The question of licensing architects has not been as actively agitated the past year as it was the year before, and from the criticisms which have been made upon the passage of laws which compel the examination of architects and licensing such as prove competent, it would seem to be worth while for the Institute to consider whether it had not better itself institute a system of examinations before admitting members to the Institute, as is done in the case of the Royal Institute of British Architects and of the Manchester Society of Architects.

It is evident that the present relation of the Chapters to the Institute is not as close as it was when all the professional members of all the Chapters were members of the Institute, either as Fellows, when raised to that position by election, or as Associates by virtue of their Chapter membership. Not a few of the older Fellows question whether the Institute did not make a mistake in giving up the title and class of members formerly designated "Associate Members," and thus retain that relation between Chapters and the Institute which has been justly considered essential for the best interests of both. If we were to go back to the old method, it is believed that new Chapters would be formed, the membership of the Institute would at once be increased, and its influence widely extended.

The work of local Chapters has been in many cases very effective, in assisting in the construction of building-laws, and urging and aiding their passage; in advising and educating municipal Governments, committees and individuals as to the conduct of competitions; in promoting and advising municipal improvements; in inaugurating and conducting or assisting in public architectural exhibitions, and in many other ways making themselves helpful factors in modern life.

The Royal Institute of British Architects has, like the A. I. A., lately adopted a form of Uniform Contract, which, as is the case with that adopted by the Institute, has been subject to a good deal of adverse criticism, but, notwithstanding, has been largely adopted and used. There will be many architects who will not use any form of contract except one of their own, and many architects prefer to have their clients employ counsel to draw up the contracts, especially when they involve the expenditure of hundreds of thousands of dollars, but it seems not only reasonable but of great advantage in ordinary contracts involving an expenditure of not more than \$50,000, that the Uniform Contract should be used, for by such use it comes to obtain a force which is of great value; the interest of both owner and contractor are established on a just basis; and its provisions for arbitration do much to prevent expensive litigation, and avert the danger of unfair treatment of the contractor by owner or architect, and give both owner and architect ample opportunity to compel a contractor to faithfully fulfil his contract. It is therefore hoped that the continued use of the Uniform Contract will increase, and that persons wishing changes made therein would send the same to the Secretary for consideration.

The attempt to alter the Constitution by reducing the number of members of the Board of Directors and by permitting a change in the same upon an affirmative vote of two-thirds of ballots cast, instead of two-thirds of all the Fellows of the Institute, was defeated, because less than two-thirds of the Fellows voted for the changes proposed, 277 voting in the affirmative to 30 in the negative on the first proposition, and 376 voting in the affirmative and 22 in the negative on the second, showing a preference not to concentrate the power to rule in the hands of a small governing Board.

Mr. Daniel C. French has been commissioned to erect a memorial to the late Richard M. Hunt, a former President of the Institute, on the wall on the Fifth Avenue side of Central Park, at one of the entrances near the Metropolitan Museum. The Directors would suggest that the Institute testify to its love and respect for the memory of Mr. Hunt by a subscription of \$1.00 from each and every Fellow.

It is the purpose of the Board to issue the *Proceedings* of the Convention by the end of the official year, and the Secretary has been instructed to print in it a chronological list of all the members of the Institute from its beginning, and to print by themselves the names of the "Founders of the Institute," and thus perpetuate the memory of those who, impelled by a love of architecture as a fine art, established it in order to elevate the practice of architecture and to encourage a standard of professional and ethical conduct.

Since the foundation of the Institute, the number of persons who have entered the profession has increased in a ratio far beyond the increase of the population of the country, and a corresponding demand for the services of architects has grown with the growth of practitioners, but the hustle and strife to secure clients has not grown less, but has increased, and the resort to unprofessional methods, which a fine instinct rebels against, has become so much a matter of course that a hesitation to enter the scramble is supposed to indicate a want of energy and enterprise by those whose professional services are set up for sale—as the manufacturer sets up his goods to be drummed for and "promoted." It is essentially the duty of the Institute to foster and maintain in the practice of

its Fellows the highest standards and to discourage everything tending to lower it, and also to encourage the growth of an instinct which is too sensitive to be defined by a code of ethics, and which settles all questions by asking how it would seem if the proposed action towards another was the acting of the other towards himself.

The committee on the Report of the Board of Directors made their report at the closing session of the Convention in the form of a series of resolutions, which report was as follows:

"Resolved, That the permanent headquarters of the American Institute of Architects be located in the City of Washington at as early a date as is possible, and that the Executive Committee be empowered to make such arrangements as are necessary.

"Resolved, That the Institute continue to be represented in the conference having in charge the establishment of standard electric rules.

"Resolved, That a committee of three be appointed by the President to obtain expressions of opinion from the Chapters as to the advisability of the licensing of architects by State legislation and the relation which the examination for such license should sustain to that required for examination for admission to membership in the Institute; and further, if they deem it expedient, that the election of Fellows be made more dependent upon professional skill and practice than at present. This report to be made at the next convention.

"Resolved, That the Directory is hereby authorized to issue a circular to each member of the Institute, requesting a subscription of \$2 from each member as a contribution from the Institute to the fund for the memorial which is to be erected in memory of its late President, Richard Morris Hunt, from the designs of Daniel C. French, and that it is the sense of the Institute that the contribution of the Institute be, at least, the sum of \$500.

"Resolved, That all matters mentioned in the report of the Board of Directors relating to the amendments to the Constitution and By-laws, and the relation of the Chapters to the Institute be referred to the special committee appointed to consider the revision of said Constitution and By-laws.

"We recommend that Mr. Andrews's resolution be presented to the Convention for action, and that it be amended as follows: That the Secretary be empowered and requested to make a collection of the building-laws of all the more important cities of the world, and report progress at the next convention, with the view of carrying out the suggestions contained in the report of the Committee on Building-laws."

The resolution regarding the erection of the monument to the late Mr. Hunt was favorably discussed by several members. The President stated the purpose of the monument. Mr. O'Rourke thought a little drawing of the proposed design would be beneficial to the subscriptions. The President stated that he was sure Mr. Hunt's family would prefer a simple monument erected by small subscriptions from a thousand artists, to a more elaborate memorial erected by large contributions from half-a-dozen of Mr. Hunt's clients.

The following resolution was also adopted:

"Resolved, That the American Institute of Architects, mindful of the enormous waste of valuable material because of ignorance of the value in strength of American timber, and appreciating the value of the elaborate tests of timber which have been made by the Forestry Division of the Department of Agriculture, sees with regret that the work has been entirely discontinued on account of deficient appropriations, and therefore takes this occasion to express its approval of Senate Bill No. 1214, introduced by Mr. Squire, of Washington, making an appropriation for the continuance of the work under the direction of the Forestry Division of the Department of Agriculture."

THE annual election resulted as follows:

President, George B. Post, New York; First Vice-President, Wm. G. Preston, Boston; Second Vice-President, James S. Rogers, Detroit; Secretary, Alfred Stone, Providence; Treasurer, Samuel A. Treat, Chicago; Directors—William C. Smith, Nashville; Levi T. Scofield, Cleveland; John M. Carrère, New York; W. M. Poindexter, Washington; James B. Cook, Memphis; George B. Ferry, Milwaukee; Henry Van Brunt, Kansas City; John M. Donaldson, Detroit.

The following were elected Honorary Members of the Institute: Gen. Francis A. Walker, Boston, President Massachusetts Institute of Technology; Sir Francis C. Penrose, F. R. S., London, Eng., President Royal Institute British Architects; Alfred Waterhouse, R. A., LL. D., London, Eng., ex-President of the R. I. B. A.

The following were elected Corresponding Members of the Institute: Tatsuno Sone, architect, Tokio, Japan; Dr. William Dörpfeld, F. S. A., Athens, German Archaeological Institute; Edward Robinson, Boston, Mass., Curator of Museum of Fine Arts; Daniel C. French, sculptor, New York; Gen. Luigi P. di Cesnola, New York, Curator Metropolitan Museum; Philip R. Uhler, Baltimore, Md., Provost Peabody Institute.

THE INFLUENCE OF STEEL CONSTRUCTION AND PLATE-GLASS UPON STYLE: A PAPER BY MR. DANKMAR ADLER.

THE author of an article recently published in *Lippincott's Magazine* summarizes the laws of architectural design in the sentence "form follows function," and endeavors to condense into three words what others have vainly tried to enunciate in numerous treatises and in bulky volumes on the Philosophy of Art. If it was

necessary to state in a three-worded aphorism the entire law of architectural design and composition, nothing could have better suited the purpose than the words quoted above from the pen of that clear thinker and brilliant writer, Louis H. Sullivan.

Every architectural work has a "function," a purpose which has called it into being, and its success is measured by the degree of approximation to fulfillment of "function" which characterizes its "form."

From this one might infer that it is only necessary to divide into a few classes the functions to be served by architectural structures and to determine the form best adapted to each, and thus develop an infallibly correct system of architectural design from which none may deviate without incurring the reproach of ignorance and lack of culture.

We should then have an architecture somewhat more scientific and vastly more practical, but as trite and as devoid of the interest imparted by the creative impulse as is the architecture founded upon the principle, *form follows historic precedent*, which stamps as barbaric every structure for which the architect has failed to provide an academically and historically correct mask and costume, and which treats as heresy an attempt to do, not as the Romans did in the year 1, but to do as one thinks the Romans might have done in the year 1896.

Returning to Mr. Sullivan's aphorism, we find that he bases it upon studies and conversations of nature which, carried a little farther, show that although the common function of all organic creation is maintenance and propagation of the various species, yet an ever varying environment has produced an infinite number of species and innumerable differences in individuals of each species.

Therefore, if "form follows function," it does not follow in a straight line, nor in accordance with a simple mathematical formula, but along the lines of curves whose elements are always changing and never alike.

If the lines of development and growth of vegetable and animal organisms are infinitely differentiated, the processes of untrammelled human thought and human emotions are even more subtle in the differences and shadings of their manifestations, while the natural variations in conditions of human environment are as great as those which influence the developments of form in the lower organisms; and human work is further modified by necessary artificial conditions and circumstances.

Therefore, before accepting Mr. Sullivan's statement of the underlying law upon which all good architectural design and all true architectural style is founded, it may be well to amend it, and say: "function and environment determine form," using the words environment and form in their broadest sense.

The functions served by the work of the architect have expanded but little, and have varied still less within the limits of the historic records of architecture, nor has there been much change until the last quarter of this century in those conditions of environment which comprise the structural and decorative materials at the disposal of the architect.

The great epochs in the development of architectural style are respectively characterized by the introduction of the pointed arch and its characteristic vaultings. It is our good fortune to have inherited all that was accomplished by the many generations who lived and thought and worked in those epochs. We are still more blessed in being allowed the privilege of participating in the creation and in witnessing the birth of another epoch in architectural design, the form or style of which will be founded upon the discovery of the steel pillar, the steel beam, the clear sheet of plate-glass, electric-light and mechanical ventilation, all devoted to the service of functions or wants created by the greater intensity of modern life and by improved means of communication between places and men.

Probably there were those in Greece who deplored the departure from correct and historic Assyrian and Egyptian architecture, which had to be made in order to originate and establish the most exquisitely finished and most fully and logically developed architectural style the world has known. And when the sturdy but gross-minded Roman used and modified Greek prototypes in accordance with his coarser and more aggressive mentality, and when, finally, he introduced the arch and the vault, and substituted for the refined and elegant treatment of the severe and regular forms inseparable from beam and lintel construction, a bold and comparatively unrefined treatment of the more irregular and picturesque forms made possible by the discovery of the arch, the new departure was certainly as displeasing and distressing to the purists and scholars of that day, as were in later days the works of those alleged barbarians whose efforts to utilize to the utmost the means and knowledge at their command, created the styles known as "Byzantine" and "Romanesque," and finally that culmination of protest against dry-as-dust tradition, the styles which scholars and men of culture derisively named after the barbarian Goths.

So, also, in our day, many of those who have been taught to understand and love and honor forms and traditions transmitted from past ages shrink from contact with the new materials and processes, and, noting the inevitable modifications of time-honored theory and practice, lift their voices in protest against legitimizing forms which are the offspring of newly-arisen functions and of newly-discovered conditions of environment.

And yet each historic style was called into being in obedience to new developments of function or environment, and each was in its

day an iconoclastic innovation upon well established and firmly founded practice.

Therefore, we are justified in assuming that the new conditions will exert a marked influence on architectural style in our day and in the future.

It is the duty of those, who by familiarity with the historical styles are best fitted for this task, to ascertain the creative principles and laws which underlie the architectural style of bygone periods of greatest artistic achievement, and to apply these principles to the utilization of the means placed at the disposal of the architect of our day for satisfying the requirements of the day.

The American architect, who travels in Europe and studies the architecture of the many ages which have preceded the last century, is impressed and charmed by the freedom and *naïveté* with which consciousness of the fact that each age is the heir of all preceding ages is proclaimed in the composition and in detail of so many structures. Nothing can be more interesting than the observation of the existence of a living vigorous style, joyous in the consciousness of life, free to assimilate the old and to create the new. Nor is it unprofitable to follow a style from the exuberance of its youthful vigor to old age and decadence, to ossification and crystallization into an inert and lifeless set of fixed and unalterable rules, into a fetich to be worshipped by future generations; in other words, into an academic historic style.

But after one has taken it all in, there is one impression stronger than all others. It is the consciousness of the zeal and earnestness of the all-pervading endeavor to so utilize all the means at command, that the form and expression of each structure might conform to its function, whether that were the worship of God, or the glorification of guild or municipality; whether intended to serve the lavish display of the wealth and dignity of the great noble, or to house the humble burgher, each kind of structure has its individuality, and of these, again, each gives expression to the character and personality of its occupant.

Our generation has in many ways shown itself worthy of its heirship of so many ages, and has given expression to its appreciation of its good fortune by transmitting to the future an inheritance still more valuable than that which has fallen to its lot.

What can the architect do, that he also may prove himself worthy of opportunities so much greater than those enjoyed by his predecessors?

Human nature has limitations which circumscribe and define the attainable in literature and art. There will be none greater than Homer, than Moses, than David, than Shakespeare, than Phidias, than Leonardo da Vinci, than Raphael, than Michael Angelo; no author, no sculptor, no painter, no architect can as an artist expect to excel many who have gone before. But the architect is not only an artist, but also an engineer, a man of science and a man of affairs. In these latter capacities, the architect of to-day has at his command instrumentalities and opportunities unknown to his predecessors. Were he an artist only, the giant strides which science, and by its aid industry, communication and traffic have made in the past fifty years would leave him by the wayside, content as are his fellow-artists of the brush and chisel to admire the onward rush, to be with it, but not of it, to be dazzled by its splendor and to thrive and wax fat under the patronage of those who initiate and control the movement of modern material progress.

But architecture is not permitted to remain placidly contemplative of the march of events. The architect is not allowed to wait until, seized by an irresistible impulse from within, he gives the world the fruit of his studies and musings. He is of the world as well as in it. The world of to-day has greater need of his aid than had any previous period, and he is pressed into its service and must work for it and with it, no matter whether or not urged by the spirit within him. The world must have buildings; it will have them adapted to its wants and functions; it will insist upon the utilization of the best of the materials and processes which scientific and industrial progress place at its disposal. The architect must, therefore, fit himself for the duties thrust upon him. The world calls upon him to do the work of to-day with the tools of to-day, not as a tyro, not as one who must first learn how, but as an architect, a master worker, as one of whom the world believes that familiarity which he has acquired with the processes by which the work of other periods has been accomplished makes him better fitted for the work of to-day, and that he will press into its service all the experience of many ages and epochs.

Michael Angelo was painter, sculptor, architect, diplomat, but above all, and in all, an artist. An important factor in his greatness as an architect was his familiarity with the technique of the auxiliary and subsidiary arts, sciences and crafts, the command of which devolves upon the architect. The great Buonarrotti did not disdain to learn the metal-founder's, the quarry-worker's and other crafts in order to be the better able to carry out the plans which his great mind had conceived. Were he among us now, he would be in the front rank of the experts and specialists in all the modern arts and sciences which have arisen to perplex and worry the artist-architect wedded to the traditions, processes and materials of the past. And being Master of specialties and details, he would, as General, master them all into martial array for overcoming the difficulties incident to the expanded and diversified demands which our time makes upon the architect.

Few, perhaps none, of us can be equal to Buonarrotti, but all can

emulate him in his zeal and capacity for hard work. We, too, can become impatient and contemptuous of the performance of auxiliaries and specialists, and dismissing them, can ourselves acquire a knowledge of the technique of their arts and sciences and crafts, and in the furnace heat of zeal and enthusiasm for the attainment of a great end, combine all that we honor in the lore and traditions of our profession with the discoveries and achievements of the science of to-day, pour all into the mould of contemporary requirements and bring forth our contribution to the architecture of the New World, the new age of steel, electricity and scientific progress.

For several years it has been the fashion among the professors of our art to decry the new materials and processes of construction and condemn their most noteworthy applications to the service of requirements born of modern conditions. The contributions which modern science has made to our power to command and utilize the materials and forces of nature, and the increased and expanded opportunities for the creation of useful and beautiful works which modern society has given us, have been looked upon askance. And it is greatly to be regretted that some of those whose works had proved them well qualified to determine under the new environment the forms best adapted to the old, as well as the new functions, have been most persistent in their condemnatory utterances against the new problems which they themselves were so successfully solving.

What I have written is intended to be a protest against the dogma that art in architecture ended with the Renaissance, a denial of the assumption that the use of materials and processes, and wants and functions unknown to the masters who flourished in that glorious period, or to their predecessors in other eras of great artistic vigor in architecture, is incompatible with the performance of truly artistic work.

I wish to maintain that the steel pillar and beam, and other contemporary contributions to the materials and processes of building construction, that the modern business building, and many other so-called monstrosities, are as legitimate contributions to architectural art, as were in their day, when first introduced, the stone pier and lintel, the brick wall or pier, the arch, the vault, the roofed temple, the vaulted basilica, the spired and buttressed cathedral. All that is wanting is the will and the ability to make proper use of these newly-discovered agencies.

The new materials and processes, the new requirements should not, however, in their introduction into architecture and in their assimilation by our art, be treated as things apart and by themselves, but they should be treated as related to and part of all that has gone before in the long history of human and artistic progress.

The author of to-day has at his disposal and does not disdain to use an enlarged vocabulary; the musician has a greater range of instruments, a richer and fuller orchestration; and the great composer deems it a privilege to be able to evolve combinations of tone that were unattainable to his predecessors. And even if the painter of to-day uses the same pigments, and depicts the same phases of animate and inanimate nature, and the sculptor uses the same marble, and both painter and sculptor play upon the same gamut of human emotions, as did their prototypes for many generations, that is no reason why the architect should look askance upon new instrumentalities and new opportunities for developing and enlarging the scope of his art.

"Let us, then, welcome the prosaic output of furnace and mill, and even the unpromising and garish sheet of plate-glass. If they are always used where they are wanted and as they are wanted and never where they are not wanted, nor as they are not wanted, we shall have taken the first step towards the transmutation of these utterances of scientific prose into the language of poetry and art. In the nature of things, the block of rough stone, the lump of clay, the log of timber, all are apparently as uncompromisingly unpoetic and inartistic as the much-dreaded and imprecated modern intruders into the programme of architectural composition, which form the title of this paper. What they have of poetic suggestion and significance they owe to the genius of man, and what man has done, man can do. Let us not stand back and admit that we are unable to learn from our predecessors how difficulties are overcome, how victory is wrested from apparent defeat.

Yet another word. I have quoted the dictum "form follows function" and have modified it into the words "function and environment determine form."

Steel pillars and steel beams occupy so little space that in order to enclose structures of which they are the essential supporting parts, they must be furnished with a filling, if a space enclosing structure is to be erected, and steel posts and beams to be adequately protected against possible attacks of fire must receive bulky fire-protective coverings. In these fillings and coverings we obtain media for artistic treatment which may be handled solely with reference to the desire to adapt "form" to "function."

From this I deduce that the influence of the new materials and processes will tend to a more free and less trammelled treatment of architectural design, and that the striving for the creation of ideally perfect form will be less hampered by limitations incident to the use of refractory materials of construction.

In the discussion which followed the reading of the several papers on steel construction and plate-glass, Mr. Carrère said he was particularly impressed with Mr. Yost's suggestion of separating

the envelope from the interior construction. If the interior construction could be placed sufficiently within the envelope, it would allow wider scope for ornamentation and treatment. He believed that the tall building of the future would be fireproof, permanent, — if anything could be said to be permanent, sanitary and healthful. Toward this end the architect should strive.

Mr. Hallberg spoke of the unsafe high buildings. When a building 300 feet high was erected of steel framework, the steel in which was half an inch thick, and covered with brick and terra-cotta, was it safe? Brick and terra-cotta were porous. Every drop of rain was absorbed, and it was only a question of time when corrosion would result. He liked the New York style of building a wall heavy enough to support the superstructure, and believed it should be followed in the West.

Mr. Post said that he had built the first steel cage about eighteen years ago, and had a right to criticize. He had been brought up as an engineer, and in following architecture he had always kept his engineering knowledge in mind. He had tested the corrosiveness of wrought-iron and steel, and found structural steel much more subject to corrosion than wrought-iron. This, however, was the age of the steel cage and plate-glass epidemic. He believed in a wall strong enough to support the structure; put the steel pillars within the walls, and thus put it beyond the reach of fire. Why the rage for large plate-glass surfaces existed, he could not understand. Why make the entire side of an office plate-glass, when the first act of the tenant would be to cover up the glass with blue shades? He was not impatient for a new style of architecture, for it could not be created in five years. Our great-grandchildren might in their time evolve a school of architecture.

Mr. O'Rourke regarded steel and iron construction as accessory merely. The true theory was to give it a secondary position — to give rigidity, but not support the outside walls. In his buildings, if every post rotted out, the walls and the building would remain. That was the true idea, he believed.

Mr. Yost said that a brick wall would expand more with fire than either steel or iron, and needed something to hold it up.

Secretary Stone read a letter from Mr. Van Brunt, explaining his absence, and referred to the subject of high buildings. He thought legislation should be directed toward putting high buildings on wide streets. Fronting Central Park, for instance, high buildings might be built on all four sides.

Mr. Post said high buildings were induced by the high price of land.

Mr. Carrère spoke of the possibilities open to cities in making improvements of accumulating a sinking-fund by making the improvements intelligently. By condemning land where it is less valuable and putting improvements on them. The increase in value of the surrounding property would create a sinking-fund that would in time pay for the improvement.

Mr. Stone said high buildings got their light from above other buildings. When they were built too close, they would defeat their very purpose by rendering the lower stories too dark for use.



NATIONAL SCULPTURE SOCIETY.

THE National Sculpture Society completed the reorganization attendant upon its becoming an incorporated body, at the meeting of the Council of the Society held at its rooms, No. 39 West 22d Street, New York. The final steps in adoption of a new constitution, necessitated by this change, were taken at the same time.

The election of officers for the new Society resulted as follows: — President, Mr. J. Q. A. Ward; First Vice-President, Mr. Russell Sturgis; Second Vice-President, Mr. Samuel P. Avery; Secretary, Mr. Barr Ferree; Treasurer, Mr. I. Wyman Drummond. Mr. J. S. Hartley was elected a member of the Council in place of Mr. Olin L. Warner, deceased.

Mr. F. Wellington Ruckstuhl, who was Secretary of the unincorporated National Sculpture Society from its beginning, announced his impending departure for Europe for an extended period, and his resignation from the Council was accepted with regret. The following resolution was moved by Mr. Sturgis and spread upon the minutes of the meeting:

"Resolved, That the thanks of the Council of the National Sculpture Society (incorporated) be and they hereby are extended to Mr. F. Wellington Ruckstuhl, the Secretary of the National Sculpture Society (unincorporated), from its organization in May, 1893, until it went out of existence on the organization of the present Society, a period of three years and five months. During this long period Mr. Ruckstuhl has devoted himself to the business and the interests of the Society with entire devotion and self-abandonment, and with thoughtful and watchful care.

"The Council hereby extend to Mr. Ruckstuhl their earnest hope for his prosperity and success during his proposed sojourn in Europe and for his speedy return to take an active part in the affairs of the Society."

BARR FERREE, Secretary.

ILLUSTRATIONS

[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

CHURCH OF THE FIRST PARISH, BRIGHTON, MASS. MESSRS. CABOT, EVERETT & MEAD, ARCHITECTS, BOSTON, MASS.

[Gelatine Print, issued with the International and Imperial Editions only.]

BROOKLINE PUBLIC BATHS, BROOKLINE, MASS. MR. F. JOSEPH UNTERSEE, ARCHITECT, BOSTON, MASS.

VILLAGE STORES AND APARTMENTS FOR W. C. STRONG, ESQ., WABAN, MASS. MR. LEWIS H. BACON, ARCHITECT, BOSTON, MASS.

FIREPLACE IN LADIES' WAITING-ROOM, UNION STATION, ST. LOUIS, MO. MR. T. C. LINK, ARCHITECT, ST. LOUIS, MO.; MR. ROBERT BRINGHURST, SCULPTOR.

SKETCH FOR WAREHOUSE. MESSRS. S. W. DODGE AND A. V. PORTER, ASSOCIATED ARCHITECTS, NEW YORK, N. Y.

HOUSE OF G. N. TRAVOUS, ESQ., EDWARDSVILLE, ILL. MR. F. C. BONSACK, ARCHITECT, ST. LOUIS, MO.

[The following named illustrations may be found by reference to our advertising pages.]

EMPIRE STYLE, NO. 1.

ENTRANCE: BROOKLINE PUBLIC BATHS, BROOKLINE, MASS. MR. F. JOSEPH UNTERSEE, ARCHITECT, BOSTON, MASS.

EMPIRE STYLE, NO. 2.

[Additional Illustrations in the International Edition.]

NEW ACADEMY OF FINE ART, DRESDEN, SAXONY. HERR CON-
STANTINE LIPSUS, ARCHITECT.

[Gelatine Print.]

This building was erected between 1886-94.

NEW TOWN - HALL, MUNICH, BAVARIA. G. HAUBERRISER,
ARCHITECT.

[Gelatine Print.]

This building was erected between 1867-72.

RESTORATION OF THE CATHEDRAL, FÜNFKIRCHEN, HUNGARY.
BARON VON SCHMIDT, ARCHITECT.

This plate is copied from the *Building News*.

SUGGESTION FOR THE LONDON COUNTY COUNCIL'S HALL, CHARING
CROSS, LONDON, ENG., BY MR. H. W. BREWER.

This plate is copied from the *Graphic*.

DRINKING-FOUNTAIN, HYDE PARK, LONDON, ENG. MR. W. R.
COLTON, SCULPTOR.

This illustration is copied from the *Builder*.

OLD HOUSE AT MAGDEBURG, PRUSSIA.

This illustration is copied from *Zeitschrift für Bauwesen*.

COMMUNICATIONS

[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

RESPONSIBILITY FOR SMOKING FIREPLACES.

NEW YORK, October 26, 1896.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—If you will publish your opinion in your next issue regarding the following controversy, you will greatly oblige parties interested.

A, as architect, draws plans and superintends the building of a house for B. The mason's specification reads, "fireplaces are to be built with extra large throats gradually contracting to the size of flue, and draught of all fireplaces guaranteed." The flues are shown on plans 8" x 8" tile-lined.

B, as builder, completes masonwork in a satisfactory manner, except that at completion of house, fireplaces are found to smoke

badly and nothing can be done to remedy the trouble, although the architect and builder spend time and money endeavoring to do so.

Can C hold A or B responsible for the smoky fireplaces, A having endeavored to the best of his ability to make plans and specifications satisfactory, and B having executed the work in a manner satisfactory to A, the work being in accordance with the plans and specifications, except that at completion fireplaces smoke.

A. B. C.

[UNLESS some extraordinary circumstances, such as the neighborhood of a hill, or a high building, either of which will at times cause down-draughts in chimneys which nothing can prevent, have influenced the result, we should say that C was entitled to expect his architect and builder to know enough of the art of constructing fireplaces and flues to be able to make them draw; and that he is, in consequence, entitled to hold them responsible for such damage as he may have suffered from their failure to do so. He may, however, be himself partly at fault. It is a difficult thing to get a fireplace to burn well, unless hard coal or coke is used, with a flue so small as 8" x 8", and still more so if the flue is further contracted by a lining; and if C wished the flues to be of these dimensions, he is to a certain extent accountable for the result, even though he may not have known the effect of restricting them within such limits. — EDS. AMERICAN ARCHITECT.]

CAST-IRON VS. STEEL COLUMNS.

NEW YORK, October 22, 1896.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In the skeleton construction of a twelve-story building, which is best to use, cast-iron, or steel columns? I find a difference of opinion among the authorities, and would like to see in print the arguments *pro* and *con*. I am,

Yours, etc. X.

[As the best method of opening a valuable discussion we publish the foregoing question in the hope that architects in different parts of the country will express their views. — EDS. AMERICAN ARCHITECT.]

NOTES AND CLIPPINGS

THE VIADUCT AT MUENGSTEN, PRUSSIA.—The Prussian Government has begun the construction of a railroad viaduct which is to be the loftiest in Europe, eclipsing both in height and in the width of its main arch, the celebrated Douro Bridge at Oporto. The total height of the latter is 204 feet, whereas the viaduct at Muengsten will attain an altitude of nearly 400 feet, while the span of the centre arch will be 500 feet. — *N. Y. Tribune*.

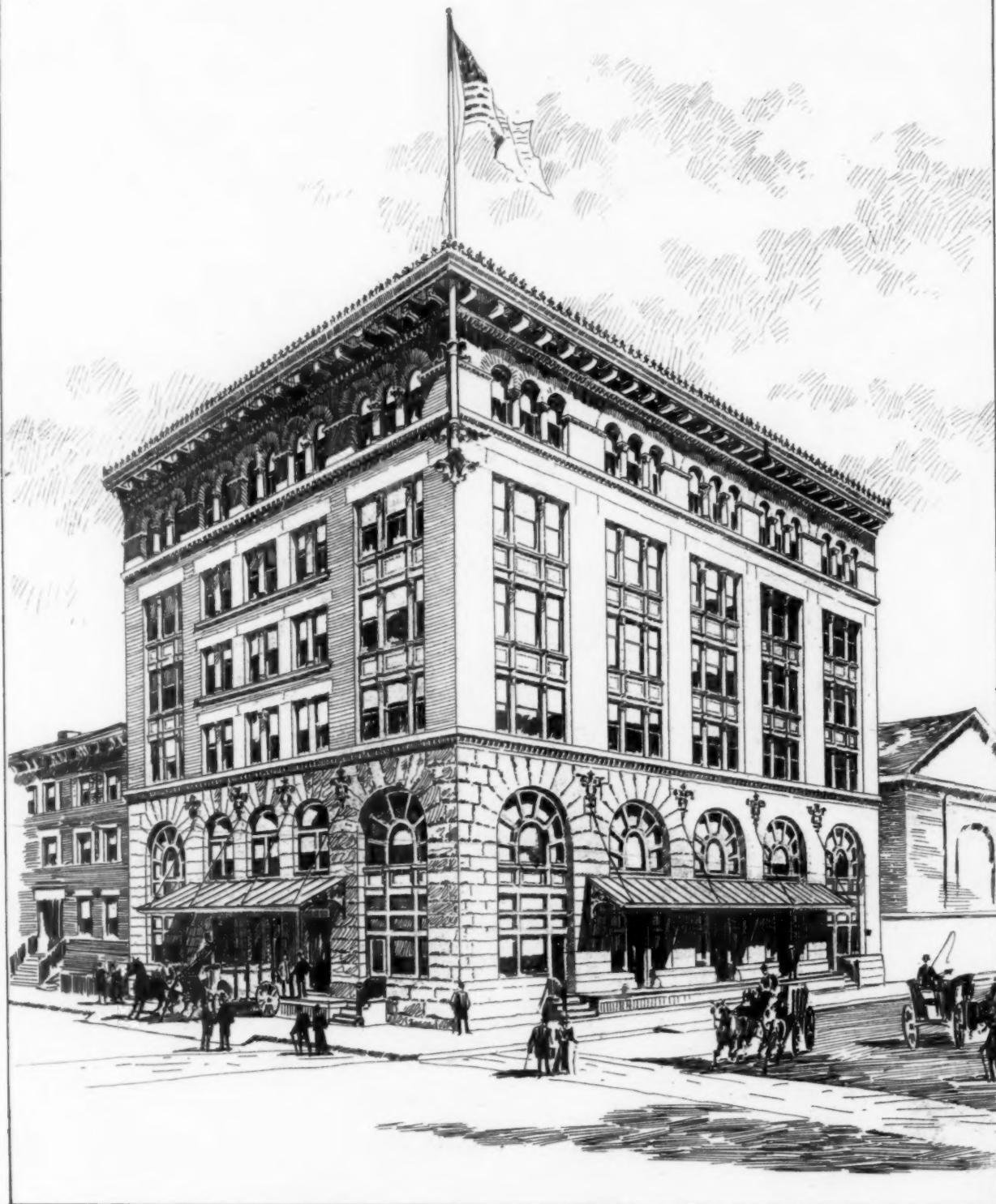
THE SCHOOL AND IRISH FLAG INCIDENT.—Patrick O'Brien, the contractor who was arrested July 4, for displaying the Irish flag from the staging of the Ward 6 School at Lawrence, Mass., then under construction, was given a hearing at the Superior Court, September 30. Charles A. Decourcy, for the defendant, moved to quash, contending that Ireland could not come under the law as laid down in the statute, it not being a free and independent country. The motion prevailed and Mr. O'Brien was discharged. This conclusion leaves unsettled the conundrum: When does a public building become a public building? We question whether the decision will be agreeable to that politically curious class, the Irish-American, since it seems to declare that the Irish flag isn't much of a flag after all. — *Exchange*.

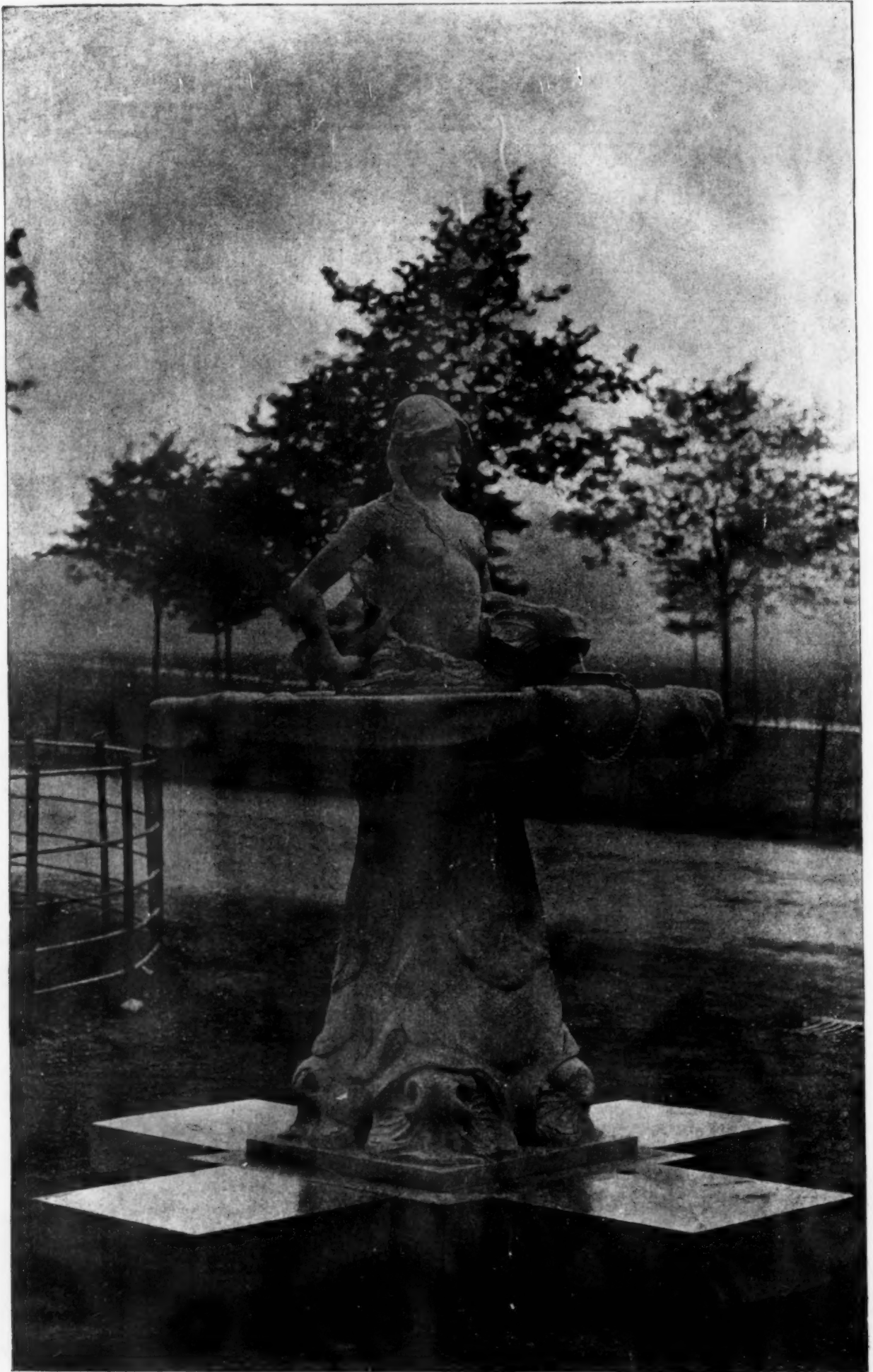
MALARIA BANISHED BY ARTESIAN WELLS.—Our correspondent at Lake City, Williamsburg County, reports that there are now eighteen artesian wells in the village, and adds: "Before the wells were bored the people suffered a great deal with fever and malaria, but now it is a rare thing, indeed, to hear of a case of either." This is very decided testimony to the value of pure water for the redemption of "malarial districts," and Lake City's experience and example should not be lost on other places where the water is bad and health no better. There was a "great deal" of fever in the village when the wells were shallow. Now a case of it is "rare." That is sermon enough for sensible people in other fever-haunted places. — *Charleston (S. C.) News and Courier*.

LIVERPOOL VS. MANCHESTER.—The competition of Manchester with the shipping trade of Liverpool has now been felt sufficiently to cause the ship-owners and merchants of the latter city to become alive to the necessity for taking measures of protection. A new business scheme will soon be put to practical test. It is intended to introduce motor cars, each one of which shall be capable of drawing three wagons carrying ten tons of produce. The wagons are to be loaded at the ship's side, and the special advantage will be that goods can be conveyed without transfer to other vehicles directly to the warehouse, wherever it may be situated. The ordinary highways will be utilized for this purpose, without the laying of any rails or other mechanical aids. It is expected that by this means the cost of conveying merchandise to and from Manchester and other towns will be reduced to a point with which the ship canal cannot compete, and the further expectation is that the railway companies will be compelled in self-defence to lower their rates, which again will tell against the ship canal. It is suggested that the despatch of merchandise in the fashion named should be by night as far as possible. Thus goods sent from Liverpool or Manchester at seven o'clock each evening would reach their destination the first thing the following morning. It is believed that a fully loaded train of three wagons can be drawn at a uniform speed of six miles an hour. — *N. Y. Evening Post*.

SKETCH FOR WAREHOUSE

STEPHEN W. DODGE: ARCHITECT.
41 WALL ST. NEW YORK CITY.
186 REMSEN ST. BROOKLYN N.Y.
A.V. PORTER: ASSOCIATE.





From the Builder

Neotype Printing Co., Boston

DRINKING FOUNTAIN, HYDE PARK.—MR. W. R. COLTON, SCULPTOR.



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Abb. 2 Teilzeichnung
des unteren Gebäudes 1:15

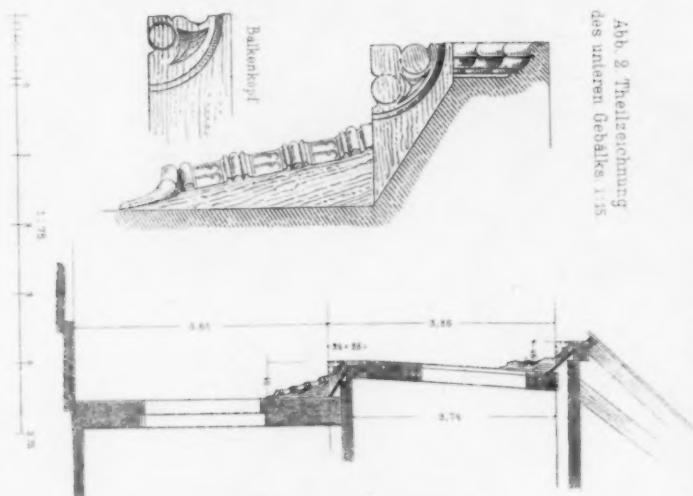


Abb. 3 Ansicht
nach der Vorderwand 1:75

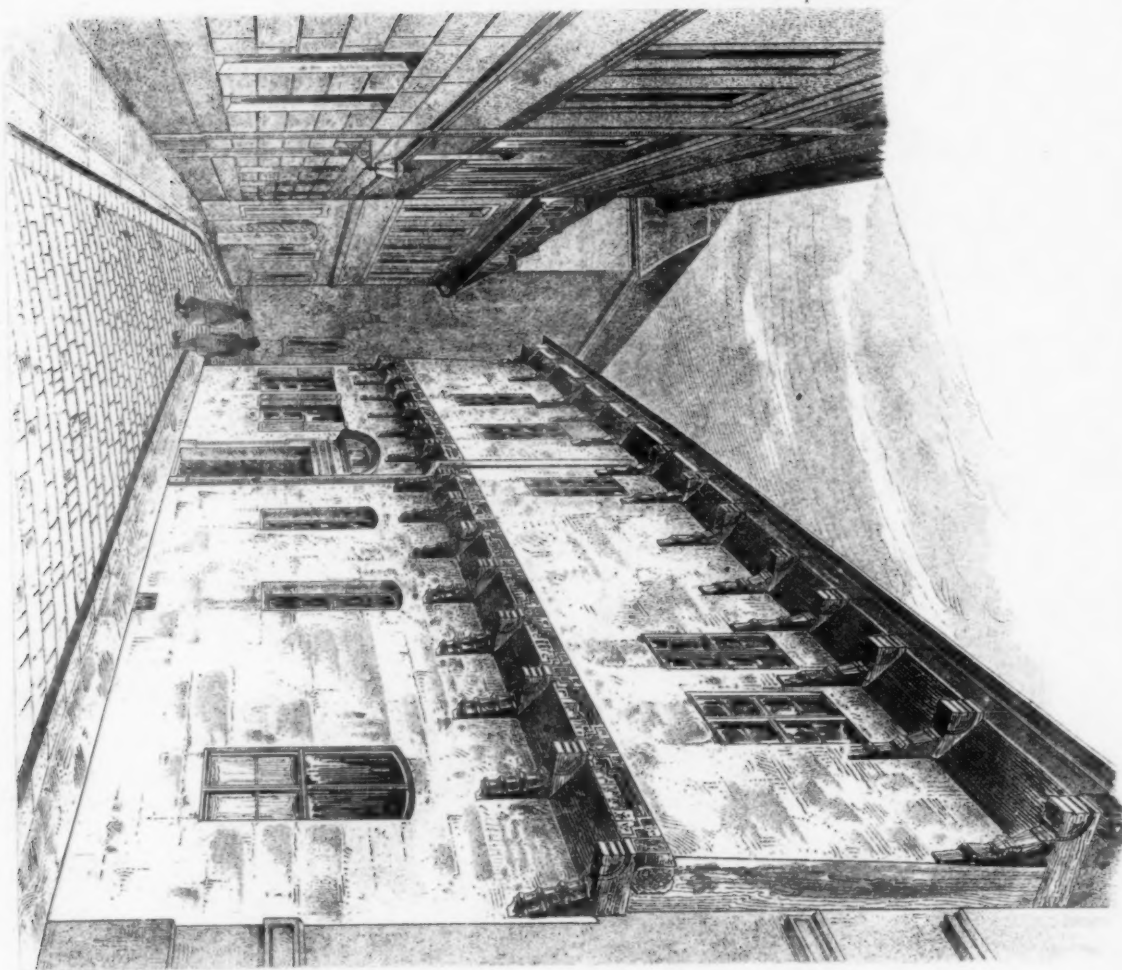
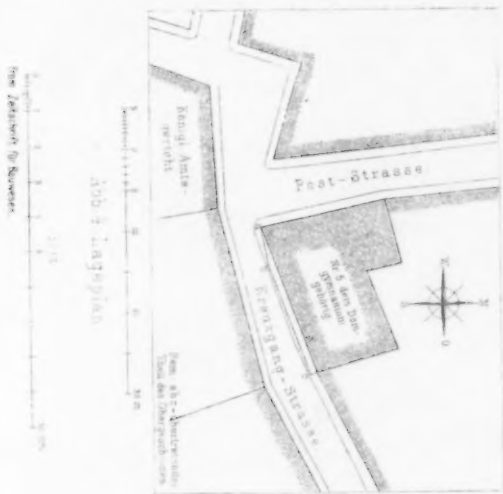


Abb. 1 Ansicht in der Kreuzgangstrasse

Abb. 5 Teilzeichnung
des oberen Gebäudes 1:15

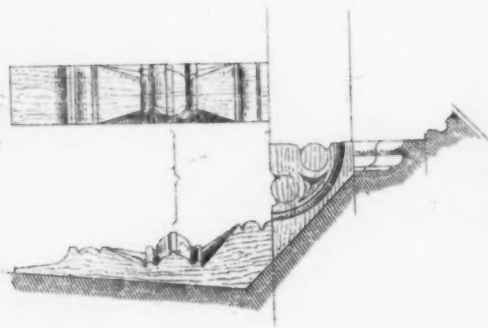
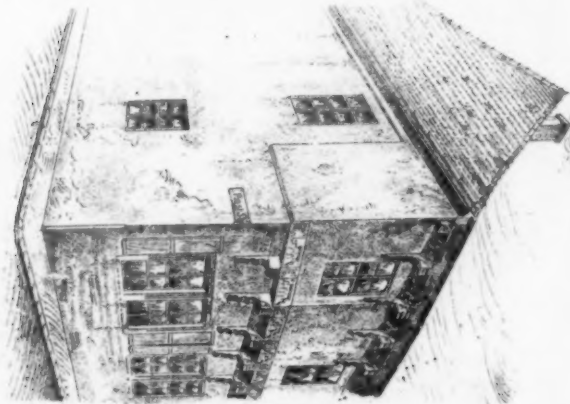


Abb. 4 Ansicht
der Fassade der Kreuzgangstrasse
nach der Fassade der Kreuzgangstrasse

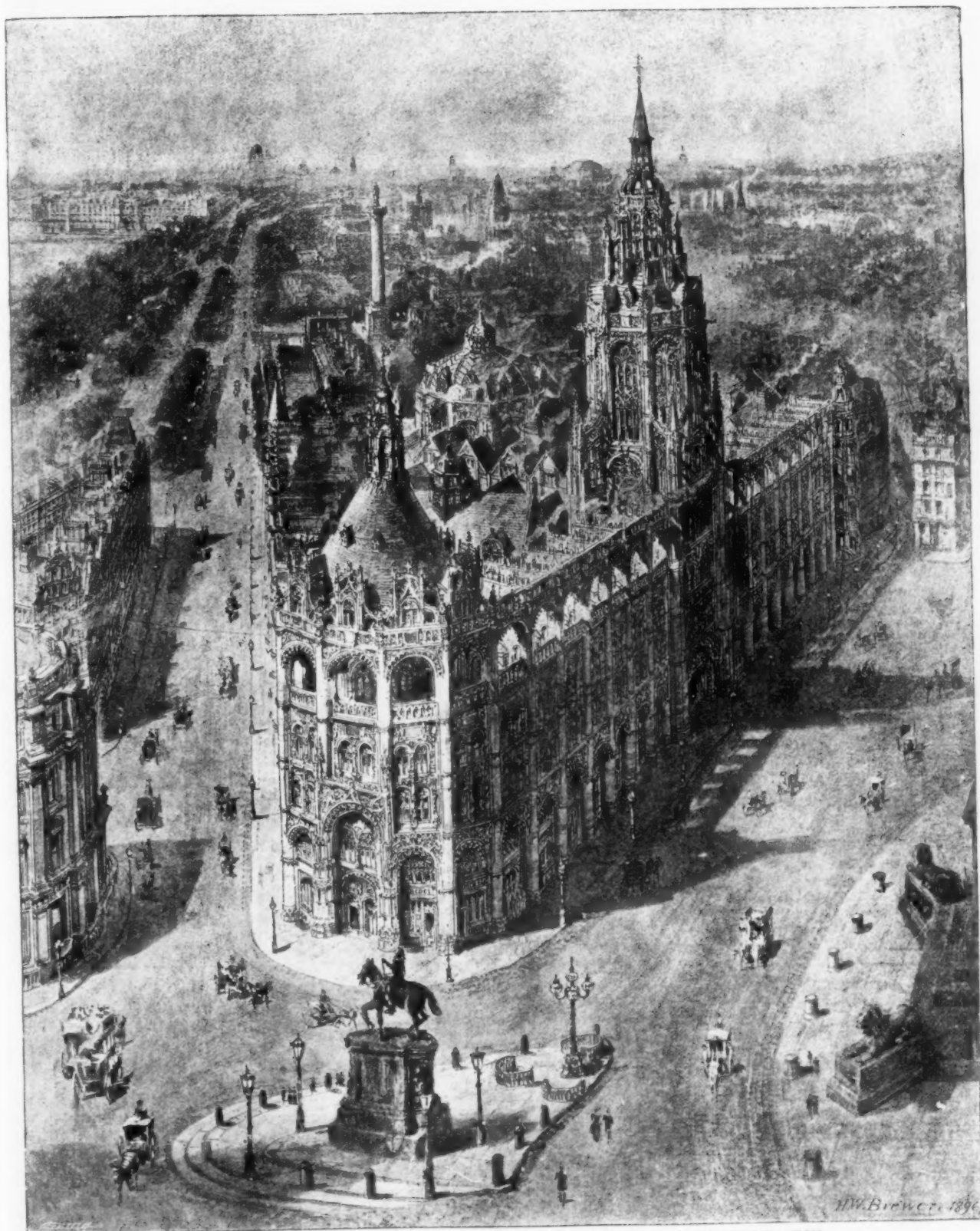




From the Building News

RESTORATION OF PÜSPÖKI CHURCH, HUNGARY, BY THE LATE BARON VON SCHINDLER, 1887

Electric Printing Co. Boston



From the Graphic.

AN ECONOMICAL SUGGESTION: A SITE FOR THE LONDON COUNTY COUNCIL'S HALL AT CHARING CROSS
THE IMPROVEMENT OF LONDON: THE OPENING UP OF THE MALL

DRAWN BY H. W. BREWER

Helotype Printing Co. Boston

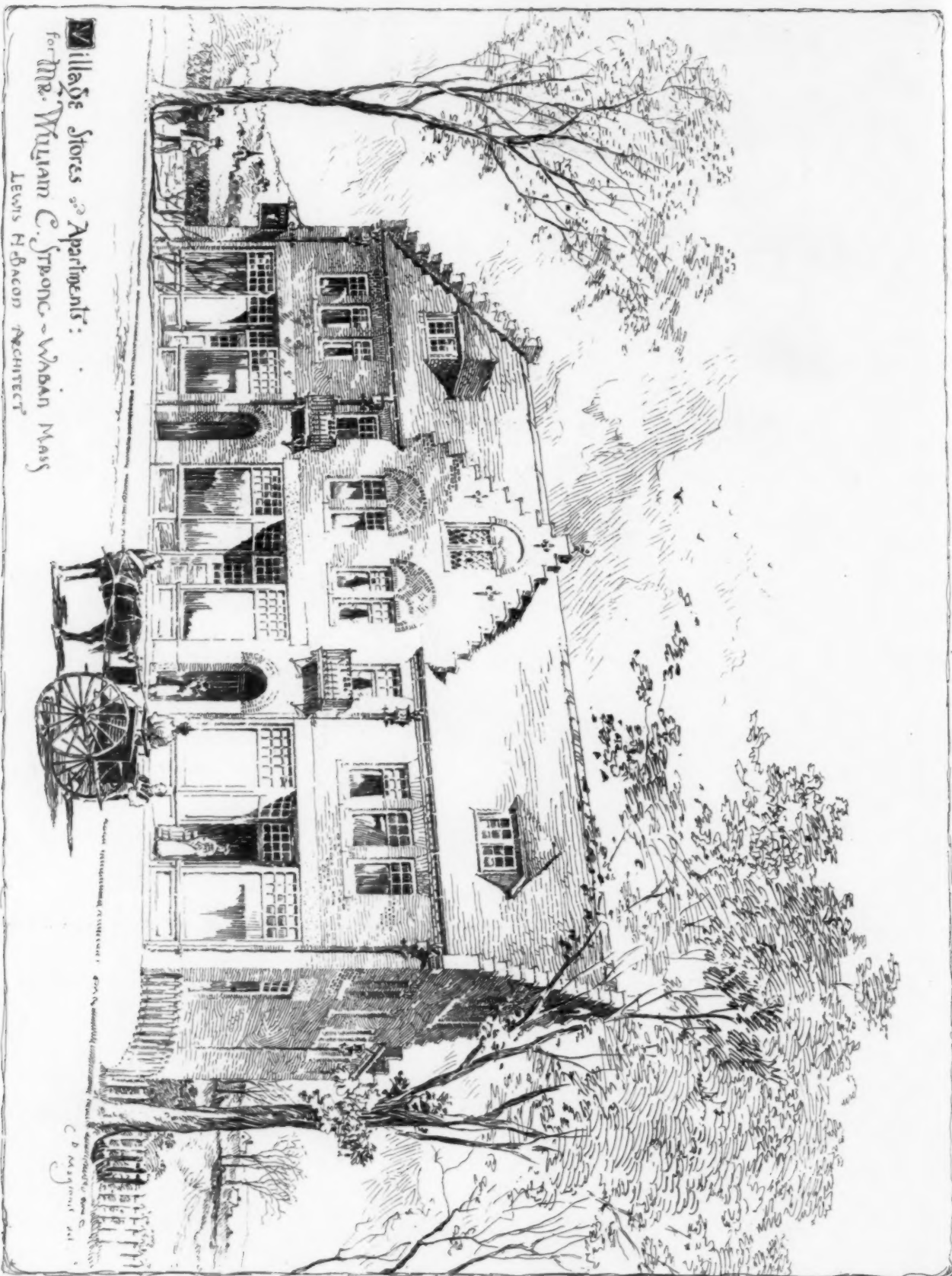


FIREPLACE IN LADIES' WAITING-ROOM, UNION STATION, ST. LOUIS, MO.

J. C. LINK, Architect. ROBERT BRINGHURST, Sculptor.

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NEW ACADEMY OF FINE ARTS, DRESDEN, SAXONY.
CONSTANTIN LIPSIG, ARCHITECT.



Village Stores & Apartments:
for Mr. William C. Strong - Woban Mass
Lewis H. Bacon Architect

Reynolds Printing Co. Boston

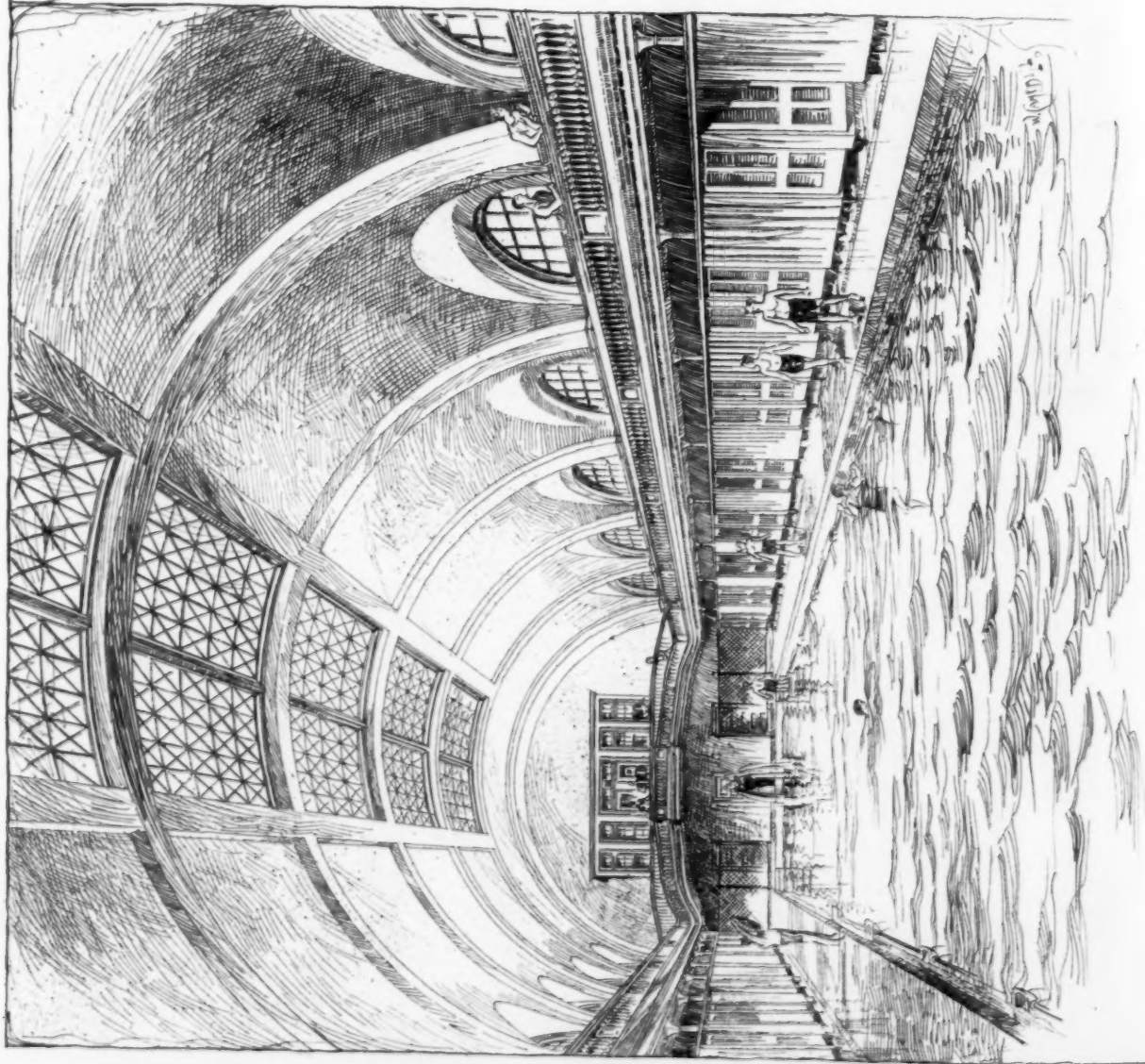


From Blätter für Architektur.

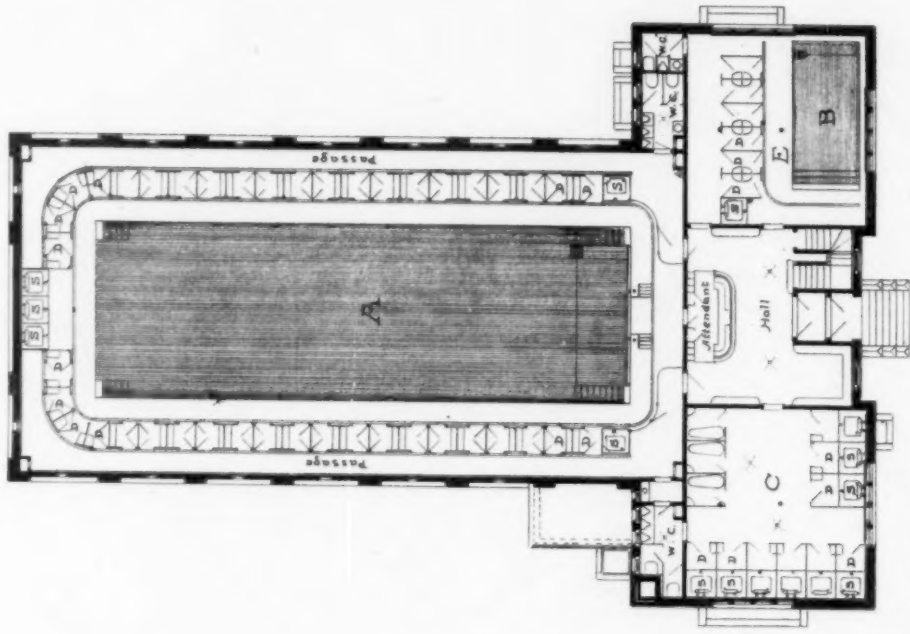
NEW ACADEMY OF FINE ARTS, DRESDEN, SAXONY.
CONSTANTIN LIPSIG, ARCHITECT.

Neumann & Co., Berlin.

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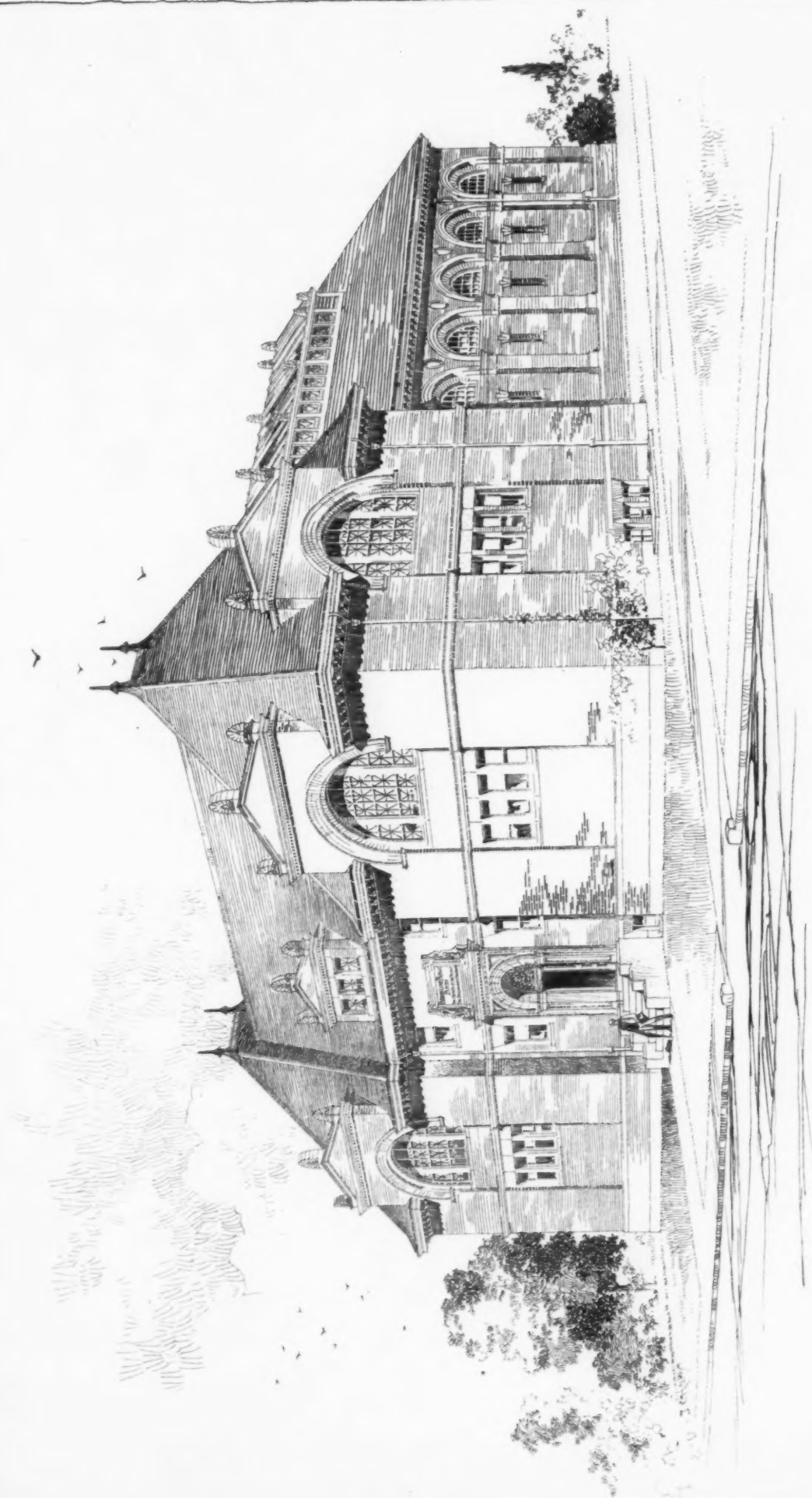
INTERIOR OF SWIMMING BATH.



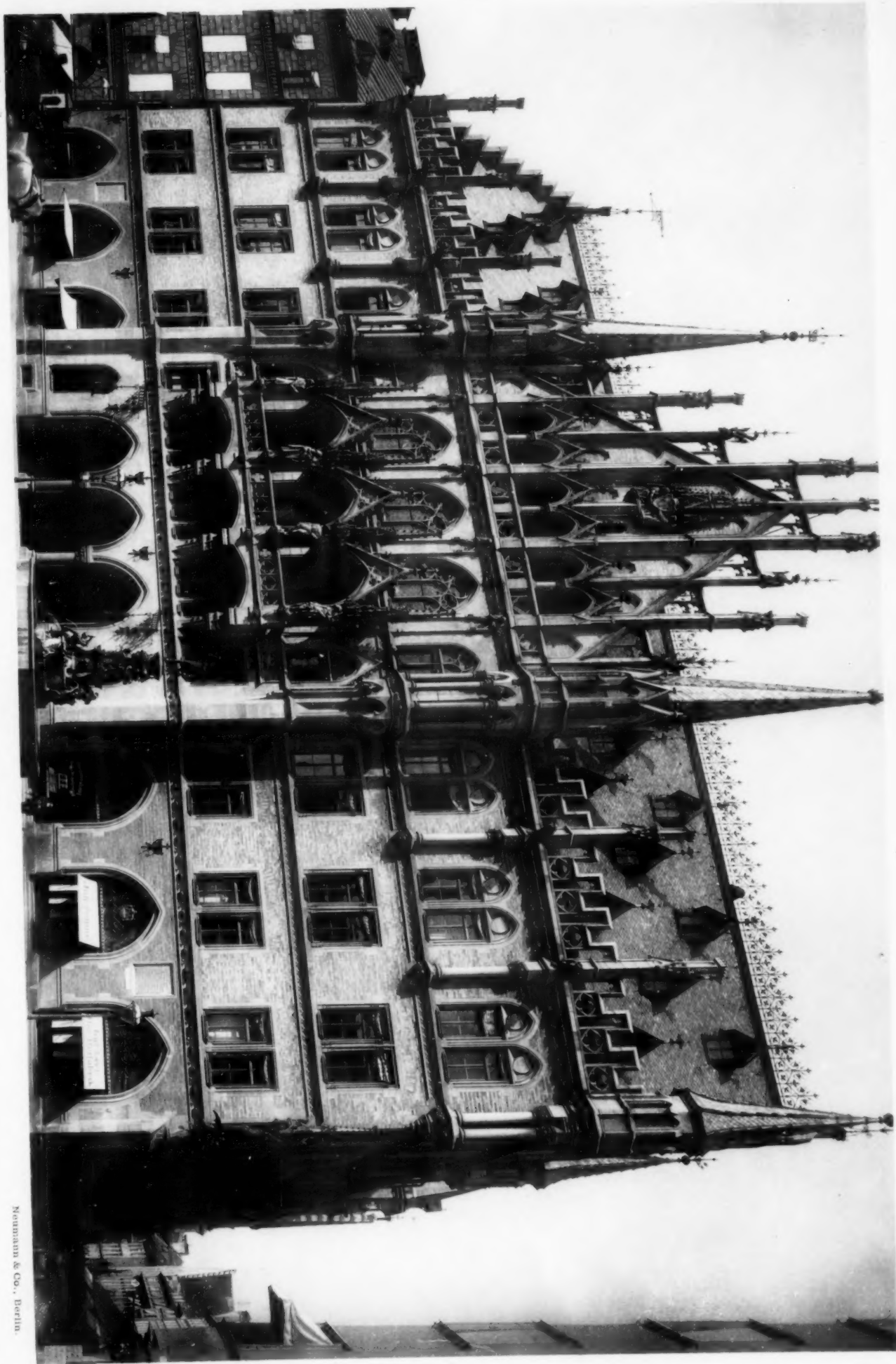
SCALE 0 5 10 15 20 30 FEET

First Floor Plan

- A - Swimming Bath
- B - Plunge Bath
- C - Private Bath
- D - Swimming School
- E - Dressing Rooms
- F - Main Baths



BROOKLINE · PUBLIC · BATH ·
F. JOSEPH UNTERSEE, ARCHITECT
605 HANCOCK BLDG., BOSTON, MASS.

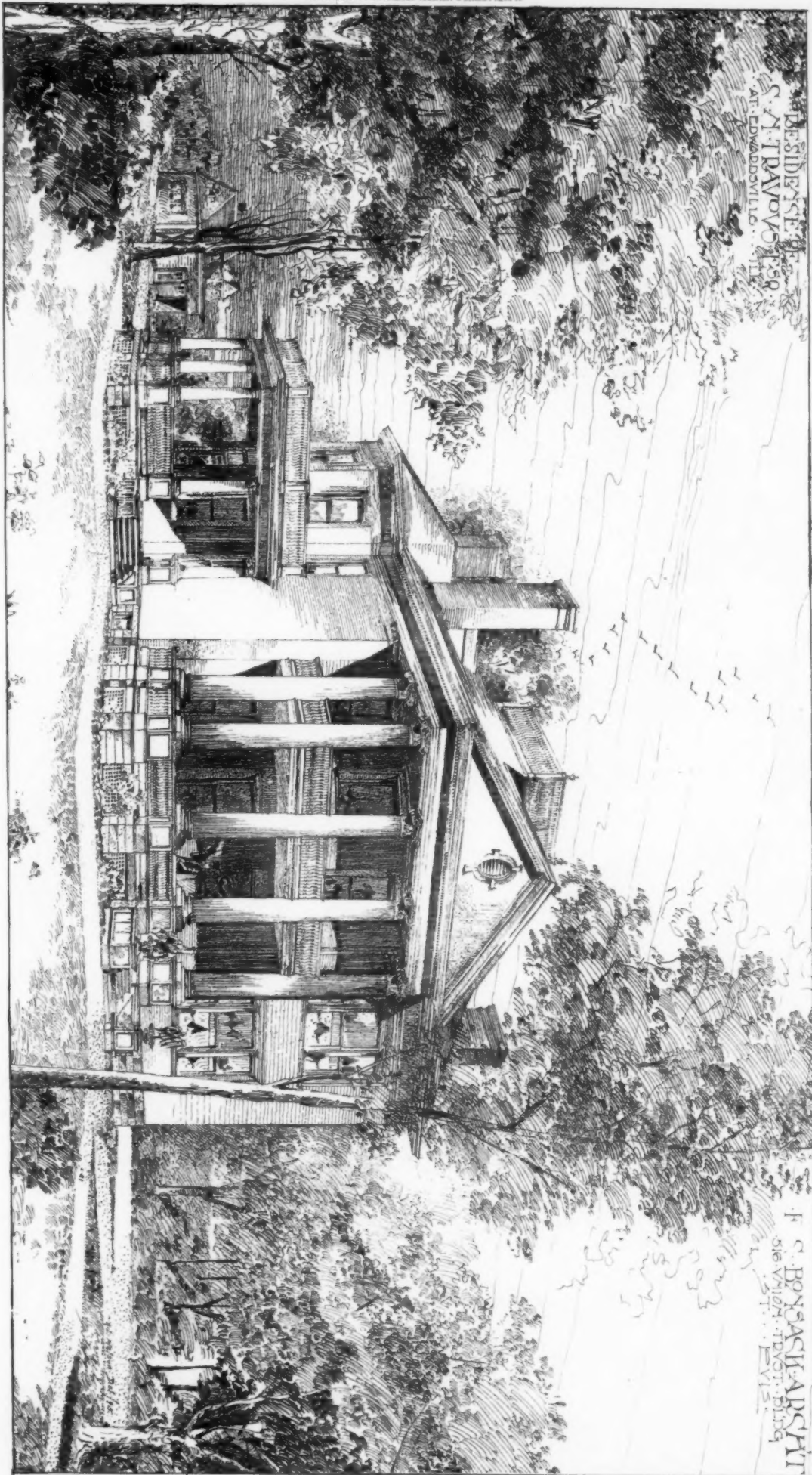


From Hüter für Architektur.

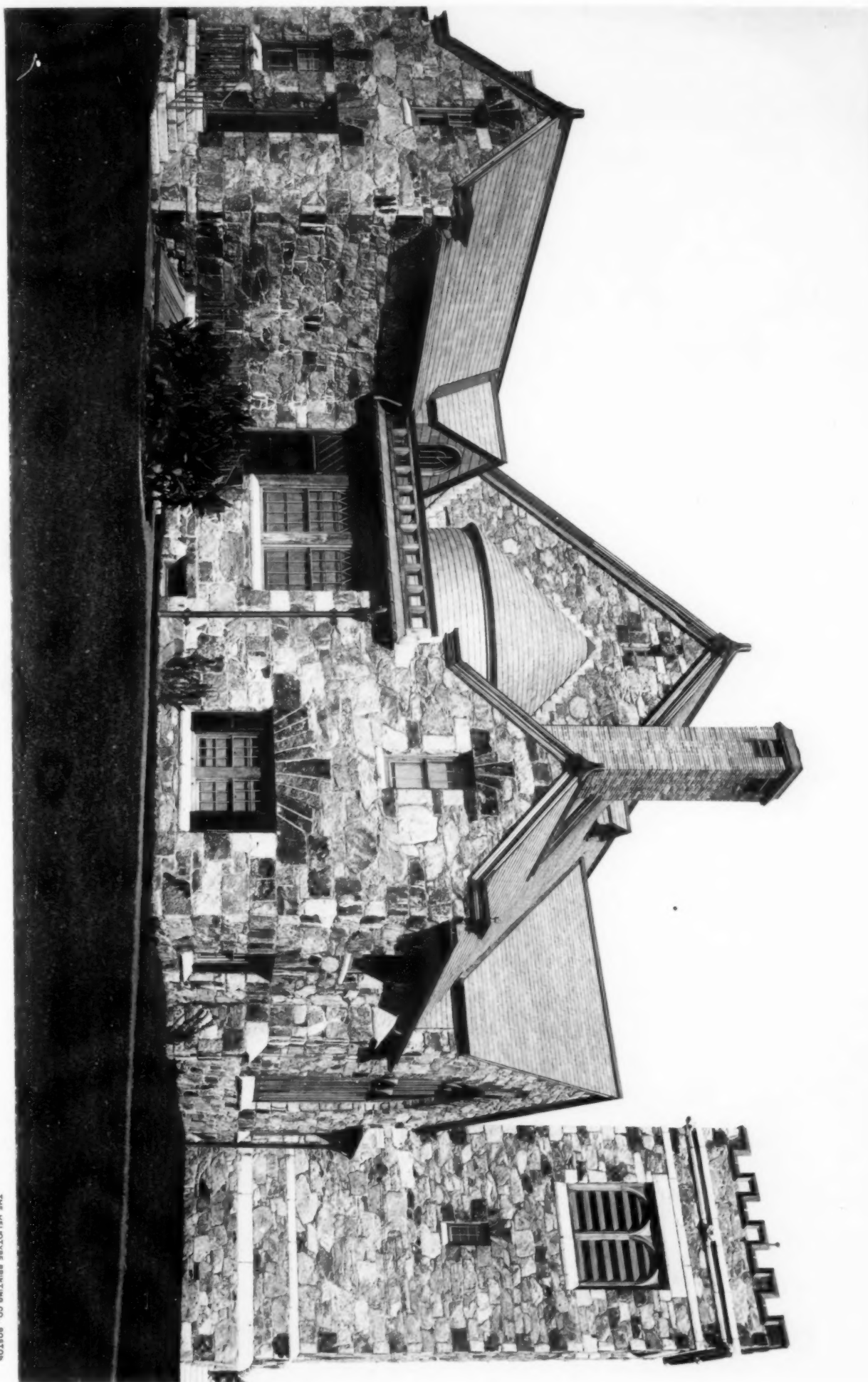
NEW TOWN-HALL, MUNICH, BAVARIA.
G. HAUBERISSER, ARCHITECT.

Neumann & Co., Berlin.

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CHURCH OF THE FIRST PARISH, BRIGHTON, MASS.

CABOT, EVERETT & MEAD, Architects.

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