

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. LV.

Copyright, 1897, by the AMERICAN ARCHITECT AND BUILDING NEWS COMPANY, Boston, Mass.

No. 1107.

Entered at the Post-Office at Boston as second-class matter.

MARCH 13, 1897.



SUMMARY:—

The Controversy over the Authorship of the Congressional Library Design.—Extending the Requirements of Incombustible Buildings in Boston.—The late Extension of Forest Reservations.—The Annual "Strike" Scare.—The Panama Canal.—The Biennial International Sanitary Conference at Venice.	81
A GREAT MEXICAN ARCHITECT.—IV.	83
ITALIAN CITIES: PADUA.—II.	83
GARDEN DESIGN.—IV.	85
SOCIETIES.	87

ILLUSTRATIONS:—

Dormitory on Nassau St., Princeton, N. J.—St. Mark's M. E. Church, Brookline, Mass.—House of E. C. Benedict, Esq., from the Northeast, Indian Harbor, Greenwich, Conn.—Stable on the Same Estate.—Stable at Seabright, N. J. Clovelly, Devon, Eng.—A Group of Capitals: Siculo-Norman. Additional: St. Michaelskirche, Hildesheim, Hanover.—Baptistal Font in the Same Church.—Ely Cathedral, Eng.—North Aisle, looking West.—General View of Choir of the Same.	88
--	----

COMMUNICATION:—

The Attempt to extend the Use of Concrete in Boston.	88
--	----

WE hardly know which is more to be regretted, the public controversy which is going on in regard to the authorship of the design for the Congressional Library Building, between Messrs. Smithmeyer & Pelz, the original architects, and the son of General Casey, the army engineer who carried it into execution, or the series of proceedings which gave rise to the controversy. On the 25th of January last, Messrs. Smithmeyer & Pelz presented a "memorial" to Congress, through Senator Blackburn, protesting, with a considerable show of temper, against the commemorative tablet which has been set up in the building, and which gives the names of the army engineers in charge of the work the most conspicuous place, and, below, separated by a line, those of Messrs. Smithmeyer & Pelz and of Mr. Edward P. Casey, as architects of the structure *ex æquo*. It will be remembered that, a year or more ago, *Harper's Weekly* published an article on the Library, which, as the publishers alleged, had been submitted to Mr. Casey, and approved by him, the general tenor of which, especially when taken in connection with the title of the illustrations, gave the impression that Mr. Casey was entitled to credit for the most important part of the architectural work on the building. The Washington Chapter of the American Institute of Architects, whose members may be presumed to have been familiar with the facts, took up the matter, and protested, both as a body and as individuals, against the wrong so done to the original designers, saying that, in their opinion "no one can, with propriety or honesty, be entitled to the credit as architects of this building except J. L. Smithmeyer and Paul J. Pelz." This protest of the Washington Chapter was taken up by the Board of Directors of the Institute, and referred to a committee, consisting of Messrs. R. D. Andrews and Frank Miles Day, which reported that "The good work in the interior of the building, however, has been designed by Mr. Casey, and his name ought to be placed on the tablet as the architect to complete the work." Mr. Casey is now practising in New York, and the New York Architectural League next considered the matter. The President appointed Messrs. Bruce Price and John Galen Howard a committee to hear Mr. Casey's version of the affair, and they reported that, having heard his statement, which they believed to be correct, they thought that "large credit" was "due to Mr. Casey as one of the architects of the Congressional Library, and that it would be not only highly fitting, but merely just, that his name should appear on the tablet which bears the names of the architects of the building."

UP to January 25th, the matter had not reached a too acute stage. While it was unfortunate that Mr. Casey's examination of the *Harper's Weekly* article had not resulted in making it perfectly plain that Messrs. Smithmeyer & Pelz were

the sole architectural designers of the main fabric of the building, so that the Washington Chapter would not have felt it necessary to make a public correction, this correction was a simple affair, and the reports submitted to the Executive Committee of the Institute, and to the League, certainly gave Mr. Casey full credit for what he had done, so that he could well afford to treat Messrs. Smithmeyer & Pelz's memorial to Congress with magnanimity, or even to help them in regaining that artistic honor of which the *Harper's Weekly* article had been, undoubtedly without intention on his part, a chief means in depriving them. Instead of this, he has sent to us, and we presume, to others, a document, called a "Reply to Senate Document No. 88," this being the title of Messrs. Smithmeyer & Pelz's protest, which, to say the least, is ill-advised in tone and illogical in argument. Nobody has ever denied his claim to credit for what he has done in connection with the interior work of the building, but it is surprising to find an architect seriously saying, as he does in this paper, that "In the Library of Congress the interior architectural effects seem to be of more importance than those of the exterior"; and that the architecture of the building which Messrs. Smithmeyer & Pelz lay claim to "consists merely of bare walls and penetrations." It is hardly necessary to say that architects would agree that the person who devises in full constructive perfection the ground-plan of a building, and the "bare walls and penetrations" of its elevations and sections is the architectural designer of the building, whatever may be done with the profiles of the mouldings, or the details of carved and painted decoration; and Mr. Casey's claim that the Smithmeyer & Pelz plan was only used by his father "to expedite the work"; and that "fundamental changes" were made in it, consisting of omitting "interior wings and connecting-pieces," changing the form of the exterior dome "from an octagonal roof to one round in horizontal section," and leaving out the "cupolas on the central pavilion," which, as he says, are "just such changes as are sometimes necessary to convert a poor design into a good one," is only further evidence that the building, as carried out, is substantially the fruit of Messrs. Smithmeyer & Pelz's study and thought, and that, if the designers of the substance of a building are entitled to more honor than the person who works out the details and decoration, or who makes the contracts, and supervises their execution, their names should be placed at the head of those whom the tablet is intended to commemorate in connection with the building. There is, of course, a possible question as to whether the superintendent, the person who studies the details, or the architect who devises the scheme of the building performs the more important duty; but we fancy that architects will hold but one and the same opinion as to this, and we do not believe that Mr. Casey would look with equanimity upon an inscription on one of his future buildings, which bracketed his name with that of his head draughtsman and the clerk-of-the-works, however brilliantly they might have accomplished their tasks. We hope he is wise enough to bear with patience a suggestion, that treatment which does not look objectionable, when applied to other people, often wears quite a different aspect when endured by one's-self. Meanwhile, we can wish nothing better for him than to be spared, in his own future career, the mortification of being neglected and supplanted in his professional work, a mishap which is only too common in an architect's professional career.

THE Massachusetts Legislature is struggling with proposed amendments to the Boston building laws, nearly all of which contemplate the extension of the list of structures which must be built of incombustible material. It is strongly urged that hotels and school-houses should be added to this class, and one amendment proposes that all tenement-houses shall be required to be of fireproof construction throughout. This last suggestion is not likely to be adopted, but the public seems to be quite ready to have hotels and school-houses fireproof, and it is to be hoped that the amendment concerning them may pass. We should, however, as we have often said, like to see amendments take the direction of compelling the removal of the old wooden structures which threaten the whole northern part of the city with destruction, and either extending the building-limits, so as to prevent the newer portions from condemnation to similar danger in future, or increasing the

required distance between wooden buildings from the present minimum of three feet to at least ten, so as to discourage indirectly the crowding of the Dorchester and Roxbury and Brighton districts with fire-traps.

FEW people realize the importance of one of the last of President Cleveland's official acts, by which, under authority of Congress, twenty-one million acres of forest land have been set apart for the public benefit. A year or so ago, Congress, through the National Academy of Sciences, appointed a Committee, consisting of Professors Charles S. Sargent, Alexander Agassiz, Wolcott Gibbs and W. H. Brewer, General Henry L. Abbot, Mr. Arnold Hague of Washington, and Mr. Gifford Pinchot of New York, to study the forest reservations of the United States, and report a plan for preserving them for the best advantage of the public. The preliminary report of this Committee has been made, and President Cleveland's Proclamation was drawn in such a way as to make early provision for carrying out its recommendations, but the full report, including detailed plans for the management of the public forests, will not be presented to Congress until next December. As showing the intelligent thoughtfulness with which the work of the Committee has been done, the Boston *Herald* quotes Professor Sargent as mentioning the Black Hills reservation, comprising about a million acres. This tract is covered with a forest of yellow-pine, spruce and cottonwood. It has suffered much from fires, and the illegal cutting of timber, and would, undoubtedly, soon disappear if not efficiently guarded, and with it would disappear the only source of timber between Minnesota and the Rocky and Big Horn Mountains, so that the owners of the mines, just north of the reservation, and the settlers in the fertile valleys below, would have to import their wood from immense distances. Moreover, the streams which flow from the hills, and nourish the farms for many miles in all directions, are fed by the springs collected in the forests, and the cutting-down of the trees would have the inevitable consequence of converting the mountains into bare masses of rock, dry except during rains, and then sending only devastating and transitory torrents to the lowlands, in place of the comparatively even flow of a forest-fed stream. In the same way, the Big Horn reserve, and that of the Teton range, while producing trees of small size, are of incalculable value as protecting the sources of the streams which diffuse fertility for many miles in all directions, and it is of the utmost importance to save them from destruction. In what way the Committee proposes to protect them we shall hardly know until the final report is issued, and its appearance will be looked for with great interest.

THANKS to the necessities of labor "champions" principally, the first of April, instead of being the date for the general revival of building operations, has come to be regular time for the more or less complete abandonment of them, and the commencement of a long season of dispute, ill-feeling, enforced idleness on the part of mechanics, and heavy loss, or, in some cases, total ruin, to employers through the strikes which the building world has come to view as inevitable on that day. Already, the granite-cutters of Boston have begun the conflict, which, by the first of next month, is probably intended to include all the building trades. For the last four years, the Boston granite-cutters have been working under an agreement proposed by the State Board of Arbitration, after the protracted strike of 1892, which provided, among other things, that there should be no discrimination in employment between union and non-union men, and that the granite-cutters' union should not take part in general strikes ordered by the Building Trades' Council. The men now demand that both these provisions shall be abolished; that the contractors shall agree to employ none but members of the union, and that the union shall be allowed to participate in "sympathetic" strikes. A committee of the master granite-cutters having declined to accede to these terms, the strike has been declared, and as a part of the controversy concerns the matter of sympathetic striking under orders of the Building Trades' Council, it is reasonable to infer that the latter intends, if it sees a favorable moment, to throw its forces of disorder into the scale in behalf of the claim made by the granite-cutters. Indeed, meetings of other trades have already been called, "to consider important business," and it seems likely that the determination which is

said to have been reached by a large part of the members of the building-trade unions, to have nothing to do in future with sympathetic strikes, will be surely tested. So far as the outside public is concerned, less loss than usual will be occasioned by strikes this year, for the reason that there is less than the average of building going on; but we hope, and believe, that general opinion will be solidly arrayed against any proposition to close the doors of employment to non-union men. The bare idea that a conspiracy is to be formed between the employers and certain workmen in a given trade to prevent any person, trained in that business, from earning a living unless he belongs to a specified organization, is revolting to every free American. Even if such an agreement were entered into, of which, happily, we think there is not much danger, so far as the employers are concerned, it is very improbable that its validity would stand before the Courts; and, indeed, the persons who made it, under recent rulings, would be likely to find themselves responsible in damages to persons deprived of employment by it.

THE present owners of the Panama Canal are proceeding quietly and systematically with investigations intended to determine the practicability of constructing a canal on a plan differing materially from the old one. It is well known that the original scheme was a crude one, taken up by speculators before the conditions were properly investigated, and that a great deal of money was wasted in useless work in consequence. The new company intends to avoid extravagance of this sort, and its project will be carefully considered by an international board of engineers, and compared with the De Lessep's plans, before any final decision is made. The new plan proposes to utilize the work already done at the terminals of the canal, but to connect them by means of a waterway with ten enormous locks, five on each slope, the bottom of the channel on the summit level being one hundred and ten feet above tide-water. So far as possible the locks will be small lakes, made by building dams across valleys in the mountain, the highest lake being ninety feet deep, and being fed by the waters of the Chagres River, carried in pipes and ditches through a distance of some ten miles. A reservoir of this capacity will afford means for controlling the floods in the Chagres River, which have always been one of the principal difficulties of the undertaking, besides furnishing a reserve supply of water for the locks below. The channel and locks are to be large enough to accommodate the largest merchant steamers, and, in most places, there will be room for two vessels to pass abreast.

THE International Sanitary Conference has been holding its fourth biennial session in Venice, and the world will await with curiosity the result of its deliberations. People in general have an idea that these international "conferences" are mainly excuses for getting a hundred or more professional men together in a pleasant place, where they can interchange adulation, and after a week of talk, accompanied by much gratuitous advertising, disperse. It is quite possible that this view may apply to some of the conferences, but it is not appropriate to the Sanitary Conference, which has been a most efficient means for securing international sanitary legislation, such as could not have been secured in any other way. The first of these conferences was held at Venice in 1891, and the question of the introduction of epidemics into Europe by way of Egypt was so thoroughly discussed that the adoption of strict quarantine regulations in Egypt soon followed. At the Second Conference, held in Dresden, a scheme of international quarantine was adopted, which should give the maximum of protection, with the least interruption to traffic; and this scheme has already been the basis of treaties between the principal countries of Europe. In 1894, the Conference, held that year in Paris, took up the subject of the Mahometan pilgrimages to Mecca and Medina, which, as is well known, are followed by a trail of pestilence. The effect of its discussion was immediately seen in the application by the Porte, under pressure from the Powers, of stringent police regulations to such pilgrimages within its jurisdiction, and a more complete plan of control only awaits ratification by England. This year, similar attention is to be paid to the pilgrimages of Persian and Indian Mahometans to Persian shrines; and, undoubtedly, the Indian plague will be discussed.

A GREAT MEXICAN ARCHITECT.¹—IV.

Dome of El Carmen, Celaya: from the Plaza Mayor.

within easy reach. San Luis Potosí, where he designed the Alarson Theatre, is much farther away, but came naturally within his artistic jurisdiction, so to speak.

The Church of Our Lady of Carmen, in Celaya, is notable as being entirely designed by Tresguerras, without and within. It was this work that occasioned so lively an architectural controversy in Mexico through the architect's defiance of conventions in establishing his proportions by the rule of his own sense of fitness. Mr. Thomas A. Janvier, one of the most sympathetic writers on art in Mexico, in speaking of this church, calls attention to "its beautiful simplicity conjoined with dignity, its lightness and its grace," and he remarks that its tower and dome are both renowned for their extraordinary beauty. The Carmen church was under construction from 1803 to 1807, and consequently represents a much later period than the Querétaro work of the artist. The edifice is 220 feet long by 55 feet wide and 69 feet high. In this church there are mural decorations by Tresguerras in the Chapel of the Judgment. There is also a painting of Our Lady of Carmen from his hand, and portraits of the artist at the ages of fifty-five and sixty-three years.

In the Church of San Francisco the altars were designed by Tresguerras, and also those in the Tercer Orden. The tower of San Augustin is likewise his work. When I last visited Celaya, in 1884, I was impressed by the rare beauty of the Celaya domes, but now my recollections of the church interiors there are indistinct.

The same must be said of my visits to San Miguel de Allende and Guanajuato. In the former city I was charmed with the beautiful dome of La Concepcion, and photographed the church with its picturesque surroundings. A feature of this dome, which is more stately than that of Carmen in Celaya, is its adornment with statues at the points where the ribs spring from the drum, which is in two stories, the lower story being colonnaded.

Still more impressive is the dome of the great church of La Compañia in Guanajuato—perhaps the noblest in all Mexico, with its



Church of La Compañia, Guanajuato.

drum colonnaded in both of its stories. The word "compañia" refers to the Company, or Society, of Jesus, the word Jesuit not being

¹ Continued from No. 1106, page 76.

used in Spanish. When I was in Guanajuato this church was undergoing radical repairs and was little more than a shell. I could therefore gain no idea of its interior, filled as it was with staging. Mr. Garczynski speaks of it as "very broad and very light, with aisles that are in perfect proportion with the nave." A photograph of the interior, he says, does not give a correct idea of the proportions, which are grand in the extreme. In this connection it should be said that the photograph of the Carmen Church in Celaya, by reason of the nearness of the point-of-view, distorts the perspective extremely.

SYLVESTER BAXTER.

ITALIAN CITIES: PADUA.²—II.

NEXT to San Antonio, the Church of San Giustina, begun in 1516, after a model in wood by Brioso, and finished thirty years after by Morone, is one of the most interesting. During the period of Austrian domination the building was used as a granary, but it has since then been restored to the Church. It is said that the building stands on the site of a former Temple of Concord. The interior of the structure is conceived in the Byzantine style, but the façade still stands unfinished. The building is crowned with eight domes, covered with lead. In the church are some precious paintings by the younger Palma and Luca Giordano, and a fine one by Paolo Veronese, depicting the Martyrdom of St. Justine.

The Eremitani, an Augustinian church, begun in 1276 and finished in 1306, is one of those buildings where one perceives with most clearness the primitive style as imported from Germany, before it was crossed with Byzantine and Florentine art and tradition. It contains in the chapel of SS. Jacopo and Cristoforo a veritable treasure, since many of its painted decorations are the work of Mantegna, the head of the Mantuan School. Unfortunately, the chapel is in a state of lamentable disrepair, and some portions of the paintings are wholly effaced. But there is enough left to give us an idea of that great vigor and power of drawing which so distinguished Mantegna, who, besides his own subjects, also painted several easily recognizable figures in the portions executed by Ardino da Forlì and Marco Zoppo. These figures are full of sentiment, in spite of the somewhat dry severity of the drawing.

On leaving this church the visitor must go to see the one called Santa Maria dell' Arena, which is said to have been built early in the fourteenth century on the site of an old Roman arena, of which there now remains no vestige. This church is especially famed for a chapel, whose walls are entirely covered with frescos by Giotto, who was only twenty-eight years old when he painted them. This chapel is a very sanctuary of Italian art. The vaults above are sprinkled with golden stars. "One would call them," writes a famous author, "the miniature illustrations of a gigantic missal." Upon the ceiling one sees Christ, the Virgin and the Prophets, gracefully grouped and forming an attractive and harmonious whole. In the apex of the choir is the figure of Christ in glory. In other parts are to be seen various religious scenes: Joachim is driven from the Temple for having taken part in the feast of the patriarchs; in another he is shown wending his way with contrite heart to the homes of the shepherds of the desert; Anne, his wife, in another scene, is asking God to grant her a child; the Angel Gabriel informs Joachim that his wife's prayer has been answered; Joachim and Anne rejoice over the fulfilment of the promise. Upon the opposite side is another series of scenes which represent the presentation and birth of Mary; the prediction that she shall marry that member of the House of David whose walking-stick shall flower; the prayers of the faithful while waiting the issue of the miracle; the marriage of Joseph and Mary; the Annunciation; the Visitation; the birth of Jesus; the adoration of the Magi; the presentation at the Temple; the flight into Egypt; the massacre of the Innocents; the Child Christ in the Temple; the baptism of Jesus; the marriage at Cana; the resurrection of Lazarus; the entrance into Jerusalem; Jesus chasing out the money-changers; the bargain with Judas; the Last Supper; the foot-washing; the betrayal; Christ before Caiaphas; the crown of thorns; Jesus carrying the cross; the crucifixion; the Marys and the dead Christ; the Resurrection; the Ascension; the descent of the Holy Ghost.

Between these two pages, as it were, on which a master's hand has traced the history of Christianity, appears a Last Judgment, in which the great Florentine master exhibited the fecundity of his tragic imagination, already aided in spite of his youth by an incomparable virtuosity. On the right, ascending to celestial glory, are bands of saints and the elect; on the left are the phalanxes of the reprobate, amongst whom mitred prelates stand cheek by jowl with filles de joie.

This chapel, like that of St. Francis at Assisi, is an historical document of exceptional value which enables us to study to the very depths the great founder of the Florentine School; it is a priceless monument of Italian art. As I said above, Giotto was only twenty-eight years of age when he executed this *chef d'œuvre*. He had as his guest at this time the great Italian poet, Dante Alighieri, who was to be for Italian literature a founder, just as Giotto was for painting. The story goes that the artist drew much inspiration from the poet, who used to visit him while at work; but there are in his work the personal elements of simplicity, grace, variety, feeling, strength and serenity which he himself worked into his compositions.

² Continued from No. 1105, page 70.

Taine, who is a good judge, wrote of him — "His fine genius, easy inventiveness, his taste for what is noble and pathetic all inclined him toward idealization and expression that work upon the feelings, and it is in this field which is peculiar to him that here, for the first time, with extraordinary *abandon* and success he has ventured on innovations and inventions. No monument better represents the dawn of the Italian Renaissance. Several traces of barbarism still exist, and the *baroque* and feeble fantasy of the Middle Ages flickers up now and again, particularly in his 'Hell.' People in those days did not know enough about the human frame and its muscles to bring together, as Michael Angelo did, in colossal and contorted figures the tragedies that Dante depicted in his apparitions and in his lugubrious wanderings." Let me add that these marvellous frescos were published in a series of chromo-lithographs in 1857, by the Arundel Society.

There are also to be admired at Padua several fine palaces, amongst others the Palazzo della Ragione, which used to be the hall of justice and which was begun in 1172, after the design of Pietro da Limena. It was the fate of this building to undergo tragic experiences: two years after the first stone was laid a great conflagration destroyed almost all of the city and put a stop to work upon the

palace: one of these is that of the Latin historian, Titus Livius, and is decorated with a bust of the historian and bears a Latin inscription which for a long time was thought to have reference to the historian himself, but which in reality relates to a namesake. Another of these three monuments, ornamented with the bust of a woman and dated 1661, recalls the tragic death of Lucretia Dondi, wife of the Marquis d'Obizzi, whose throat was cut in her chamber by a faithless friend of her husband's, Attilio Pavonello, who, unable to seduce her, thus took his revenge. This drama presents some analogy with that of another celebrated Paduan, Bianca de Rossi, who preferred to be killed upon the grave of her husband rather than yield to the desires of that infamous tyrant, Ezzelino da Romano.

In front of the Livy monument stands the wooden model of Donatello's horse for the Gattamelata statue. The walls of this hall are decorated with frescos divided into three zones and subdivided into 319 compartments, some of the work being attributed to Giotto. The middle zone is devoted to the signs of the zodiac commingled with symbols typical of each month and season of the year. A very superficial examination only is needed to prove that these paintings are not due to Giotto.



Great Hall in the Palazzo della Ragione, Padua.

building, which was not recommenced until 1209 and was only finished in 1219. In 1420, another fire destroyed the vaulting, a particularly bold piece of work, executed in 1306 by Giovanni degli Eremitani, an Augustinian. Finally, in 1755, a cyclone swept away the roof. This disaster the Venetian Senate took upon itself to repair and entrusted the work to Bartolommeo Ferracino, an architect from Bassano, who erected a magnificent timber roof and ceiling, so audacious in design that it to this day excites wonder.

The interior of this building is severe of aspect, owing to the almost entire absence of ornamentation, a characteristic it shares with many other buildings in the Lombard style of the twelfth and thirteenth centuries. The vast hall is one of the most spacious in Europe, since it measures not less than 81.5 m. long by 27.16 m. broad, while it is 24 m. high.

The interior decoration is of the strangest: on entering through the door of the municipal palace, which can be recognized by a medallion of the celebrated Paduan Egyptologist Belzoni, one finds upon either side statues of the Egyptian divinity Isis, with lion head and female body. A little farther along one comes upon the so-called "stone of infamy," a kind of pillory of black marble whither insolvents came to take in public the poor debtor's oath; it bears this inscription: "*Lapis vituperii et cessionis bonorum.*" Three cenotaphs adorn the wall which faces the entrance from the municipal

Amongst other interesting buildings must be mentioned the Palazzo del Capitano, so called because it was inhabited by the captain of the city. It was built about 1345 and still preserves of its primitive form a portico running round two sides of the interior courtyard. Nor must I forget the Loggia del Consiglio, an elegant Renaissance monument begun in 1493, and finished in 1526, nor yet the University which dates from 1222, nor the new civic museum with its many interesting deposits.

H. MERU.

LEAD SHOT. — There is a general idea that lead shot are made spherical by falling from a height. The only purpose of lofty shot-towers is to give the shot a chance to cool and harden as they tumble. They are just as perfect spheres when they start from the top as when they reach the well of water two hundred feet or so below. The usefulness of the water is merely as a soft cushion to receive them. Shot cannot be made from pure lead, but an admixture of arsenic causes the lead to form globules, like mercury. The molten mixture is placed in a big iron saucepan with perforated bottom, and the drops falling through are the shot. They must fall some distance in order to get time to cool and harden. A batch thus made, they are scooped out of the water, tumbled about in a revolving barrel with plumbago, and finally put through a series of sieves, to sort them into sizes for market. — *Scientific American Supplement.*

GARDEN DESIGN.¹—IV.

DISCUSSION.



LEAD VASE: PENSURST, KENT

formal lay-outs alone, because a combination to a certain extent was preferable in ordinary cases. In a large scheme like that of Versailles, and places of the kind, the formal lay-out was unavoidable, though at the same time it was generally done on such a large scale that people were unable to appreciate it unless they had a plan in their hands. It seemed, therefore, that something on a smaller scale was more desirable. And when one came to consider what was to be done in producing a garden at the present day, they ought to be careful not so much to get a Dutch garden, or a garden of some particular period, as to consider the principles which lay at the bottom of garden-planning in the same way as they did when engaged in house-planning. It appeared to him that some few of the principles would be as follows: The garden should be so arranged that portions of it could be seen from the house. They ought also to be able to see different views from different rooms, and, particularly, they should not be able to see the whole of the views at once. The garden should be so arranged that it was quite as much suggestive in what was not seen as it was interesting in what was seen. This was a principle which applied to almost any kind of design, and certainly to what might be called theatrical effect. The garden should be also so arranged that the house could be judiciously seen from it. One should not only be able to get a view of the house, but there should be a certain number of vistas, which should, if possible, be terminated by something of an interesting nature, such as a summer-house, or perhaps a statue. A summer-house need not always be placed at the end of a vista, because summer-houses were often better in somewhat secluded parts of the garden. Besides this, there should be certain parts of the garden which were not easily seen, with thickets for birds, and places only penetrated by the gardener, or those in search of tennis balls.

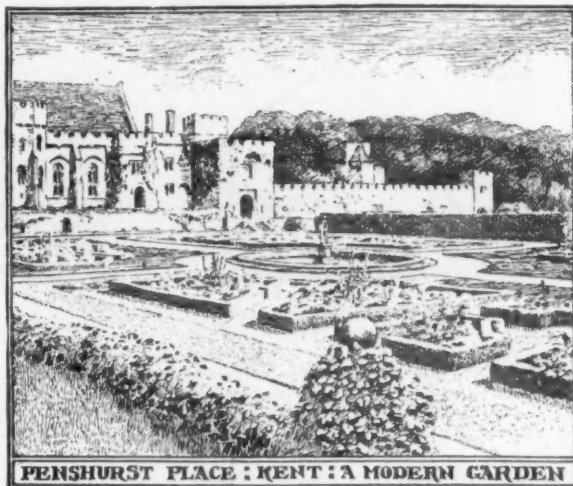


An English Garden Terrace.

They should also consider that the youth of the present age were considerably addicted to games like tennis, whilst old age was ad-

MR. J. A. GOTCH said he had much pleasure in proposing a vote of thanks to Mr. Thomas for his interesting paper, illustrated as it had been by so many beautiful views. Few of them could hope to have the opportunity of dealing with such enormous lay-outs as the Italian villas seemed to have, but even from them they could gain some few notions. One of the principal ideas that one gathered was, as Mr. Thomas had said, the excellence and desirability of a formal lay-out. He himself was not one of those who would go in for

dicted to bowls. Such games required to be played on smooth surfaces of turf, and therefore these ought to be dominant features in the laying-out of gardens, thereby producing large spaces, either perfectly level, or nearly level. These spaces, too, were all the better if they were at different altitudes. The access should be convenient, and they should be divided by some definite sort of boundary, such as a yew hedge, which grew more quickly than many people were apt to think. Such a hedge formed a beautiful background in the winter, when its foliage was dark, and also in the spring, when it was bright green, always contrasting well with the shrubs. Moreover, a hedge gave a straight line to the view, which was very desirable, and showed off the irregularity of the naturally growing shrubs. It was also important to have the paths to a certain extent level and dry, so that people might be able to walk upon them with ease, and to discourse without loss of breath. It was, of course, a good thing to be able to descend from one level to another by steps, and not by slopes, although those who were fathers and mothers of young children would confess that steps often led to serious contusions. Indeed, he had known cases where the garden had been laid out in the early days of a family with slopes, and afterwards with steps, when the children attained to years of discretion. It all came to this, that the garden should be designed as they designed a house, according to the dictates of common-sense; and common-sense, put into beautiful forms, seemed to be the foundation of the useful arts — of the art of gardening, as well as the art of architecture. Mr. Thomas had shown them some exceedingly interesting and fine specimens of gardens, especially those of the Italian villas. He was acquainted with another Villa d'Este, situated on the Lake of Como, which was a most pleasant place. There one had what seemed to be a large modern hotel, while, on turning the corner, a tremendous sixteenth-century avenue could be seen, going up hill, and leading to an alcove containing a statue. This vista was bordered on either side by a number of water-troughs, about 6 feet long, and as wide as a table. The water fell



PENSURST PLACE: KENT: A MODERN GARDEN

from one to the other of these, and as there were about 120 of them in all, the total rise would be something like 100 feet to 150 feet. All this was contained in the hotel garden, so that one got excellent accommodation there, with the study of architecture thrown in. With regard to the larger lay-outs in his own district, near Kettering, there was an enormous one, which was quite unintelligible unless the plan were studied. In this case the avenues did not all focus on the house, but were in communication with it. It was said that these avenues totalled up to the extraordinary length of 70 miles, and it was stated that the Duke of Montagu was very anxious to plan an avenue up to London, but as there were difficulties in the way, he planted the same length of avenue on his own grounds. In any case the avenues were quite as much a feature in the landscape as the ocean was at the seaside, and, in fact, one could not get away from them. At every period of the year these avenues were impressive, either by reason of the great mass of foliage in summer, or by the beautiful tracery of the boughs in winter.

Mr. F. G. F. HOOPER seconded the vote of thanks, and expressed the pleasure he had received in listening to the interesting paper and seeing such a fine collection of photographs thrown upon the screen. The subject was one of such technical nature that he would not discuss its details, but only express his thanks to Mr. Thomas for his very interesting paper. He hoped that papers illustrated by photographs would become more and more numerous, as they had marked an era in their existence that evening by using a lantern of their own for the first time. The lantern had been purchased by the Committee, aided by a substantial gift from Mr. Fleetwood, President of the Camera Club, and would be available for all future meetings.

Mr. F. M. ELGOOD said he would like to make a few remarks, which might lead to discussion. Was it perfectly correct to say that every one was now agreed that a formal garden was the garden

¹ A paper read by Mr. F. Inigo Thomas before the Architectural Association, November 20, 1896. As it was not possible to procure illustrations of the views used by Mr. Thomas in his lecture, we have reproduced certain cuts in his and Mr. Blomfield's book on "The Formal Garden in England," (published by The Macmillan Co., New York), which may serve as aids to the text. Continued from No. 1166, page 79.

SOCIETIES.

AMERICAN INSTITUTE OF ARCHITECTS.

AN adjourned meeting of the Board of Directors was held February 18 and 19, 1897.

President Post, of Committee on Government Architecture, reported that the bill to regulate the designing of Government buildings had been reported upon favorably in the House, but the committee had been unable to get it called up, from want of funds to employ some one to watch the matter, and it will be impossible to get it acted upon by this Congress. This is not an unmixed evil, as it is hoped that the next Secretary of the Treasury, Hon. Lyman J. Gage, will cooperate with the Institute in perfecting plans for the elevation of the service. . . .

Letters were read, from B. E. Fernow on re-timber tests:

UNITED STATES DEPARTMENT OF AGRICULTURE, DIVISION OF FORESTRY,
WASHINGTON, D. C., December 15, 1896.

ALFRED STONE, Secretary American Institute of Architects, Providence, R. I.:

Dear Sirs, — I am in receipt of your letter, stating the resolution passed by the American Institute of Architects.

As we were not allowed during the last fiscal year to use our entire appropriation, turning back over \$6,000 unused, the argument that our test work could not continue for lack of appropriation will hardly appeal to any committee having increased appropriations to consider.

I believe that at the present time it would hardly be probable that any exertion on the part of parties interested would be successful.

I myself should prefer to simply have the full use of the present appropriations for this work, which would enable us to rig up a simple laboratory and to carry on some preliminary scientific investigations which have appeared to be absolutely necessary, before the data so far collected, or to be collected in future, can assume the value which they will ultimately have. To do this we have money enough, and may profitably wait for larger appropriations until we have revised the general method of testing. In this particular, the determination of the moisture present and its influence upon the strength, requires much more careful investigation than the wholesale method heretofore employed has permitted.

I recall to you the fact that this series of investigations was not so much undertaken to establish merely strength values, but rather to study the effects of such variable influences upon strength, and finally to furnish data of inspection by which an engineer or architect may be able to predict relative value of any given stick. I call your attention in this connection to a short article which is to appear in Riehle's Physical Digest of next month, in which I contend that for the establishment of standard values of strength, green timber alone should be tested.

I have written thus at length, appreciating your interest in our work, so that you may know my position regarding the present status of it.

Yours truly, (Signed) B. E. FERNOW, Chief.

We shall presently issue a circular containing in condensed form the results of all our tests, 40,000 in all.

The Secretary reported that Mr. Fernow would send circulars to all Fellows of the Institute. Mr. President Post stated that the charter of the Greater New York will provide for tests of building materials.

From W. A. Langton, Registrar of the Ontario Association of Architects, announcing that at present it was not feasible to consider an international union under the A. I. A., as the question of forming a Dominion Association was now under consideration.

From W. H. Hayward, Secretary of National Building Association, announcing favorable action of the Association in regard to bill regulating Government architecture.

From Cass Gilbert and R. D. Andrews, in regard to the proposed competition for the buildings for the University of California, Mr. Andrews advising consultation with the A. I. A., as contained in the following letter:

BOSTON, January 16, 1897.

J. B. REINSTEIN, Esq., 217 Sansome St., San Francisco, Cal.:

Dear Sir, — The immediate cause of my writing to you is the receipt of a request from Mr. Maybeck to write upon a card the names of six architects for judges of the competition for the buildings of the University of California, and to sign the same. I saw Mr. Maybeck in Boston and discussed with him other possible schemes for competition. I have also seen and talked at length with the men in New York after their interview with Mr. Maybeck.

There are so many points of view regarding a matter of this sort that I am convinced that the only dignified, and consequently safe, path before you is to appeal to the highest professional board of the country, which is the American Institute of Architects, and to ask them for a detailed scheme of competition, or to have them confer with the Regents in regard to the matter in a formal and authorized way. I write this letter and make this suggestion largely because Mr. Maybeck has made this specific demand upon me, as noted above. I must refuse to act in this matter as an individual while the important organization of our profession has not been authoritatively approached.

Very truly yours, (Signed) ROBERT D. ANDREWS.

A prolonged discussion showed that the committee representing the University had consulted many of the officers of the Institute and its Chapters, as well as other prominent architects, all of whom, it is believed, had advised against an International Competition, and the President of the Institute had already signified that the services of the Institute could be obtained.

The Secretary stated that he had received a letter from Messrs. Smithmeyer & Pelz, which accompanied a protest against placing the name of General Casey's son on the Commemorative Tablet of the Congressional Library Building (Senate Document, No. 88, 54th Congress, 2d Session), which, together with Mr. Casey's reply, presented by Mr. Carrère, was received, and both were ordered to be placed on file.

After a general discussion it was Voted, That the Detroit Convention be held on the date fixed upon by the local committee, namely, September 28, 29 and 30.

The President reported in regard to headquarters of the Institute at Washington that the Committee finds that the act of Congress, restricting the use of the Congressional Library Building solely for library purposes, will prevent granting any part of it to the Institute. The Washington Chapter, however, reported that, under certain conditions, permit may be obtained for quarters in the Smithsonian Institution, or in the Corcoran Art Galleries, but it would be undesirable to subordinate the Institute to any other society. The Committee, therefore, propose to pursue the matter farther and see if proper quarters cannot be procured, as it was of the first importance to establish headquarters at Washington, and found a Museum of Architecture, which could, by the help of the United States Government, through its consular representatives, easily secure the material for the most complete collection of examples and models in the country. The Board expressed its approval of the plan, and requested the Committee to continue the work which it had begun.

The session of Friday, February 19th, was devoted largely to a consideration of proposed revision of the By-Laws.

Mr. Keister gave an outline of the changes proposed, and then read the entire Constitution and By-laws proposed by the Committee. (This is not published here, as the Committee is to issue it in circular form and send it to every member of the Board of Directors for review and criticism.) A prolonged discussion ensued, in which the President gave the following outlines of his view of the proper course for the Institute to pursue:

"The Institute of Architects can only be thoroughly influential in exact proportion to the strength of its Chapters, and as long as the local societies are prosperous and influential. Suppose they become weak and struggling, the Institute will lose its prestige. Everything should be done to foster, guide and protect the interests of the Chapters.

"I believe that the step taken at the time of the consolidation with the Western Associate of Architects in dispensing with the old organization, by which all members of Chapters were Associates in the Institute, did more to weaken the Institute than any good that was gained. I believe it is absolutely essential, in order to foster the Chapters, to make their membership entirely desirable by the character of the men that we wish to have in affiliation with us, and that every architect who is in any way connected in any grade of membership with one of the Chapters, or one of the constituent societies, should have *ipso facto* a membership in the Institute co-relative to the membership in the Chapters. I think it is almost essential to the prosperity of the various sub-societies that a return should be made in that respect to the old organization. There is a great deal that is very interesting and should be thoroughly and well considered in the report of this special committee. I would, therefore, suggest that the Members of the Board be requested to communicate their views or criticisms to the Secretary or President, as the committee may elect, and would suggest that they request that these criticisms be made within some special date; that the committee should then convene to consider these criticisms within some other special date, and to remodel the Constitution and By-Laws as proposed by the Board, and under its remodelled form, to have it again printed and sent to the Directors, and, if the committee think it desirable, that a special meeting of the Directors be called for the purpose of considering the final draft of the Constitution and By-Laws. A mistake in the changes in the organization would be almost fatal to the welfare of the Institute.

"Since I have been a member of the Institute of Architects — and I believe that I was one of the members of the early association — most of the time in its deliberations at conventions has been occupied in the consideration of the Constitution and By-Laws. The Institute is capable of something better than the consideration of the Constitution and By-Laws when it meets in convention. Let us, then, try to perfect them and put them in such shape that they may have some reasonable chance of permanency. If I might digress, I may, perhaps, be pardoned for taking your time for a few moments, and speak on the general subject of the progress of the Institute in case its Constitution and By-Laws are properly and permanently established, and in case it has a permanent location and national headquarters in Washington. During the period of my presidency I have given much thought to the matters of the Institute, its present status and its possible influence. We have, I believe, passed through the period of organization and early growth, and have reached a point at which it is possible that the Institute of Architects should do careful work in controlling the development of the architecture of the country as a *fine art*, not as a mere business, but as a *fine art*. I propose, after having discussed the matter with several of our prominent architects, at the next convention of the Institute to submit a proposition — for by that time I presume our headquarters will be established at Washington — that the architects of the Institute go to their rich clients with a thoroughly perfected scheme, and solicit subscriptions for as large an amount of money as they can induce their clients to contribute for educational purposes. I believe that by going to our rich clients, and of course the architects of the country have among their clients all the rich men of the land, that we could raise a sufficient sum of money to endow six or eight travelling-scholarships in Europe. I believe it is perfectly feasible for the Institute to establish competition for such

scholarships, and that by pursuing such a course it will add to its own dignity, and add undeniably to the influence of the Institute as a body, for it is a well-known fact that the public view an individual, or society, or corporation by and in the same proportion at which it views and asserts itself.

"This is a pretty large subject and I hope during the next few months to develop it in such a way that I may be able to submit it to the Institute at the next convention, and my object in mentioning it at this time is that, as the preparation and development of such a scheme would require a very considerable amount of labor, I do not feel inclined to undertake it unless it is the general opinion of the Board that the scheme is not entirely wild and visionary, and that it may be regarded, if properly considered, as likely to be reasonably successful. I would say further, although I have simply considered this matter in a very general and loose way, that it is my idea if we could collect sufficient money to endow such travelling-scholarships that the Institute might establish a quarterly or semi-annual competition among the architects and architectural students, not for money prizes, but for the right to compete for scholarship prizes. That these competitions should be similar in a certain measure to the competitions for entrance to the Beaux-Arts in Paris; that they should consist of architectural problems worked out by plans, elevations and sections and certain written examinations, also examinations in modelling and free-hand drawing. This could be done by local committees of the various societies and referred to a central committee of the Institute, which would examine and see if the young men were eligible to compete for the Grand Prix. Should the Institute so assert itself as an educational body, that would be the strongest claim it could make for the establishment of a great architectural college in Washington.

"Let us see what can be done, for it is desirable that such a thing should be done; second, if it can be done, is an organization possible? third, it would, perhaps, be a matter of the least difficulty to get the necessary money. If the architects thoroughly and honestly go to work with their clients, they can get them interested.

"I would like to ask the committee to consider the introduction into their By-Laws of a provision something similar to that which obtains in the Fine-Arts Federation of New York, that for the ordinary transaction of business, the body in convention may vote as a whole, that when the ayes and the noes are called, a vote should be taken by Chapters in proportion to the membership in each Chapter.

"My views may be entirely different from that of the members of the Institute, in that while I can see no possible reason why artists (I mean painters and sculptors), should not be members of Chapters or other constituent societies, I do not think that under any circumstances they should be Fellows of the Institute of Architects. We are a society of architects, and I want you to pause for a second and think what the term 'architect' means. Until the recent times and division of labor the architect was the engineer, painter and sculptor, as well as the designer of buildings (that ought not to be our aim), and I think that the very best men in the profession may be fairly considered to be painters and sculptors, as well as architects. I do not believe that any man ever made a success in architectural design, unless he had sufficient technical knowledge of painting to be able to render his design and make a picture of it; nor is a man able to make good details unless he is capable of putting his fingers into the clay and mould it himself? No man could arrive at true architectural art unless he is to a very considerable extent an engineer, though he does not practise it specifically and become an expert. The true architect includes the painter, the sculptor and the engineer, and I do not think that a man who simply terms himself a painter, a sculptor, or an engineer, ought to be a Fellow of the Institute of Architects."

Mr. Warren moved: That this Board give its hearty endorsement to the plan. Unanimously carried.

Upon motion of Mr. Eames it was Voted that:

"Whereas, The President of the Institute has outlined a policy and partially formulated a plan looking to the establishment of the Institute at the National Capital, and upon which the future importance and success of the Institute largely depends — a plan which has received the heartiest endorsement of the Board of Directors; and

"Whereas, his personal influence and ability are absolutely necessary to the successful incorporation of this achievement, be it

"Resolved, That the continuance of Mr. Geo. B. Post in the office of Presidency of the A. I. A. is hereby deemed essential to the interest of the Institute, and in order that this object may be attained, we, the members of the Board of Directors, move an amendment to Article IV, Section 1, of the Constitution and By-Laws, to read as follows: 'Section 1, The President shall be elected at each annual convention to serve for one year.'

Attest: ALFRED STONE, 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.]

DORMITORY ON NASSAU ST., PRINCETON, N. J. MR. M. TAYLOR PYNE, ARCHITECT, NEW YORK, N. Y.

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

ST. MARK'S M. E. CHURCH, BROOKLINE, MASS. MR. G. A. CLOUGH, ARCHITECT, BOSTON, MASS.

HOUSE OF E. C. BENEDICT, ESQ., FROM THE NORTHEAST, INDIAN HARBOR, GREENWICH, CONN. MESSRS. CARRÈRE & HASTINGS, ARCHITECTS, NEW YORK, N. Y.

STABLE ON THE SAME ESTATE.

STABLE OF MR. J. C. HOAGLAND, SEABRIGHT, N. J. MESSRS. SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS, NEW YORK, N. Y.

OWING to an accident the three next above mentioned illustrations cannot be published until our next issue.

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

CLOVELLY, DEVON, ENG.

A GROUP OF CAPITALS: SICULO-NORMAN.

[Additional Illustrations in the International Edition.]

ST. MICHAELSKIRCHE, HILDESHEIM, HANOVER.

[Gelatine Print.]

BESIDES the bronze statue recently erected by the City of Hildesheim to the memory of her great Bishop Bernward (950-1022), the quaint old town can boast of still another, far grander, monument which this remarkable man himself created during his lifetime, the Convent and Church of St. Michael, the Bishop combining the characters of founder, patron, painter, sculptor, architect and builder all in himself. Many years of his useful life were devoted to this noble task, and after he had brought the work to a close, and finished by preparing his own burial-place in the crypt under the west choir, he died and was laid at rest a few months after the consecration of the church, in 1022. The plan of the church, a three-aisled basilica, in pure Romanesque style, which, unfortunately, is not preserved in all its parts, is conceived in uncommon grandeur. According to the rule of the Benedictine Order, to which convent and church were dedicated, the architect-bishop gave the church two distinct choirs, an east choir for the diurnal services, and a west choir where the nocturnal vigils for the dead were held. Of these only the west choir is still in existence, and as the latter is being used for the regular services, the visitor receives the impression, with reference to the points of the compass, as though the whole church had been turned end for end. There were, of course, also two transepts, each of which had arms extending north and southward. These extensions, divided off from the transepts by partition walls of considerable height, contained double galleries and were named the "Choirs of the Holy Angels." Only one of these is left, but, fortunately, in an excellent state of preservation; notably the beautiful "Gallery of Angels," modelled in stucco and tinted, is intact. Access was had to these galleries through four staircase-towers, arranged centrally in front of the transept-extensions. These towers were of octagonal plan, having a round upper story, surmounted by a conical roof. They were overtopped by two large square towers placed over the transepts. It may be imagined that the church as originally built, with its six towers, must have been an imposing sight. Only the eastern one of the large towers is preserved. The slate-covered spire shown in our plate is of much later date, it having been placed on the tower about the year 1679.

BAPTISMAL FONT IN THE SAME CHURCH.

[Gelatine Print.]

ELY CATHEDRAL, ENG.: NORTH AISLE, LOOKING WEST.

ELY CATHEDRAL, ENG.: GENERAL VIEW OF CHOIR.

COMMUNICATION.

[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.]

THE ATTEMPT TO EXTEND THE USE OF CONCRETE IN BOSTON.

BOSTON, March 6, 1897.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

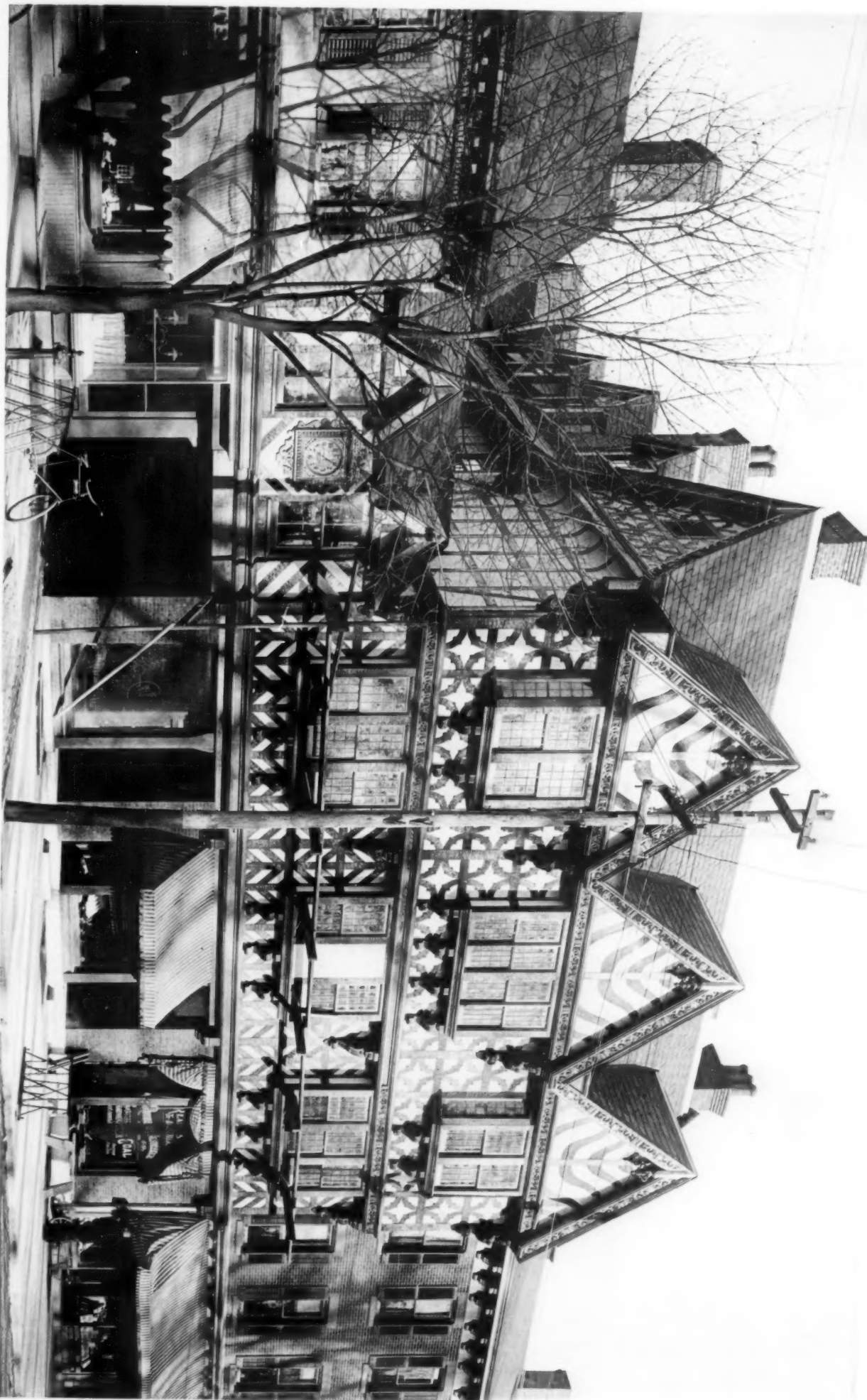
Dear Sirs, — In your *American Architect* of to-day you speak of a bill before the Legislature looking towards authorizing the use of concrete for foundations.

House Bill No. 357, which is, I presume, the bill referred to, is much broader in its scope than the article in the *American Architect* would lead one to suppose, as by its enactment the use of concrete would be authorized as a substitute for stone and brick in almost all their uses.

The law at present allows the use of concrete for footings, and the opposition to the bill came from a feeling that the general use of concrete for walls, especially above ground, should be hedged about by safeguards which should protect the community against the use of a dangerous material, — which concrete unquestionably is, unless made with the greatest care. I am,

Yours truly, ARTHUR G. EVERETT.

Copyright, 1897, by The American Architect and Building News Co.



DORMITORY ON NASSAU STREET, PRINCETON, N. J.

M. TAYLOR PYNE, Architect.

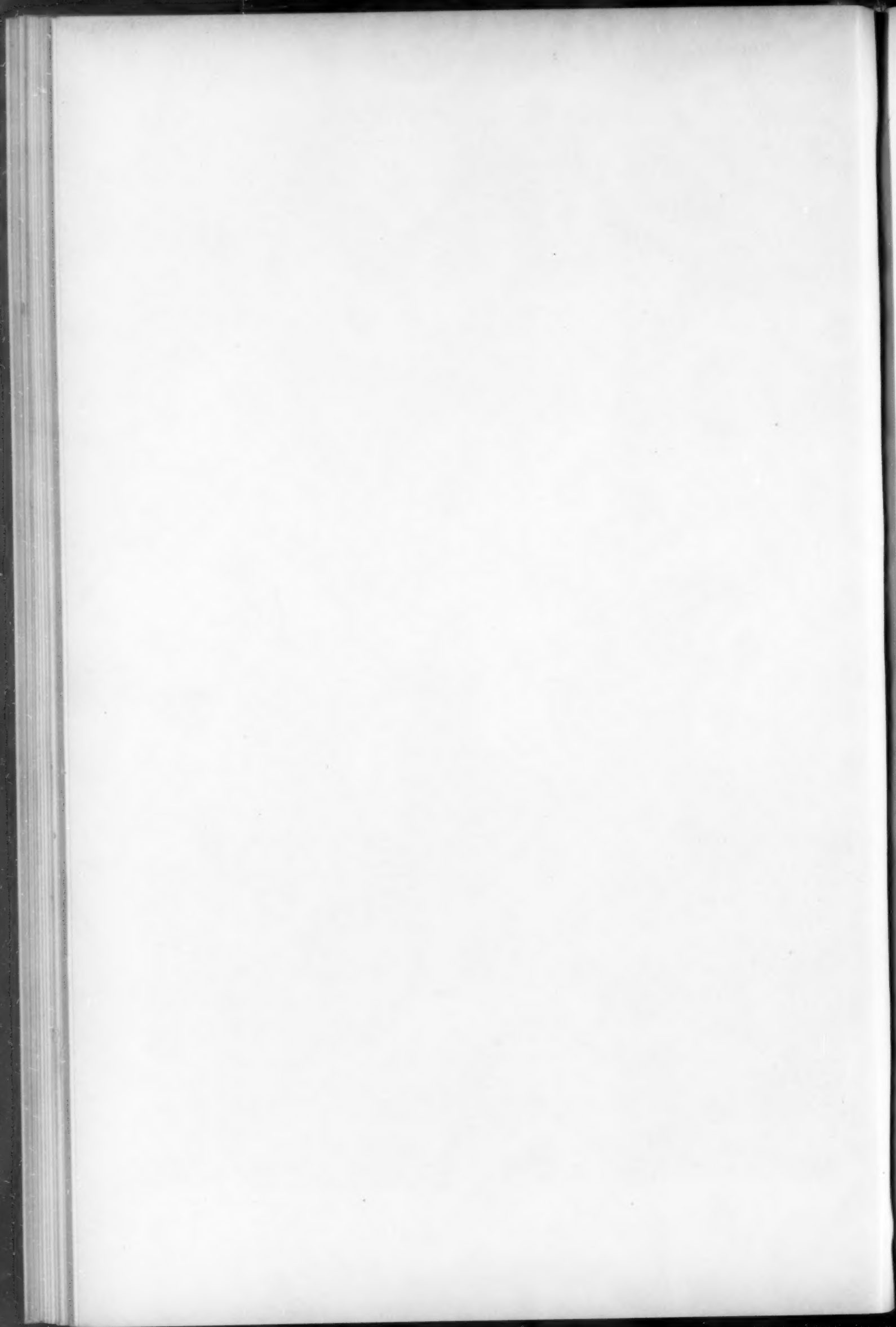
THE HELIOTYPE PRINTING CO., BOSTON.

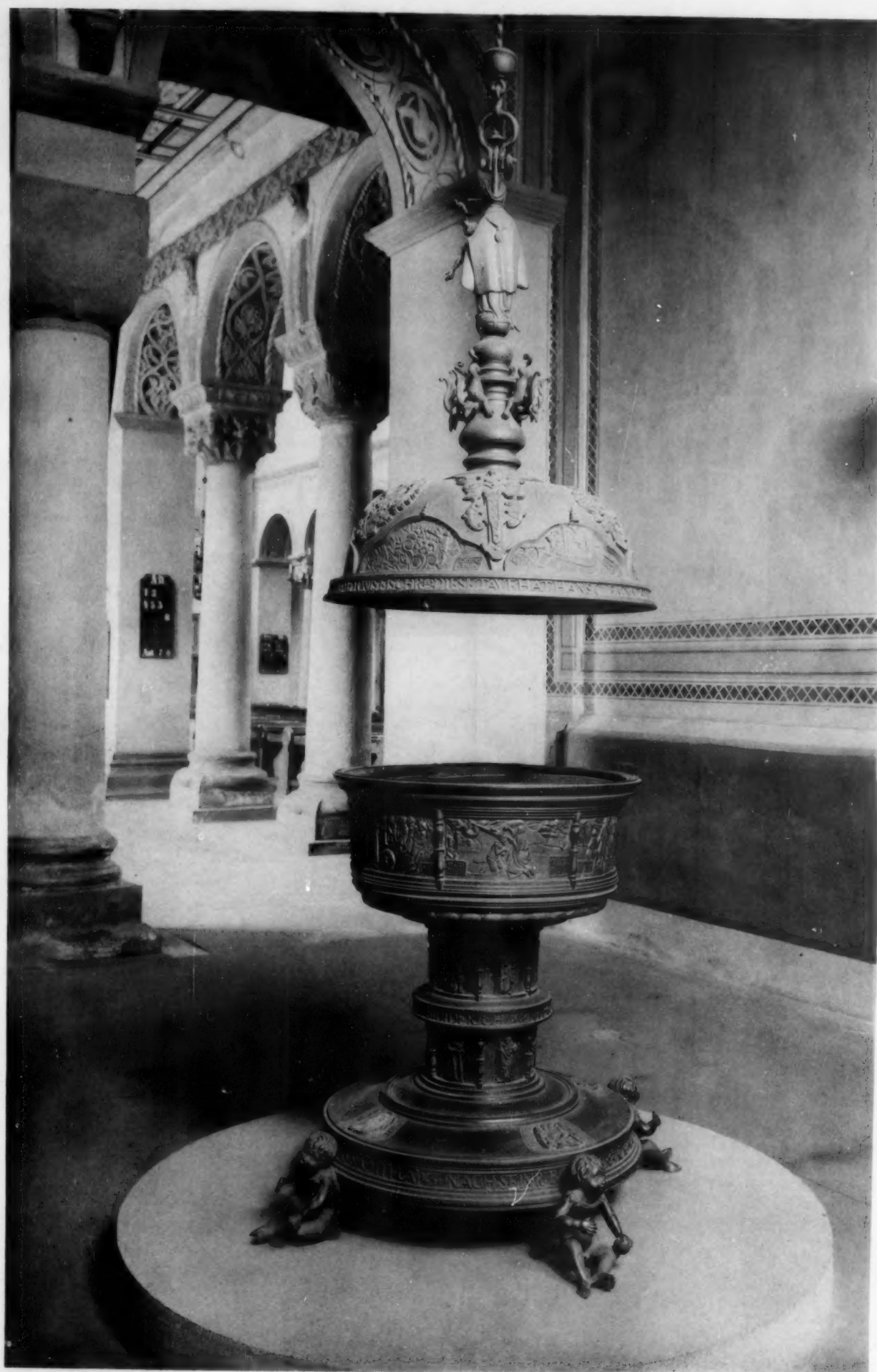


Blätter für Architektur.

Neumann & Co., Berlin

CHURCH OF ST. MICHAEL, HILDESHEIM, HANOVER.

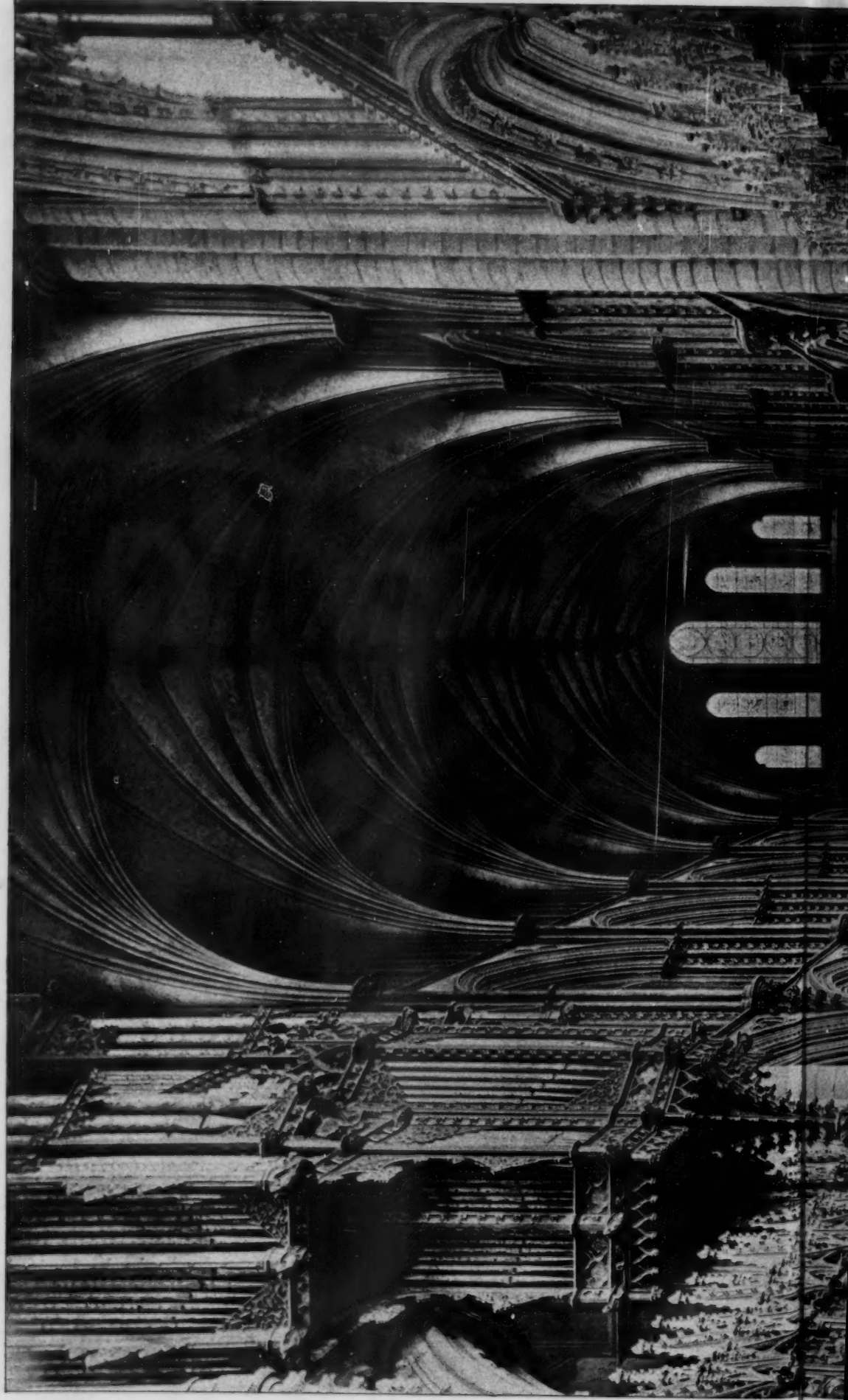


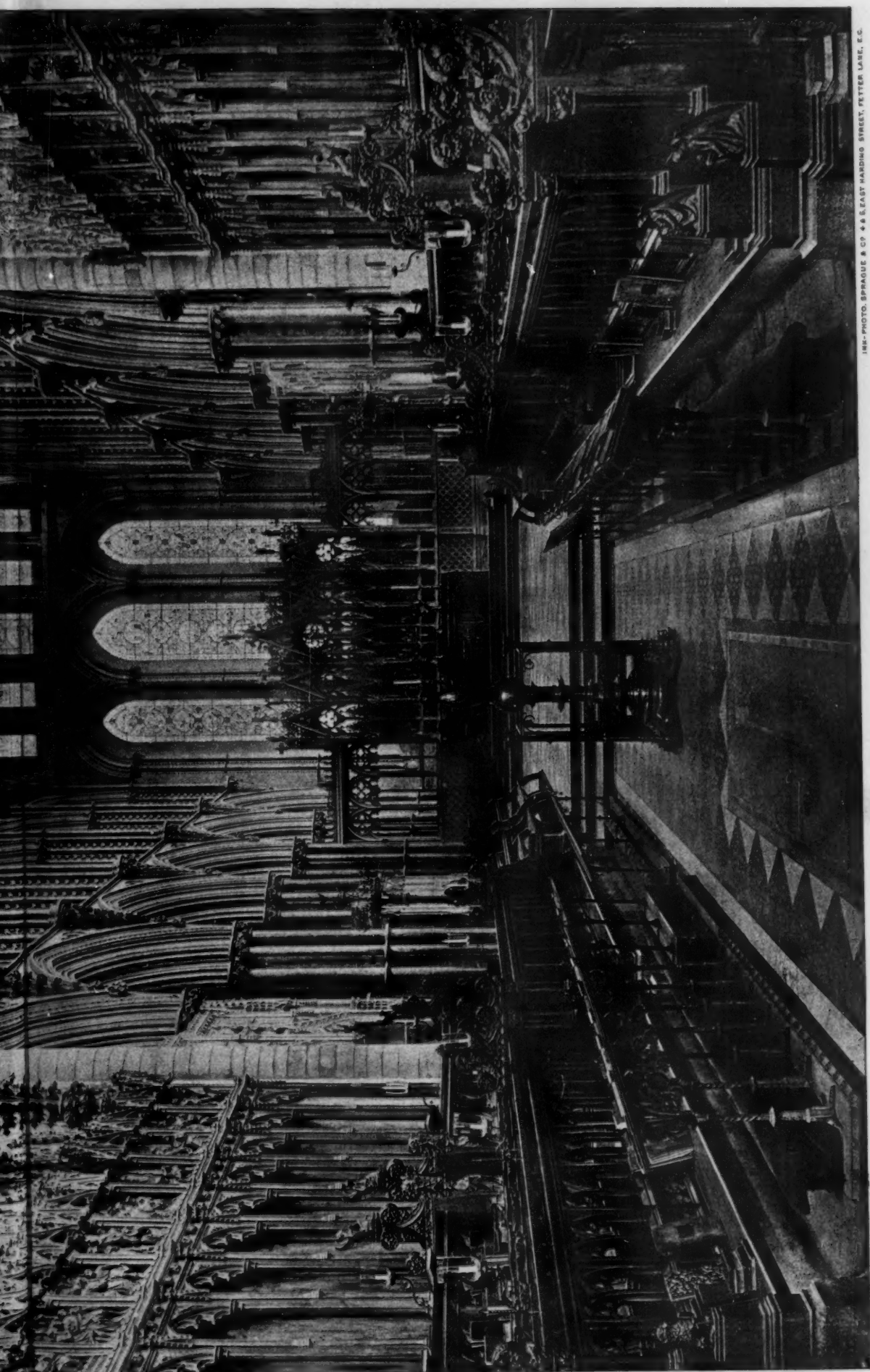


Blätter für Architektur.

Neumann & Co., Berlin

BAPTISMAL FONT IN ST. MICHAEL'S CHURCH, HILDESHEIM, HANOVER.





188- PHOTO. SPRAGUE & CO. 44 & 46 EAST HARDING STREET, FETTER LANE, E.C.

PHOTOGRAPHED BY S. B. BOLAS & CO.

CATHEDRAL SERIES, No. 91.—ELY: GENERAL VIEW OF CHOIR.



ST. MARK'S M. E. CHUR

G. A. CLOUGH



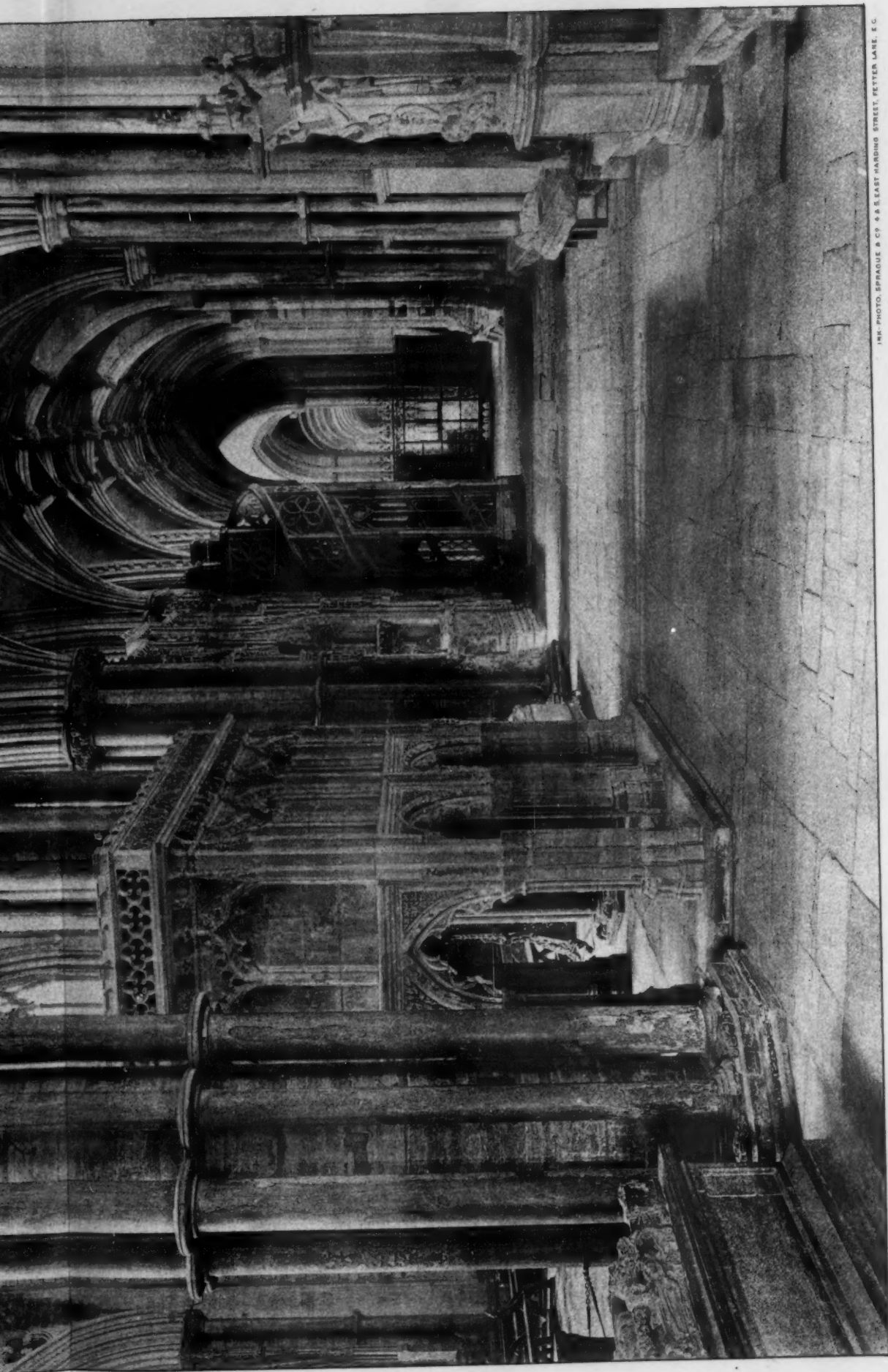
CHURCH, BROOKLINE, MASS.

CLOUGH, ARCHITECT.

HELIOTYPE PRINTING CO., BOSTON

AMERICAN ARCHITECT AND BUILDING NEWS, MARCH 13, 1897. No. 1107.





PHOTOGRAPHED BY R. S. BELLAS & CO

CATHEDRAL SERIES, No. 11.—ELY: NORTH AISLE, LOOKING WEST.

1881. PHOTO. SPRAGUE & CO. 4 & 6 EAST HARDING STREET, FETTER LANE, E.C.