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CONTENTS.

SUMMARY:—

The Soldiers' and Sailors' Monument for New York. — Later News about the Harrisburg Capitol Competition. — Advertising in a Government Publication a Public Scandal. — A Collection of Photographs of American Sculptors' Works in Process of Formation. — The Niagara Water Power. — The Great Engineering Strike in England. — Ancient Greek Houses unearthed at Priene. — The Marconi System of Telegraphy.	77
THE HARRISBURG CAPITOL COMPETITION.	79
LETTER FROM PARIS.	80
SOCIETIES.	82

ILLUSTRATIONS:—

St. Paul's Church, Rochester, N. Y. — Rose-windows: Plate VIII. — House at Middleboro, Mass. — House and Staircase-hall at Middletown, Conn. — A Dining-room, Hartford, Conn. — West Side Republican Club-house, New York, N. Y. — Apsidal Treatment, No. 27: Nave of the Cathedral, Lucca, Italy. — Equestrian Statues of General Washington: Two Plates.	82
Additional: Sunday-school Annex, St. Paul's Church, Rochester, N. Y. — Main Porch of the First Presbyterian Church, Detroit, Mich. — Premiated Design for the Hotel Metropole, Morecambe, Eng. — Alliance Assurance Offices, Manchester, Eng.	82

COMMUNICATIONS:—

The Government Timber-tests. — The Stevenson Monument at San Francisco. — Electrical Procedure.	82
NOTES AND CLIPPINGS.	84

THE competition for the new Soldiers' and Sailors' Monument, in New York, which ended in the selection of a design by Messrs. A. A. and C. W. Stoughton, with Mr. MacMonnies as sculptor, has brought about renewed troubles between the artistic societies and the Monument Commission. It will be remembered that the former have long maintained the opinion, which, we suppose, is shared by nearly all artists, that the Fifth Avenue entrance to the Central Park, hemmed in on two sides by lofty buildings, and crowded with discordant attractions, is not a good place for setting up an important and interesting work of pure art; and they, at one period, earnestly advocated the selection of a site for the monument in question on the Riverside Drive, which, with its romantic background of river and distant hills, affords unrivalled advantages for such a purpose. The Commission, however, notwithstanding the representations of the united artistic societies, preferred the more "central" and crowded location at the Park entrance, and voted to adopt it. Now, however, it seems that, under the law, no monument or statue of any kind can be erected upon land belonging to the City of New York without the consent of the Mayor, the President of the Board of Aldermen, the President of the National Sculpture Society, and the President of the Municipal Art Society. The accepted design, which was submitted to a jury consisting of Professors Ware, Hamlin and Sturgis, is a very attractive one, quite worthy of the best setting that can be secured for it; and it is perhaps through a consciousness of this that the National Sculpture Society has made one more determined effort to prevent its artistic burial at the Park entrance. At a meeting a few evenings ago, the Society unanimously adopted a resolution expressing its hope that its President would see fit to refuse his consent to the erection of the monument in that place; and it is understood that the President, Mr. J. Q. A. Ward, agrees in opinion with the Society. Without his consent the monument cannot be placed where the Commission proposes, unless the Legislature should repeal the existing law; and it is not likely to do so. Of course, it will require a good deal of resolution on the part of the Presidents of the Sculpture Society and the Municipal Art Society to persist in preventing the execution of the present scheme, but it is much to be hoped that, having taken action, they will remain firm. Independent of the merits of this particular case, the whole future usefulness of the two Societies depends upon their faithfulness to their principles. If they stand resolutely by their opinions, the community will think that those opinions are of value, and will hereafter consult and respect them far more than ever; while, if they allow themselves to be swayed by considerations of expediency or personal influence, their usefulness will at once end. To have their judgment set aside by the Legislature, if this should happen, would not lessen their real authority, but

would rather increase it, by conferring upon it the crown of martyrdom; and any abandonment of the field now would be a very great misfortune for American art.

IT seems that a new chapter is not unlikely to be added to the story, illustrative of Pennsylvania honor, with which our readers are already familiar, with the object, no doubt, of teaching a lesson to people who presume to criticise persons in power. It will be remembered that six architects were specially invited to submit designs in the recent competition for the Harrisburg Capitol, and were promised, in consideration of their doing so, compensation to the extent of one thousand dollars each. This compensation, we are told, will probably be withheld from five of the six architects in question, on the ground that, as their designs could not have been executed, without modification, for five hundred and fifty thousand dollars, they have violated their part of the contract, and are not entitled to require from the State performance of its part. The sixth competitor, whose design could, it is claimed, have been carried out for the sum mentioned, and will therefore, according to the story, receive his thousand dollars, is the one whose drawings were excluded from competition by the experts, on account of their violation of the terms of the programme. The agreeable impression which this proceeding is calculated to produce upon the profession is likely, it seems, to be intensified by the determination which is said to have been taken by the Capitol Commission, to refuse to pay the expert jurors the agreed compensation for the time and trouble which they expended in examining and reporting upon the competitive designs. What excuse could be found for withholding the experts' compensation remains to be seen, and it is quite likely that the Commissioners are innocent of the intentions attributed to them by the newspapers; but the mere suggestion of the possibility that they may entertain such purposes, supported by the knowledge of the manner in which they have already treated a contract with professional men, will make it difficult for the State of Pennsylvania to obtain honorable expert service hereafter.

WE have been asked our opinion, as conductors of a journal representing the building trades, upon the practice of the Bureau of American Republics in soliciting paid advertisements for the periodical publications issued by the Bureau, which are printed at the Government Printing Office, and distributed at the public expense. The Director of the Bureau, in his annual Report to the Secretary of State, defends his system by saying that "It will be found upon examination that publishers of trade journals of the best repute have either offered no criticisms, or, having received a proper explanation of the policy, have promptly endorsed it." So far as we are concerned, it is hardly necessary to say that, if we have hitherto offered no criticisms on this practice, we have never endorsed it, nor would it be possible for us to do so. The excuse given is that the annual appropriation for the Bureau is small, and that the money received for advertising in its publications, which amounts, we believe, to something like fifty thousand dollars a year, forms a welcome addition to its resources; but the fact that a certain amount of public benefit is derived from an obvious perversion of a public trust is no excuse for such a perversion. It is evident that to allow officials to use the public property for carrying on any sort of money-making business in competition with private individuals is to open the door to the grossest corruption and oppression. The Constitution makes no provision for the conduct of such business on the part of any department of the Government, and any law of Congress, supposing one to exist, authorizing such a traffic, would be void, so far as it transcended the powers vested by the Constitution in the General Government. At the time of the incorporation of the United States Bank it was questioned whether such an incorporation could legally be granted; but the Act was sustained, on the ground that the establishment of such an institution was necessary and proper for carrying on the fiscal operations of the Government. No such justification can be alleged for the practice of lightening the expenses of a department by using its publications as an advertising medium, and it is to be hoped that a summary stop may be put by the Executive to a system which not only seems to be illegal but is obviously

discreditable to the Government of a great and honorable Commonwealth like ours.

THE National Sculpture Society, through its Secretary, Mr. Barr Ferree, 112 Wall St., New York, appeals for photographs of examples of American sculpture. The Society believes that there are in this country a large number of works, existing either as monuments in cemeteries or elsewhere, as casts or originals in museums and private collections, or as bits of architectural sculpture, which it is important to be able to compare and study; and the formation of a collection of photographs of such works should be begun without delay. It is desirable that photographs should be given outright to the Society, as they can in that way be used with more freedom; but the Society will gratefully accept on loan such as the owners do not wish to part with absolutely, and will care for them during the period for which they may be lent. In regard to specimens of sculpture of which no photographs are known to be available, the Society would be glad to receive information, giving the location of the works, the name of their author, if possible, and any facts in regard to their historical connection, or their relation to architectural or other objects.

WE owe to the kindness of a subscriber some cuttings from the Buffalo newspapers, describing the turning on of power from Niagara Falls to various mills and elevators in Buffalo. Several manufacturing plants, as well, we believe, as some of the lines of street railways, have been operated for several months past by the Niagara power, but it is only within a few weeks that arrangements have been completed for delivering what is almost an unlimited supply. The main conduits transmit current from the Falls at a pressure of about ten thousand volts, but this is, of course, converted into one of much lower pressure before it is utilized for motive power. Buffalo is only about twenty miles from the Falls, so that transmission is a comparatively simple matter, and there seems to be a prospect that the factories at Niagara itself, with those in Buffalo, including the street-railway system, which already takes some two thousand horse-power, will consume all the current that the present turbines can supply.

ENGINEERING has an interesting article on the great engineers' strike in England. While deploring the trouble, it says, without hesitation, that it had to come sooner or later, for the engineering business could not have continued long in England under the conditions imposed upon it by the Unions. The latter, as it says, no doubt with truth, closely organized and cunningly led, have attacked, one after another, the employing corporations, and, taking advantage of their want of a common understanding, or rather, perhaps, of their jealousy of each other, have reduced them to a condition of dependence which has become unendurable. Now, the engineering contractors, finding that they must either manage their own affairs or abandon their business to the Americans and Germans, have themselves united against their united oppressors to fight a battle which they know to be one for the life or death of the industry in which their property is invested. Meanwhile, the English newspapers are full of suggestions in regard to the matter. Among these, those which show the advantages in the way of peace and harmony which have followed profit-sharing in engineering operations are the most interesting. The manager of the Metropolitan Gas Company, Mr. Livesey, tells, for example, how, after a long and determined struggle with the Unions, which attempted to take the control of the Company's works out of his hands, he succeeded in freeing himself from their dictation, and then established a profit-sharing scheme under which his men work far better and more intelligently than before, and find happiness and comfort in doing so. Certainly, such a man should be able to speak with authority in regard to the interests of both employers and men, and he says, in regard to the engineers' struggle, that: "The temporary stoppage of a great industry, the distress of many thousands of families, and the heavy losses of the employers, great calamity as it is, is as nothing to the ruin the trade unionists would bring upon the nation if the theories that animate them were allowed to prevail." In resisting their demands, the English engineering contractors are, as Mr. Livesey says, "rendering a great service to the country." *Engineering*, in speaking of Mr. Livesey's experience, says that while coöperation, in principle, is the best of all remedies against the mutual hatred which designing agitators stir up for their private benefit, it is difficult to apply it in the engineering business, where the

risks are great, and losses often more than equal profits. It would, however, be possible, perhaps, to make a beginning by giving foremen or superintendents an interest in the pecuniary result of the work on which they might be engaged. They would, presumably, be able to bear a small share of a loss, where the ordinary workmen could not be expected to do so; and the increased zeal with which they would be likely to do their part of the work would be peculiarly effective. If we are not mistaken, a good deal of engineering work, including the operation of certain railroads, is done in this country under some simple plan of this sort, and the English contractors would undoubtedly be glad just now to have all the light that they can get on the subject. Of course, the leaders of the Unions there, as everywhere, bitterly oppose everything that tends to mutual understanding between employers and employed; but there is a feeling now in England that British industry has been ridden by the Union agitators long enough, and an improved system now has a better chance of being tried than ever before.

PROF. BENJAMIN IDE WHEELER writes to the *Tribune* an interesting account of the explorations which have been made by the Germans at Priene, on the coast of Asia Minor, opposite the island of Samos. Many years ago, the temple of Athena, portions of which were then still standing, was studied by an English expedition, and the capitals and bases there found, under the name of "fragments from the Temple of Minerva Polias at Priene," are familiar to architects as the most beautiful known examples of these features of the Ionic order. Since the English expedition, the local lime-burners and masons have made way with what was left of the temple, and nothing now marks its site but a heap of stones. Two years ago, the German archæologists resolved to begin new investigations, and the excavations so far made have been surprisingly fruitful. Although Priene did not reach the height of its prosperity until the time of Alexander, it seems to have possessed a certain superiority of artistic cultivation, possibly in consequence of the relations which it maintained with Athens, of which it is said to have been a colony; and it is most fortunate that the substructure of the ancient city has been found in a remarkably perfect state of preservation, so that the streets, with the various buildings on them, the agora, with its porticoes, the council-house, the seats in which are still in place, and a small theatre, are plainly to be distinguished. In the private houses, not only is the style and general distribution quite distinguishable, but the remains of the decoration are still visible. Professor Wheeler likens the ruins to those of Pompeii, and the study of them, in comparison with those of the Græco-Roman town of nearly five hundred years later date, will be most instructive.

THE *Revue Industrielle* gives some particulars of the most recent experiments with the Marconi system of telegraphing by electricity without wires. As every one knows, the principle of this system is the transmission through water or air of impulses at a certain rate of succession, which are received by an apparatus tuned, so to speak, in accord with the transmitting instrument. The inventor has lately set up a transmitting station on the shore of the Gulf of Spezzia, and a vessel of the Italian navy has been detailed to receive the messages. When all the circumstances are favorable, it is found that messages are readily sent from the shore to the ship, through a distance of ten miles or more; but variations in the weather, other conditions remaining the same, will sometimes reduce the distance to four or five miles. It is found also, that, although the current is transmitted through the water, and would seem to diffuse itself through the fluid, an obstacle interposed between the transmitting and receiving instruments sensibly checks the signals. As soon as the ship carrying the experimental receiver moved behind a point of rocks, so that it was shut out from sight from the transmitting station, the signals became unintelligible, although the distance between the two instruments was less than four miles; and as soon as the ship moved out into open water, so that it could be seen from the transmitting station, the electric signals became clear again. By enclosing the receiver, or putting it behind the chimney, also, the signals were weakened. The experiments seem, however, to have demonstrated the value of the Marconi system, and, unless it is superseded by the Tesla method of employing very powerful and intense currents, it seems likely to develop into a practical form of telegraphy.

THE HARRISBURG CAPITOL COMPETITION.

WE make the record in the interesting but, to all architects, disappointing case of the recent competition for the Legislative Building at Harrisburg complete up to date by publishing, at length, the opinion of Judge Mitchell of the Pennsylvania Supreme Court on the appeal from Judge Simonton's opinion in the lower Court.

COPE *et al.* } MAY TERM 1898, NO. 4.
vs. } C. P. DAUPHIN COUNTY
HASTINGS *et al.* } FILED.

MITCHELL, J.

By the Act of April 4, 1897, P. L. 19, the respondents were appointed commissioners to erect a new State Capitol at Harrisburg. The location, upon or near the site of the old capitol, the Colonial style of architecture, and the cost, not to exceed \$550,000, were fixed by the Act, and were mandatory upon the Commissioners and every one dealing with them. So, to a lesser extent, was the fireproof character of the building, but everything else was left to the discretion of the Commissioners under the general direction that the building should "in their judgment be adapted to the present and future use of the General Assembly, its officers, committees and employés." The Commissioners were further directed "with the least possible delay, to advise with and employ an architect and adopt plans, etc."

Under this Act the Commissioners engaged an architect to assist them as "Professional Adviser," and issued what has been known as the Programme, under which this suit arises. Its provisions will be examined more in detail hereafter. For the present it is enough to say that three disinterested architects were selected as a Board of Experts to whom all plans were submitted anonymously, with the assurance to those competing that all the plans submitted would have full consideration, that the Board would recommend eight designs, out of which the Commissioners agreed to select one, whose author should be appointed architect "to design and supervise the erection" of the building, and two others whose authors should receive first and second medals, respectively. The programme further contained elaborate provisions for the competition, the selection and technical details of the requirements of the building, etc., not necessary for us to dwell upon.

Thirty designs were submitted, out of which the Board of Experts selected eight which they reported to the Commissioners, with a recommendation as to their relative excellence. The Board also reported that "in the matter of cost, all the designs submitted . . . would exceed the appropriation" unless the materials used and the character of the workmanship were to be unworthy of the capitol of the Commonwealth. The Board further reported that two of the designs submitted had been excluded from the competition for violation of the directions of the programme, one, because trees were shown in one of the drawings, and the other because all the elevations in the drawing were not rendered in monotone.

The Commissioners, upon the receipt of this report, and also of complaint as to the exclusion of the two designs as above noted, disapproved the action of the Board of Experts, and by resolution reciting the facts, cancelled and set aside the competition under the programme, ordered all the designs to be returned to the authors, and invited the submission to the Commissioners of new plans by all the competing architects.

On this action of the Commissioners, the complainants filed the present bill, averring that they had entered the competition by preparing and submitting plans in accordance with the programme, and "that the action of the Commissioners in thus disregarding the obligations of said Programme, and in annulling the provisions of the same, is a violation of the obligations assumed thereunder by the Commissioners to your orators and will result in depriving your orators of the opportunity of securing one of the prizes therein provided for." This is the cause of action, and the averment of damage, in the complainants' own language, and it will be seen at once that it is radically defective in setting out, at most, nothing further than a mere contingent right, without the averment of the happening of the contingency on which the right will arise. It asks the court to compel the Commissioners to award the prizes to three of the eight preferred designs, but does not say that complainants' designs were among the eight. If the relief asked were granted there is nothing to show that complainants would be in any way benefited by it. Courts of equity are not set in motion upon speculative contingencies. In strict practice, therefore, the bill should be dismissed, on this ground alone. But as there are questions of public interest involved we prefer to consider the case further, and, if the bill is otherwise sustainable, to allow an amendment on this point, especially in view of the pendency of another bill by a different complainant, in which this defect does not occur.

The bill and complainants' case are based on the view that the programme contemplates only the selection of an architect and not a plan. It is admitted that the selection of a plan must rest in the discretion of the Commissioners, but it is argued that the choice of an architect was, by the action of the Commissioners in issuing the programme, made a preliminary step, as to which they bound themselves to abide by the report of the experts, and that such action was not a delegation of discretion as to a plan but a mere means of informing themselves as to a class of architects from whom the selection could best be made.

This brings us to the examination of the programme, and it must

be conceded that some of the expressions look towards the complainants' view. Thus it is entitled "Programme of a Competition for the Selection of an Architect for a new Capitol Building"; Section 5 of Part 1 states that "the object of the Commissioners in instituting this competition is to select and appoint an architect to design and supervise" the building; Section 7 provides that "the prize of this competition is the award of a commission to design and supervise the erection" of the building; and some other expressions tend the same way though less strongly. On the other hand, by Section 1 of Part 1, all American architects are invited "to submit drawings in competition"; by Section 4, "all drawings with accompanying description will have full consideration"; by Section 10, the advice of the Board of Experts was to be "upon the relative merits of the designs submitted"; by various sections of Part 2, the Board of Experts are to select "those eight designs which in their judgment are best"; the "selection of designs will be governed by the merit of each design as a whole"; it is "the designs so selected which are to be reported to the Commissioners, who are then to select 'one of the said designs as being in their opinion the most satisfactory'"; and other sections bearing in the same direction. The view of the appellants would require us to hold that these reiterated provisions as to the drawings and plans had no reference to the merits of the plans themselves as means of obtaining the best building, but only intended them as evidence from which to judge of the ability of the authors as architects, and left the subject of plans for the actual building entirely open for future and separate consideration.

That the elaborate scheme, so advertised as to bring in thirty competitors from all parts of the United States, each preparing twenty-four large and laborious drawings, should be intended only as a preliminary skirmish for the appointment of an architect, to be followed by another and separate contest for a plan, the thing with which the real interest of the State is concerned is not only unusual and startling but in the highest degree unbusinesslike. Under it the author of the best plan might be a youth just through his professional studies, of great artistic ability, but without the practical experience of ever having built a single house. Indeed, the programme itself foresees and provides for this very contingency. By Section 24 of Part 2, "If, by reason of youth or inexperience, or for any other reason, the architect chosen as above provided shall, in the judgment of the Commissioners, be an unsuitable person to be placed in charge of this work, he shall, at the request of the Commissioners, associate with himself in the performance of his duties an architect who shall be acceptable to the Commissioners, and such associated architect shall be paid a portion of the fees," etc. A construction which would thus seem to provide a method for the selection of an architect only, and then at the same time provide in express terms for the contingency that the method might lead to the selection of an unsuitable person, so obviously stultifies the whole programme that it should not be adopted unless the language used admits of no more sensible construction.

There is no compulsion to adopt such a view. On the contrary, it is opposed not only by the clauses already cited but also by the whole scope and object of the programme. What the State wanted and the Act of Assembly commanded was a building. That was the sole object in view. The architect and the plans are only means to that end, and the selection of the architect is not the first step in importance, nor necessarily in order of time. [1] This is already shown by the provision for an associated architect. But the adoption of a plan as well as the selection of an architect is demonstrated in the next Section, 25: "The architect so appointed shall then revise his competitive drawings to meet the further requirements of the Commissioners, and, upon the basis of these revised preliminary drawings, shall prepare fully detailed working-drawings and specifications of the Legislative Building, and shall, during its construction, supervise the work, etc." What possible purpose can be attributed to the command to prepare "fully detailed working-drawings and specifications" according to his plan, and to proceed with the construction of his plan has not been adopted. Much stress was laid in the arguments by appellants upon the expressions in the programme, already quoted, that the object of the competition was to select an architect "to design and supervise," etc., that the prize was a commission "to design and supervise," etc., and other like uses of the word "design." But this selection shows that the designing meant was that which was done for the competition, and not afterwards. All difficulty is avoided by this construction. The prize is truly stated as a "commission to design and supervise" the construction of the building, for that is the appointment which carries with it the very considerable sum of five per cent upon the cost of the building, much more probably than would be paid for the design alone. The best design having been selected, its author was to be the architect, not to make a new design which might not be equal to his first and not to supervise the building on another's plan, but on his own, and if, notwithstanding the merits of his plan, he was likely to fall short in practical ability he was to have an associate. This view does away with the self-condemning features of the programme and makes it sensible and consistent throughout. The plan of the successful architect was to be revised, and this was the real object of all the provisions sought to be construed as looking to a separate selection of architect and plans. The best plan was to be selected and adopted, and treated as evidence of the capacity of the architect for doing the

¹ The italics are ours. — Eds.

work, but the adoption was not to be absolute in either respect. The architect might be required to take an associate of more experience, and his plan was to be open to revision upon suggestions by the Commissioners. The incorporation of ideas from other plans was provided for in Section 35 with the consent of the authors and upon compensation. But with an associate or without one the author of the plan selected as best was to be the architect of the building, and with revision or without it his plan was the one to be put into working-drawings and constructed. Considered as a whole and with regard to its purpose and the circumstances of its issue, the programme does not admit of any other rational construction.

We come now to the action of the Board of Experts and of the Commissioners. As already said, the experts reported that all the plans would exceed the limit of the appropriation and would require modification or the use of inferior materials and workmanship. They also reported that they had felt constrained to exclude two designs from the competition "for serious violation of clauses well defined in the programme," to wit, No. 15 because of "trees being shown on the elevation at one-sixty-fourth scale," and No. 21 because of "all the elevations and sections not being rendered in monotone, at least three colors being used." This action by a board of professional gentlemen of such high character and intelligence can only be accounted for by their erroneous view of the scope of the programme as limiting their duties to the selection of an architect. The two plans excluded, it is true, violated the plain conditions of the competition, and the authors have no ground of complaint, for they were bound to know the risk of departures from the programme. But the violation was of requirements that affected only the drawings, and did not touch the merits of the designs but only the work of the experts in estimating them relatively to the others. When therefore the experts enforced the conditions so relentlessly against two minor offenders, it was not to be expected that they would overlook violations that went to the very substance of the plans themselves. Yet each of the eight recommended exceeded in cost the amount of the appropriation, and this was the most important and mandatory requirement not only of the programme but of the statute itself. It is no answer to say that the designs could be modified to bring them within the necessary limit. Distinct notice was given in Section 1 of the programme of the amount of the appropriation available, and "in order to permit uniformity in estimating the probable actual cost of the building" the preliminary expenses of the competition, to be deducted from the gross appropriation, were assumed to be \$10,000. And in the supplement to the programme it was again explicitly reiterated that "the provisions limiting the cost and specifying the areas required are mandatory, and will be strictly and fully observed in judging the designs." The nature and extent of modification necessary to produce the required reduction of cost are peculiarly matters of technical knowledge, on which, however, the experts gave the Commissioners no assistance. And if modifications were permissible at all, prior to the selection of a design, it would seem that mere corrections of the drawings should more readily be allowed than modification of the substance of the plans. The Commissioners therefore had a right to be dissatisfied with the action of the Board of Experts, and in setting aside all the competitive designs and re-opening the whole competition they were not only within their powers but were doing merely what the Board of Experts, as a matter of strict right, should have advised.

It is much to be regretted that a scheme so carefully prepared and so well intended should result in failure. But the responsibility does not rest upon the Commissioners. Primarily it is the fault of the competing architects, who disregarded the most important and mandatory requirement of the whole scheme, which even the Commissioners themselves were not at liberty to depart from, and secondarily, in a lesser degree, of the Board of Experts, who neither enforced the conditions strictly against all competitors nor gave the Commissioners the necessary information to enable them to judge how far the departures from the programme could safely be excused and remedied.

These views necessarily put an end to all claims for relief under this bill, but as some other points of importance have been argued we proceed to notice them, although briefly. The Commissioners are invested by the statute with a discretion on the subject-matter which cannot be controlled or reviewed by the courts or parted with by the Commissioners themselves. The law is not disputed, that delegated authority requiring the exercise of the personal discretion and judgment of the agent cannot be delegated by him. We think it quite clear that if the appellant's construction of the programme should be adopted and the Commissioners be held to have bound themselves to limit their choice of an architect to one of the authors of the eight plans recommended by the Board of Experts it would be an illegal delegation of their discretion. It is argued that so long as the Commissioners retained the ultimate right and power of selection they might take any steps they thought proper to secure a class of competent persons from whom to select. The argument is entirely sound so long as it is applied to the voluntary action of the Commissioners. If they had selected one of the class, no other outside of the class could object that their action was illegal by reason of delegation of authority to select the class. They might voluntarily or in the exercise of their discretion limit their choice to one of eight, chosen by others as most competent, but they could not bind themselves to do so. The discretion which was free at first must remain free to the last or up to the time of final judgment and action.

A further objection to the bill is that it is virtually against the State. The defendants have no personal interests in the matter. They are clothed with authority as agents of the State, and their acts, which are made on the basis of the bill, were done by virtue of their office only. Three of them, a majority, are named in the act by their office only. The building is upon ground of the State, and is to be built and paid for by the State. An injunction concerning it in any way would not affect the Commissioners in their personal capacities but only as the officers of the State, and, through them, the State itself. It is not charged that they are acting against the law, but against private rights growing out of their own previous action. The State cannot be interfered with on such grounds.

On the whole case our conclusions may be summed up as follows:—
First.—Complainants have shown no interest in the subject-matter entitling them to relief.

Second.—By the bill and the attached report of the Board of Experts, it appears that complainants violated the terms of the competition and were therefore not entitled to be considered in the selection.

Third.—That the action of the Commissioners complained of was not illegal but was justified under the terms of the programme.

Fourth.—That even if the action of the Commissioners had been in disregard of the programme they could not bind themselves so as to delegate their discretion or limit their final judgment.

Fifth.—That the State being the real party in interest as defendant, and its officers not being alleged to be acting in violation of the law which created their authority, the courts are without jurisdiction of the subject-matter.

Decree affirmed.

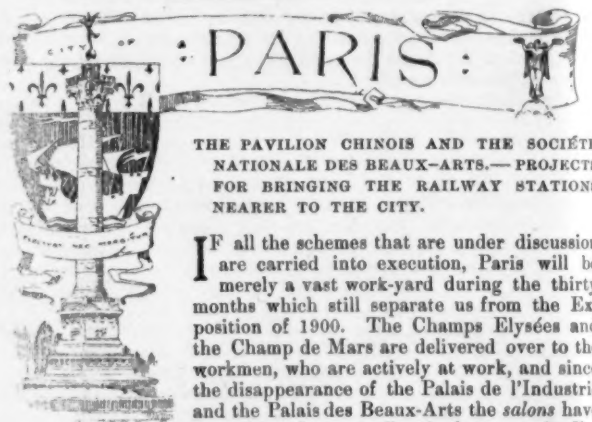
Argued November 1, 1897.

Present: ALL JUSTICES.

F. I. GOWEN, JOHN G. JOHNSON *for appellants.*

LYMAN D. GILBERT, ROBERT SNODGRASS *for appellees.*

Opinion filed November 9, 1897.



THE PAVILION CHINOIS AND THE SOCIÉTÉ NATIONALE DES BEAUX-ARTS.—PROJECTS FOR BRINGING THE RAILWAY STATIONS NEARER TO THE CITY.

IF all the schemes that are under discussion are carried into execution, Paris will be merely a vast work-yard during the thirty months which still separate us from the Exposition of 1900. The Champs Elysées and the Champ de Mars are delivered over to the workmen, who are actively at work, and since the disappearance of the Palais de l'Industrie and the Palais des Beaux-Arts the salons have been themselves actually "in the streets." For an instant one might have hoped that this situation would allow of a reconciliation between the two rival societies—a reconciliation which is ardently desired by the public; but this hope must be abandoned. The Société Nationale des Beaux-Arts, formerly the Salon of the Champ de Mars, in fact has proposed to the City of Paris that it shall lease the site of the Chinese Pavilion, in the Bois de Boulogne, to erect thereon a new palace. How many palaces! The Chinese Pavilion is found just at the entrance of the Bois de Boulogne, just before the grand avenue which leads to the Arc de Triomphe. This would be a superb site, but it is to be desired that the beautiful perspective of the Bois should not be intercepted by an architectural mass, however beautiful it might be. Moreover, here is the text of the agreement which M. Dubufe, in the name of the Société Nationale des Beaux-Arts, has submitted to the City of Paris: "The Société Nationale des Beaux-Arts demands that the City of Paris shall grant to the Society, for the term of forty years, the Chinese Pavilion,—the Society having come to an agreement with the present lessee. The Société Nationale des Beaux-Arts shall construct on the site of the buildings now existing a palace of brick, stone and iron, conformable with the plan prepared by M. Formigé. The City of Paris binds itself for forty years, in the sum of 16,900 francs, plus the taxes. The palace shall become the property of the City of Paris at the expiration of forty years, but the City shall retain as its principal tenant the Société des Beaux-Arts. Should the Society, beside the Salon, desire to preserve in the new palace, permanently, a portion of it as a club-house, or *maison des artistes*, the City shall name a rental which shall be mutually satisfactory. The Society reserves to itself the right of renouncing the privilege at the end of ten years, in which case the present lessee of the Chinese Pavilion shall be granted full right of occupancy in the buildings erected up to the expiration of his lease, which would then have thirty years to run." This scheme of agreement indicates very clearly the intentions of the Société Nationale des Beaux-Arts. If the arrangement is carried out with the City of Paris, we shall have a Salon four kilometres beyond its former place of sitting. If the Salon des Champs Elysées should do likewise, the public and the

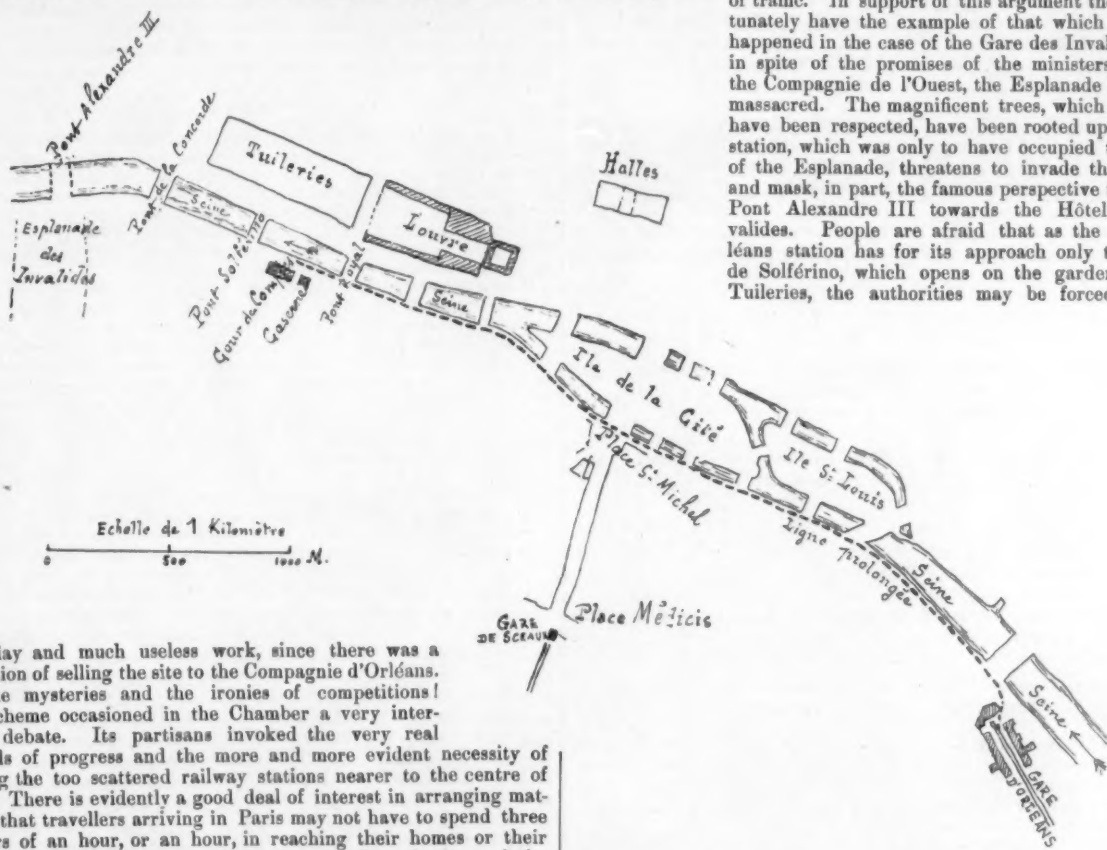
critics would probably demand the building of a special railroad to serve these far-distant countries of painting and sculpture.

The creation of new railroad lines in Paris attracts the attention of the public and the railroad companies in the most serious manner, and the Chamber of Deputies lately consecrated five long sessions to the discussion of a scheme of agreement having for its object the ceding to the Compagnie d'Orléans of the ancient Palais de la Cour des Comptes, together with a portion of the d'Orsay barracks, for the establishment of a new railway station. This agreement was adopted by a vote of 358 to 145, and as it is probable that the Senate will ratify the vote of the Chamber, the entire left bank of the Seine bids fair to be rooted up and transformed. Will the result be good or bad? The future must answer. It is evident that the question is big, and that its consequences are important. In any case, we shall at length have the satisfaction of seeing disappear the ruins which for twenty-five years have disfigured our quais, and recalled the most evil days of our civil war of 1871.

Two years ago a competition was held for the reërection, on its former site, of the destroyed palace. This competition, which was a very important one, gave rise to some very remarkable schemes, and that of M. Moyaux, architect of the government, obtained the first prize, of 7,000 francs. Since then no one has heard anything about it. Everything had fallen into the silence of the ruins themselves, when all at once we learned that this competition had occasioned

The partisans of the scheme support their contention by citing the experience which has already been had in the prolongation of the old Gare d'Sceaux as far as the Place Médicis. Since this alteration was made the amount of travel has increased by 47 per cent. And finally, they invoke statistics, the reports of engineers, and especially the approval which the Chamber of Commerce has given to the scheme. And this is one of the best of reasons, for the reports of engineers, and statistics, are equally invoked by the opponents of the scheme, who deduce from them absolutely contrary conclusions. One of the principal arguments invoked against the project is found in the necessity of rebuilding and transforming a large part of the sewers on the left bank. The new line when prolonged, having to follow the banks of the Seine below the quais, cuts all the drains which empty into the river. It would, therefore, be necessary to reverse the present grade of these drains, and cause them to empty into a new intercepting sewer. This would evidently occasion great expense, but the question to determine is whether public interest must be sacrificed in such a case. Artistic and æsthetic reasons are also brought forward by the opponents of the scheme. Distrustful of the talents of the architect, they ask whether a railroad station of iron, erected in the very midst of monumental Paris, near the Louvre and Tuileries, is not sure to spoil the fine perspective of the Seine, destroy the trees, and bring into the midst of an elegant and artistic quarter a noisy and unpleasant congestion of traffic.

In support of this argument they unfortunately have the example of that which has just happened in the case of the Gare des Invalides, for, in spite of the promises of the ministers, and of the Compagnie de l'Ouest, the Esplanade has been massacred. The magnificent trees, which ought to have been respected, have been rooted up, and the station, which was only to have occupied the sides of the Esplanade, threatens to invade the centre and mask, in part, the famous perspective from the Pont Alexandre III towards the Hôtel des Invalides. People are afraid that as the new Orléans station has for its approach only the Pont de Solférino, which opens on the garden of the Tuileries, the authorities may be forced to cut



an outlay and much useless work, since there was a suggestion of selling the site to the Compagnie d'Orléans. Ah, the mysteries and the ironies of competitions! This scheme occasioned in the Chamber a very interesting debate. Its partisans invoked the very real demands of progress and the more and more evident necessity of bringing the too scattered railway stations nearer to the centre of Paris. There is evidently a good deal of interest in arranging matters so that travellers arriving in Paris may not have to spend three quarters of an hour, or an hour, in reaching their homes or their offices. A large number of clerks live in the suburbs, and the Compagnie d'Orléans will certainly find it greatly for its interest to facilitate the daily traverse of this host of suburban, and its private interests will of course identify themselves with those of the public. And, moreover, this new artery once established, it will be noticed how short a distance will then separate the Gare d'Orléans from the Gare de l'Ouest, now being built on the Esplanade of the Invalides. These two lines connected, the whole length of Paris would be traversed by railroads. Moreover, we are to be confronted, in the relatively near future, with the prolongation of the Sceaux line as far as this new transverse line. The distance between the Gare d'Sceaux and the Place St. Michel, through which passes the Orléans line, is very short. It will only be necessary then to prolong the Ligne du Nord as far as the Halles to bring it about that from the very centre of Paris one can easily set out to either of the four points of the compass—north, south, east or west. Independently of the practical reasons of life and movement in favor of the scheme, there is one of a financial nature which should be kept in mind. In consequence of the agreements entered into between the companies and the State, the latter must in sixty years become the owner of the railroads. Now it is more than probable that the present Gare d'Orléans will be remodelled, and brought nearer to the centre. Under the proposed scheme, the State to-day sells to the Compagnie d'Orléans a site which will be paid for at the rate of 10,500,000 francs, and which at the end of sixty years will be restored to it, with all the buildings which the Company shall have erected thereon at its own cost. Such an operation as this is not one to be despised.

the garden in two, in order to create a grand outlet in prolongation of the bridge itself. Now, because of the differences of level on the side of the Rue de Rivoli, which is above the level of the garden, it may be necessary to fill it up in such a way as to make a slope practicable for carriages, and, as a consequence, the perspective of the gardens would be once more cut into two portions. All this, you see, makes a terrible cutting off of vistas. Never have we had to give so much attention to perspectives.

Should heed be given to all such arguments, it would come about that we must never meddle with anything, never change anything, and must abandon every utilitarian project; and yet it must be first proved that all these pessimistic forebodings would be realized. It must be recognized, moreover, that every time there has been a question of changing anything in Paris such protestations have arisen. When, formerly, it was suggested to suppress a portion of the Luxembourg and to transform the nursery [*pépinière*], people cried out against the vandalism, yet, after the change was made, people recognized that the new arrangement was better than that which had preceded it. When, in 1855, it was proposed to build the Palais de l'Industrie, an outcry was raised against those who proposed to "wreck" the Champs Elysées. Later, when it was proposed to destroy this building, the same clamor was raised in behalf of the defence of these same Champs Elysées, and to prevent the destruction of the very building whose erection they had endeavored to prevent not many years before! All this is not very logical, perhaps, but we are made that way in France,—and so are other

people. At any rate, the scheme for the new Gare d'Orléans upon the site of the former Cour des Comptes has been voted, and, if the Senate does not veto the decision of the Chamber of Deputies, the work will probably be completed by 1900. Since the Metropolitan Railroad does not make its appearance, we seem likely to have at least real railroads to replace it in a certain measure, since the new line will be used exclusively for passenger traffic, and will not be opened to freight.



THE NATIONAL SOCIETY OF MURAL PAINTERS.

THE National Society of Mural Painters met on November 23d at 42 West 18th Street. There were full and interesting reports from the Committees on Civic Buildings and Education. The Society ratified the code governing competitions as prepared by the Joint Committee from the National Sculpture Society, Architectural League and National Society of Mural Painters. The following committee were appointed for the year:—

Committee on Education, F. S. Lamb, Walter Shirlaw and C. Y. Turner; Civic Buildings, Jos. Lauber, E. H. Blashfield and C. R. Lamb; Exhibitions, F. C. Jones, W. B. Van Ingen and Fredk. Marshall.
J. WILLIAM FOSDICK, Recording Secretary.



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

ST. PAUL'S CHURCH, ROCHESTER, N. Y. MESSRS. HEINS & LAFARGE, ARCHITECTS, NEW YORK, N. Y.

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

ROSE-WINDOWS: PLATE VIII.

HOUSE FOR JUDGE C. D. ALDEN, MIDDLEBORO, MASS. MR. GEORGE H. INGRAHAM, ARCHITECT, BOSTON, MASS.

HOUSE AND STAIRCASE-HALL, COR. WASHINGTON ST. AND WASHINGTON PLACE, MIDDLETOWN, CONN. MR. F. R. COMSTOCK, ARCHITECT, HARTFORD, CONN.

A DINING-ROOM, HARTFORD, CONN. MR. F. R. COMSTOCK, ARCHITECT, HARTFORD, CONN.

WEST SIDE REPUBLICAN CLUB-HOUSE, NEW YORK, N. Y. MR. J. A. SCHWEINFURTH, ARCHITECT, BOSTON, MASS.

This building, 32' x 110', is now erected to a height of three stories; the additional two stories are to be built in the near future. The first story is of Indiana limestone; above this the façade is of light-pink "wash brick" with Indiana limestone quoins, finish, etc.

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

APSIDAL TREATMENT, NO. 27: NAVE OF THE CATHEDRAL, LUCCA, ITALY.

EQUESTRIAN STATUES OF GENERAL WASHINGTON: TWO PLATES.

[Additional Illustrations in the International Edition.]

SUNDAY-SCHOOL ANNEX, ST. PAUL'S CHURCH, ROCHESTER, N. Y. MESSRS. HEINS & LAFARGE, ARCHITECTS, NEW YORK, N. Y.

[Gelatin Print.]

MAIN PORCH OF THE FIRST PRESBYTERIAN CHURCH, DETROIT, MICH. MESSRS. MASON & RICE, ARCHITECTS, DETROIT, MICH.

[Gelatin Print.]

PREMIATED DESIGN FOR THE HOTEL METROPOLE, MORECAMBE, ENG. MESSRS. H. & E. MARTIN, ARCHITECTS.

ALLIANCE ASSURANCE OFFICES, MANCHESTER, ENG. MR. CHARLES HEATHCOTE, ARCHITECT.



[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 GOVERNMENT TIMBER-TESTS.

PROVIDENCE, R. I., November 29, 1897.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In view of the great importance of the timber-tests which have been conducted under the direction of Prof. B. E. Fernow, Chief of the Division of Forestry of the United States Department of Agriculture, and because he can no longer use the regular appropriations of the Department for this special work, it is very desirable that the Bill introduced in the last Congress by Mr. Squires, Senator from Washington, should be re-introduced and passed at the coming session of Congress.

The bill, with slight changes, which it is expected Mr. Squires will re-introduce, will be as follows:—

"A BILL

"To appropriate funds for investigations and tests of American timber.
"Whereas an enormous waste of forest products and incalculable loss of life and property occur from ignorance of the true value and strength of American timber; and

"Whereas a thorough examination and elaborate tests of our timber have been carried on in the Forestry Division of the Department of Agriculture, but have proceeded very slowly, and are now discontinued on account of deficient appropriations; therefore,

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the sum of one hundred thousand dollars is hereby appropriated, out of the funds now in the Treasury of the United States not otherwise appropriated, for the continuance of these investigations, this sum to be applicable also to the purchase of the necessary equipment and for the speedy publication of results, to be expended under the direction of the Secretary of Agriculture, through the Forestry Division; and, furthermore, that not less than thirty percentum of the amount appropriated be devoted to the investigation of timbers of the Pacific Coast; provided, that State institutions or private citizens of any of the Pacific Coast States agree to fit up a testing laboratory satisfactory to the Secretary of Agriculture and subject to his control for the time of such testing.

"Such appropriation, or so much of it as the Secretary of Agriculture shall decide to be necessary, to be immediately available."

It is hardly necessary to add anything for the consideration of the architects of the United States, who have always supported and urged such legislation, and the American Institute of Architects passed a resolution at the Nashville Convention, in 1896, endorsing the bill; but all do not realize the great value of these tests in showing the relative strength of seasoned and green timber, which tests have not been carried far enough to obtain exact data, but enough has been done to demonstrate that the final conclusions will be very far-reaching in their influence on timber construction; nor do they realize that the architects of the country are interested in the use of wood to an extent representing not less than \$100,000,000 of raw products each year.

Lack of knowledge of the true value of our native woods leads to much waste in their use and misapplication in structures.

Our virgin supplies are being rapidly exhausted, and hence there is an urgent necessity to utilize the remainder with greater economy, and more rationally.

The Division of Forestry has inaugurated the first systematic and comprehensive series of studies of these forest products, and the results so far obtained have already demonstrated that the saving which can be effected by the application of the same, amounting to millions of dollars, can be secured by the expenditure of a few thousand dollars.

The appropriations for the Division have been too small to push the work to its best advantage and the work has now been practically abandoned.

The scope of the work has also been necessarily circumscribed by the absence of adequate funds and facilities and hence not all the properties of woods, especially those in which architects are concerned, have been investigated.

With the methods developed by the work of the Division of Forestry an expenditure of \$100,000 would probably permit a complete investigation of our leading woods as to all their properties. Such knowledge will be of more value in the preservation of our forests than any other one measure the Federal Government could devise.

Will not every architect who reads this article immediately interview the Member of Congress from his district, and the Senators from his State, and show to them the value of the experiments tried, and the need of the appropriation asked for?

ALFRED STONE, Secretary, A. I. A.

THE STEVENSON MONUMENT AT SAN FRANCISCO.

SAN FRANCISCO, November 13, 1897.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—That San Francisco should be the first to erect a fitting memorial to the memory of the great novelist is no more than natural, as it was here that he wrote "*The Wreckers*" and "*The Silverado Squatters*," in which he caught the very spirit and essence of San Francisco.

To Mr. Bruce Porter is due the credit of being the first to conceive the idea of erecting a monument to Stevenson's memory and carry it to a successful conclusion. The cost was made up from subscriptions received from all parts of the country and from abroad. When enough money was realized to warrant work being commenced the problem of where to erect the memorial was not long unsolved, for, from its site in Portsmouth Square, the very centre of San Francisco's "Latin Quarter," your eye follows along the many walks Stevenson used to tread when out for an airing, and then meets the buildings, once frequented by Bohemians—in one of which Stevenson conceived "*The Wreckers*" and "*The Silverado Squatters*"—bordering the Plaza.

It is in this Plaza that the pioneers love to sit when in a reminiscent mood and talk of the many stirring events that took place within its square during the early 50's. The atmosphere teems with the bacilli of historic and dramatic events, and it is evident Stevenson must have been susceptible to them, as his novels of local interest will show.

The memorial stands in the centre of the Plaza. The design is simplicity itself. A plain unornamented pedestal of gray granite supports the bronze galleon ("*Bonaventure*"), which is toned a light green, as are also the dolphins and the representation of water. The sails of the galleon are gilded. The lines of the ship, the set of the yards, and the swirl of the water make one of the most artistic bits of modelling we have. There is an inscription on the pedestal,—sentiments expressed and lived up to by Stevenson:—

"To be honest; to be kind; to earn a little; to spend a little less; to make upon the whole a family happier by his presence; to renounce when that shall be necessary, and not be embittered; to keep a few friends, but these without capitulation; above all, on the same grim condition, to keep friends with himself—here is a task for all that a man has of fortitude and delicacy."

The design is by Bruce Porter, the modelling by George Piper.
HENRY SHERMUND.

ELECTRICAL PROCEDURE.

SAN FRANCISCO, CAL.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Apropos of the articles appearing in your Journal on the "National Electrical Code," it may prove of interest and instruction to other readers than myself if you would kindly give answer to and explain the following:—

A building is wired for 50 volts, the loss is not to exceed 5 per cent of the initial pressure, therefore 50 volts, which is the pressure required at the lamps to bring them to their highest efficiency, is 95 per cent of the initial pressure, or $\frac{50 \times 100}{95} = 52.63$ volts required from the street-mains.

On tapping the street-mains a pressure of 117 volts is found.

It is conceded that a low-resistance lamp is superior to one of high resistance, therefore a 50-volt lamp is to be used.

This can be done only by reducing the pressure from 117 volts to 52.63 volts.

I am informed that there are no practical means of accomplishing this for buildings, that there are no resistance-coils nor pressure regulators adaptable to the above purpose.

It therefore, seemingly, becomes necessary to use a lamp of 117 volts' capacity, less the loss in the house wires.

With the wiring as above, this is possible, the loss in volts being then approximately but one-half.

But why incur the relatively large first cost to wire for 50 volts when lamps of about 115 volts only can be used?

It is customary to figure from the lamps to the main feeder, proportioning the wires to the voltage of the intended lamps, their candle-power and the stipulated loss in the wires; in view of the above, this seems to be a backward way of doing: why not take the pressure from the street-main as it enters the building, proportion the wires in the building to the same and adopt a lamp to suit?

This is not considered good practice, yet it is consistent if the pressure in the street-main is to determine the voltage of the lamps.

In specifying that the wiring of an installation shall be for a given voltage with a given loss, is the purpose to insure wires of a sufficiently large size regardless of the lamps, leaving that to be determined later by the pressure?

The larger the wire the less is the resistance for a given pressure and the less is the danger of over-heating and fire-risk. Yet with no device to control the pressure in the main at the point of entering the building the life of the lamp is impaired (the pressure being high and the lamp resistance low), in which case the cost of renewals may become so large as to condemn a perfect system of wiring.

Theoretically the electrical energy (watts) for a lamp of a given candle-power is the same, whether it be for high or low resistance, but practically a low-resistance lamp requires less (watts) per candle-power than one of high resistance; the low-resistance lamp also has greater stability; yet the tendency seems to be to wire buildings for lamps of high voltage, even to 220 volts. Why is this so? Naturally the first cost is materially lessened in wiring for high voltages, but is not maintenance greatly increased?

The ideal condition would seem to be that which provides at the point of connecting with the house-wires a current of no greater pressure, be it high or low, than is required when all the lamps are burning; yet this condition, seemingly, is un-

obtainable. The foregoing is full of opposites, taken from practice. A few words of comment or explanation would aid in harmonizing the seeming conflict.

HENRY A. SCHULZE.

HAVING referred these matters to a competent expert, we are informed that all lighting companies furnishing current for incandescent lamps decide upon a standard voltage to be used, and if lamps are to be connected to the general system the wiring should be calculated for the standard voltage. The proper method always is to determine first what voltage is available and then to work back to the lamps, using wire and lamps that are suitable for the voltage that is maintained at the service entrance to the building.

The loss in wiring cannot be calculated without knowing the amount of current, and this cannot be determined without knowing the voltage at the terminals of the lamps. In specifying that the wiring of an installation shall be for a given voltage with a given loss, it would be assumed that the lamps are to be operated at the voltage stated.

With the alternating-current system the pressure at the service entrance may be made anything desired, by the use of a suitable transformer, but with the direct-current system the voltage in a building must be what is furnished by the street-mains. There is no way of reducing the pressure on a direct-current system without a loss so great as to be prohibitive.



Nearly all of the isolated electric plants and by far the greater number of general systems in the large cities supply current to incandescent lamps at a pressure of over 100 volts. Even the plants that have been operating 50-volt lamps are gradually changing their practice and are furnishing current at about 100 volts. There is a very good reason for this: A 100-volt lamp takes only half the current required by a 50-volt lamp, and while the energy expended in the lamps is the same because the number of amperes multiplied by the number of volts is the same, yet the loss in a given wire is only one-quarter as much with 100 volts' pressure. The loss in a wire is $C^2 R$ where C = current and R = resistance of wire. Assume $C = 1$ with a 50-volt lamp; then $C = \frac{1}{2}$ with a 100-volt lamp. Assume $R = 1$. Then with a 50-volt lamp $C^2 R = 1^2 \times 1 = 1$, and with a 100-volt lamp $C^2 R = (\frac{1}{2})^2 \times 1 = \frac{1}{4}$; or, with a 100-volt lamp R may be made equal to 4 and $C^2 R$ will still be no more than with a 50-volt lamp $[(\frac{1}{2})^2 \times 4 = 1]$. This means that if the same wiring is used there will be only $\frac{1}{4}$ as much loss with 100-volt lamps. For the same loss as with 50-volt lamps only $\frac{1}{4}$ as much copper will be needed.

There are no qualities in the 50-volt lamp that will compensate for this advantage in using 100 volts' pressure. It may be possible to make a 50-volt lamp that at constant pressure would be slightly higher in efficiency than any 100-volt lamp could be; but as a matter-of-fact much more study has been given to the higher-voltage lamp, and the most efficient lamps now used will be found on 100-volt systems. This is due to the better regulation on these systems. The smaller losses in the wire make it possible to keep the voltage much more constant for even less investment, and with either 50 volts or 100 volts the high-efficiency lamps must have a very nearly constant voltage at their terminals.

Where regulation is very poor, that is, where the voltage changes greatly, the 50-volt lamp is probably more satisfactory, because it has a large filament and can be made to withstand the changes for a longer time without burning out. This was an advantage with the alternating-current system at the time when wiring was less carefully done and the transformers delivered current at pressures that varied over a considerable range. The lamps were not efficient but they would last. With the service that is now given, however, by well-managed electric companies, it is far better, all things considered, to use the higher-voltage lamp. If a building has been wired for 50-volt lamps, the wiring is all the better for 100 volts or over, though it probably is heavier and more expensive than is really necessary.

NOTES AND CLIPPINGS

THE PANAMA CANAL.—"There is not the slightest doubt that the Panama Canal will be an accomplished fact within ten years," said Alfred Ahrling, civil engineer, of Stockholm, Sweden, who is stopping at the Cosmopolitan, to *The Picayune* representative last night. Mr. Ahrling spent three years as one of the civil engineers of the great project, and only recently severed his connection with the new Panama Canal Company, which is now prosecuting the work, he says, with a force of about two thousand men. "The work is being now advanced with great adroitness and remarkable economy and system," said he to *The Picayune* man. "And I am free to say that if the first company had husbanded the 500,000,000 which it expended on this project the Panama Canal would be very, very near completion to-day. There was a great deal of waste, as the world knows pretty generally, in this first management, and the evidences of this waste are, in fact, to be seen even unto to-day. M. Hutin is now the director-general, and M. Mauge the manager-in-chief. Their administration thus far reflects greatest credit upon their ability and judgment. With the means at hand, which are comparatively slender, they are accomplishing wonders. They have spent about \$5,000,000 up to date, and if the funds hold out a little longer there is no doubt that the work will be successfully brought to a close, and it cannot be possible that the funds for the enterprise shall not be forthcoming. The work is now being concentrated upon the mountain ridge between Emperador and Meroflores, a stretch of which Culebra is the centre and about the highest point to be cut through. The hills along here rise to a height of some six hundred feet, and about two hundred feet have been shaved off this altitude. They are of a sandstone nature, and blasting is done to advantage. The entire stretch yet to be cut through is about nineteen miles, for the canal on the Atlantic side has been completed to Bohlia and on the Pacific to Meroflores. The water-level plan, which was that first figured on, has been abandoned, and the canal will have, according to later and better-advised engineers, to be divided by seven locks, stationed at intervals. This is done for the reason that the difference in the tide of the Atlantic and the Pacific is something in the neighborhood of twenty-two feet. The tide on the Pacific coast rises to twenty-four feet, while that on the Atlantic rises to only two, and it would consequently result that, if the water-level plan were adopted, there would at one time be an ungovernable flood pouring in from the Panama entrance on the Pacific side, and at another an ebb which would leave the ships high and dry on the land. There has consequently been devised a series of locks. Two are placed at the Atlantic and Pacific outlets, and there are five of them in the intervening space. To Bohlia, on the Atlantic side, the canal is filled with water from the Gulf, and to Meroflores, on the Pacific side, the canal is filled with the water of the Pacific Ocean. The lock is opened at Panama when the tide is coming in, and allowed to fill the canal, and when it begins to ebb it is closed down, allowing the water to remain inside. The same thing is to be done on the Atlantic side. The intermediate sections, which are held in the embrace of the locks, are supplied by the water of the Rio Grande and Chagres rivers. There will be sufficient

water when these works are completed for the heaviest ship in existence or ever to be made, as science calculates. The depth of the canal will be fifty feet. It is hardly possible that the intelligence and capital of the world are going to allow this huge enterprise, which means so much to the commerce of all nations, to lag for the lack of funds. It is too nearly completed, and there is a possibility of its completion in the too immediate future. If the work is continued under such direction as that it at present enjoys, the time of its completion is not far distant."—*The New-Orleans Picayune*.

THE CHANTILLY BEQUEST IN DANGER.—At the time when the Duc d'Aumale bequeathed Chantilly to the French nation he fondly imagined that he had arranged matters in such a manner as to preclude there ever being any question as to the ownership, or as to the fulfilment of his intentions. It seems, however, that his action in devising the Palace of Chantilly to the French Academy, and the estate, as well as all the endowments, to the French Institute, has led to a difficulty which is likely to result in, at any rate, the endowment and the real estate being eventually absorbed by the National Treasury, and entirely diverted from the object for which they were intended, namely, the maintenance of the palace and of the superb collections therein contained. The Treasury cannot come down for succession duties upon the Academy, who are only trustees. But with regard to the Institute of France the case is quite different. The Institute is, for fiscal purposes, a "society," and the law which was promulgated a few months ago against religious societies as devisees of a testator applies to this learned society. That is to say, it will be considered to hold the property not in its corporate capacity, but, as in the case of religious societies, the property will be held to vest in the superior or head of the order, represented by the president. Now the president of the Institute of France is chosen from the members, none of whom are any longer in the first flush of youth. A president's term of office is thus not usually a long one. The present president will have to pay succession duty to the Treasury—out of the estate of course—when the estate vests in him. When he dies, or when from any other cause he ceases to be its president, the same duty is chargeable over again upon his successor, who will likewise pay out of the estate. And thus it will go on until there is no estate or endowment left, the Treasury having absorbed it all in the shape of succession taxes. That at any rate is the law according to the most eminent legal authorities in France, as well as in the opinion of the great law offices of the Government. Any modification in favor of the Institute will have to be voted by the legislature, and every clerical influence in France, which is daily becoming more powerful, will be brought to bear to prevent any such measure in favor of the Institute being enacted unless it is extended to all the religious societies in France. Let me add, that the inventory of the Chantilly estate and collection has just been completed, and serves to show that the bequest of the Duc d'Aumale is even more valuable than was at first imagined. The library alone, with its 30,000 volumes and 2,000 rare manuscripts, is estimated by experts as worth \$2,000,000. The picture-gallery contains more than 800 paintings, each one of them a famous masterpiece. Indeed the collections themselves, independent of the palace, the estate or the endowments, are valued at the very lowest figure at \$15,000,000, an enormous quantity of plate and jewelry, some of the latter much of it historic in character, being comprised in the collections.—*Marquise de Fontenay in the Philadelphia Press*.

ST. ALBAN'S ABBEY AT THE MERCY OF LORDS GRIMTHORPE AND ALDENHAM.—Two great English noblemen, Lord Grimthorpe and Lord Aldenham, are engaged in what, from a distance, looks like a generous rivalry to see which can spend the more money in restoring and decorating the beautiful old abbey at St. Albans, in Hertfordshire. Each of them has already devoted large sums to these purposes, and each is more than willing to contribute such further amounts as are necessary. Closer inspection of this pious contest, however, reveals that it does not lack the element of bitterness that has marked a few other contests of the same kind. Both of the noble lords are eager to forward the work of restoration, but each is equally anxious that the other shall have nothing to do with the undertaking. For Lord Aldenham is a churchman of the variety known as "high," while Lord Grimthorpe belongs to the "low" contingent, and neither regards his rival as any better than a pestilent heretic, who should not be allowed to meddle with sacred things like the ancient abbey. The result is that the ravages of time are disappearing from the edifice at a lamentably slow rate, and nothing can ever be done until one or the other of the two noblemen has gained a temporary victory over his foe and obtained the privilege of spending a few thousand pounds as he sees fit. While this is doing, the other lord stands back, criticising scornfully and accumulating strength and influence to use in the next tussle, which he usually wins. Lord Grimthorpe runs all to Early English severity of style and furnishing, while Lord Aldenham delights in silken banners, high altars with golden crucifixes, the clanking of censor chains, and the wreathing smoke of incense. This incompatibility of taste between the would-be benefactors is rather trying for visitors, who would like to have the church a perfect specimen of one style or the other, and are not much concerned as to which may be selected. Lord Grimthorpe is very old, however, and though his influence has been preponderant in the work already done, Lord Aldenham's turn will come in the not distant future, and then, it is expected, he will riot in ecclesiastical magnificence to his heart's content.—*N. Y. Times*.

WASHINGTON'S STATUE FOR LONDON.—D. C. Murray, the novelist, is proposing a National subscription to erect in London a statue in honor of George Washington. Messrs. Bayard and Hay have both approved the scheme. *The Daily Chronicle*, however, questions whether the statue might not result in an embitterment of relations, and says: "Like all near relatives, England and America quarrel now and then. Perhaps some day it might occur to a boisterous jingo to make the statue of the Father of His People the subject of an unedifying demonstration."—*N. Y. Tribune*.

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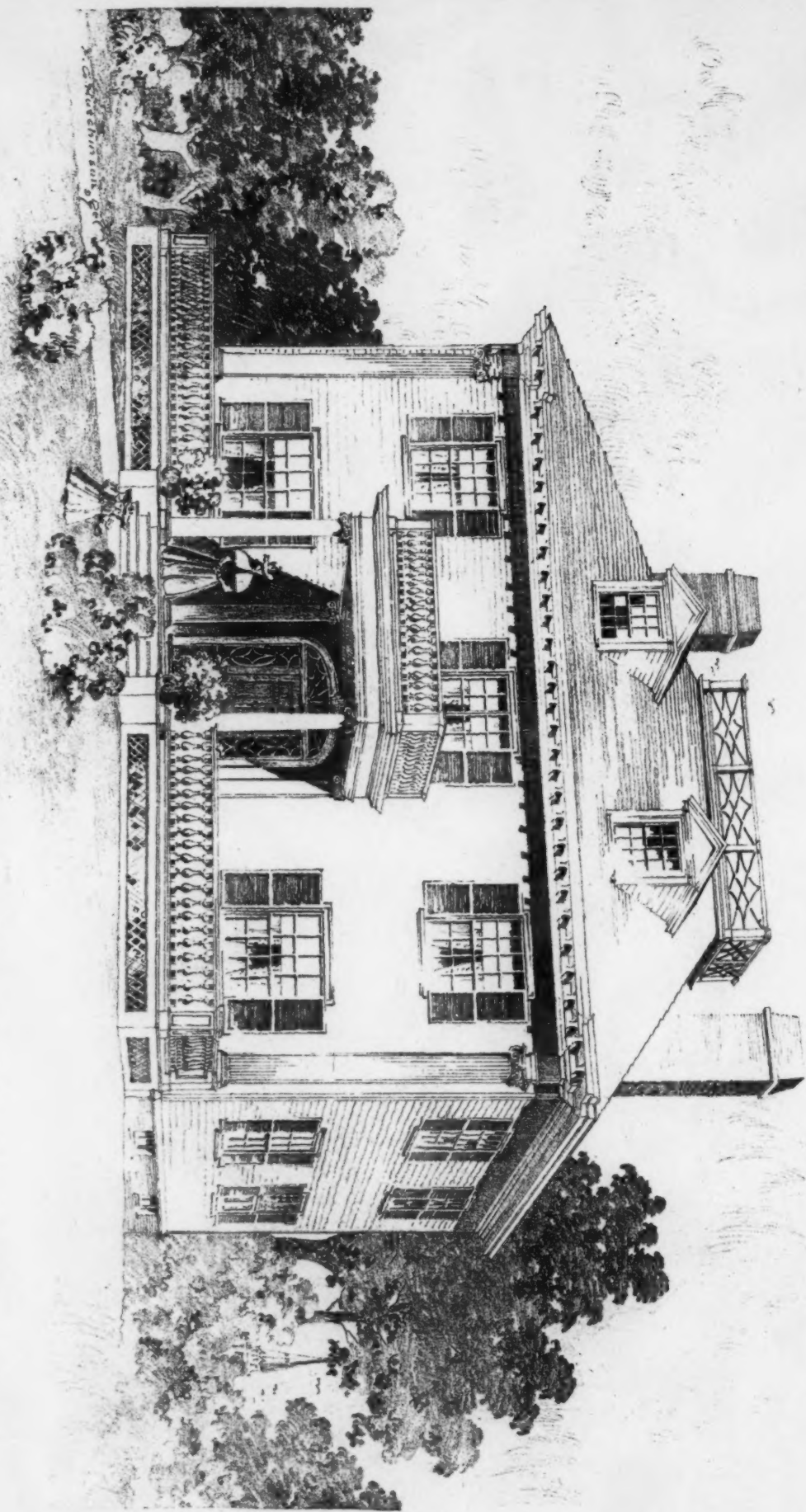
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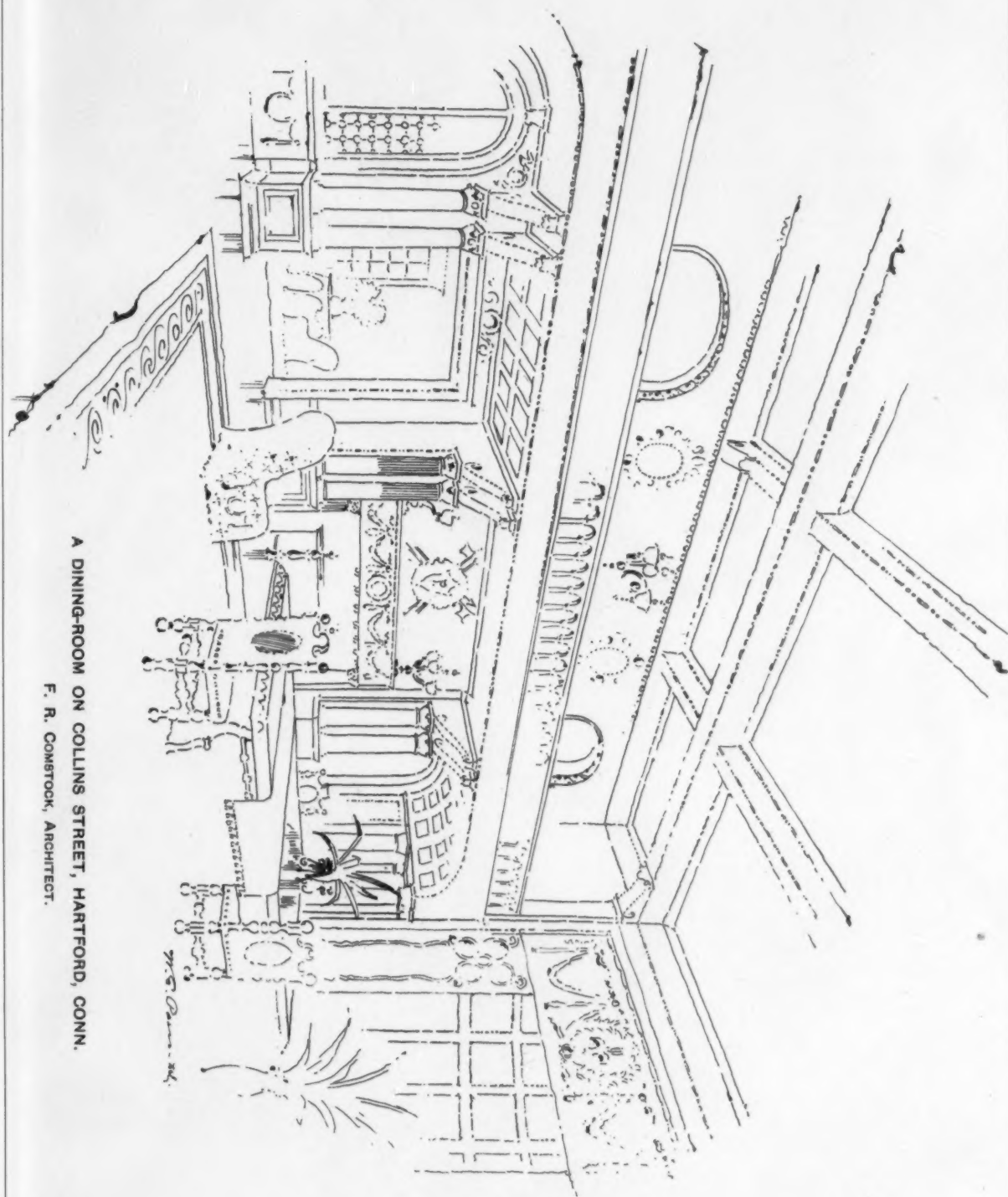
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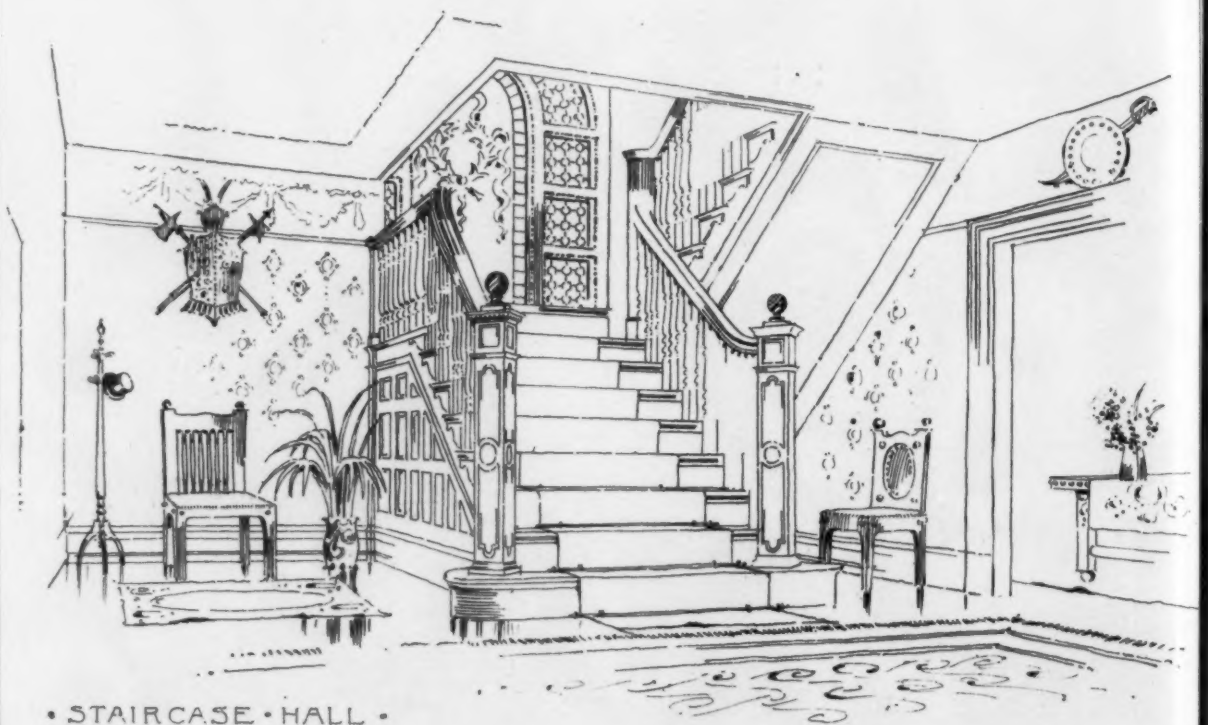
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— HOUSE FOR JUDGE G. D. ALDEN —
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A DINING-ROOM ON COLLINS STREET, HARTFORD, CONN.
F. R. COMSTOCK, ARCHITECT.

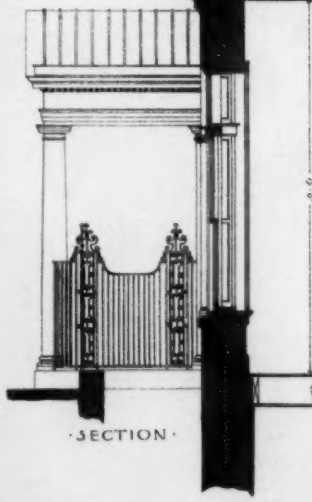
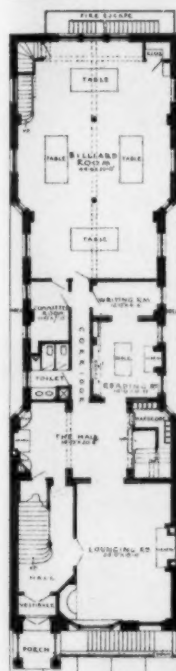
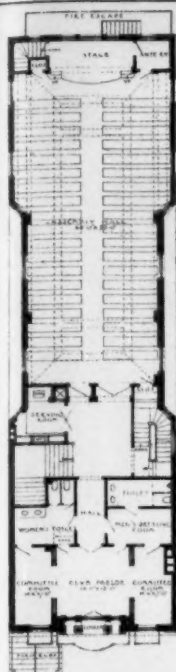


• STAIRCASE • HALL •

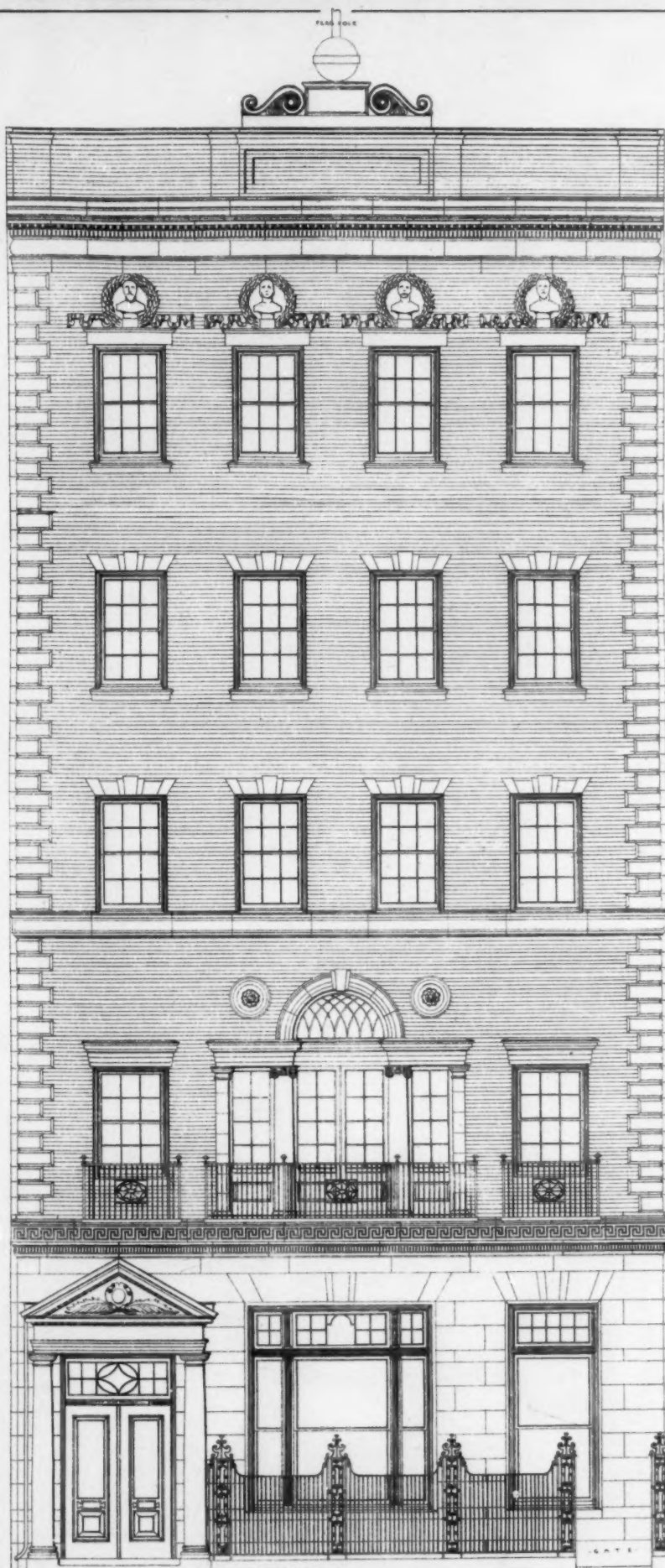
HOUSE ON WASHINGTON STREET, MIDDLETOWN, CONN.

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SECTION

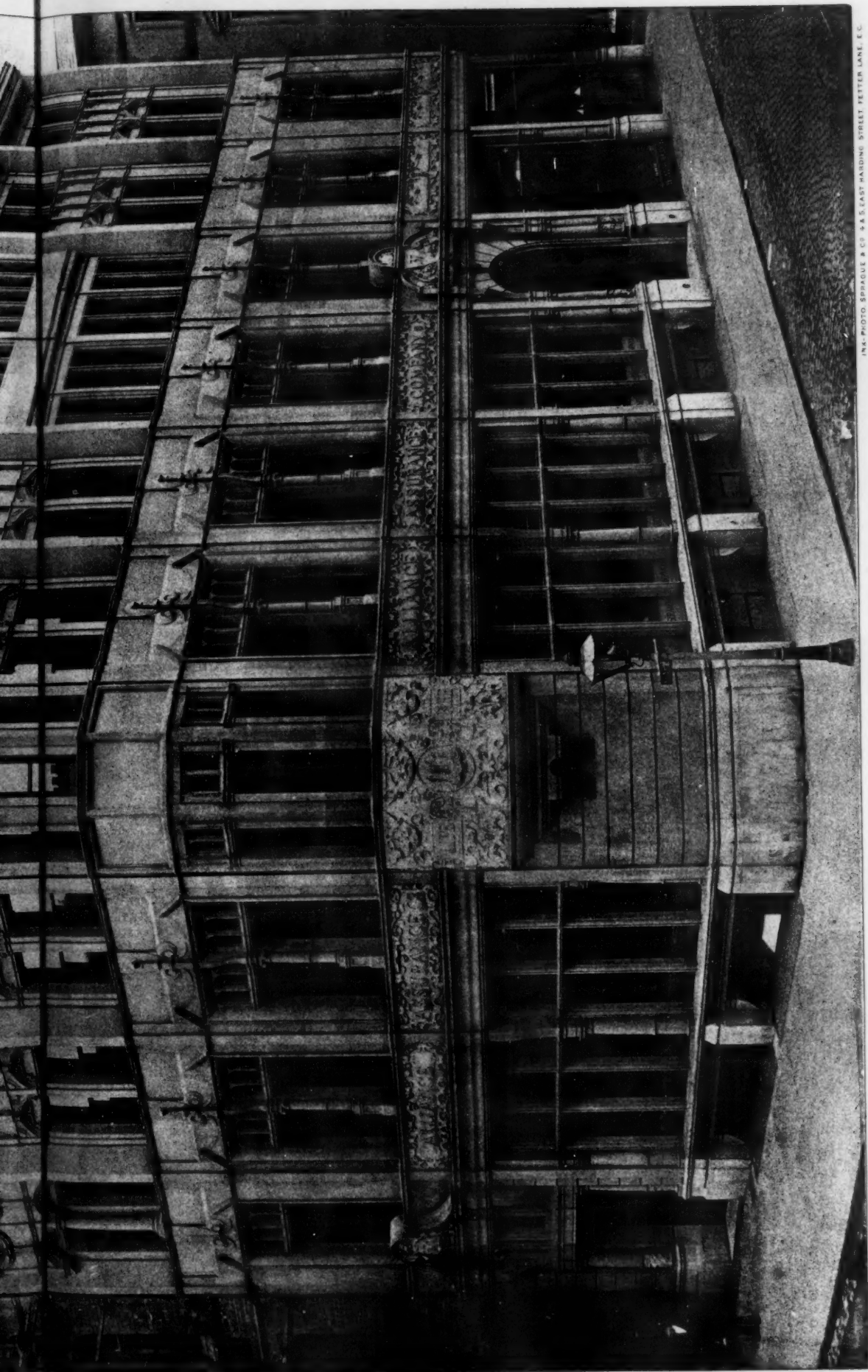


FRONT ELEVATION
SHOWING COMPLETED FACADE
WEST SIDE REPUBLICAN CLUB
BOULEVARD BETWEEN 45th & 46th STS.
NEW YORK CITY
JAS SCHWEINFURTH ARCHT.
BOSTON

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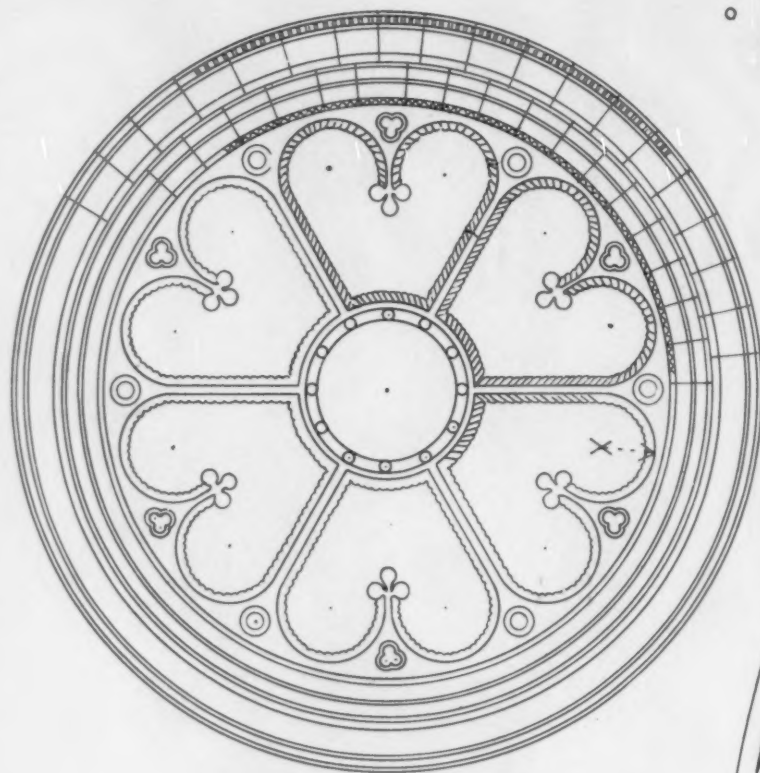


INS. PHOTO SPRAGUE & CO. 44 S. EAST HANDING STREET FETTER LANE, E.C.

PHOTOGRAPHED BY BEDFORD LEMERE & CO.

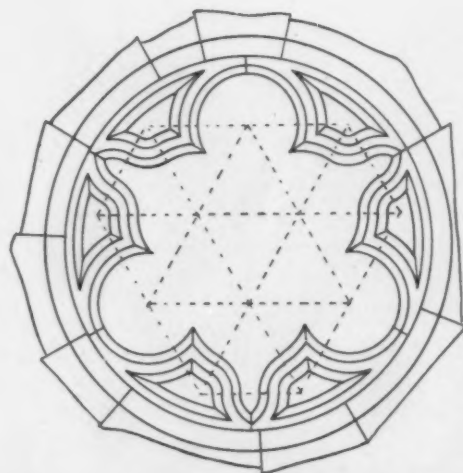
ALLIANCE INSURANCE OFFICES, MANCHESTER.
CHARLES HEATHCOTE, Architect.

• ROSE



CHURCH AT NESLE,
[SEINE-ET-OISE]
FRANCE.

SCALE 0 1 2 3 4 5 FEET



WALTHAM ABBEY CHURCH, ESSEX,
ENGLAND.

SCALE 0 1 2 FEET



S. KATHARINA, C.
GERMANY
[14TH CENT.]

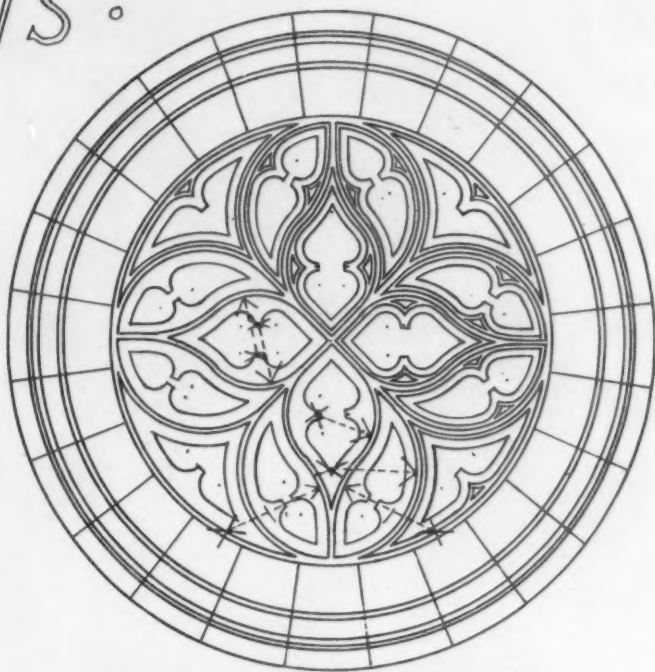
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WINDOWS.

VIII

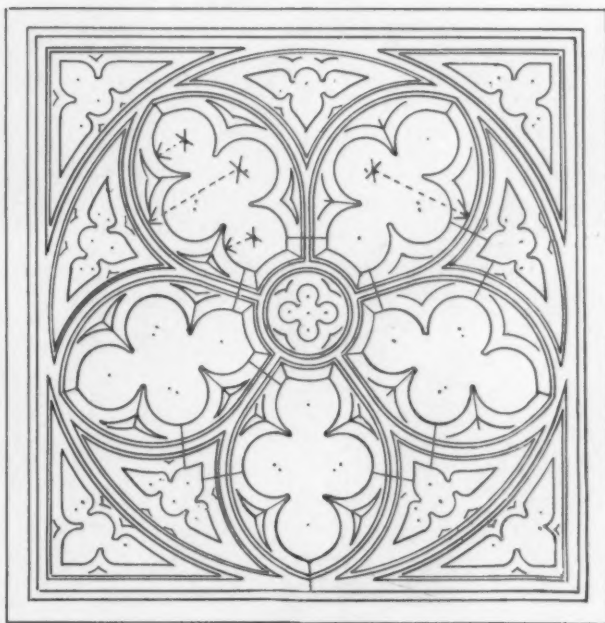


REGENSBURG CATHEDRAL,
GERMANY.
[15TH CENTURY]
SCALE 0 1 2 FEET



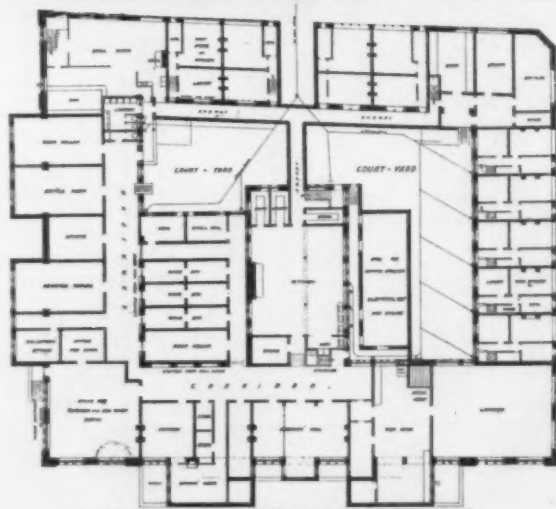
NOTRE DAME DE BROU.
[EURE-ET-LOIN]
FRANCE

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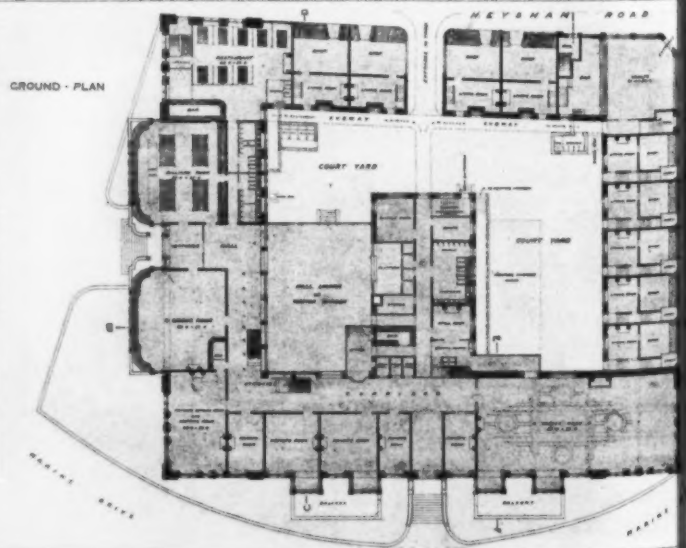


WORSTEAD CHURCH, NORFOLK.
ENGLAND.

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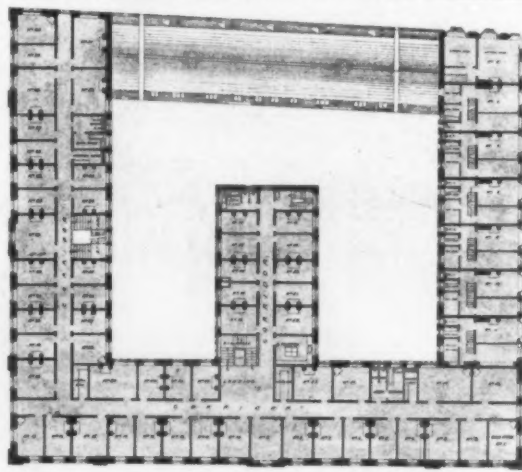
BASEMENT PLAN.



GROUND PLAN



FIRST FLOOR PLAN

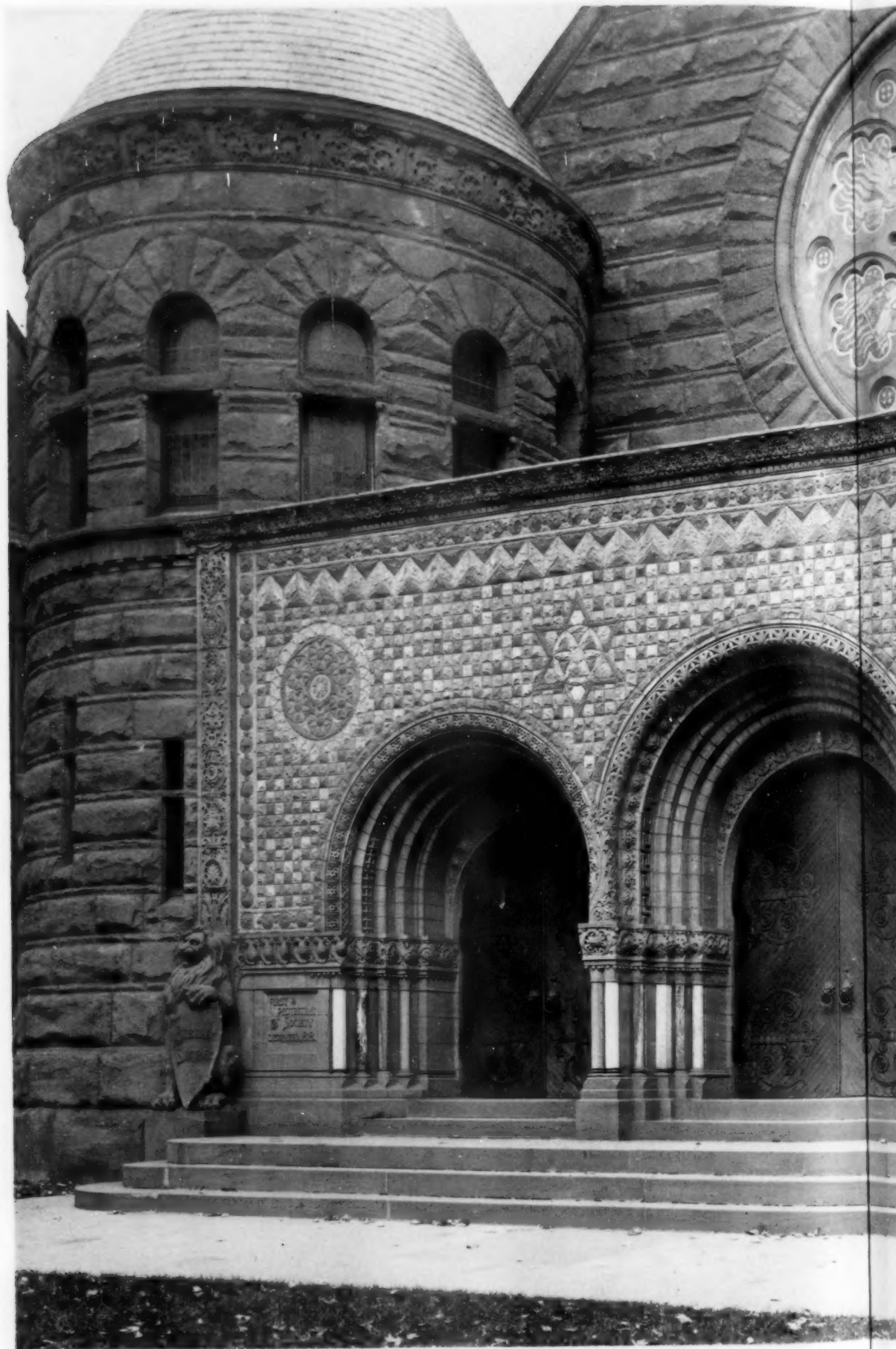


SECOND & THIRD FLOORS

IN A PHOTO. SPRAGUE & CO. 4 EAST WARDING STREET FETTER LANE, E.C.

FOR HOTEL METROPOLE, MORECAMBE.

Messrs. W. & E. MARTIN.



NEGATIVE BY H. H. SIDMAN, NEW YORK

MAIN PORCH: FIRST PRESBYTERIAN

MASON & RICE, ARCHT.



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