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UNABLE to secure in the premises we have occupied for twenty-three years the space required by our expanding business, we find ourselves under the necessity of removing to other quarters, and after November 1 our offices will be at No. 238 Tremont Street, a few doors only away from our present quarters. Following the ordinary commercial practice in such cases, we shall hold at 211 Tremont Street, from November 4 to November 21, inclusive, a "removal sale," during which time customers can procure our publications—the "*Georgian Period*" and the "*American Vignola*" excepted—at bargain rates.

THIS "removal sale" will afford a first-rate opportunity to several classes: it will enable former subscribers, whom the hard times of a few years ago forced to suspend their subscriptions, to procure in complete form the needed back volumes at satisfactory rates; it will enable clubs, societies and town libraries to secure as complete files as can now be made up at such satisfactory figures as to make the purchase a real act of economy; and it will enable the draughtsmen and younger architects to pick and choose from our shelf stock odd copies containing illustrations of a given kind of building or the text of serial articles, which are of interest and value, but which, for one reason or another, we have never brought out in book form. Few people realize the vast amount of valuable matter that is buried in these eighty-odd volumes of ours, and we ourselves are constantly coming upon valuable material that even we had forgotten. For example, the many papers descriptive of architectural tours would, if brought together, form one of the very best of guide-books for the architectural traveller. Other forgotten serial papers are, for example, the translations from Planat's "*Encyclopédie de l'Architecture*"; "Office Helps for Architects"; "Scaffolding"; "Construction and Arrangement of Theatres"; "United States Government Building Practice"; "The Statics of Structures"; "Equestrian Monuments"; "Paint Facts and Specifications"; "Mural Painting"; "Art in Modern Churches"; "Architectural Shades and Shadows," etc.

THE closing of a large number of mills belonging to the United States Steel Company, throwing twenty thousand men out of employment, is significant in several ways. Primarily, it undoubtedly means that there has been a serious decline in the demand for manufactured steel, and the Directors of the Steel Company, like the sensible business men that they have always shown themselves to be, prefer to curtail operations, in accordance with the market, rather than accumulate an unsalable surplus. Another thing that is shown by the proceeding is that the talk about "invading foreign markets" with American manufactured steel, of which there was so much in the newspapers a few weeks ago, is mere drivel, put out, probably, for the sake of influencing the stock market. No one knows better than the real heads of the Steel Company that it costs more to make steel in this country than in Germany, Belgium, France or England, and that the only way of selling American steel in Europe is to sell it at a loss. This

has been done, of course, many times, but, probably, always for the purpose of working off, at a small loss, a surplus unsalable here, so as to avoid breaking the protected and profitable American market by pressure to sell. While such an operation answers well enough as a temporary expedient, it would be absurd to go systematically into the business of manufacturing goods to be sold at a loss, and the managers of the Steel Trust evidently have no intention of doing so.

THE week has been rather fruitful in curious developments in labor matters. A legislative commission is sitting in Massachusetts, for the purpose of considering new legislation for the benefit of the workingman. It has given several hearings, at which a great variety of suggestions have been made, ranging from the extirpation of labor unions to the compulsory establishment of a working day beginning at eight o'clock, "in order that every workingman could take a bath before beginning his day's toil." A few days ago an unexpected contribution was made to the discussion, in the shape of a communication from the Massachusetts branch of the Brotherhood of Locomotive Engineers, requesting that, if any legislation were recommended by the Commission in regard to fixing hours of labor, times or terms of payment, or other matters of the kind, locomotive engineers might be specially excepted from its operation, as they felt that they could themselves make more satisfactory terms with their employers than could be made for them by legislation. How the champions of labor will take this declaration of independence on the part of a closely organized body of workmen of the highest intelligence remains to be seen; but it seems to have given a good deal of food for reflection to the Commission. Meanwhile, the champions, undismayed by the sight of revolt in all directions, proclaim more loudly than ever their intention of subjugating the public as well as the workingmen. Boston has, apparently, been selected as the scene of the next attack upon what few rights the non-union community has left; and it is openly menaced with the fate of Chicago, whose industries have been well-nigh destroyed by union tyranny. Fortunately, the Massachusetts courts are very different affairs from those of Chicago, and with the aid of a fearless and energetic judiciary, the lovers of liberty in Boston can give the labor tyrants a hard fight.

THE people interested in preserving the Park Street Church, in Boston, have published a pamphlet, reviewing the matter, calling for financial aid in purchasing the building and land, and rather unjustly, as it seems to us, reflecting upon the proprietors of the church for being willing to sell the building. It must be remembered that the Park Street Church has no historical associations. It is a beautiful specimen of the architecture of the first year of the nineteenth century, but that is all; and, while it would, no doubt, be praiseworthy in the proprietors to make some sacrifices to preserve an interesting work of art, they can hardly be expected to bear all the burden. It is acknowledged that the building, which is now in the midst of a business quarter, is inconveniently located for its congregation. In fact, not long ago it was in danger of being closed, and was saved from abandonment only by the efforts of its distinguished pastor, and some of its members. Moreover, the very life of a church depends upon the amount of good that it does in a community, and, with a million and a half of dollars, which is understood to be now offered for the property, Park Street Church might become a great power in Boston on the side of purity and righteousness. It is not too much to say that it ought not to neglect such an opportunity. No doubt, a fine old church is an admirable thing, but one young man, or one girl, saved from degradation by Christian effort, is worth all the old churches in the world, and if the Park Street congregation, meeting in some more convenient place, and with a large invested fund at command, can do its Christian work more efficiently, its duty is plain; and no one need fear that the cause of art will suffer from its fidelity to its mission. As we have before pointed out, the sale of the Park Street property does not necessarily involve the loss of the building, which can easily be removed and set up elsewhere, either for the use of the same congregation, or as an artistic monument for the benefit of the public; and if Plymouth Rock, which has been

moved several times, and now lies at some distance from its original position, has not thereby lost the veneration of the public, certainly Park Street Church would lose little by transportation from "Brimstone Corner" to a quieter locality.

PROFESSOR ROBERT H. THURSTON, the distinguished head of the Sibley College of Engineering at Cornell University, died there very suddenly this week, on his sixty-fourth birthday. Professor Thurston was very well known to architects through his books on the materials of engineering, which are, naturally, also the materials of architecture. In these books the important qualities of such materials are described with a precision and intelligence which have long made them standard works of reference in office libraries. Professor Thurston was a native of Providence, Rhode Island, and a graduate of Brown University. He served with distinction in the engineering corps of the army during the Civil War, and at the close of the war was appointed Professor in the Naval Academy. Shortly afterwards he was offered the charge of the engineering department of Stevens Institute, in Hoboken, and carried out there some remarkable investigations, which made his name famous on both sides of the Atlantic. In 1885, on the organization of the Sibley College of Engineering, he was invited to become its head, and has remained there ever since.

CURRENT rumor says that the Standard Oil Company contemplates "crushing" the Russian oil companies, and forcing them to enter its fold, by selling oil in foreign countries at less than the cost of production. Beginning in India, the story goes, kerosene is to be sold at one cent per gallon, until the Russian companies abandon the contest, and join the monopoly; when, of course, prices will be raised sufficiently to reimburse both parties for the expense of the contest. As humble consumers of oil, it is, perhaps, unfitting for us to suggest that an honest penny might be turned by some one in buying kerosene in Burmah, at one cent a gallon, and bringing it back to this country, to be sold at twelve cents. We do not know whether the Dingley tariff imposes a duty upon oil, but if it does, as is probable, the duty might with advantage be revoked at the next session of Congress, in the interest of nine-tenths of the people of the United States, who would be glad to take advantage of any "concessions" that might be granted foreigners at their expense in the purchase of oil. Meanwhile, although we do not imagine that the managers of the Standard Oil Company know anything about the matter, American purchasers of Standard Oil in quantity have been known to find their tanks partly filled with water, for which they had paid the price of oil; and foreign markets are not likely to be successfully invaded by such means.

THE Seventy-third Annual Exhibition of the Pennsylvania Academy of the Fine-Arts will open on Monday, January 25, 1904, and close on Saturday, March 5. As usual, works for exhibition will be collected and returned, free of charge, in Philadelphia, New York and Boston, and exhibits may be offered for sale, under the charge of a competent agent, subject to a commission of ten per cent on the selling price. The Gold Medal of the Academy will be awarded in the discretion of the Board of Directors, as well as the Walter Lipincott prize for figure-painting, the Jennie Sesman Medal for landscape-painting, and the Mary Smith prize for water-color painting by a woman artist; and the Temple Fund is available for the purchase of meritorious works. Works by artists residing in Europe must be placed in the hands of M. A. Guinchard, 76, Rue Blanche, Paris, for submission to the jury, before November 21. American exhibits will be collected, in Boston, January 4; in Philadelphia and New York, from January 4 to January 6.

A VERITABLE architectural curiosity is to be seen in New York, on ground formerly a part of Alexander Hamilton's farm, Hamilton Grange. The ingenious rector of the Roman Catholic parish of Our Lady of Lourdes, finding that his parishioners needed a new church, and had not much money to pay for it, conceived the idea of building it out of second-hand materials, of which there happened to be a large supply in the market. The old Academy of Design had just been pulled down, and he secured the black and white marble, and the beautiful carvings, of that interesting structure, and arranged to incorporate them in the new building. Then the marble Stewart house, which once stood on the corner of Fifth

Avenue and Thirty-fourth Street, was demolished, and Father McMahon secured the materials of this imposing Renaissance mansion; and finally, the Archbishop made him a present of the marble of the temporary east end of the cathedral. Naturally, the mixture of the Truth-in-Art Veneto-Florentine Gothic of the Academy of Design with the French fourteenth century style of the Cathedral, and these with the Corinthian pilasters and rusticated corners of the Stewart mansion give a somewhat peculiar effect, but architects are accustomed to this sort of mixture, and find a certain satisfaction in it; while, as Father McMahon says, those who don't like the outside of the building had better come in, and see if what goes on inside will not please them better.

IT is curious to think of a monument to Servetus in Geneva, but one was recently unveiled there, with appropriate ceremonies, under the auspices of the Calvinist churchmen of the city. It is fair to say that Calvin, instead of tying up Servetus in his study, and privately incinerating him, as is popularly believed, simply carried out what he thought to be his duty, as the autocrat of Geneva, in sanctioning the execution of a sentence already pronounced by the lawful authority. In these days, when heresy is no longer cognizable by the criminal law, the great and good Calvin would probably be the first to rejoice at being relieved of the necessity for participating in a judicial execution, and it is as an expiation for the intolerance of the age in which he lived, rather than for personal or local intolerances, that the monument has been erected by the faithful disciples of the reformer. Some one with a taste for research might, by the way, write an interesting treatise on expiatory monuments, which are becoming sufficiently numerous to warrant special consideration. The best known one is, of course, the Chapelle Expiatoire, in Paris, erected over the place of interment of Louis XVI and Marie Antoinette, which has a curious history, and next comes, perhaps, the monument to Admiral Coligny, murdered on the night of Saint Bartholomew, in front of the Oratoire, near the spot where he fell under the swords of the Catholic mob. This last is, perhaps, hardly an expiatory monument, since it was erected to a Protestant, and is attached to a Protestant church; but it is, at least, a monument to toleration, and the distance between toleration and expiation is not great.

A CURIOUS little labor quarrel is in progress in Boston. The messenger-boys employed by the Western Union Telegraph Company were recently "organized" into a union, presumably by some "champion" who wanted their fees. Soon afterwards, a boy who held a high position in the union was discharged for unfaithfulness to his duties, the specific fault being, we believe, that he was detected in keeping messages until he could deliver four or five at a single trip, and get pay for all of them, instead of delivering each separately, as the regulations require. The first duty of unions being to support their leaders in whatever they do, the boys were called out on strike. The patience of the managers of the Company had already been severely tried by the incompetence and negligence of many of the boys, and they gladly availed themselves of the opportunity to employ girls in their place, for day work, retaining the most trustworthy of the boys for night work, and for errands to saloons or other doubtful places. The girls have done the work well, are more faithful than the boys, are glad to earn the same wages that the boys have been receiving, and enjoy the outdoor life, so that the managers of the Company declare that they will never go back to boy messengers. The curious part of the story is, however, that labor and political circles are violently excited because girls are employed, instead of boys, at the same wages. A resolution has been introduced into the Board of Aldermen by a distinguished politician, who is well aware that only males vote in Massachusetts, and supported by other Aldermen, likewise conscious of this fact, demanding the instant removal of all Western Union wires from within the city limits, and instructing the city authorities to proceed at once to make such removal; and a mass-meeting, under the auspices of the Central Labor Union, consisting mainly of building workmen, is to be held, to afford opportunity for oratory on the subject before the approaching elections. Why honest and faithful girls should not have as good a chance to earn a living as boys is a question which it would be difficult to answer; and the friends of feminine industry and independence, who are a great host in Boston, will do well to see that no oppressive manœuvre against women is concocted by the politicians.

THE ANNUAL ADDRESS OF THE PRESIDENT
OF THE AMERICAN INSTITUTE OF ARCHITECTS,
MR. C. F. McKIM.

LADIES and Gentlemen,—Once more it is my privilege to welcome you to an Annual Convention of the American Institute of Architects, the Thirty-seventh.

Last year, as the guest of the Washington Chapter, we met in the Capital city to discuss the affairs which bring us annually together. This year it is our good fortune to be welcomed by our brothers of the Cleveland Chapter. Not only is this true, but we are assembled here in a community whose splendid spirit of progress in recent years has placed it in the front rank of cities in the march of public improvement.

The tribute to the Institute you make by your presence, is abundant proof of your interest at a time when the demands of professional practices are both numerous and imperative. Last year we rejoiced that the Institute, after nearly half a century of existence, had come into possession of a permanent home, of which, as one of the historic monuments of the country, we are justly proud. At the same time the circumstances under which we hold it are not yet satisfactory. A balance of \$10,000 is still owing, and the interest on this sum takes from our treasury each year an amount of money which we can ill afford, in view of our many other obligations. The regular receipts of the Institute do little more than pay current expenses, and the imposition of this additional burden cannot but impair its usefulness. It would be obviously unfortunate, as well as unfair, to have recourse to measures which would fall upon the few. The burden should be distributed as widely as the branches of the Association, of which our building is the home. Subscriptions should come from every one according to his means, until our ownership is without incumbrance. In regard to the raising of funds, the suggestion has been made that a good method would be for the Chapters to take up the question, each in its own body, working methodically, through proper committees, to this end.

Remembering the despatch of "sympathy" sent us on the day of President McKinley's death by the President of the Royal Institute of British Architects, the receipt at this moment of our Convention, of a message from the same source, attests the increasing and cordial interest with which the problems surrounding our advancement are regarded in England.

At this unsettled stage of our professional relations with our own Government, it is especially gratifying to feel that the older professional body of the Mother Country, whose relations with their government are already well established, are not indifferent to the interest of their younger colleagues on this side of the water. In answer to the questions now pending between Congress and our profession, so vital to the welfare of both, President Webb's message brings timely encouragement to our committees on Government architecture and "on the improvement of Washington," but we cannot fail to appreciate still more strongly the spirit which prompted him to send it. He cables:—

"War Office, Public Offices, Museum, College of Science, five per cent on estimated cost. Washington Commission Park improvement plans as fine as anything could be."

(Signed) WEBB.

Indeed, if I may be permitted to digress for a moment, the intelligent interest in the details of the Park Commission Scheme, shown not only by London men, but by members of the allied societies elsewhere, is more general and outspoken than some of us realize.

Your Commission has received, during the present year, many letters and expressions attesting this feeling. In the great project of the Victoria Memorial, for instance, connecting the Strand at Trafalgar Square with Buckingham Palace, the creation of the President of the Royal Institute, Mr. Webb was from the first interested in the Washington plan, and especially in those of its features which reflected the influence of Le Notre. His warm endorsement was shared by leading men in and out of the profession and should mean much to those who may hereafter be charged with the responsibility of deciding the fate of the plan approved by President Washington. The voluntary withdrawal of the Pennsylvania Railroad from the Mall—an act of public spirit and appreciation of the original purposes and aims to which this great central artery was devoted by the Father of his Country, must henceforth render impossible encroachment upon a space reserved for the

public use and essential to the development of one of the noblest avenues ever laid out in any country.

The relations of our profession to Congress are of the highest interest to us. Congress owes much to architects, for the nation's greatest architects built Congress a palace to live in, one of the noblest capitols of any country.

But we owe much to Congress and the Institute must feel that this is now especially true. The Fifty-seventh Congress, besides the restoration of the White House, authorized the construction of a Municipal building for the District of Columbia, the Army War College, a building for the National Museum, the Engineers' School of Application, the Union Railroad Station, an office-building for the use of Representatives, a Hall of Records, beside making provision for the Lincoln Memorial. Designs for nearly every one of these buildings have been entrusted to members of our profession.

Bearing in mind this great volume of work and the intimate relations that have for so many years been maintained between our profession and the central government, it should by no means be a cause of astonishment that from time to time difference of opinion should arise as to the exact form that these relations should assume. We should not feel that representatives of government, zealous in what they consider wise economies, are inimical to those principles that we regard as fundamental. Yet we must bear in mind that there are times when right relations are to be maintained only by the greatest tact and moderation.

If, as some fear, such times are upon us now, it behooves us to meet each situation as it rises, fairly, calmly, and above all without heat, remembering that nothing is to be gained by mere assertion, everything by convincing proof,—remembering that we have fair-minded men to deal with, but men who can look at things from our point-of-view only when they have been convinced that that point-of-view is right and for the good of all. We must approach them in a spirit of the highest consideration, prepared to yield everything except principle.

It is very desirable, at this time especially, that the Institute should not remain idle with respect to the future development of the Park System of the National Capital. The plans of the Commission appointed by the Senate through the efforts of the Institute, have already been made familiar in the public press and by illustrated lectures in all the principal cities, and have made a strong appeal to the national pride.

Educated people everywhere have come to understand the scope of the work and to sympathize with it. Throughout the country, especially in Buffalo, in Cleveland, St. Paul and as far west as Seattle, the example has served to quicken, strengthen and inspire each city to develop and to make the most of its natural advantages. Moreover in England, the interest in this undertaking has been very great.

But it must not be forgotten that the execution of the project depends now, not upon the attitude of a sympathetic public, but solely upon the appropriations which Congress may see fit to make from time to time. Ultimate success can only be hoped for in the fuller understanding of the plan by our legislators. They must be brought to realize its fundamental importance.

This is a work which may be accomplished largely by the zeal and perseverance of this Institute through its Chapters. The Senator or Representative who must make up his mind whether or not the needed expenditure from the public treasury is justified, will be influenced less by the resolutions we may pass here, than by the architects of his own city and his own State, who are known, perhaps, to him personally and who can explain the plan and make clear to him its merits.

A word here as to the duties of Chapters. They are the organic members of the National body. In such matters as that of which I have just spoken, the influence of the Institute is exercised largely through them. It is of the highest importance, then, that they zealously and faithfully perform the duties which belong to them.

While their coöperation in all that concerns the welfare of the Institute has, as a rule, been earnest, and the Institute daily owes more to their efforts, yet there has been felt in certain quarters a lack of interest, a failure to grasp opportunities, fatal to effective work as a whole. The need of united effort cannot be too strongly emphasized.

The Institute has ample reason for felicitation in both the increase and betterment of our schools of architecture in Harvard, Columbia, Pennsylvania, Cornell and Illinois Universities, as well as in the admirable and still older foundation of the Institute of Technology in Boston.

The movement to endow an American Academy of Fine Arts in Rome on the general lines of the French Academy in the Villa Medici is not new to you.

Till now dependent for support upon the insufficient means at the command of the incorporators (members of the Institute), the number of scholars has of necessity been small, and the convenience for work not such as would be afforded by an older, well-equipped and well-endowed institution. Nevertheless, in spite of its vicissitudes, such has been the quality of the work and the few men turned out, so strong the conviction of those most deeply interested in the need for an institution offering a post-graduate course intended only for those who shall be already technically equipped, that a bill for the incorporation of the American Academy in Rome by Act of Congress, and asking for the protection of the United States Government, was introduced in 1901 by the late Senator McMillan.

The persons named as incorporators, besides the leading architects, painters and sculptors, include the great universities and technical schools, represented by their presidents; the Secretaries of State and War, the Librarian of Congress, the Government architect, and a considerable number of men chosen from the community at large, known for their interest in art and education.

The bill passed the Senate and was favorably reported to the House, but, owing to the legislative conditions prevailing in the latter body during the closing weeks of the session, it failed to become a law. I am happy to say that it will be re-introduced in the coming Fifty-eighth Congress, and is considered to have every prospect of success.

In this enterprise the Institute has a deep concern, and towards its final achievement and the passage of the bill has already pledged its earnest support.

It is proposed to add to the incorporators of the bill the principal institutions and societies of art, represented by their proper committees. It would seem eminently fitting that this body should be included in, if not lead the list, and I ask your attention to this point.

Gentlemen of the Institute, I thank you for the honor you were pleased to bestow in electing me a second time your President. I shall value the remembrance of this and of my participation in the work of the Park Commission and of the restoration of the White House enterprises, so largely yours, as the most precious testimonial of the good-will and kindly feeling of my professional fellows, and I shall carry with me as long as I live the deepest sense of your generous confidence.

Looking back over the past two busy years, I realize more and more fully how very much the welfare of the profession is bound up in the welfare of the Institute — in the work we are called upon to share — how much each member is strengthened by becoming a participator in the work for all.

As a proof of gratitude for all that I owe the Institute, I shall endeavor by every means in my power to further the principles and aims which make it deservedly the National Body.

CONVENTION A. I. A.

REPORT ON PRESIDENT'S ADDRESS.

THE Committee appointed to consider the President's address reported, commending to the attention of the convention and of the profession at large the importance of the questions referred to by the President. The relation of the Government to the profession is held to be of supreme importance, but a controversial attitude and discussions in the public press by individual members of the profession are deprecated.

Members are asked to make the suggestions which occur to them in this connection to the proper Committee of the Board.

The recommendations of the President in relation to the American Academy of Fine-Arts in Rome are approved.

The Committee feels, with the President, that the past year has brought to the profession increased esteem in the eyes of the public at large, and asks the convention to agree with them that this fact has been largely due to the good fortune of the Institute in having had in its presidential chair during the last two years the distinguished gentleman now, to the regret of all, retiring.

The Committee holds that the honor done its President by the Royal Institute of British Architects adds to the dignity of each member of the Institute, and presents this resolution: —

"The Institute begs to offer to its retiring President its most sincere congratulations upon the presentation to him of the Gold Medal of the Royal Institute of British Architects.

REPORT OF COMMITTEE ON CHAPTER REPORTS.

THIS Committee finds the reports of the various Chapters most encouraging, showing great activity in almost all sections.

The net gain in membership is not so great as might have been expected, but the character of work done has improved.

The Committee finds that the Institute is being steadily strengthened by its Chapters and their work in promoting legislation for the betterment of local building laws, in improving the conduct of competitions, and in claiming recognition in the designing of State and city buildings. A number of the Chapters have held lectures and discussions of serious and important character, and, by some, monthly competitions have been conducted for the junior members.

The most active chapters were those of Baltimore, Boston, Cincinnati, Cleveland, Michigan, New Jersey, Rhode Island, St. Louis and the State of Washington.

A RESOLUTION OF RESPECT.

"THE American Institute of Architects in convention assembled desires to put on record its deep and hearty appreciation of the great and life-long services to the profession rendered by Professor Ware and to express its regret at his withdrawal from active educational work.

"It would be difficult to overestimate the importance of Professor Ware's work as the pioneer and organizer of architectural education in this country.

"Perhaps the best gauge of the extent and value of his services is to be found in the debt of gratitude which is recognized by the large number of his former pupils all over the country and the affectionate regard in which they hold him.

"It is moved that these resolutions be spread upon the records and that a copy be sent to Professor Ware."

ARCHITECTURAL EVOLUTION.¹

BEFORE commencing my paper may I be allowed to say a few words about the work of the Chair to which I have recently had the honor to be appointed? The Chair was founded in 1840, and is therefore the oldest Chair of Architecture in England. T. L. Donaldson was the first Professor, and his memory is kept green in the college by the silver medals presented annually which bear his name; Hayter Lewis was the second, and the third was Roger Smith. Those who knew Prof. Roger Smith will bear me out when I say that his kind heart and lovable disposition made him many friends. He was ever willing to give his time to younger men who came to him for advice, and his ripe experience was always at their service. My acquaintance with him, although slight, commenced many years ago, shortly after he was appointed to this Chair. Recently I had occasion to see him two or three times on a certain matter, and nothing could exceed his courtesy and kindness. His death will, I feel certain, be keenly felt by the many who during his long tenure of the Chair had the good fortune to be his students. Prof. Roger Smith, like his predecessor, confined himself chiefly to lectures arranged for students whose work in the daytime in offices left them only a few spare hours for outside study. No other course, doubtless, was possible in the days when the pupillage system was the only method by which men could study to be architects. But architectural education, like education in other subjects, is undergoing a change. The pupillage system will continue, but it seems probable that it will continue in a modified form. It will continue, because only in an office can men get thoroughly in touch with actual practical problems and learn the inner mysteries of their profession; it will probably be modified because the feeling is growing that to enable a student to reap the full benefit from the work placed before him in an office a preliminary training is necessary. Lectures after office hours are unsatisfactory for many reasons. Moreover, in any systematic course of study for our profession, and I think I may say for any other also, interest centres not in the lecture-room, but in the studio, laboratory, or class-room as the case may be. Lectures in any course of study of a practical character are but interludes; they have their value, but they require supplementing so much that to make any course of real value a student's whole time has to be devoted to it. The council and faculties of this College have realized the necessity for a more systematic course of training for architectural students than has been regarded as possible in the past. I believe with them that the time is ripe for a departure from former methods, and I also believe that before many years have run, university courses in architecture will be as general in England as they are now in America, and in some of our colonies. Architectural evolution is not merely a matter of academic interest. It has its practical side, which is of value to all architects. To trace the workings of a man's mind in his work; to see how, ever observing the requirements of his time and adapting himself to his materials, he took an idea from here and an inspiration from there, and so treated them as to give them new expression, is in itself excellent practice for all who are called upon to design. As an historical study it is the most fascinating of any. That all styles, from the earliest days of Egypt to the time of the great Renaissance of the fifteenth century, form an unbroken sequence, few will deny. A few links here and there may be missing in the chain, especially in the earlier work, owing to the lapse of

¹ Inaugural Address read at the opening of the London School of Architecture, University College, London, on Wednesday, Oct. 7, 1903, by Professor F. M. Simpson, F. R. I. B. A.

years, but these are becoming fewer and fewer daily. In a short paper like this it is impossible to mention every instance or to trace every step. All that can be done is to illustrate the truth of the contention by reference now to an individual building, now to a group of buildings, and now to some constructive point which had considerable bearing on the development of a style. Other instances, doubtless, will occur to many of you of like importance which might with equal fitness have been given.

Of the many factors which determined architectural development in different countries and at different periods, climate, religion, the nature of buildings, the materials available, and the state of the labor market may be regarded as the most important. All these exercised their influence in turn. Rome, with its teeming population inclosed within its walls, a population which demanded not only houses to live in, but also vast public palaces for their recreation and amusement, required buildings very different from those of simpler Athens. To have built these, many stories in height as most of them were, with the lintel of the Greek, would have been an extremely difficult, if not an impossible, task. The Romans, therefore, would have been forced into using the arch, even if they had not early acquired a taste for it from the work of their neighbors the Etruscans. But the arch by itself would not have been sufficient to overcome all the difficulties they had to contend with in the erection of a huge building such as the Colosseum, if it had not been that, in the neighborhood of the city, there existed ingredients which formed a remarkably strong cement. This enabled them to use concrete to a far greater extent than had been done before, or has been possible since. For the mixing of the concrete and its employment for walls and vaults unskilled labor was all that was required.

The Greek temple, with its small naos and external peristyle, was eminently appropriate in a country where the people lived much out of doors, and where the public worship was performed outside and not inside the building; but when Christianity became general, the services demanded a different type of building even in countries where the climatic conditions were much the same as those of Greece. The changes which were made are well illustrated in the present Cathedral of Syracuse, which is one instance out of many of the conversion of a temple into a church. A wall was built between the columns of the external peristyle, so that the ambulatory became the aisles. Openings were pierced in the naos wall to connect the aisles with the nave, and a chancel was built out at the east end. The entrance was reversed, and the posticum of the temple became the porch of the church. When new churches were built, the idea for these was taken from the colonnaded timber-roofed basilicas of ancient Rome. In the early days of Christianity money was scarce and workmen as a rule unskilled, and the basilican plan and methods of construction provided the largest possible floor-space for the congregation at the lowest possible cost. Moreover, after the time of Constantine, old marble columns to divide the nave from the aisles were to be had, almost for the asking, from the ruins of the secular buildings of the great city, and by their aid a decorative effect could be obtained without much expense. In claiming that all architecture is evolved from previous efforts, one is merely reiterating the old truism that nothing comes out of nothing. The contention does not rob an artist of his claim to originality. It merely emphasizes the fact that true originality—the originality that produces lasting good, and is not merely a passing fashion—is the outcome of knowledge. This knowledge may be either traditional, as in the days when the secrets of a man's craft were handed down from father to son for generations, or it may be acquired by study, as was the case with Brunelleschi, Bramante, and other great early masters of the Renaissance. An architect of the present day has to conform to much the same requirements and to work with much the same materials as the myriads of his predecessors. All that he can do is to try and advance one step farther than they have. Behind him is a vast store of accumulated treasure, and if he can extract from it a few grains, and infuse into them his own spirit, his own individuality, he has done as much as anybody can expect to do. What is *art nouveau* is seldom true art, and what is true art is never entirely new. To say that Anthemius of Tralles learned much from his Greek and Roman predecessors is not to detract one iota from his reputation. To hint the opposite is only to suggest a doubt as to his sanity. In his beautiful detail the inspiration drawn from ancient Greek mouldings and carvings is so undoubted that even if the connecting links were lost, which is far from being the case, as the work in Syria of the fourth and fifth centuries shows, the similarity between the two is proof enough. Not quite so apparent at first, but really quite as great, is the connection between the plan and construction of his great church, St. Sophia, Constantinople, and such a Roman building as the Basilica of Constantine. In both buildings the supports are few, and consist of two great piers on each side, which separate the nave from the aisles, and mark the three compartments of the central area. The side buttressing to resist the thrusts is similar in both, and each building has or had a screen of columns between the great piers, which served to support the galleries, and at the same time to give scale to the building. The screens in the church still remain, and form one of its most beautiful features; those of the Basilica have long since disappeared. Where the church differs principally from the Basilica is in the plan of the ends of the central area, and in the substitution of the dome for the intersecting vault. Each bay of the Basilica is square, and all three are equal. In the church the central bay alone is square, the ends are semicir-

cular, and opening out of each big semicircle are colonnaded niches. The double apse arrangement is a Roman device. One of the large halls in the Baths of Diocletian, Rome, has an apse at each end, and full width of the hall, and a similar plan was also followed in many of the entrance vestibules to buildings such as the baptistery of Constantine and the tomb of Constantia. The idea of the colonnaded niches is also Roman, if the restoration of the Baths of Gallienus, of the third century, are correct. Even if they are not, St. Sophia is not the earliest Byzantine building in which they occur. They form the most characteristic feature of the interior of some of the circular and multangular churches of the period; of these, St. Sergius, Constantinople, San Lorenzo, Milan and St. Vitale, Ravenna, were commenced before the old church of St. Sophia was burned, and consequently before the design for the new one was made. But although the idea was old, the application of it was new. The plan of the central nave of St. Sophia is as though one of these circular buildings had been cut in half, and one half tacked on to each end of a central square. The result is a noble hall, which for about 220 feet has an average width of over 100 feet. No other building of architectural pretensions in the world, not even St. Peter's, Rome, has an unencumbered floor-space so wide for such a length. Anthemius showed his genius to a still greater extent in his treatment of the ceiling. He took the circular dome of the East, which from the early days of Assyrian art, many years before Christ, had ever been a feature there, and by the aid of pendentives placed it over the great central square, high above the transverse and longitudinal arches. This was a wonderful achievement, not because of the mere span of the dome (that of the Pantheon is nearly half as wide again), not because a circular dome had never before been placed over a square by the aid of pendentives (examples exist in the East as early as the second or third century), but because no dome approaching in size that of St. Sophia had ever before been raised in that manner. The nearest approach to it is the 80-foot dome which covered San Lorenzo, Milan; but in this example it is doubtful if the space below was ever other than octagonal. I have dwelt at some length on St. Sophia because it is not only a standing example, and a great one, of the truth of evolution in design, but it is also the most truly original, and at the same time, in my opinion, so far as the interior certainly is concerned, the most beautiful architectural creation in the world. It is a proof of the extent of Anthemius's originality, that he could combine eastern and western traditions, and yet produce so great a masterpiece. One of the most interesting chapters on architectural evolution is that which deals with the development of groining and the substitution of the clustered pier for the cylindrical column. The two must be considered together; they are inseparable. In the basilican churches, the intersecting vault which played so important a part in the large buildings of Imperial Rome finds no place. It occurs occasionally in early work in a few small churches in some parts of Italy; but it was not until the eleventh century was well advanced that it became general in large ones. Basilican churches have timber roofs, which, as a rule, are ceiled on the under-side; the fifteenth and sixteenth century flat coffered ceilings at present in many of these churches probably took the place of earlier ones of similar design. These ceilings are continued without a break from east to west. In the church of St. Miniato, Florence, however, built at the commencement of the eleventh century, the timber roof over the nave is broken in its length into bays by means of transverse arches thrown across from pier to pier, with corresponding arches across the aisles. Whether these arches were introduced in the first instance because it was found by experience that the lofty and not over thick nave walls required lateral abutment, or because the builders had come to regard an unbroken ceiling as monotonous and unsatisfactory in appearance, is uncertain. The fact remains that about the time mentioned they began to be used, and consequently St. Miniato and one or two other churches of the same period may be regarded as the connecting links between the earlier church with its unbroken timber roof and the later church, which was divided into bays, each bay being vaulted. The vaults themselves were at first constructed much in the same way as the Roman vaults, without transverse arches, except that they were not so massive and heavy. The first alteration was that transverse arches were added, and the vaulting formed into bays. This innovation, slight though it appears at first, led to important changes. Diagonal ribs were next introduced under the groins—or points of intersection of the vault—and these, together with the transverse arches, formed a skeleton on which rested the severeys or compartments of the vault. The vault now became a groined and ribbed vault which required specially-designed piers to support its different parts. The cylindrical column was ill-adapted for the purpose, although it is true that in some of the finest of the mediæval churches in France it continued to be used a century after the principle of vault supports had been perfected. The clustered pier, therefore, took its place. Piers, oblong and square in plan, had, it is true, been used occasionally in certain places in some basilican churches before this; but for the development of the complicated clustered plan from these more simple forms vaulting is entirely responsible. The change commenced with the introduction of transverse arches. In the small church of St. Eustache, Milan, of the ninth or tenth century, in which arches span the aisles but not the nave, the piers are not oblong but T-shaped, and the arches rest on the ribs at the back of the piers, and on corresponding pilasters on the aisle walls. When arches spanned the nave as well as the aisles the piers became

cruciform. In St. Miniato, Florence, those that support the transverse arches are quatrefoil in section. This form, or the cruciform, was satisfactory so long as only transverse and longitudinal arches were employed, but as soon as diagonal ribs were introduced it became insufficient, and shafts had to be inserted in the four internal angles of the cross to support them. In the nave of St. Ambrogio, Milan, built in the second half of the eleventh century, the system is complete, and every rib and arch has its corresponding member in the pier. The buildings of the eleventh and twelfth centuries throughout Europe are heavy in appearance and massive in all their parts, but as the workmen grew more skilled, the work became much lighter. Nowhere is the change so conspicuous as in the vaulting and in the size and forms of the piers. It was soon discovered that there was no necessity to carry the groining shafts down to the floor, and that they were better corbelled out from the wall, as then they offered more resistance to the thrust of the vault. Sometimes the corbelling is just above the piers, as in Exeter and Lincoln Cathedrals, sometimes it is at the level of the string-course above the arches of the arcade, as at Carlisle, and sometimes higher up still, above the triforium, as at Salisbury and Wells. In consequence of this change the piers could be made more slender, and beautiful forms such as are to be seen in Exeter Cathedral and in other churches of the fourteenth century were the result. Other modifications all tended in the direction of lightness. As the number of ribs of the vault increased, instead of attempting to provide a separate skewback and separate support for each—which in England would have been impossible in Late work owing to their number—the builders brought them together to a common springing and the tas-de-charge, with its many advantages, was produced. In France the architects, as a rule, even as late as the end of the fifteenth century, clung to the simple and dignified quadripartite vault, in which only transverse arches and diagonal ribs are employed. In England, however, they departed from it, and multiplied the ribs to such an extent that the vault became a network of ribs so close together that little room was left for any filling-in. As soon as this point was reached, the reason for the construction, followed for so long, disappeared, and the workmen said to one another, "Why form a skeleton and fill in afterwards? Why not build both rib and filling-in together?" Thus was born the fan-vault—an English design pure and simple, and a logical outcome of the multiplication of ribs—in which both moulded rib and panel are worked on the same stone. I have taken groining as an illustration because it is the most characteristic feature of mediæval architecture; but a similar sequence of development is just as noticeable in other parts of a building. I might have shown, for instance, how the design for the blind arcading on walls changed its character until the large windows of the fourteenth century left little wall-space on which arcading could be placed, and how, as the windows became more and more like panels pierced for light, what wall-space remained was covered with sunk panelling, to such an extent that in some churches, especially in those which retained their old stained-glass, it is often somewhat difficult to tell at a glance which is wall and which is window.

The shock of the Renaissance first felt in Italy at the commencement of the fifteenth century was a shock which the builders there richly deserved. In England it came 100 years later, partly because the traditions of mediæval art were far stronger here than in Italy, and partly because the revival of letters had not yet taken a strong hold in this country. The great men of the Italian Renaissance, in seeking for inspiration from the ruins of ancient Rome, did a grand thing for architecture. They felt that the old art was moribund, and needed strong measures to bring it back to life. They had no qualms about taking hints from their predecessors of centuries before—from the men who built so sturdily, if somewhat roughly, and on so noble a scale. They felt that in the old buildings there was a virility that was deathless. The more they studied them, the more they became imbued with their spirit. And in this absorbing process they lost none of their own individuality. They sacrificed nothing to archaeological correctness. They never allowed tradition to interfere with utility. They abandoned none of their building science—science which had been accumulating for centuries; in fact, they added to their store. No one can say that Brunelleschi's dome in Florence is a copy of anything which had gone before. Its construction is different, its form different, and its detail. Sansovino's library in Venice, although reminiscent of the Colosseum, only shows what can be done by a man with fine ideas and rich imagination, who is also a student of architecture. Peruzzi's charming Palazzo Massimi in Rome—a gem which stands alone among the color-washed palaces of the city—has a refinement which no ancient Roman building possesses, and shows that the Greeks had not taught in vain the value of simplicity, and the full beauty of the lintel. These men picked up anew the thread of Classic traditions, which, although entangled for centuries with other threads, had never been entirely lost in Italy. Their work, although not coming in natural sequence like the Byzantine Romanesque and Gothic, has still a place in the history of architectural evolution. It was not so much a Renaissance as a recovery. What chance have we to-day of a similar recovery in England? The conditions which exist here now are not so far different from those which prevailed in Italy in the fifteenth century. It is true that the fine traditions, started by Inigo Jones and continued by Wren and his followers, were all destroyed by the two revivals of the last century; but we still have their buildings almost as fresh as ever. The lapse of years since they were built is trifling, compared with that

which separates the early days of the Italian Renaissance from the time of the Roman Emperors. The threads ought not to be so difficult to pick up. In fact, one may fairly say, when one considers much of the work of the last ten or fifteen years, that this has already been accomplished. How long, however, shall we continue to hold them? When one remembers the see-saw of the last half of the century just passed, he would be a bold man indeed who would venture to prophesy. And yet agreement among architects is absolutely essential if our art is to progress as it should progress. No art can advance satisfactorily when its exponents are pulling in different directions. Such a state of things is bad for architects, and worse still for workmen, as they are called upon to work in one manner one day, and in another the next. Is it to be wondered at that, under the circumstances, they so often fail to take an interest in what they do? It is unsatisfactory also for the general public, who, seeing no standard, are apt to believe that there is no art.

For a real advance, harmony between architect, builder and client is essential. It existed in the eighteenth century in England; it existed in the fifteenth century in Italy; it is the secret of the strides made by architecture in the Middle Ages. It is true that in one sense the old war of the styles is now over. It is true that men are no longer eager to cut one another's throats over the rival merits of two phases of architecture, or to dispute fail to take an interest in the correctness of the curve of a moulding. But is it peace? There are still two camps. There are still Classicists, although they are no longer pedants, and there are still Romanticists, although they have ceased to be mock-mediæval. A fusion between the two, if it be possible, although it would take time, would be worth some waiting for. Some years must elapse before one can be expected to lie down with the other. But as the Classicist gets a little more playful, and the Romanticist a little more formal, the two may meet. After all, the principles underlying good work are much the same in whatever language they are expressed, and the differences perhaps are not so great as appears on the surface. In the last century men fell into the evil of a too literal rendering of old work; but that is no reason for going to the other extreme and ignoring it altogether. It seems to me that the folly is quite as great to refuse to profit by the successes and failures of the past as it is to remain indifferent to and ignore new developments in building science. The masters of the Renaissance succeeded because although they studied old work they did not copy it. They blended its essence with the requirements of the time, and so produced new art. As they worked, so might we. What is wanted is a basis from which to start—something that the weaker can fall back upon, and the stronger advance from. And if there can only be agreement as to what that basis should be, there is every chance that the end of the century will see a traditional vernacular style once more flourishing in England, and that another chapter will be added to the history of architectural evolution.

GERMAN FORESTS.

THE entire area of the German empire amounts to about 135,000,000 acres, of which about 126,000,000 acres are devoted to agriculture and forestry. Of the remaining 9,000,000 acres, which consist of waste and barren lands and of land used for industrial purposes, about 2,000,000 acres might perhaps still be reclaimed for agricultural and forestry purposes by means of bog-cultivation and drainage.

Of the entire agricultural area of 126,000,000 acres, about 35,000,000 acres, or more than one-quarter, consists of forests or forest land. About 18,500,000 acres of the total forest area are cultivated as purely forest holdings, and about 16,500,000 acres are attached to agricultural holdings. The total forest area is distributed amongst 950,000 holdings, of which the greater number are only of small extent; of the larger ones, about 2,000 belong to the States and Crowns, and possess a total area of about 12,500,000 acres; of the small holdings 97 per cent are attached to agricultural holdings, so that, to a certain extent, they may be considered as agricultural holdings. It would seem that the number of agricultural holdings, with forest lands attached, is gradually declining, most probably owing to the increased efficiency of farming. On the other hand, forest land shows a gradual but distinct increase.

Although the example of the German empire shows that it is possible to reap a substantial annual benefit from instruction in forestry and the consequent rational cultivation of forests, mere pecuniary gain is by no means the sole factor which ought to justify the solicitude displayed on their behalf by far-seeing governments, as there exist many other reasons, dictated by other motives and considerations, for the cultivation and preservation of forests.

The forests of a nation are closely bound up with the lives of the people in legends, poetry and history. In olden times they were protected by laws and statutes under pain of severe punishment, and they are still preserved in some countries with the greatest possible care, not only by the State, but by private landowners, provincial and municipal corporations and other bodies. An empire of the inland extent of Germany, for example, requires for social, hygienic and climatological reasons a larger extent of forest-land than countries with a less extent of inland and longer coast-lines. The proximity of forests acts upon those who dwell in or near them in a similar manner as the proximity of the sea exercises a healthy influence upon those who dwell on or near the coasts, and it may be asserted that, to some extent, a country without forests resembles a country without a coast.

The inhabitants of the forests, the foresters, wood-cutters and other forest workmen and dwellers are, as regards health, strength and a certain native shrewdness and sagacity, as superior to the peasants of the plain as these again are superior in health, strength and many sturdy virtues to the majority of the inhabitants of the towns.

From an æsthetic point-of-view, forests are absolutely necessary, as necessary in their special province as dunes, moors, heaths, rocks, mountains and even bleak lands, as they all form the necessary complements to cultivated land and impress upon the beholder the infinite play of contrast and variety displayed in all the manifestations of nature.

Finally, from a climatological and hygienic point-of-view the value of forests to a nation cannot be too highly estimated. The presence of large forests supplies the air with moisture and most probably exercises influence upon the regularity and extent of the rainfall; heavy and protracted rainfall which might cause serious inundations is regulated to a greater or lesser extent by forests, which act as natural reservoirs for water storage and gradual supply. Air vitiated with dust and other impurities, chemical, physiological and mechanical, passes into forests to undergo filtration and chemical transformation, and issues forth again purified and revived with health-giving constituents. The fate of parts of Italy, which, under rational conditions of forestry and agriculture, might have been the paradise of Europe, is a warning example amongst many others of the dangers that attend the practice of reckless deforestation, and the conclusions to be drawn therefrom have not been overlooked in Germany, where unruly rivers are now being rendered amenable to control by afforestation at their sources.

The devastation caused by the recent floods in Silesia shows the necessity of action of this nature in Germany.

In Switzerland, where the floods have wrought much damage during the rainy summer of this year, an influential party is advocating the diminution or prevention of floods by afforestation instead of by engineering works for the regulation and correction of the courses of rivers, to which latter the preference has hitherto been given. The Association of Forestry, which met lately at Schwytz, has expressed itself most emphatically in this sense.

Leaving aside the question of the relative efficiency of the two methods of the prevention of floods by river regulation or afforestation, the former is certainly much more expensive than the latter. Between 1871 and 1901 the Swiss Government has expended about £2,000,000 on the regulation of rivers by engineering works, and only about £125,000 on afforestation work for the same purpose. — *The Architect*.

AN ENGLISH ART SCHOOL IN BELGIUM.

ACCORDING to the *Morning Post* Mr. Alfred Gilbert, R. A., has now completed his arrangements for the establishment at Bruges of a school for the study of every branch of the fine-arts on entirely practical lines. He had several reasons for choosing Bruges as the site of his art school, or rather art colony, for Mr. Gilbert's scheme is far wider and more comprehensive than the word "school" suggests. An ancient city of noble traditions, beautiful in itself and with its peacefulness undisturbed by the rush and hurry of modern life, Bruges impressed Mr. Gilbert from the first as an ideal place for study. Again, it is one of the cheapest towns in Europe to live in, a great recommendation to the art student, who is almost invariably poor, and its central position makes it within comparatively easy reach of England and of some of the chief art centres of the Continent. The school will be divided into three sections: The elementary, in which rudimentary drawing and modelling and still-life painting will be taught; the middle, where, besides drawing, painting and modelling from the life, the students will be called on to make daily exercises in composition, and learn the arts of embossing and chasing and the making and tempering of tools; and the advanced, where they will be engaged in carrying out, individually or in collaboration, some specific design. From the advanced class Mr. Gilbert proposes to obtain what assistance he may need in the execution of his own work, which will be carried on in the presence of the whole school. Both male and female students will be received and will board in houses managed by the nominees of Mr. Gilbert, who will himself supervise their arrangements.

Some idea of the great scale of Mr. Gilbert's plans may be gathered from the fact that the group of buildings that he has acquired at Bruges cover an area of three acres. One-third of this has been portioned off for the school studios, one-third for a great number of private studios, which will be at the disposal of the students on very moderate terms, and the remaining third for the laundry, dairy, etc., of the colony of artists. The houses for the male students will be part of the premises, and Mr. Gilbert can arrange for the accommodation of about two hundred, who will sleep in cubicles unless by special arrangement. All will be lodged and boarded on inclusive terms, and there will be a club for the men managed by the students themselves on the principle of a naval mess, which will supply all additional wants. Every encouragement will be given to the social as well as to the art side of the colony's life. Pianos will be in each common room, and it is hoped that an amateur musical society will soon be formed among the students. There is yet another interesting feature. A permanent exhibition in a large gallery will be attached to the school, and to this exhibition artists of all nationalities

will be invited to contribute. The whole will be, or at least Mr. Gilbert hopes it will be, a self-contained colony of artists, in which there will be means of studying all that appertains to the complete equipment of a craftsman. Mr. Gilbert will have the good wishes of all English artists in his venture, and his pupils will have the privilege of working with a man who is not only one of the first masters in the world of his own chosen craft, but who has besides an extraordinary gift of sympathy, which enables him to understand as few can how hard is the struggle that confronts every sincere student. Mr. George Gilbert is the secretary of the new school.

INTERESTING DISCOVERIES AT OXFORD.

AN interesting discovery has been made at Queen's College, Oxford. During the long vacation important works have been in progress, including the installation of the electric-light throughout the college and the overhauling of a part of the drainage. In introducing the electric-light it was convenient to pass a cable through the crypt underneath the apse of the chapel, which was erected in the northeast corner of the great quadrangle in 1714. On opening the crypt it was found to contain on a stone rest a leaden casket with the remains of the founder, Robert Eglesfield, chaplain and confessor to Philippa, Queen of Edward III, from whom the college derives its name. Eglesfield died in 1349, aged forty-three, and was buried in the college chapel. Cut deep in the lead, on the top of the casket are the words, "Reliquiæ Fundatoris," a peculiarity being that the letter "d" is turned backwards. No date accompanies the inscription. In front were coffins of Provosts Brown, Fothergill and Collinson, and in a recess to the right on entering were the coffin of Provost Smith and the remains of Provost Haltom. The latter was buried under the old chapel in 1704, but his coffin was removed when the new chapel was built a few years later.

There were also in the crypt some curious memorials which had formerly been placed in the old chapel, and at its demonstration were probably for safety transferred to this spot. One was broken stone, to which was attached a small brass representing a tun or barrel, with a musical note known as a "long" upon it, with the capital letter "R." This is a rebus of the name "Langton," Robert Langton having been a doctor of laws, and nephew of Bishop Langton, who at one time was provost of the college; Robert built the large ante-chapel to the old chapel in the year 1518. The stone had also upon it a depression in which the head of the figure of Langton had rested. In the muniment room of the college was a brass which in the last century was believed to be that of Robert Eglesfield, the founder of the college, but archaeologists described it as of later date, and no doubt correctly so. The head of this brass fits into the depression in the stone on which is the rebus, and it is certainly that of Robert Langton.

Another interesting discovery was a brass representing the figure of a man, with an inscription below. The features and the details of the inscription are all rubbed quite flat. This has been identified as the memorial of Nicholas Hyenson, fellow of the college in 1477. In addition, there was found a stone with an inscription of "Radolphus Hamisterrey, Master of the University College." Above the inscription in the depression of the stone there was evidently originally a figure, but this has disappeared. In the crypt were the three gravestones, which formerly rested on the floor of the old chapel, of Provost Airay (Provost, 1599-1616), Provost Christopher Potter, and Provost Langbaine. Airay's stone has a brass plate with an inscription upon it, and the other stones are engraved with the arms of the provosts. In the identification of these memorials an engraving by Burghers representing the ground-plan of the old chapel was found useful. This plan also facilitated the determination of the position of the west front of the ante-chapel, which was disclosed in the excavations made for drainage purposes in the line of the path leading from the great gate of the college to the chapel passage.

The drainage works also disclosed some feet below the surface two passages, one in the front quadrangle and the other in the back, the object of which at first seemed doubtful. It was conjectured they might have belonged to an older building occupying the site of the present college. Mr. James Parker (President of the Oxford Architectural and Historical Society), who was consulted, satisfied himself that the tooling on some of the stones corresponded with the tooling of some of the stones which were laid when the college was rebuilt. It is now looked upon as certain that the passages were conduits leading to large blind wells intended to receive the surface water from the college roofs and quadrangles, and that the conduits were made so large to hold the flood water in case of an exceptional rainfall.

The crypt had been closed, the leaden casket and coffins being left as they were found. The remains of Provost Haltom, from which the coffin had fallen, have been deposited in an oak casket, and the gravestones have been placed in the ante-chapel. The brasses, found in the crypt, with the stones to which they are attached, are fixed in the wall of the apse, together with two other brasses that have long been preserved in the muniment room. They will form an additional feature of interest in the chapel, the foundation-stone of which was laid on February 6, 1714, the dedication taking place on All Saints' Day, five years later. The illuminated windows in the chapel by Van Ling (1635) are in good preservation, and were removed from the first chapel. They depict scenes in the life of Christ. The westernmost windows are earlier, and two of

them bear the date (1518) of Robert Langton's ante-chapel. Some tiles of an ornamental character were discovered *in situ* near the western entrance of the old chapel, some of them adorned with the same rebus as is on the brass which formed part of Langton's memorial. — *London Times*.

ILLUSTRATIONS

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

STUDY FOR HOUSE OF M. H. WEISSBROD, ESQ., GREENFIELD, MASS. MESSRS. E. C. & G. C. GARDNER, ARCHITECTS, SPRINGFIELD, MASS.

HOUSE OF GEORGE E. ROGERS, ESQ., GREENFIELD, MASS. MESSRS. E. C. & G. C. GARDNER, ARCHITECTS, SPRINGFIELD, MASS.

DESIGN FOR A COUNTRY HOUSE. MR. E. G. W. DIETRICH, ARCHITECT, NEW YORK, N. Y.

Additional Illustrations in the International Edition.

NOTE: — A photographic catastrophe, occurring too late to allow of remedy or substitution, reduces the number of illustrations in this issue.

GERMAN ELECTRIC CHANDELIERS AND LIGHTS: TWO PLATES.

THESE interesting designs are copied from *Architektonische Rundschau*.

NOTES & CLIPPINGS

AN IMAGINARY WOUND. — A workman in a big building company's yards nearly died of fright a few days ago. The foreman heard a yell and much commotion among a lot of carpenters in the yard, and rushed to the scene. He found one of the men on the ground with a 2 inch bit apparently sticking through his side, white as a ghost, and practically out of his mind. His fellow workmen had sent for an ambulance and were about as badly frightened as he. The foreman took out his knife and slit the man's jumper and shirt down the back. The bit came away with the shirt, tightly rolled up in it, and the man was absolutely unscratched. It appears that he had been standing against an unfinished caisson in which 2-inch holes were being bored. The bit was run by compressed air, and when it came through the planking was very hot. It was the heat from the bit which made the workman think it was in his body. — *Exchange*.

SACRILEGE AGAINST NATURE. — When Columbus discovered America there stood in a remote mountain gorge in Cherokee County, North Carolina, a tulip poplar-tree that was then 400 years old. For four more centuries it grew and flourished, and was recently felled for exhibition at the St. Louis World's Fair. The tree was 13 feet in diameter at the base when it was cut. The gorge in which it grew was so inaccessible, being forty miles from a railroad, that it was impracticable to obtain a section near the base. Forty feet up, where the tree was a little more than 6 feet in diameter, a disk was cut. This has been polished, and will occupy a place in front of the hunter's lodge. On the polished disk have been engraved the important historical events of the Old North State from the time that Sir Walter Raleigh took possession of the land in his sovereign's name on July 4, 1584, through the Colonial days, during the Revolution, and up to the present time. Another section of the tree will stand like a monument in the forestry exhibit. It is 10 feet high. A portion has been dressed, polished and varnished, while the lower portion is covered with the bark. — *Harper's Weekly*.

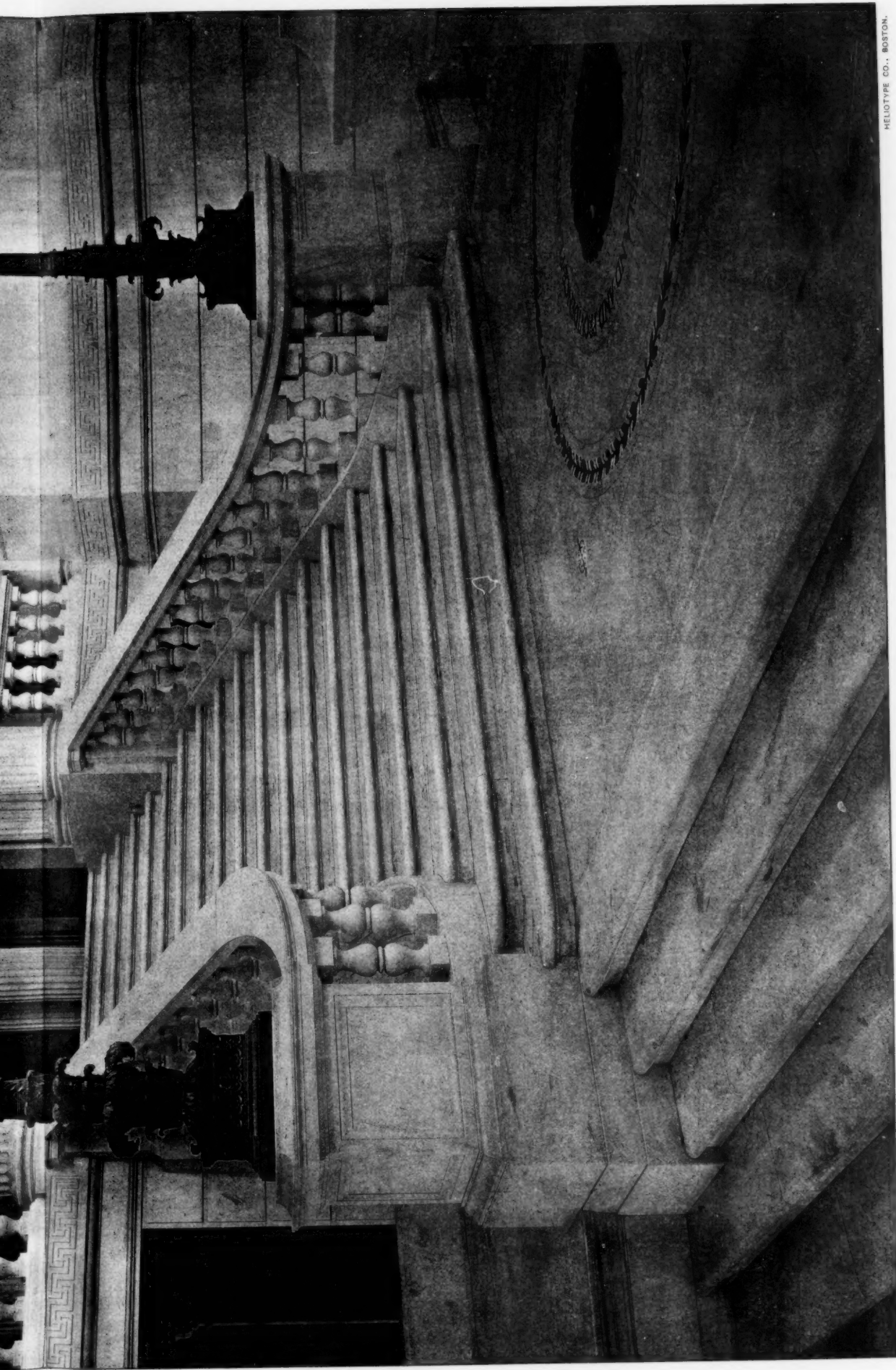
AUTOMATIC LAKE WATER-GAUGE. — The United States Lake Survey, under the direction of Major W. L. Fisk, has installed at the outer end of the south pier in Milwaukee, Wis., an automatic display water-level gauge, and others will soon be put up in various lake ports. The contrivance is a small house built on the pier, from two windows of which are seen large black figures, each 2 feet high, which tell the mariner that at the Milwaukee Harbor there is a certain depth of water above the amount charted. The charts show a depth which is believed to be below the lowest mark. The machinery which runs the contrivance is entirely automatic, and every time the water rises or falls a tenth of a foot the figures are changed to correspond. Sometimes there is only a little fluctuation, and, again, a fall of 1 foot is registered in half an hour. The changes in water level are marked by a galvanized iron float, weighing about 180 pounds, that floats in a crib just below the house, built on the pier. From this a cable leads over a ratchet wheel, a part of the machinery of which is set in the top of the house. From the other end is suspended a counterweight, just half as heavy as the float. The principle of the contrivance is based on a double escape-

ment, similar to the escapement of a watch, only that there are two wheels instead of one. Between these two wheels is hung the third wheel, over which passes the cable connecting the float and its counterweight. From this wheel is hung a forty-pound weight, placed in such a position that no matter which way the wheel moves it must carry the weight up with it. When a difference of one-tenth of a foot has been marked the weight is automatically transferred to the inner wheel of the double escapement, and this sets in motion the gearing which moves the circular curtain that displays the figures through the windows. This permits the weight to drop back into position again and transfers it to the other wheels, ready to repeat the operation. After the opening of navigation next year, a strong reflecting lens lantern behind each of the curtains, one for feet and the other marking decimal parts of a foot, will enable mariners to note the record at night. In addition to this, there has been installed in the same house a small self-registering gauge, designed by Chief Engineer E. E. Haskell, which automatically records the water level at every minute of the day and night, winter and summer. Just outside the pier, an iron pipe about 4 inches in diameter has been let down into the water. At the bottom it is closed, with the exception of a small hole, and a column of kerosene, 4 feet long, has been poured in from the top. The oil, being lighter than the water, remains at the top, with its level the same as the water outside. Into this a small float is placed, and the oil prevents it freezing in the winter. From this float a wire leads over a small screw thread wheel on the register, and being counterbalanced, this moves the wheel with the variations in the water level, and these are automatically recorded on an endless strip of paper fed through under a pencil, at the rate of 2 inches per hour. For every foot of variation, the pencil moves 2 inches laterally on the paper. — *N. Y. Evening Post*.

SHORT-SIGHTED PAINTERS. — Mr. Kenyon Cox addresses the following communication to the *New York Evening Post*: "It is perennially surprising what nonsense is written, by people who should know better, about short-sightedness in painters. Now it is Mr. Val Prinsep who thinks Whistler must have been short-sighted, because he painted broadly, and that Reynolds was short-sighted because he wore glasses and painted broadly, too. Why can they not remember that many more people wear glasses for long sight than for short; that eyes normally grow long-sighted from the flattening of the lens, which is one of the effects of age, and that painters nearly always grow broader in their handling and finish less as they grow older? Of course, you are right in saying that the most long-sighted painter need see no more than he chooses, but there is more in it than that. Nearly all painters of minutely finished miniature work have been short-sighted, as was notoriously the case with Meissonier. As they cannot see their work at all, except close to it, they paint for near effect, and paint in detail. Conversely, a long-sighted painter cannot finish minutely without great eye strain, and takes to working broadly for distant effect. Glasses will help him, of course, as they help him to read fine print, but they worry him in looking at nature. Hence, many painters who did miniature work in youth have enlarged their scale and their style as they grow older. If breadth really came of short-sightedness, the reverse would be the case, and short-sighted painters would begin broadly, and gradually achieve more finish, while long-sighted painters would begin with great finish and end with microscopic detail. Has such a case of increased finish in age ever been heard of in art? The fact is that, so far as a painter's work is conditioned on the focal length of his vision, it is how his picture looks to him, not how nature looks, that counts.

THE MARINE BAND AND THE LABOR UNIONS. — If there ever was a labor controversy in which the general public has been disposed to see only one side, it was the refusal of the Chicago bands to play with the United States Marine Band at the Chicago centennial. Outsiders saw a great civic celebration marred by a silly and unreasonable wrangle, they saw the parade marching, as one humorist put it, to the music of phonograph and pianola, and they straightway cursed the men who had done the marring. The musicians have not chosen to remain silent under these attacks, and have issued a full and frank statement of their position. "The civilian musicians have no objection to the Marine Band playing for the people that support them," the union magnanimously says: "in fact, they believe this band should be used for that purpose, but for no other. And had the Marine Band been ordered to Chicago to participate in the centennial, representing the United States Government, without pay, other than their regular pay, there would have been no objections, and they would have been fulfilling their proper function." The strongest point which the union makes is against the local committee, which, it is stated, allowed the union to believe that the Marine bandmen represented the Government, and were the guests of Chicago. That is to say, at the banquet, the Secretary of the Navy and the musicians alike were guests and alike were expected to contribute something to the gayety of the occasion, the Secretary by making a speech, the others by playing a few selections. "The fact that the members of the Marine Band stood in the alley in the rear of the Auditorium during the progress of the banquet, waiting for the stage door to open," says the union pertinently, though the newspapers flatly dispute the statement of fact, "does not appear to uphold the contention of the committee that they were to appear as guests, representing the United States Government, at the banquet, but would rather indicate that the committee had contrived to obtain the service of the Marine Band through misrepresentations to the Navy Department." Nothing is gained, to be sure, by calling the Government organization "a very mediocre band of poorly paid Government musicians," but it is none the less worth while to have the data for each man to make up his mind as to the sinners against and the sinning. — *Exchange*.



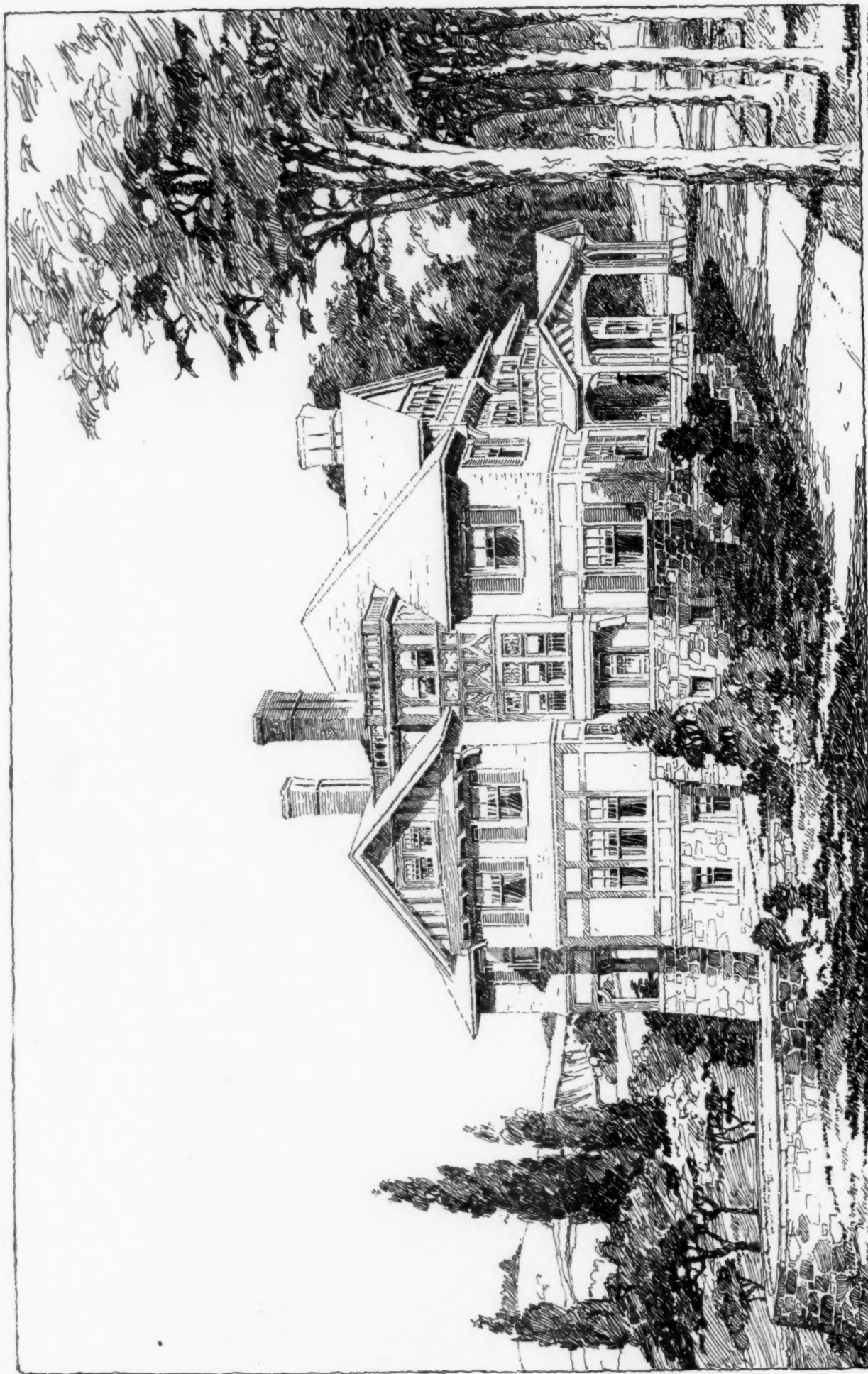


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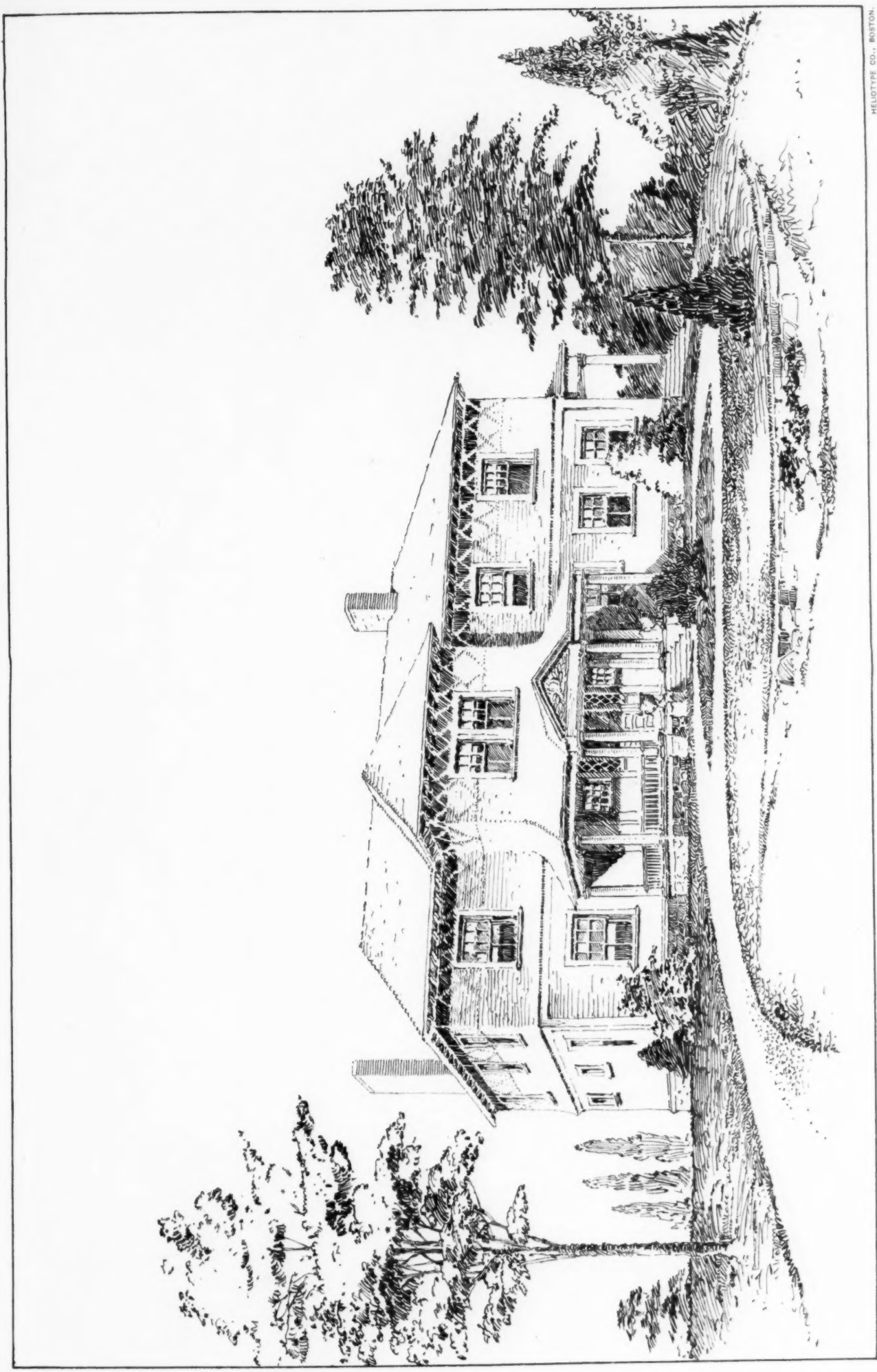
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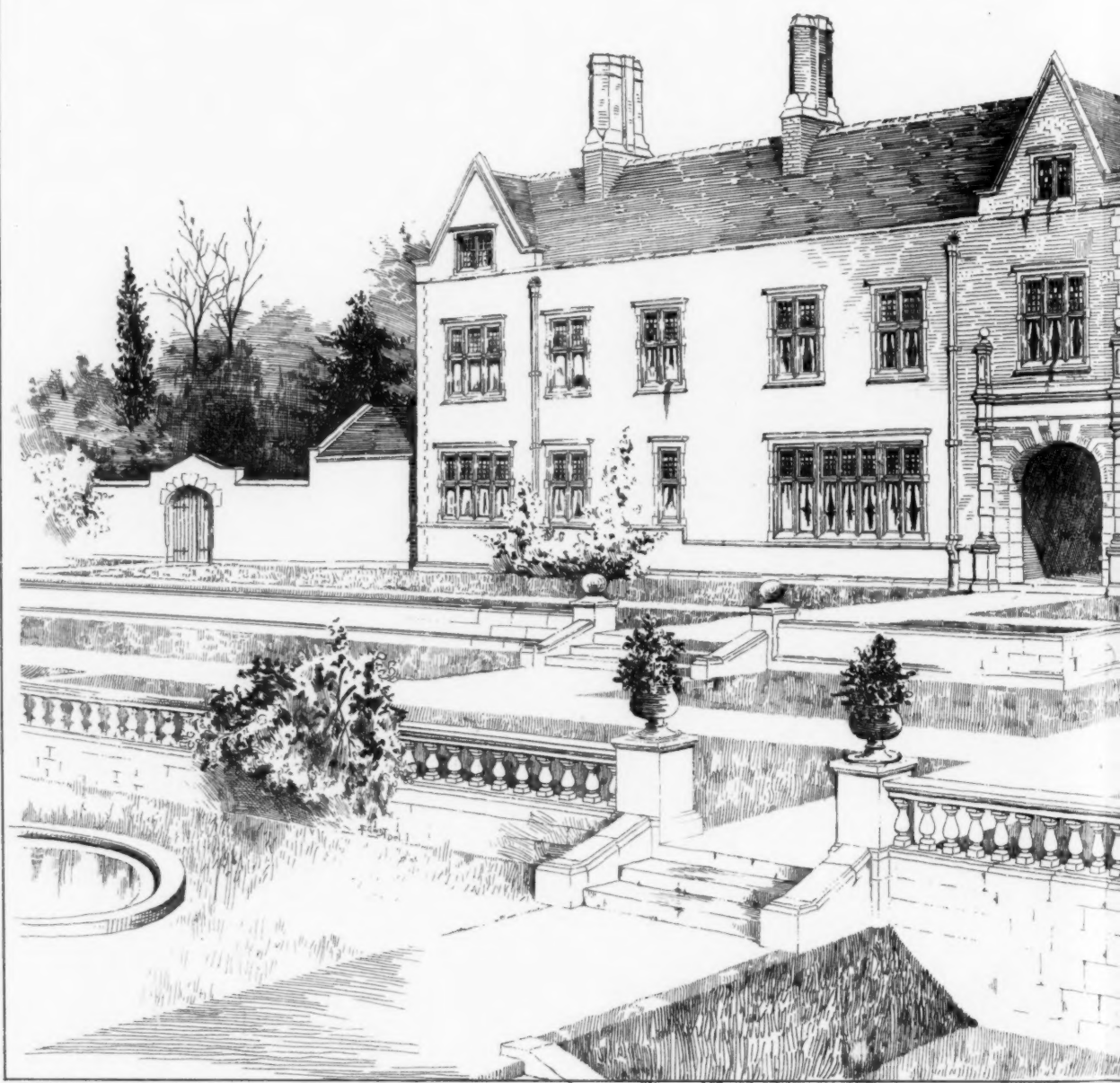
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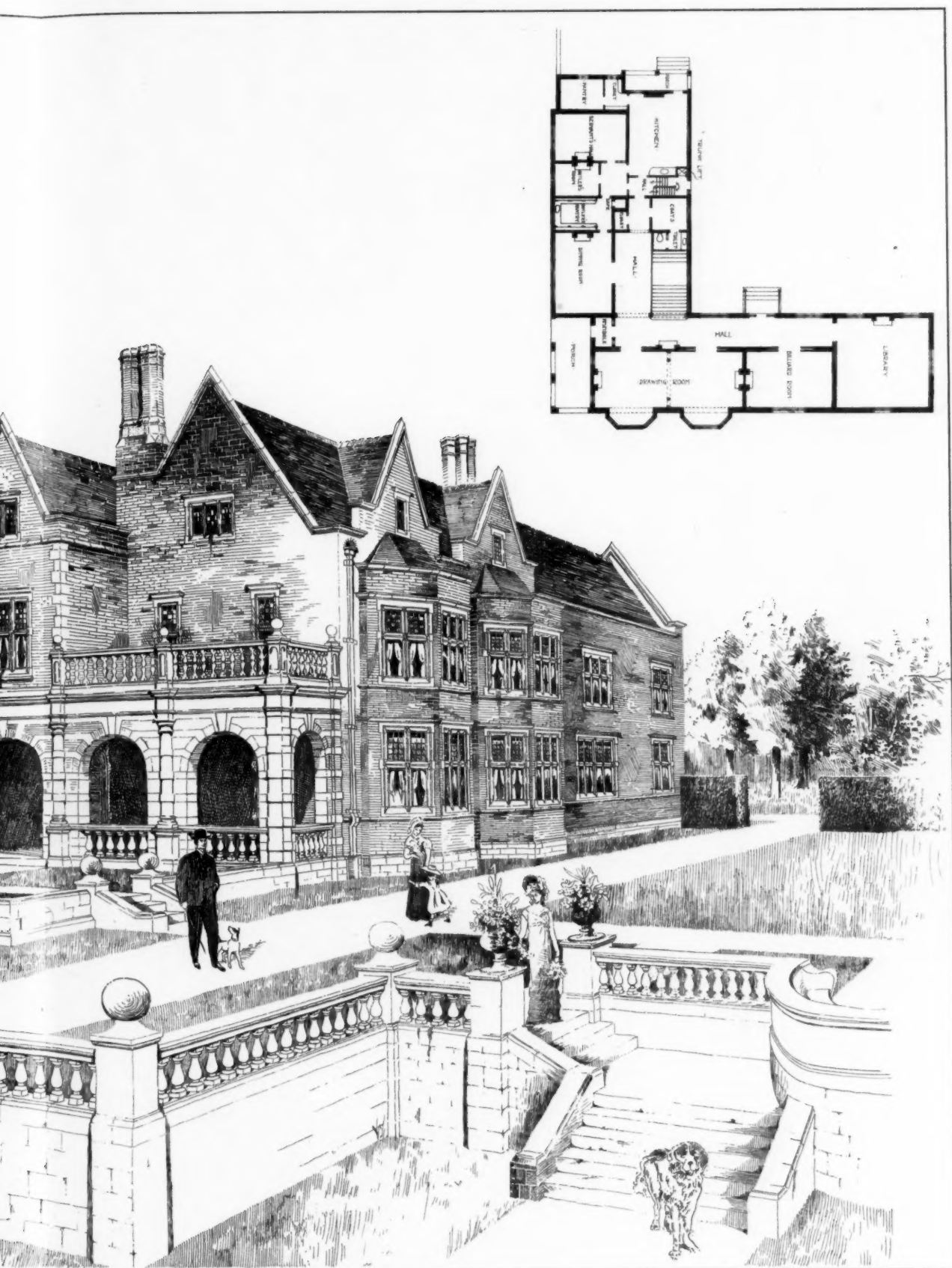
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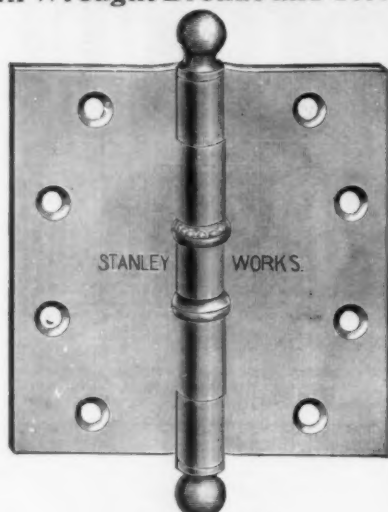
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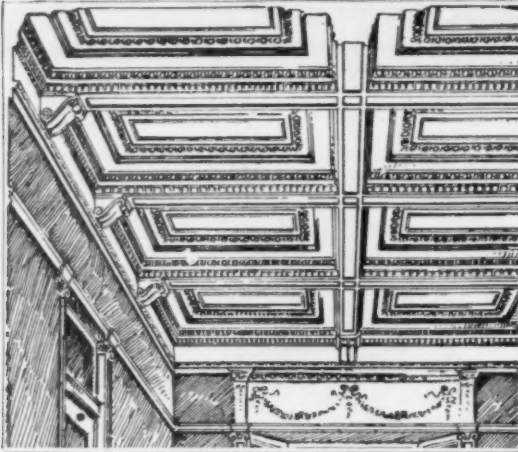
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CODE OF PRACTICE FOR SUB-ESTIMATING AND SUB- CONTRACTING

Adopted by the Master Builders' Association of the City of Boston, Aug. 2, 1894.

ARTICLE I.

Obligation of Principal Contractor to Sub-Contractor.

A principal contractor is under obligation to treat upon an equal basis all estimates which he "receives" prior to putting in his own bid. Estimates must be considered as "received" when they come into a principal contractor's possession, either by his direct solicitation or by being accepted by him. The opening of a bid, knowing it to be such, constitutes receipt of the same.

A principal contractor is under no obligation to use a bid which he has not solicited, accepted, or received, but if he does not wish to use the estimate of a sub-bidder he should decline it, if proffered personally, or should return it unopened if sent to him by mail or otherwise. The retention of a bid should be construed as a receipt of the same.

A principal contractor, when making up his estimate, is not entitled to receive bids from sub-contractors if he is at the same time making himself their competitor by figuring their portion of the contemplated work. It is legitimate for a principal contractor to figure all portions of work, depending upon no one for what are usually known as sub-estimates, but it is not legitimate for him to receive bids from others for sub-work if he is himself figuring those portions independently.

ARTICLE II.

Award of Sub-Contracts.

The principal contractor having been awarded a general contract should immediately award the sub-contracts to the lowest bidder in each branch.

ARTICLE III.

Penalty for not Awarding Contract to Lowest Sub-Bidder.

A principal contractor failing to award a sub-contract to the lowest sub-bidder to whom he is under obligation as previously provided should be liable to pay damages to the said lowest bidder, in amount not less than ten per cent of the amount of the estimate.

Payment of such damages will not relieve the principal contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE V.

Payments to Sub-Contractors.

Unless the contracts made with sub-contractors otherwise provide, payments during the progress of the work should be made by the principal contractor to the sub-contractors upon the same basis of payment, in relation to amount of work performed, as is prescribed in the contract made by the principal contractor with the owner.

Final payment to a sub-contractor should be considered as due at the expiration of thirty days after the completion of his work and its approval by the architect or owner, unless otherwise provided by the sub-contract or agreement.

ARTICLE VII.

Obligation of Sub-Contractor to Principal Contractor.

Should a sub-contractor refuse to contract at the amount of the estimate he has given to a principal contractor who has used the said estimate in good faith, he then should be liable to the said principal contractor for damages in amount not less than the difference between the amount of the estimate which was submitted by him and the amount at which the principal contractor may be obliged to contract the work.

Payment of such damages will not relieve the sub-contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE X.

Bids to Architects or Owners.

When bids for separate departments of work on a building are solicited by the architect or the owner, they should be submitted with the understanding that they are direct estimates, for which direct contracts are to be made by the owner with the lowest bidder, and no other disposition of such bids should be permitted without consent of the bidder submitting the same.

Sub-bids should be given only to the principal contractors who are estimating the work in question, and should not be left with architects or owners for the inspection and information of principal contractors. Sub-contractors must understand that bids thus left with architects or owners are in great danger of losing their confidential character, and that if they so leave them they cannot claim protection or redress under the first article of this Code.

SUGGESTIONS.

Members of this Association having sub-contracts to let, or material to buy, should, as far as may be consistent with business principles, deal only with members of the Association, or at all events give their fellow-members an opportunity to compete, and then give them the preference, other things being equal.

All bidders should take cognizance of the danger they may be subjected to through the practice, so prevalent in some architects' offices, of making change in plans or specifications, or in both, during the progress of estimating. Correction of this pernicious practice can only be obtained through refusal by contractors to estimate under such conditions.

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Pennsylvania Hospital, Philadelphia, Pa.	" 1755
Carpenters' Hall, Philadelphia, Pa.	" 1770
Independence Hall, Philadelphia, Pa.	" 1729
Faneuil Hall, Boston, Mass.	" 1741
and others.	

CHURCHES

King's Chapel, Boston, Mass.	Date 1749
Seventh-day Baptist Church, Newport, R. I.	" 1729
Christ Church, Alexandria, Va.	" 1767
Christ Church, Philadelphia, Pa.	" 1727
St. Paul's Chapel, New York, N. Y.	" 1764
Old South Church, Boston, Mass.	" 1729
First Church, Hingham, Mass.	" 1681
St. John's Chapel, New York, N. Y.	" 1803
First Congregational Church, Canandaigua, N. Y.	" 1812
St. Peter's P. E. Church, Philadelphia, Pa.	" 1758
Gloria Dei Church, Philadelphia, Pa.	" 1700
and others.	

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date 1636
Royall Mansion, Dedham, Mass.	" 1737
Philipse Manor House, Yonkers, N. Y.	" 1745
Tudor Place, Georgetown, D. C.	" 179-
Mappa House, Trenton, N. Y.	" 1809
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Mount Vernon, Va.	" 1743
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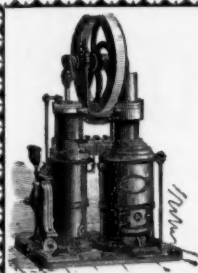
Porches and Doorways	67 Subjects
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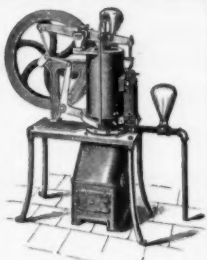
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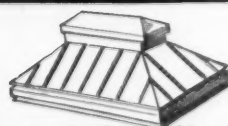
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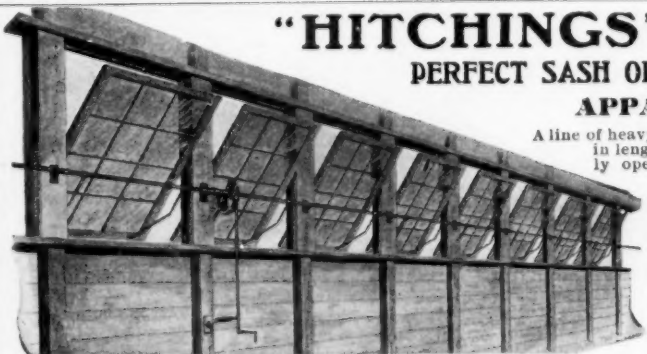
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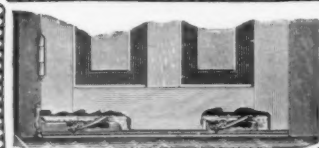
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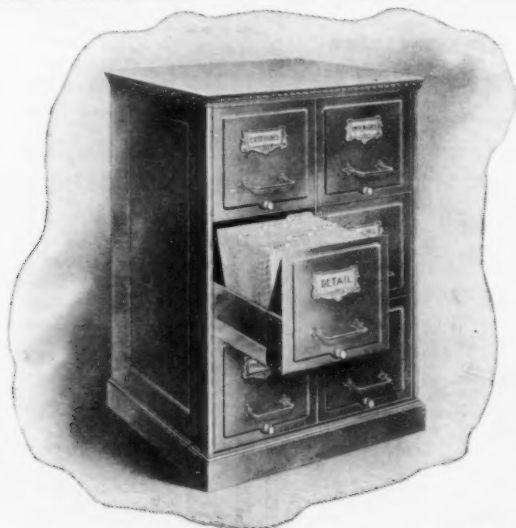


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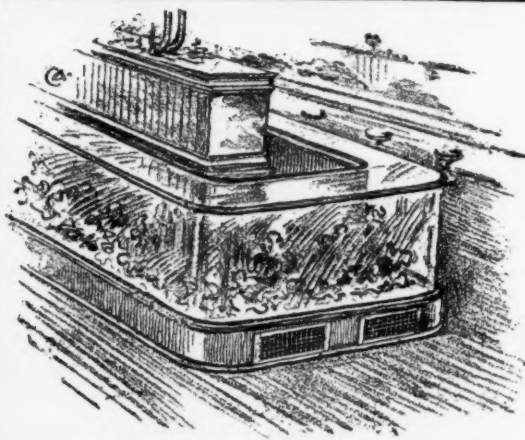
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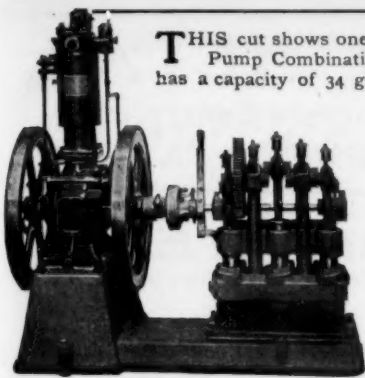
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Meriden, Conn.—A big electric power plant is to be located here. The plant, which will be an auxiliary to the big station at Berlin, will probably be located near the entrance to the park.

Minneapolis, Minn.—Plans have been prepared by Harry W. Jones for a \$30,000 pavilion at Lake Harriet. The main part will be of an irregular rounded formation, about 100 feet through at its widest part. Branching out from the main part will be a hundred foot colonnade on either side. The style is modern Italian, and the architect's drawings show a very attractive structure.

Muncie, Ind.—The Union Traction Co. has purchased half a block of ground in the heart of the city upon which will begin at once to build an interurban terminal station.

New Bedford, Mass.—The Committee on City Property has recommended an appropriation of \$21,348.50 for fire station at the corner of Reed and Kempton Sts.

Newport, R. I.—Mrs. John Nicholas Brown will improve the Hugh T. Dickey estate on Halidon Hill. The old house, a Newport landmark fronting the harbor, is to be torn down. On the site Mrs. Brown will erect a handsome stone villa.

New York, N. Y.—Plans have been filed with the Bureau of Buildings for Public Library No. 9 in the Carnegie chain of free libraries. The building, which is to cost \$60,000, will be erected at 112-114 E. 96th St., from plans prepared by Babb, Cook & Willard, 3 W. 29th St. It will be three stories high.

Columbia authorities are advocating the project of acquiring a university hospital, or one under control of the university, where clinical instruction and the section teaching at the bedside could be carried on. To build and maintain such a hospital it is estimated that a capital of \$2,000,000 must be raised.

E. A. Cruikshank & Co. have sold for the estate of F. Gaillard Thomas No. 140 to 158 St. Ann's Ave., 19 three-story brick dwelling-houses on plot 80' x 200', occupying the block front between 134th and 135th Sts. The buyer will make alterations to the buildings.

Ground has been broken for the new Harlem Hospital on Lenox Ave., between 136th and 137th Sts. The hospital will be eighteen months in building and will cost upward of \$400,000.

McKim, Mead & White have nearly completed plans for the new \$3,000,000 Bellevue Hospital, for which contractor's bids are to be received this fall.

Norwich, Conn.—Carpenter & Williams, of this city, have the contract for the erection of the first two wards for the new insane hospital to be built by the State in this city. Their bid was \$129,000 and was the lowest of the five submitted.

Oklahoma City, O. T.—An up-to-date central fire-house is to be built.

Ottawa, Ont.—\$100,000 has been appropriated for public buildings here, the chief of which will be a new national museum.

Paterson, N. J.—The corner-stone of the Danforth Free Public Library, the gift of Mrs. Mary E. Ryle to the city, was laid on October 24th with appropriate ceremonies. The building will cost, when completed, \$200,000. It is to be built of limestone, in the Ionic style of architecture. It will have a frontage of 120 feet on Broadway and a depth of 88 feet in Auburn St. In the centre of the rear will be a bookstack building, 34' x 36', to accommodate 60,000 volumes.

Racine, Wis.—City Engineer Conolly has the preliminary sketches for the contemplated fire house and police headquarters, to cost \$15,000.

Richmond, Va.—It is reported that Messrs. E. W. Warburton and H. S. Bird, stockholders in the Williamsburg Knitting Mill Co., of Williamsburg, have secured control of the concern and will increase the capital from \$50,000 to \$80,000 and enlarge and improve the plant.

Rockland, Me.—Work has begun at Seven Hundred Acre Island on the foundation of a summer residence for Charles Dana Gibson. The cottage is to cost \$10,000.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

oxbury, Mass.—Plans for the new Inter-Colonial Club-house, to be erected at 214 and 216 Dudley St., opposite Greenville St., call for a building four stories high, 72 feet front, 118 feet deep, constructed of brick and stone. Plans have been made by John A. MacEachern and the contract for the work of construction has been awarded to A. C. Chisholm.

Seattle, Wash.—The contract for the erection of the public building here has been awarded to Magrath & Duhamel, of this city, for \$665,000. The building is to be of Chuckamuk stone, but the government reserves the right to substitute granite for that stone at an additional cost of \$60,000.

Selma, Ala.—The town is certain of meeting the conditions imposed by Mr. Carnegie for a \$10,000 library building.

Seymour, Conn.—The Woman's Club is conducting an active propaganda in favor of a new library building.

South Boston, Mass.—The new coopeage plant on C St., near Anchor St., for the Brooklyn Coopeage Co. will be of brick and stone. The buildings will comprise a two-story structure 100' x 128', and another 100' x 256', to cost \$80,000 above the land. Contracts have been awarded to E. W. Clark & Co., of Boston, and A. E. Krouse, of New York, with A. H. Vinal, of Boston, as supervising architect.

Foundations are in for the addition to the Walworth Manufacturing Company's plant in E. 1st St. The proposed structure will be 54' x 259' in general dimensions and six stories high. The cost is estimated at \$75,000.

Spartanburg, S. C.—The city has accepted Mr. Carnegie's conditions, and so will have before long a \$15,000 library building.

Springfield, Mass.—The new home office building of the Springfield Fire and Marine Insurance Co. will be erected in the Renaissance style of architecture, three stories in height. Excavations for the foundation will be started at once. Peabody & Stearns, of Boston, are the architects. The Central Building Co., of Worcester, the contractors. The building will cost in the neighborhood of \$300,000.

Stouchsburg, Pa.—An engine-house is to be built here for the new fire company.

St. Paul, Minn.—The School Board report to the council recommends the expenditure of \$115,000 for additions to buildings, heating plants and a new structure. This covers an eight-room addition to the Phalen Park School in the 1st Ward, four-room additions to the Douglas and the Hawthorne Schools and a new four-room building in the 6th Ward. The Board is considering a proposition for erecting a new high school in the St. Anthony Hill district, to cost \$125,000.

The Deeks Co. are pushing work on the Northern Pacific freight-house on E. 4th, between John and Kittson St. The building will be 942 feet long and a portion two stories high. Cost, \$75,000.

Washington, D. C.—An appropriation of \$20,000 is recommended for the fire department. Edwin F. Durang, architect, has completed plans for an additional building, four stories high, of stone, for Trinity College. The cost will be \$75,000. W. J. McShane, of Philadelphia, is estimating.

Westerly, R. I.—Edgar B. Moore, of New York, proprietor of the Gladstone Hotel at Narragansett Pier, is preparing to build a new casino at that place, where he has purchased the site of the old casino, which was burned, and the Billington land across the street to the north. He intends to build on the Billington land. The plans are being drawn by Taft & Belknap, architects, of New York.

West Haven, Conn.—The West Haven School Board at a recent meeting voted an appropriation of \$33,200. \$30,000 of this is to be used in building an addition to the Union School, while the remaining \$3,200 will be used in enlarging the Brown St. School.

West Point, N. Y.—The appropriation of Congress for improvements at the Military School amounts to \$5,500,000, and later it will be asked to make an additional appropriation of \$8,000,000 for the same purpose. Accommodations are to be provided for the housing, training and recreation of 1,200 cadets. Among the notable improvements will be the new



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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Academic Building, new riding hall, and new cadet barracks.

Williamsburg, Pa.—Chas. M. Schwab will erect here, it is said, an industrial training-school, similar in construction and purpose to that recently dedicated at Homestead, and costing \$100,000.

Winchester, Mass.—A press report states that 24 of Winchester's women have started to raise \$200,000, with which to found a woman's sanitarium and temporary home. They have made an appeal to the public to assist in raising the money. One man has pledged \$1,000. The plan is to build the sanitarium on a site containing several acres, bounded by Forest St. and Highland Ave.

Yarmouth, Me.—Wescustogo Lodge, K. of P., has secured the lot opposite the residence of M. C. Merrill on Main St., for a new hall site. The building will be two stories, somewhat larger than Maconic Hall. When erected the upper story will at once be finished for lodge purposes. The lower part of the hall will not be finished at once, as there is some possibility that it may be leased by the Government for post-office purposes.

Youngstown, O.—The Independent Knights of Pythias will erect a modern club-house and auditorium. Several building sites have been optioned, but either the one at Oak Hill Ave. and Walter St. or the lot opposite Trinity Methodist Episcopal Church in South Phelps will be selected. A building with a frontage of at least 50 feet will be erected. Within 30 days plans will be made and the work will then be pushed to completion if sufficient stock is sold.

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 24, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 17th day of November, 1903, and then opened, for the low pressure steam heating apparatus, complete in place, for the U. S. Post-office at Lockport, N. Y., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Lockport, N. Y., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

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PROPOSALS.

HOSPITAL.

[At Camp Eagle Pass, Tex.]

Office of Chief Quartermaster, Department of Texas,
San Antonio, Tex. Sealed proposals will be received
at this office and office of post quartermaster, Camp
Eagle Pass, Tex., until November 19, 1903, for the
construction of an 8-bed hospital, brick, including
installation of plumbing, gaspiping and hot water
heating at Camp Eagle Pass, Tex., according to plans
and specifications to be seen at this office and office
of post quartermaster, Camp Eagle Pass, Tex. In-
formation furnished on application. T. E. TRUE,
D. Q. M. G., U. S. A., C. Q. M. 1454

ROAD WORK.

[At Fort Worden, Wash.]

Constructing Quartermaster's Office, Port Town-
send, Wash. Sealed proposals will be received here
until November 14, 1903, for constructing road,
granolithic walk, etc., at Fort Worden, Wash. Full
information will be furnished at this office. GEO.
H. PENROSE, Q. M., U. S. A. 1454

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PROPOSALS.

HOSPITAL.

[At Fort Mackenzie, Wyo.]

Office Constructing Quartermaster, Sheridan, Wyo.
Sealed proposals will be received here until No-
vember 20, 1903, for construction of a 12-bed hos-
pital at Fort Mackenzie, Wyo. Work on building
shall commence not later than March 1, 1904. Plans,
specifications, instructions to bidders, proposal blanks
and other information may be obtained at offices of
depot quartermasters at Omaha, St. Paul, Denver
and Chicago, and at this office. CAPT. THOS.
SWOBE, Q. M. 1454

STOREHOUSES.

[At Fort Slocum, N. Y.]

Office of the Quartermaster, Fort Slocum, N. Y.
Sealed proposals for the construction of subsistence
and quartermaster storehouses at Fort Slocum, N. Y.,
will be received at the office of the undersigned
until November 14, 1903, at which time and place
they will be opened in the presence of bidders. Plans
and specifications can be seen at the office of the
undersigned on any day except Sundays, between
the hours of 9 A. M. and 4 P. M. R. W. KINGMAN,
2d Lieut., 16th Inf., Q. M. 1454

STOREHOUSE.

[At Omaha, Neb.]

Office of Chief Quartermaster, Omaha, Neb. Sealed
proposals, subject to the usual conditions, will be
received here until November 16, 1903, for the
construction of a new quartermaster's storehouse at
Omaha, Neb. Full information furnished on applica-
tion to this office, where plans and specifications
may be seen. WM. E. HORTON, acting chief Q. M. 1454

BREAKWATER.

[At Biscayne Bay, Fla.]

U. S. Engineer Office, Jacksonville, Fla. Sealed
proposals for dredging and for constructing a stone
breakwater, Biscayne Bay, Fla., will be received
here until November 19, 1903. Information fur-
nished on application. FRANCIS R. SHUNK, Cap-
tain, Engineers. 1454

PRISON.

[At Portsmouth, N. H.]

Sealed proposals will be received at the Bureau of
Yards and Docks, Navy Department, Washington,
until November 21, 1903, for constructing a naval
prison with appurtenances at the navy yard, Ports-
mouth, N. H. Appropriation, \$125,000. Plans and
specifications will be furnished by the bureau upon
deposit of \$25 as security for their return. MOR-
DECAI T. ENDICOTT, Chief of Bureau. 1455

BUILDING.

[At Fort Myer, Va.]

Fort Myer, Va. Sealed proposals for constructing
blacksmith shop, guard-house and extension to rid-
ing hall, will be received until November 21, 1903.
Information on application. W. F. CLARK, Q. M. 1455

COALING PLANT.

[At New London, Conn.]

Sealed proposals will be received at the Bureau of
Yards and Docks, Navy Department, Washington,
D. C., until November 28, 1903, for constructing
an extension of the coaling plant at the naval station,
New London, Conn. Funds available, \$24,700. MOR-
DECAI T. ENDICOTT, Chief of Bureau. 1455

PROPOSALS.

ELECTRIC ELEVATOR.

[At League Island, Pa.]

Sealed proposals will be received at the Bureau of
Yards and Docks, Navy Department, Washington,
until November 7, 1903, for an electric elevator
for building No. 25, Navy Yard, League Island, Pa.
Appropriation \$3,000. Plans and specifications will
be furnished by the Commandant of the naval station
named or can be seen at the Bureau. MORDECAI
T. ENDICOTT, Chief of Bureau. 1453

Treasury Department, Office of the Supervising Ar-
chitect, Washington, D. C., October 14, 1903. Sealed
proposals will be received at this office until 3 o'clock
P. M. on the 15th day of December, 1903, and then
opened, for the construction (including plumbing,
heating apparatus, electric wiring and conduits) of
the U. S. Post-office, Custom-house, etc., extension
of Jacksonville, Florida, in accordance with drawings
and specification, copies of which may be had at this
office or at the office of the Custodian at Jacksonville,
Fla., at the discretion of the Supervising Architect.
JAMES KNOX TAYLOR, Supervising Architect. 1453

Treasury Department, Office of the Supervising Ar-
chitect, Washington, D. C., October 15th, 1903. Sealed
proposals will be received at this office until 3 o'clock
P. M. on the 8th day of December, 1903, and then
opened, for the construction (except heating appa-
ratus) of the U. S. Post-office at Meriden, Connecti-
cut, in accordance with the drawings and specifi-
cation, copies of which may be had at this office, or at
the office of the Postmaster at Meriden, Conn., at the
discretion of the Supervising Architect. JAMES
KNOX TAYLOR, Supervising Architect. 1453

Treasury Department, Office of the Supervising Ar-
chitect, Washington, D. C., October 14, 1903. Sealed
proposals will be received at this office until 3 o'clock
P. M. on the 16th day of November, 1903, and then
opened, for the construction (including plumbing and
heating apparatus) of stable and laundry building,
U. S. Bureau Engraving and Printing, Washington,
D. C., in accordance with drawings and specification,
copies of which may be had at this office. JAMES
KNOX TAYLOR, Supervising Architect. 1453

HOSPITAL AND STEWARD'S QUARTERS.

[At New Bedford, Mass.]

Office Constructing Quartermaster, 209 Thames St.,
Newport, R. I. Sealed proposals will be received
here until November 11, 1903, for constructing
frame hospital and frame hospital steward's quarters
at Fort Rodman, New Bedford, Mass. Information
furnished on application. CAPT. H. C. HODGES,
Jr., U. S. Infantry, Q. M. 1453

CHURCH.

[At Dutton, Ont.]

Proposals will be received until November 15
for erecting a Presbyterian Church. F. W. DRAKE,
Secretary. 1454

HEATING.

[At Portsmouth, N. H.]

Sealed proposals will be received at the Bureau of
Yards and Docks, Navy Department, Washington,
until November 21, 1903, for a heating system for
the new naval prison, navy yard, Portsmouth, N. H.
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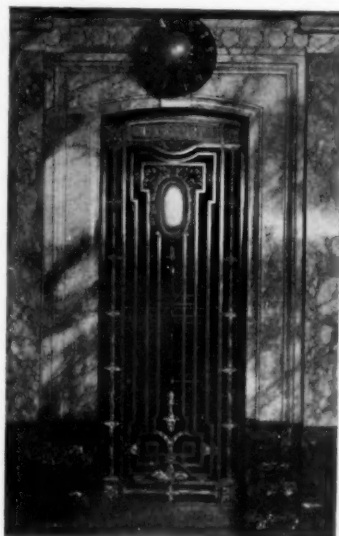
PROPOSALS.

CEMENT, STONE, ETC. [At Fort Monroe, Va.]
Engineer Office, U. S. Army, Room 2, Custom-house, Norfolk, Va. Sealed proposals for furnishing and delivering Portland cement, broken stone and lumber at Fort Monroe, Va., will be received here until November 23, 1903. Information furnished on application. E. EVELETH WINSLOW, Capt., Engrs. 1454

BUILDING. [At New Orleans, La.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until November 28, 1903, for constructing a brick and steel building for shops and offices at the naval station, New Orleans, La. Appropriation, \$70,000. Plan and specifications can be seen at the Bureau, or will be furnished by the commandant of the navy yard named upon deposit of \$10 as security for their return. MORDECAI T. ENDICOTT, Chief of Bureau. 1454

PLUMBING. [At Portsmouth, N. H.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until November 21, 1903, for a plumbing system for the new naval prison, navy yard, Portsmouth, N. H. Plans and specifications will be furnished by the bureau upon deposit of \$5 as security for their return. MORDECAI T. ENDICOTT, Chief of Bureau. 1454

MARKET-HOUSE. [At Monroe, La.]
Bids will be received until November 2, 1903, for the erection and entire completion of a market-house building by the city of Monroe, La., according to plans and specifications prepared by L. M. Weathers, architect, of Memphis, Tenn., which can be had from J. M. Breard, chairman public building committee, Monroe, La., and also at the office of L. M. Weathers, architect, Room 25, Cotton Exchange Building, Memphis, Tenn. J. M. BREARD, Chairman Public Building Committee. 1453



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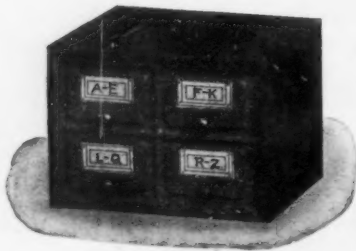
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ELEVATORS, ETC.
Kimball Bros. Co., Council Bluffs, Ia.
Morse, Williams & Co., Philadelphia.
Whittier Machine Co., Boston.
ELEVATORS (Foundry).
Northern Engineering Works, Detroit, Mich.
ELEVATOR SIGNALS.
Herzog Teleseme Co., New York.
ENGINEERS.
Jager Co., Charles J., Boston.

ENGINES (Hot-Air).
Kider-Erickson Engine Co., New York.
FAN SYSTEM.
Sturtevant Co., B. F., Boston, Mass.
FAUCETS (Combination).
Union Brass Works Co., Boston.
FILING DEVICES.
Art Metal Construction Co., Jamestown, N. Y.
FILTER.
Loomis-Manning Filter Co., Phila., Pa.
FIRE-ESCAPES.
Standard Fire escape & Mfg. Co., Boston.
FIREPROOFING.
Associated Expanded Metal Co., New York.
Brown Hoisting Machinery Co., The, New York.
National Fireproofing Co., Pittsburg, Pa.
FIREPROOF LATHING.
Hayes, Geo., New York.
FIREPROOF SHUTTERS.
Kinnear Mfg. Co., The, Columbus, O.
FLOOR POLISH.
Butcher Polish Co., Boston.
FOUNDRY EQUIPMENT.
Northern Engineering Works, Detroit, Mich.