

PRICE 15 CENTS.

OCTOBER 20, 1894.

THE
AMERICAN ARCHITECT
AND BUILDING NEWS

VOL. XLVI.

* REGULAR EDITION *

NO. 982.

ARCHITECTURE

ENGINEERING

DECORATION

211 TREMONT ST.

CONSTRUCTION

BOSTON MASS.

CONTENTS.

EDITORIAL SUMMARY.
 TWENTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN
 INSTITUTE OF ARCHITECTS.
 REPORT OF THE BOARD OF DIRECTORS, A. I. A.
 REPORT OF THE COMMITTEE ON EDUCATION, A. I. A.
 SKELETON CONSTRUCTION AND THE FIRE-DEPARTMENT.
 THEATRES. — VI.
 SOCIETIES.
 COMMUNICATIONS.
 EXHIBITIONS.
 NOTES AND CLIPPINGS.

THE NEW YORK STATE BUILDING, WORLD'S COLUMBIAN EX-
 HIBITION, CHICAGO, ILL.
 ACCEPTED DESIGN FOR BEXAR COUNTY COURT-HOUSE, SAN
 ANTONIO, TEXAS.
 HOUSE AND STABLE, CHESTNUT HILL, MASS.
 TAYLOR LIBRARY, MILFORD, CONN.
 HOUSE AT ROCHESTER, N. Y.

Additional Illustrations in the International Edition.

DINING-ROOM IN HOUSE AT GREAT BARRINGTON, MASS.
 [Copper-plate Etching.]
 STATUE OF THE REPUBLIC, WORLD'S COLUMBIAN EXHIBITION,
 CHICAGO, ILL. [Gelatine Print.]
 NEW PREMISES, OLD SQUARE, BIRMINGHAM, ENG.
 A STREET HOUSE.

ILLUSTRATIONS.

THE CAPITOL, COLUMBUS, OHIO: VIEW FROM THE SOUTHEAST.
 [Gelatine Print issued with the International and Imperial Editions only.]



and back four times, over the hottest part of the fire. The amount of radiating surface thus secured is enormous, and the simplicity and economy of the apparatus are equally remarkable.

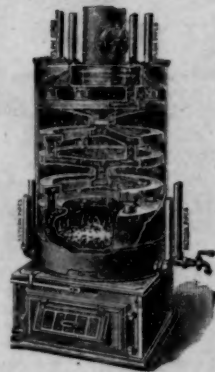
Write for our book, entitled "Hot-Water Heating," which in a concise form gives the full explanation of the principles of hot-water heating, together with all the practical data necessary to guide one in making a choice of apparatus. Mailed free.

SMITH & ANTHONY COMPANY,

48 to 54 Union Street, BOSTON.

56 Beekman Street, NEW YORK.

217 Lake Street, CHICAGO.



Three-Fifths OF A TON OF COAL

Per room kept the 25 rooms of this house at 70° all winter.

Fifteen tons of coal in all, and every room at 70° all the time.

It was done with a Hub Hot-Water Heater — the most powerful apparatus ever made.

A GLANCE AT THE CUT

shows the secret of this Heater's phenomenal power. The sections overhang each other, the circulation being from the sides to the centre

APOLLO BEST BLOOM

is the brand of galvanized iron that is true to gauge, flat (does not buckle), and is uniformly workable (bends without weakening).

GALVANIZED IRON

A first-class worker in galvanized iron knows, to his cost, the difficulties, in exacting work, imposed by refractory metal and sheets not flat, and the losses incurred through varying thickness.

EVERY SHEET GUARANTEED

The extra cost is too small to appear in small sales. The actual cost of his job to the worker is less, if well done.

APOLLO IRON AND STEEL COMPANY

Pittsburgh Pennsylvania

WORKS AT APOLLO

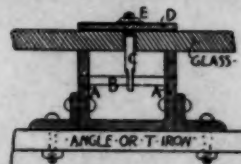
G. BICKELHOPT,
 PATENT



METALLIC
 SKY-LIGHT
 WORKS.

242 and 245 West 47th Street, New York.
 Telephone: 675 39th St. a few doors west of Broadway.
 Send for Catalogue.

PARADIGM SKYLIGHTS



See our full page ad. of June 2, 1894.

PARADIGM CONSTRUCTION COMPANY,
 41 Pine Street, New York.

VAILE & YOUNG'S
 Patent Metallic Skylights.



Without Putty.
 Construction adapted to all forms and styles of Skylights. Thousands of feet in use have proved its superiority. Particularly adapted for Depots, Mills, Factories, etc., where large and continuous lights are required.

Send for Illustrated Catalogue

126 N. Calvert St., Baltimore, Md.

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. XLVI.

Copyright, 1894, by the AMERICAN ARCHITECT AND BUILDING NEWS COMPANY, Boston, Mass.

No. 982.

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

OCTOBER 20, 1894.



SUMMARY:—

The Protection given by Mechanics' Lien Laws.—A Simple Form of Lien.—Bores in Architects' Offices.—How to Recommend Goods to Architects.—The Death of Professor Rossi.—Ice-Making with Nitrate of Ammonia.—A Patent Privy Vault.	17
THE TWENTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.	19
SKELETON CONSTRUCTION AND THE FIRE-DEPARTMENT.	23
THEATRES.—VI.	24
SOCIETIES.	26
ILLUSTRATIONS:—	
The Capitol, Columbus, O.: View from the Southeast.—The New York State Building, World's Columbian Exhibition, Chicago, Ill.—Accepted Design for Bexar County Court-house, San Antonio, Tex.—House and Stable at Chestnut Hill, Mass.—Taylor Library, Milford, Conn.—House at Rochester, N. Y.	
Additional: Dining-room in House at Great Barrington, Mass.—Statue of the Republic, World's Columbian Exhibition, Chicago, Ill.—New Premises, Old Square, Birmingham, Eng.—A Street House.	26
COMMUNICATION:—	
A Question of Ventilation.—Roughcast.—Coloring Plaster Casts.—The Wages of Mechanics in the Last Century.—Wiring for Electric-lighting for Buildings.	27
EXHIBITIONS.	28
NOTES AND CLIPPINGS.	28

ONE of the most perplexing problems of modern social science is the securing of the wages of poor working-people against the effects of the fraud or extravagance of their employers. In the abstract, there is no reason why one class of persons should have their income assured to them more than another class, and there is much to be said in favor of the view that legislation for securing the wages of working-people, in preference to the claims of other creditors, makes the working-people themselves careless and improvident, by relieving them of the necessity for using common prudence in their business affairs. There is, however, a maxim of law, that no prudence can protect a man against fraud; and legislation which, without discriminating against any honest creditors, will make it impossible for a dishonest speculator to raise money for himself, by mortgaging the work which has been done for him by innocent persons, and leave these persons without payment, is certainly proper. Whether the ordinary mechanics' lien laws of our States accomplish this result in the best way is more than doubtful, their effect being, in many cases, to rob honest owners for the benefit of rascally contractors; and it seems as if they might be improved, without much difficulty, by a better discrimination among the parties against whom such liens are to be enforced. In Germany, where frauds are perpetrated upon workmen by speculators, who buy land on credit, and build, piling up mortgage upon mortgage, until they have secured, and disposed of, the whole value of the property, without having paid for the materials or labor which have been put into it, there is a strong feeling in favor of the enactment of mechanics' lien laws, similar to those in force in our States. In support of this idea, a good deal of sophistry is produced in some of the German newspapers in regard to the relation of mortgagees. One man says that, in his opinion, all the claimants against an estate, including mortgagees, material-men and workmen, should, if the estate is sold to satisfy the claim of any one of them, share the proceeds in proportion to their several claims. It is obvious that this curious plan would open the door to all kinds of fraudulent collusion, while the rates of interest charged on mortgage loans subjected to such chances would be so enormously enhanced that building with borrowed money would almost cease. It is argued, not without some show of reason, that, as the erection of a building on a piece of land enhances the value of the estate, the owner of a mortgage on the land, instead of having his security increased by the added value of the building, ought to be still confined to the land for his security, leaving the building free, to be pledged as security,

either for a new loan, or for the claims of the workmen employed on it. The reply to this is that, as the building is attached to the land, the owner of a mortgage on either, separately, would be unable to realize on his security. The holder of a mortgage on the land, if he wished to call in his loan, or the mortgagor stopped paying interest, could not foreclose, and take or deliver possession, without interfering with the rights of the owner or mortgagee of the building; and the mortgagee of the building could not, if it were sold separately from the land, realize the cost of pulling it down. It seems plain that nothing is to be gained by jugglery with mortgage deeds, and the inevitable effect of any attempt to do so would be to raise rates of mortgage interest; but it might be possible to check the practice of mortgaging in advance property not yet in existence. If a man could only mortgage so much of his building as was actually erected, and the workmen were given a simple lien for their wages, this lien, accruing first, would take precedence of the mortgage, and the mortgagee could either pay the money and take up the lien himself, and add it to the amount of his secured debt, just as he would take up a prior mortgage, or a tax-title; or refuse to pay over his money until the lien was discharged. In either case, the workman would be sure of his pay, and this without giving him an unjust preference over other people, or doing anything for him beyond simplifying the procedure for the collection of debts due him, a favor which poor and busy men have a right to ask of the law; while the mortgagee, although it would give him the trouble of ascertaining what liens existed, before he paid over his money, could not complain of being obliged to exercise some prudence in this respect, if the law gave him the means of getting the necessary information about such liens by simple inspection of a record.

WHERE work on a building is done for the owner of the land, through a contractor, the case would be the same. Each man's lien accruing as he did his work, the owner would only have to see the receipts for wages, to be sure, when he made the payments under the contract, that no lien existed. As to the manner of recording and giving notice of such liens, experience would be the best guide. Architects often, in the owners' interest, endeavor to ascertain whether the men at work on a building have been regularly paid; but, particularly in a large building, they come and go so that it is difficult to remember their faces, and perhaps the best way would be to have either the owner or the contractor, as might be agreed upon between them, provide a book, in which each man who worked in the building must, at the commencement of his labor, register his name, or forfeit all right to a lien. Every week this book should be balanced, and receipts in full signed by each man opposite his registered name, and his right to a lien for the work of that week should thereupon terminate. The registry book would then be conclusive evidence at all times of the existence of all liens for labor on the building, and could be consulted with confidence by owners and mortgagees. In practice, the men would probably grumble a little at having to take the trouble to write receipts for their wages in the book, but a habit of exactness and punctuality of this sort would be much better for them than the lax practice of working along in uncertainty for a time, and, a month afterwards, going secretly and getting a lawyer, for a fee of half the amount due, to file a lien at some distant record-office. In cases where a man worked only a day or two, instead of completing a week, he would still be obliged to register his name, and the contractor, if he wished to get his payment, or the owner, if he wished to raise his mortgage-money, or to be secure against unsatisfied claims, would still have to get his receipt in the book by taking it to him, if in no other way. The evidence of the book ought to be held as conclusive, in all cases. Workmen are often weak enough to sign receipts for money which has not been paid them, in the vague hope of getting it out of somebody somehow; and they should be taught that their signature binds them, and that they have no right to injure innocent people by their feebleness. Of course, there is a possibility that a contractor, or an owner eager for his mortgage-money, might forge signatures to receipts; but the penalties for forgery are not such as to invite aberrations of this sort, and such forgeries would be small in amount, and easily detected.

PROBABLY the reflection has recurred to a good many architects besides ourselves, that the present season is characterized, so far as building is concerned, by an unusually large crop of patented devices of various kinds, which the inventors, or agents, find it necessary to recommend at great length to architects by means of personal visits. To the young architect, who has plenty of leisure, as well as inclination, for acquiring practical knowledge, these visits are not always unwelcome; and there is not only instruction, but amusement, in describing each inventor's device to the succeeding visitor, and hearing his comments upon it. To the busy practitioner, however, such interruptions are a serious matter. He may shut himself up in the innermost recesses of his office, fancying himself safe; but the practised and persistent salesman will draw him forth as easily as a fisherman lures a trout from its hiding-place. One well-worn trick is for the visitor, on being requested by the office-boy to send in his card, to say that he has been desired to call. Of course, he is shown in, and the architect, coming out to welcome an expected visitor, is met with the cool explanation that if the intruder had not been actually invited to call, the omission was doubtless inadvertent, and he had taken upon himself to remedy the oversight. An architect must be pretty amiable to bear this sort of deception with equanimity, and it is doubtful whether such advocacy benefits the parties who have goods to sell. There is a notion, very current in the community, that, in order to extend a business, it is necessary to employ salesmen endowed with "push," or, in other words, impudence. This idea, so far as architects are concerned, is a very unfounded one. All architects like to know of new things relating to building, particularly if they are good things; but none of them like to be intruded upon by bores, and few can be imposed upon by the Munchausenisms which may answer for the customers of a cheap auction-room; while many of them are experts in nearly every matter relating to the art of construction. It is folly for a manufacturer to send to such men, as his representative, a glib bore, ignorant of the first principles of mechanical or physical science. Often, the impression made upon architects by the visits of these individuals is such as to prevent them from considering goods, perhaps not without merit, so injudiciously brought to their notice.

IF we might offer a suggestion to the people who wish to introduce a new elevator, or steam-boiler, or heating system, or electric-lighting machine, or plumbing appliance, to architects, in the hope of having it called for in architects' specifications, we should say that the first thing to be done was to prepare a circular, containing, not an ignorant and untrustworthy description, full of unsupported assertions, but an accurate and intelligent account, showing wherein the new affair differs from those already in use, with which, it must be remembered, architects are sure to be familiar, and giving reasons for its superiority, based on the physical laws familiar to educated men, and not on offers of ridiculous "guarantees, or money refunded," which discredit a good thing, and do very little to help a bad one. These circulars may either be sent, or presented with discretion, to architects. They will go immediately into the waste-basket, in any case, but, if they are written with a real knowledge of the subject, they will be read by a majority of architects before they are tossed away. The next thing is to keep the matter before the profession by some sort of standing advertisement in the professional journals. This need not be long. Architects have good memories for what interests them, but they cannot be expected to remember the address of all the people who bring new goods to their notice, particularly as these addresses frequently change. Having provided for all this, the manufacturer or dealer can afford to wait awhile. On an average, it will probably be several months before an architect who has read the circular will have occasion to use the goods; but when he does have such occasion, he wants to know at once where to get them. Perhaps he is writing a specification, in a great hurry, and would like to specify them by name without interrupting the course of his thoughts; or, more often, he will be talking over a building with his client, and wishes to call the latter's attention to what he has reason to think a valuable novelty. In either case he must have the address, corrected to the latest date, directly under his hand, or he will content himself with something else. To put off the matter until the agent, of whose name and address he is totally ignorant, calls again,

or still worse, until he has rummaged through a pile of ten or twelve thousand circulars, supposing him to have accumulated such a treasure, is simply to abandon it altogether, and the inventor or dealer, no matter how eloquently he or his representatives may have expressed himself in his interviews with the architect, or how instructive and costly his circulars or catalogues may have been, loses that sale. If, however, the architect can turn at once to the address he wants, he will write, or refer his client to it, and, if the article in question is really better than old ones of similar sort, the sale is more than likely to be made. After this, it may be many months before the same architect has the question presented to him again, and, when he does, he will need the same facilities for solving it, but, meanwhile, other architects will be going through the same experience, and supposing the thing for sale to be desirable, it is sure to commend itself to them, always provided that they know, at the moment they want it, where to get it.

THE death of so eminent an archaeologist as Professor Rossi ought not to pass unnoticed by architects, although the latter are not accustomed to interest themselves very much in the Early Christian period, to which Rossi devoted most of his zeal and skill. Incidentally, however, his investigations among the inscriptions and mosaics of the Catacombs and the early Christian churches have cleared up many a point of architectural importance, and, we hope, have inspired more than one architect with a renewed feeling of reverence and enthusiasm for the Church which we have received from the martyrs who loved it so tenderly, and defended it so well.

A SUGGESTION which we find in a late German paper is worth remembering. It seems that Paul Altmann, Berlin, N. W., makes a small ice-machine, about the size of an ice-cream freezer, in which nitrate of ammonia is used as the freezing substance. A cylinder is mounted on pivots, on a stand, so that it can be revolved about an axis perpendicular to its side. In this cylinder is set a smaller one, with a tight cover. The small cylinder is filled with pure water, and set in the large one, and the space between them packed with a mixture of seven pounds of nitrate of soda and three quarts of water. The cover of the outer cylinder is then screwed on, and the whole whirled around for fifteen minutes. If the covers are then taken off, the inner cylinder is found to be full of ice. The water to be frozen should be as cool as possible before putting into the cylinders, as the nitrate of ammonia has a rather limited chilling power, and will not cool water to the freezing-point from a higher temperature than about 60° Fahrenheit. After the operation is complete, the solution of nitrate of soda in the large cylinder is to be poured into a pan, and evaporated to dryness on the kitchen stove, and is then ready to be used again.

A RATHER curious patent has been taken out in Germany, by H. Nolte, a carpenter, of Bochum, for an arrangement of vaults and privies, which might be found useful for country cottages. Herr Nolte builds an ordinary vault, which, it is needless to say, ought to be of brick, cemented tight. An open iron stand, in the middle, supports a large iron pipe, which ends under the seat above. Naturally, the vault gradually fills, but as soon as the semi-liquid mass rises to the level of the bottom of the pipe, the orifice is trapped, and, instead of the whole effluvium of the contents of the vault escaping through the seat, nothing rises through the pipe except the emanations of the comparatively small quantity contained in it, and these, as the editor of the *Bautechnische Zeitschrift* observes, can be kept down by pouring in a pint or so of oil. If the vault has a tight cover, with a ventilation-pipe carried to a harmless outlet, and an inlet for fresh air, the gases generated will not force their way into the house, and it is said that the undisturbed surface of the general mass in the vault becomes covered with a crust, so that few vapors rise from it. We cannot say that we regard this as altogether a nice arrangement, and a provision for an earth-closet, or for galvanized iron pans, on wheels, the contents of which should be removed to the garden every morning, would be infinitely preferable; but it is at least better than the horrors of most country privies.

TWENTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE FIRST DAY'S SESSION.

APPARENTLY the three or four score architects who assembled in the rooms of the Architectural League felt that this, the Twenty-eighth Annual Convention of the American Institute of Architects, was to be an interesting and important occasion, for every one looked cheerful and animated — which is not always the case at these meetings — and so kept in harmony with the bright and bracing character of the day.

Mr. Burnham's opening address was simple, straightforward, and at times forceful, and such recommendations as he did make all would be willing to see carried out.

The report of the Board of Directors was mainly historical, and contained no recommendations of any material value, and recounted no facts which were not already very generally known.

The report of the Committee on Education, prepared and read by Mr. Van Brunt, was a notable contribution, taken from a literary standpoint, and was listened to by all with close attention and welcomed with applause. Mr. Van Brunt frankly said that one of his fellow committeemen had said the report might properly be presented, but he, for one, would not like to try to carry it out. And this seemed to be the feeling of those who had listened so carefully to its reading, and particularly of Mr. Post, who, partly misunderstanding the motion of Mr. Yost, objected to the report being officially brought to the notice of the conductors of the several architectural schools with the recommendation that the scheme outlined should be put into working shape and adopted.

Mr. Van Brunt goes too fast and too far in his suggestion. It is not logical to assume that schoolboys can, at the opening of their careers, understand the philosophical and ethical considerations which now so much interest the reporter after many years of study and applied practice. What the boys must be taught in school, aside from the mere matter of technical dexterity, is the real meaning of distribution of plan and mass, balance, proportion, the values of parts and their relation to the whole. In teaching these, the architectural schools do their full and their best duty, and it is a teaching that can hardly be done anywhere else than in schools. Incidentally, as it were, the pupils learn the history of art, the properties of the several styles, and so on, so that they can, in a large measure, apply later to work done in such style as they may elect to practise in those lessons in proportions, values, and so on, which they learned to consider in the abstract at the time when they were being taught them in their practice-work on Classic architecture, which better than any other is suited to the needs of instructor and pupil.

Every parent wishes it were possible for his son to begin his life at about the degree of attainment and education he himself has reached, but he realizes that human life is so directed that each entity has to waste a large part of its working energy in doing to-day just the same thing that human beings have been doing for eons. Yet each generation, thanks to the forethought and guidance of its predecessor, succeeds in getting a grip on life and its activities a little earlier and a little higher up. Such progress as this ought to be held satisfactory, except by the most resolute of dreamers.

Mr. Upjohn's report for the Committee on the Preservation of Public and Historic Buildings was extremely local in its tenor and entirely blinked the possibility of making a recommendation that would draw public attention, and, perhaps, secure some fruition. He devoted himself entirely to stating that the Customhouse, on Wall Street, had been offered for sale and that it was regrettable that a building of that character should be torn down, whereas it offered such excellent opportunities for adornment with memorial busts, statues, panels, etc., in honor of those men of worth whom the Government ought to commemorate in enduring form. Incidentally, he suggested that the name of Isaiah Rogers, as architect of the building, ought to be inscribed on it — a rather fleeting immortality if the building is to be destroyed. He also recounted that an attempt had been made to cause the Secretary of the Treasury to direct the removal of the name of Frazee, as architect, from the Sub-Treasury Building on Wall Street, and the substitution for it of the name of the real designer, William Ross.

If our recollection serves us rightly, just this report was submitted at the Convention held at Washington four years ago. One would think that the fact that nearly all the members of the Cabinet and their wives travelled to Batavia last week to attend the dedication of the old land-office of Holland Purchase, as a memorial to Robert Morris, might have indicated to this Committee that there were a good many buildings besides the two on Wall Street that are worthy of their attention and that the Government is not unwilling to listen to representations which will cause their retention and preservation.

The Afternoon Session was wholly given up to discussing the matter of a number of amendments to the By-laws.

The most important of the amendments bore on the connection between the Institute and its Chapters; in fact, related to the very life and marrow of the association, and yet the discussion and debate was so managed that practically only one side of the question was presented. In a manner it was a question of the Ins and the Outs, in which the Ins legislated for the Outs without giving the latter a fair hearing. The debate resulted in the adoption, without practical change, of the amendments as printed in one of our recent issues, so

that henceforward, an architect in order to become a member of the Institute must first join one of its Chapters, and more than this, "every practising member of a Chapter" must become a member of the Institute.

We question whether there are not certain bodies now Chapters of the Institute, which will prefer to surrender their Charters rather than endure this dictation. For instance, in the Boston Society of Architects which, after an existence of some years, accepted a Chapter Charter while maintaining its own independent organization, the voting strength lies with the Society members who are not members of the Institute, and it is very questionable whether this majority will allow itself to be dragooned into joining the Institute against its will with the exaction of double dues. It is quite within the bounds of possibility, that they will vote to abandon the Chapter Charter and then what will be the status of those, now members of the Institute, who cannot remain members of that body if they be not, first, members of a Chapter?

It is possible, too, that the new ruling may lead to trickery. An architect desiring to join the Institute, but being willing to pay dues only to that body, finding that his desire cannot be satisfied unless he first join a Chapter, will possibly accept the condition and join one, but his election to the Institute once secured, he will thereupon resign from the Chapter and cleave only to the Institute, and in this simple way completely nullify the object of the framers of this mistaken regulation.

It is the more remarkable that the Convention should have accepted this amendment so easily, and, moreover, should have been in a manner guided to accept it by Mr. Burnham's rulings, considering the fact, that at one point of the discussion he found it desirable to leave the chair in order to warn the Convention that it should be very careful not to take any action that would give warrant for the accusation that the Institute is a trade-union and not a deliberative professional body.

The programme for the evening was thrown into confusion, because of the want of foresight of the manipulator of the stereopticon needed to illustrate Mr. Fox's paper on "Greek Detail," for at the last moment he discovered he could not procure the needed supply of gas.

However, Mr. Sturgis read his paper on "Modern Style founded on Ancient Greek Architecture," upon which Messrs. Van Brunt and Andrews made some enjoyable comments.

To fill the time assigned to Mr. Fox's postponed lecture, Mr. Jenney gave a brief abstract, from memory, of the paper he had prepared for delivery at a later session, and Mr. Yost read a paper on the "Evolution of American Architecture."

THE SECOND DAY'S SESSION.

There are few things more laughable than to observe how a deliberative assembly, unused to sitting, is terrorized by the unuttered sound of its own thoughts. Yesterday the reporting committees had it pretty much their own way, with only occasional dispute, while to-day they were even more fortunate. Not that the reporters did not give every one a fair chance to refute their views, but a "dumb devil" seemed to have possession of practically all who were not members of the Committee. This condition was all the more remarkable, because Mr. Post, the Chairman of the Committee on a Code for Competition, whose report practically opened the morning session, announced that in answer to its circular inviting suggestions, the Committee had received a great many replies embodying a greater number of varying and irreconcilable suggestions. Yet when the opportunity was offered, the writers of these replies, some of whom were doubtless present, had nothing to say in advocacy of their own suggestions.

This report on competitions, a very important one, as it recommended radical changes, was considered section by section and adopted, practically without debate, and was then referred back to the Committee that its articles might be arranged in more logical sequence and slight changes made in its phraseology. But we are not clear whether it is to be later resubmitted to the Institute for final adoption, or whether it is to be issued to members forthwith and held to be at once in force. Neither is it quite clear whether this "code" is to be considered mandatory or simply recommendatory. If it is to be held mandatory, no penalty is provided for breach of its observance; while if it is merely recommendatory, it is not very obvious what will happen in case some are willing to observe its articles in a given case, while others are not, the third party to the question, the prospective client, being wholly oblivious to or refusing to acknowledge the existence of the code and its stipulations.

Of the several important recommendations, perhaps the most important is one which has a bearing on the compensation for designs submitted in limited competitions, and this is so closely connected with the schedule of charges that the old rate of one per cent for preliminary studies, as it has long stood in the schedule, is to be abandoned in favor of the rate established in the proposed code. How this new rate will be actually stated in the schedule, whether or not the tabulation figured out by Mr. Carrère will be given in full, we do not know; but the new rate for preliminary studies and for competitive studies in limited competition is arrived at by a computation which gives, as a result, what is practically two-and-a-half

times the square-root of the estimated or intended cost of the proposed building.

Although Mr. Post gave warning that this question was one whose determination would tend to indicate whether the Institute desired to encourage or to discourage competition, and though Mr. Carrère showed that under the present schedule the charge for preliminary work on a million-dollar building would be \$10,000, while by the proposed code the recompense to an individual competitor would be but \$500 in certain cases, yet even then no one cared to debate the question.

Another radical change is in the exclusion of perspective drawings from those which, under the code recommended, are hereafter to be submitted in the limited competitions for public and semi-public buildings. This will be ill news to a large class of artist-draftsmen who have devoted years to acquiring skill in this special field of work and who have, in consequence, in a measure unfitted themselves for winning as fair a livelihood in any other way. The ostensible reason for the proposed change is that there is much trickery used in the making of perspective drawings and that a "catchy" perspective—which often would not stand the test of being translated back into elevation—did more to win a competition than did the merits of the plan, which, of course, is really of the first importance. It was said that the competitor who was so lucky as to secure the service of Hughson Hawley usually won the competition. Of course there is a certain reasonableness in this, but as the code proposes to allow a competitor to render his elevation in any medium he prefers, there will be just as much chance for a catchy rendering by Hughson Hawley to carry off the prize. Moreover, it is questionable whether it will be easy to induce the intending client, the holder of the competition, to forego his right to have the work which he is to pay for presented to him in a way by which he can understand fairly what it is really to be. This may not be of very material importance, since the code seeks to compel in every case the absolute awarding of the work to some one of the competing architects on the award of an expert adviser or a commission of three architects.

It seemed to us that from beginning to end the code had been prepared without giving due regard to the rights of the party who is to pay the scot. In fact, it was rather cynically remarked by some one, that if a client who had held a limited competition found as the result that he was bound to erect a building which did not meet his expectations and desires, he had no one but himself to thank for his disgust, since he should have taken care to invite as competitors only men whom he knew would satisfy him!

After this report and one or two other unimportant ones were disposed of, Mr. L. H. Sullivan read a very Ruskinian paper on "Emotional Architecture as compared with Classical," during which he took occasion not only to point the finger of scorn at modern civilization, but also to say some very unkind things about education, a word which he found to be the most "pathetic" in the language. While the reprehension he held for educators was catholic and general, it was even a little more specific in the case of those educators who had to do with our architectural schools.

This following on the heels of Mr. Van Brunt's report of the day before, looked as if an assault was being made on the several architectural schools in the country, and consequently no one was surprised that, when Professor Ware took the floor to read Mr. Longfellow's careful paper on "Early Italian Church Architecture," he should make a brief reference to the remarks of each of these gentlemen. He regretted that before making their strictures they had not investigated to discover how far the recommendations they made were already forestalled by the method of instruction now followed. Speaking for Columbia College, he said that so far as he could comprehend the situation, the essentials of the recommendations of both of these gentlemen were already there in practice. Architecture was not there taught as mere book learning, but as a broad and ever-expanding subject and it was the constant endeavor of the instructors to cultivate and expand the mental faculties and artistic appreciativeness of the pupils in all possible directions.

Mr. Longfellow's paper was followed by one by Mr. Cummings on a kindred topic, "The Barbarians in Italy," a fragment, he explained, of a more comprehensive study, upon which he was at work.

The papers of Mr. Day and Mr. Gibson on travelling for architectural study were extremely interesting, Mr. Day's being very suggestive and Mr. Gibson's practical and to the point. Mr. Blackall alone offered some remarks, drawn from his own experience as a travelling-scholar.

TWENTY-EIGHTH ANNUAL REPORT OF THE BOARD OF DIRECTORS, A. I. A.¹

THE Twenty-seventh Annual Convention, which was held in Chicago in July and the opening-days of August, 1893, in connection with the World's Congress of Architects, will long be remembered by those who were so fortunate as to attend it and to share in the enjoyment of that unrivalled display of architecture which housed the World's Columbian Exposition. The generous hospitality of the Illinois Chapter, the fine drive which was given to the visitors for the purpose of showing the interesting streets, parks, boulevards and architecture of Chicago, and the sail on the Lake, ending with the enchanting view of the illuminated White City and

the display of fireworks, are among the choicest memories of one's life.

In the fifteen months which have intervened, there has been much to engross the attention and tax the energies of your Directors, a short résumé of which is herewith submitted.

Mr. A. Page Brown, of San Francisco, was elected by the Institute as a Director for three years, the Nominating Committee having put his name on the printed ballot without ascertaining that he was not a Fellow of the Institute. The Board of Directors therefore declared Mr. Robert Stead, of Washington, D. C., to be elected, he having received the next highest number of votes cast.

The first meeting of the Directors, which occupied two days, was marked by a very full attendance, and at that meeting the Buffalo Chapter officially called the attention of the Board to the design of the proposed Buffalo Federal Building and re-opened the question of entrusting the designing of the Government buildings to the office of the Supervising Architect, or of opening them to a properly devised and equitable competition. The details of the contest and the merits of the case have been so fully discussed in the correspondence of the President and the Board of Directors with the Secretary of the Treasury and the Supervising Architect, in the admirable paper prepared by Mr. Glenn Brown, a Fellow of the Institute, and in the discussions of the architectural journals and the press of the country, that it is not necessary to rehearse the story, but simply to state that the so-called McKaig Bill, which will, if passed, bring about the desired reform, has been reported upon favorably by the House Committee on Public Buildings and Grounds, and is now on the Calendar in the House and with every prospect of its passage in both the House and the Senate, and if passed will probably receive the signature of the President.

The Board of Directors wish to thank the special committee of architects, Messrs. Bruce Price, John M. Carrère and E. H. Kendall, who have had this matter especially in charge in Washington, for their untiring exertions and successful work, and also the whole body of the profession, both in and out of the Institute, for the interest created in the subject through the local press and for the promise of support which has been obtained by the personal appeal to Senators and members of Congress by individual members of the profession.

Before the expiration of the Fifty-third Congress we hope to be able to congratulate you upon the passage of the McKaig Bill.

At the first meeting of the Board, a Committee consisting of Messrs. Kendall, R. W. Gibson, E. A. Kent, J. W. McLaughlin and W. L. B. Jenney, was appointed to consider the relations of the Chapters to the Institute, which Committee will make its own report, and together with a Committee appointed at the last annual Convention, Messrs. Ferry, Illsley and Gibson, have sent to the Secretary a long list of proposed amendments to the By-laws which, in accordance with existing By-laws, have been sent to each Fellow of the Institute more than thirty days before the date of this Convention and will be properly before it for action at this time.

The death of Mr. W. W. Carlin, of Buffalo, caused a vacancy in the Board of Directors for one year, and Mr. A. Page Brown, who had been elected a Fellow, was appointed by the Board of Directors to fill the vacancy.

The Directors have requested the President and Secretary to issue Charters to three new Chapters, namely:

On July 27, to the Southern California Chapter of the American Institute of Architects, with twenty-two members.

On August 1, to the Washington State Chapter of the American Institute of Architects, with twenty-three members.

On August 10, to the Brooklyn Chapter of the American Institute of Architects, with fourteen members.

There have been three letter-ballots issued during the year.

Thirty-two Fellows have been elected and five have been rejected. A letter-ballot will be issued upon the adjournment of this Convention containing eight names.

There have been ten deaths since the last annual Convention, the largest number, we think, in any one year since the organization of the Chapters, and three resignations.

There were 475 Fellows at the last Convention and there are now the same number as at the last report.

In addition to the statistics given above, the Secretary finds that there are twenty-six Chapters of the Institute with an aggregate membership, not including Honorary and Corresponding Members, of about 600.

Mr. William Pitt Preble Longfellow, elected nearly thirty years ago a Fellow of the Institute, has, by giving up the practice of the profession, ceased to be a Fellow, but through the work which he has done in writing a dictionary of architecture, and in much other architectural literary work, has kept closely in touch with the profession. The Board, therefore, takes especial pleasure in proposing him for election as an Honorary Member of the Institute.

The Board also proposes the election of Prof. Charles H. Moore, of Harvard College, John S. Billings, M. D., of the Johns Hopkins University, Baron Henry von Geymüller, and Prof. Cady Staley, President Case School Applied Sciences, for election as Honorary Members.

Mr. S. M. Randolph, who was admitted to the Western Association of Architects in 1884, and has been a Fellow of the Institute since the consolidation in 1889, has resigned because of entering other business, which is, however, closely connected with the profession,

¹ Submitted to the Convention at its first session, Oct. 15, 1894.

and therefore, and also because of his honorable practice while in the profession, they recommend him for election as a Corresponding Member.

The Board also recommends for election as Corresponding Member, Mr. J. S. Walker, of Apia, Samoa, an architect and engineer who is accredited to us by undoubted authority, and who feels more closely connected with this country than with any other, and is desirous of joining with us as closely as our Constitution and By-laws will permit. It also proposes Prof. Edward S. Morse, of Salem, Mass., the writer of the work on Japanese architecture, as a Corresponding Member, and William Paul Gerhard, Sanitary Engineer, of New York, Montgomery Schuyler, so well known as a writer on architectural subjects, and Charles MacDonald, the eminent engineer, both of New York.

Since the last annual Convention, the death-roll has been unusually large, and death has taken from us some of our most valuable Fellows:

J. B. Johnston died on the 20th of September, 1893, at Ogdensburg, Vt., aged 52 years.

Alpheus C. Morse died on the 25th of November, 1893, at Providence, R. I., aged 75 years.

P. W. Ruehle died on the 1st day of December at Chicago.

Geo. H. Edbrooke died on the 25th of January, 1894.

Geo. Walter da Cunha died on the 31st of January, 1894, at Newark, N. J.

August Bauer died February 8, 1894, at Chicago.

William Worth Carlin died on the 23d of March, 1894, at Buffalo, N. Y., aged 43 years.

William Henri Adams, Chicago, died May 3d, 1894.

Arthur Rotch died on the 15th day of August, 1894, at Beverly, Mass., aged 44 years.

The Secretary has just learned of the death of James Douglass, of Milwaukee, Wis., but cannot give the date.

Mr. Carlin was a member of the Board of Directors, and the vacancy caused by his decease was filled by the election of Mr. A. Page Brown, of San Francisco, who had received enough ballots at Chicago to elect him a director, but he was found at that time to be ineligible.

Mr. Arthur Rotch has done so much for the profession by his own work in this, his native country, and during a long residence in France; by the establishment, in connection with other members of his family, of a Travelling-Scholarship, and by numerous gifts during his life, and munificent benefactions by legacy upon his decease, that his name will be perpetuated in after years by these great and personal benefits to generations yet unborn.

In our list of Honorary Members, we have for many years been permitted to print the name of César Daly, who died in Paris, January 12, 1894. Distinguished as the author of "*L'Architecture Privée*" and other serials, a voluminous writer, a beautiful draughtsman and accomplished designer, his reputation was enduring and his fame world wide. By order of the Board of Directors, Messrs. R. M. Hunt and the Secretary were directed to prepare a proper minute for the records of the Institute, and to send a copy of the same to the family of the deceased, which was duly attended to.

John Baird, also an Honorary Member, died in Philadelphia, Pa., February 13, 1894, aged 72 years.

The Secretary has learned that Mr. S. A. Cook, of Tacoma, Wash., died in that city on the 27th of April, 1893, leaving at that time but one Fellow of the Institute — Mr. G. W. Bullard — in the State of Washington.

The Report of the Proceedings of the Twenty-seventh Annual Convention and the publication of the papers read before the World's Congress of Architects was so voluminous, and the authors of the papers were so wide-spread, that there was a mortifying but necessary delay in its publication, but it is hoped that the value of the papers which it contains will compensate for the tardiness of their issue, and the Board desires to take this method to thank the authors of the several papers for their kindness in preparing them. A large edition was printed and the Secretary desires to announce that copies can be obtained from him if desired. It is especially desired that they should be placed in Public Libraries, and Fellows can render a service to the Treasury of the Institute, as well as to their local libraries, by purchasing copies to be forwarded to them.

The Board is impressed with the growing demand upon the profession on the part of committees representing State, County, municipal, or other public and corporate bodies, to exact bonds for the completion of public buildings within stipulated amounts. This demand should be resisted as humiliating and unprofessional and fraught with great danger, shifting as it does the best energies of an architect from producing artistic work and conscientiously serving his client to the best of his ability, to a constant study as to how he can manage to manipulate the work so as to be sure that its cost does not exceed the agreed sum without betraying in the work the evidence of the shaving to which it has been subjected. It is suggested that steps be taken to secure the cooperation of the American Society of Civil Engineers to resist the insidious growth of a practice which, if allowed to go on unshackled, will become so thoroughly entrenched that it cannot be shaken off.

The decision in the case of Rotch & Tilden vs. Fry shows the great value of carrying cases of attempts of infringements of the rights of architects into Court and procuring decisions which will, as precedents, determine authoritatively the rights of architect and client, and great credit is due to them for persistently pursuing

the case to a conclusion — and to a conclusion as just as it is important — but it is not often that an architect is able to bear the great expense of carrying a contest to a final decision, especially against a wealthy client who is determined to resort to all of the delays and appeals which a successful counsellor can manage to obtain; it, therefore, seems fitting that some action should be taken to revive an effort that was made by the Western Association of Architects, before the consolidation, to form a protective league for the purpose of advising and, if necessary, prosecuting cases which may arise.

Renewed efforts have been made to secure for the daughters of the late President Thomas U. Walter, LL. D., the just compensation for professional services performed so fully and faithfully for the United States Government with such earnestness and enthusiasm that he thought little of himself or of the reward which was his true desert. In consequence, he died poor, and those dependent upon him have been for many years trying to secure a part of that which he ought to have received. It is hoped that the present Congress will pass the bill before it expires.

Arrangements have been made and Committee appointed to secure data for a history of the Institute, and Mr. Bloor, for so many years the Secretary of the Institute, has been retained for that purpose.

REPORT OF THE COMMITTEE ON EDUCATION, A. I. A.¹

THE Committee on Education, on account of the wide separation of its members, has found it impracticable, either in person or by correspondence, to consult together with that freedom which is demanded by the increasing importance and difficulty of the subject committed to them. But the present condition and future prospects of architecture seem at this moment to be so peculiarly dependent upon the character of the training in the professional schools of the country that your Committee venture to present for your consideration a brief and necessarily unstudied statement of the architectural situation, with an inquiry as to the possibility of improving it through a modification of our educational methods.

This statement is made, not with the expectation of revealing any new thing, but rather to formulate in a more or less definite way a condition of things, which, without such formulation, is apt to remain without any clear recognition; and the suggestion for improvement is offered, less with the expectation of laying before you a practical scheme for reform, than of stimulating inquiry and awakening discussion.

We consider that the present condition of architecture in this country as a fine art, though there are clear indications of a late advance in academic scholarships and in technique generally, is unsatisfactory, because in this advance there cannot be detected any healthy progressive principle. In fact, it is rather a progress of personal enterprise and skill than of principles, and does not seem to promise any large or characteristically national fulfilment. It is made on irregular skirmishing lines, not without evidence of individual gallantry here and there, but with none of that effective unity of effort, which is the only means of achieving results adequate and proper to our especial civilization.

As architecture is now for the first time in the hands of men of education, it becomes very important indeed for us to consider whether this education cannot be such as to inculcate convictions, to make our young architects the agents of a far more definite and orderly progress, and to inspire them with a certain definite consciousness of duty in respect to the development of a system of architectural forms, less conventional in character, and more accurately adjusted to the expression of our new life.

But it is said, "Let us be content to do our duty to our art and to our clients, each one to the best of his ability and according to his best lights, and let the style of our time take care of itself, as the styles of former ages and peoples have been created. For these historical styles have developed themselves out of the political, religious, commercial, ethnological, and social conditions, and technique has varied with variations in materials and methods. Why should we attempt to interfere with this natural automatic process of evolution?"

In answer to this question is involved a statement of the difference in the conditions of practice in ancient and modern times. But it seems hardly necessary to repeat this statement before such an audience as this, and to say again that our past is a far larger region, a far greater inheritance than belonged to any of our predecessors, and that our minds are preoccupied and our ideas complicated by an infinite variety of architectural monuments.

The progress of investigation in archaeology has made us familiar with the buildings and arts of every age and race; we have classified and defined the styles; we have theorized infinitely and created a science of aesthetics. We can, therefore, no longer be, like our predecessors, unconscious ministers in the development of style. As our resources have been infinitely expanded, our personal responsibilities to our art have become far greater and our task far more difficult. Architecture has thus necessarily become a learned profession and we cannot do our duty without academies, libraries and museums and a large equipment of photographs and prints. The architects of the great historical eras, dealing with comparatively simple problems and with only one set of forms at a time, were enabled to concentrate their forces, to develop style without affectations and

¹ Submitted at the first session of the Twenty-eighth Annual Convention, A. I. A., Oct. 15, 1894.

with infinitely less consciousness of effort than ourselves, who are distracted by our knowledge and perplexed by our exacting reminiscences. These conditions have introduced a new element into the practice of architecture, an element of self-consciousness, of dilettantism and imitation, which have sophisticated modern architectural manifestations and deprived them of that sincerity, power and simplicity which can result only from concentration of intelligent effort and from strong convictions, based, not upon the traditions of the studios, but upon a philosophical analysis of our vast resources of design.

Without presuming to criticize the methods of instruction in our schools of architecture, as at present conducted, and certainly with a grateful appreciation of what their professors and teachers have already accomplished in the service of a purer and nobler art, we would ask them to systematize and coordinate the study of all the historic styles, as they were successively developed in their progress from picturesque barbarism to the elegance and refinement of the higher civilizations; to make this study an essential part of the curriculum of the schools; to teach the outlines of history by the architecture which was a part of it; not to select certain of the styles for exclusive study, leaving what seems the less interesting and beautiful, the less highly organized or less applicable to our use, to be picked up by chance, if at all. Our project would be to pursue this study of history through its manifestations in architecture from archaic to modern times, or, at least, to the nineteenth century, not with the minute patient scrutiny of the archaeologist, but with the spirit of the artist seeking to learn how forms and ornament were developed out of the genius of civilizations and peoples and how, as they were significant of the progress of human culture in the past, they should be used in the service of modern art.

We recognize that the best discipline of the faculties of design can be obtained only by especial and continued practice with the most highly organized of all these styles, and that Classic art must continue to be the *means*, but not the *end* of this discipline.

We believe that this organized study of the historical styles would prevent the graduates of our schools from becoming mere spend-thrifts with their inheritance, and that with this new knowledge, apparently never heretofore taught, they would learn to be tolerant. "*Savoir c'est pardonner.*" They would practice, not with unreasoning prejudice in favor of this, that, or the other forms of art, nor with the indifference of eclecticism, but with a sense of the deep significance of these forms, to whatever era they belonged, as expressions of the history of our race, and with a conviction that decorative forms in historical architecture are not mere fashions or accidents of the times, nor mere independent isolated phenomena, but symbols, slowly evolved by processes of art from certain definite conditions of human life, as links in a continuous chain of evolution, as genuine and serious manifestations of art, however rude.

Would not this larger comprehension, thus obtained, of the significance of ancient decorative forms and this increased respect for them as means of expression have an immediate effect upon their adjustment to modern uses, and ultimately upon the development of contemporary style? Would they not be used with more intelligence and feeling? Would not our young architects be less subject to undisciplined caprice on the one hand, or to academical prejudice on the other? Would they not become in the best sense catholic and more worthy to inherit the inexhaustible wealth of the past? Would they not, above all perhaps, be freed from the mean virtue of conformity or archaeological accuracy, which has done more to retard the progress of architecture as a fine art than any other influence except ignorance and pretense?

There can be no doubt that as the true basis of architectural composition of the highest sort is to proportion and to decorate structure, and that as structure is constantly developing with new methods, new devices of engineering, and new materials, the architecture of the immediate future must necessarily assume new character, at least in its outlines, supplanting to a great extent those Classic or romantic ideals or standards which custom has arbitrarily imposed upon modern practice. Are our present methods of education preparing our young men to accept these inevitable changes without a wasteful and futile effort to effect a reconciliation between ancient academic prejudices and these new things? Will the architecture of our country in the next decade express in no doubtful terms the civilization of America in its best estate? For this difficult task do we not need a much more scientific coordination of precedent, a much more philosophic analysis of the architecture of the past than is secured by our present methods of education? The question evidently is, not, how are we to effect a compromise between engineering and architecture, but how are we to convert engineering into architecture, how are we to use the immense resources of beautiful precedent at our command in order to translate this prose into the poetry of a high art? The language of form, made accessible to us by a system of study such as we propose, would be as copious as the language of words at the command of Tennyson and Browning, of Longfellow and Lowell. The vast vocabulary of these great masters, these "builders of the lofty rhyme," is made up of words and phrases derived from the entire experience of mankind, not from any especial era, or from any selection approved by any school or academy of learning. They could not have expressed their inspirations with any such arbitrary or scholastic limitations of terms. The duties and the privileges of the modern architect in respect to his art are the same as those of the modern poet in respect to literature, but the prejudices

of the architect's education have, by exclusions of language, apparently entirely artificial and unnecessary, embarrassed his efforts to express in terms of art the exigencies of modern structure, material and use. He is still trying to write new songs and sonnets and epics in Classic Latin or mediæval French, and is still wondering that no one but himself comprehends or enjoys them. We are conscious that this analogy between literature and architecture must not be pushed too far, for the two arts have very different messages to deliver to the intelligence of mankind. Architecture, of course, can express emotions and thought only indirectly by symbols. But the analogy is close enough to support and illustrate our argument.

If the American Institute of Architects should succeed in persuading the schools of architecture throughout the country to teach the whole course of history by architecture, and should open to them the whole series of historic forms in the order of their evolution without prejudice, the genius of the more spacious times in which we live, which are the culmination and the result of all that has gone before, would stand a much better chance for adequate expression. Let the schools teach our young men not to conceal or disguise or condone in a mask of cold convention the inevitable changes of form which must come in process of time with the changes in our social and economic conditions, but to welcome them frankly and express them, not with quotations from other tongues, not with the affectations and pedantries of academical learning, but with the large freedom derived from a comprehensive knowledge of all that has been done or said in forms of art by all peoples.

It seems to us that it is only by some such process as this that architecture as a fine art can keep pace with science. We are not proposing any such folly as the deliberate invention of a new style, or any possible amalgam of old styles, but we are inquiring whether it is not practicable by an analytic study of precedent, without arbitrary preferences, to apply to the art of our times a synthetic method of evolution. Our art should be an art of scholars and artists, not of antiquarians, nor of amateurs, nor of pretenders. They should be instructed and inspired by the past, not controlled by it. As viewed from a philosophical standpoint, do not our present methods, without such a comparative study of form as this, open us fairly to the charge of empiricism?

If we may not in this way accomplish a revolution in the architecture of our time (we do not desire a revolution, but a reform), we may at least give to the architects of the next decade a far wider point-of-view and a far deeper understanding of their functions and responsibilities in an evolution of style, which, if it is not directed, will continue to be lost in fruitless and disorderly experiments.

When we see members of the Institute, men of the highest available professional training, repeating at the same times and in the same places, châteaux of Francis I, town-halls of Henry IV, Italian villas of the cinque-cento, palaces of Palladio, decorating casinos and theatres with every form of Arabian or Saracenic art, building libraries in southern Romanesque, country houses like the farms of Normandy, churches like those of Edward IV or St. Louis, dwellings after those of every era of English history, public structures in every form of the Renaissance — when we see them dissipating their forces in these barren revivals, each one according to his fancy, we may well doubt if this is the best possible use of our knowledge of precedent. Can the discipline of our schools produce no better result than this confusion of tongues? Is it not time for us to consider how we can work together with profitable unity of effort, each aiding the other? Does not the inevitable modern accent which may be detected in all these attempts to speak ancient languages prove that characteristic modern style is possible, and is only restrained from its full and natural development by the prejudices of our education? If the secret of rational progress does not lie in a more scientific and thorough method of studying the styles and the historical conditions from which they grew, to the end that we may use them not as mere imitators and revivalists, but as artists and creators, where else shall we seek for a remedy?

The new type born of such a study must necessarily be infinitely richer, more elastic, more various than any of those which lie behind it; it must include all their virtues and none of their vices. It would substitute a true vernacular for one which is spurious and vulgar. Architectural effort united upon such a type as this, would not imply a uniformity, which would soon become wearisome and monotonous. It would rather imply variety and unity, effective concentration of power, and such a concentration means logical and consistent progress. Such a progress with our present methods surely we are not achieving.

Hitherto, it must be sadly confessed, we have treated our great resources, if not like undisciplined barbarians with the spoils of war, certainly more like the arbiters of Parisian fashions, than like artists and scholars. The new education, far less pedantic, and far more cosmopolitan and generous than the old, and also far more discriminating, must teach us the real value and meaning of our inheritance, and how to use it with a full appreciation of our responsibility to art and to the civilization of our time. HENRY VAN BRUNT.

Chairman.

A SIGN PAINTED BY MILLET. — Offers have been made by the Louvre Museum for a blacksmith's sign representing a horse tied to a door, which still swings before the smithy at Gruchy, near Cherbourg. It was painted by Jean François Millet, the painter of the "Gleaners" and the "Angelus." — *Providence Journal*.

SKELETON CONSTRUCTION AND THE FIRE-DEPARTMENT.¹

SEVEN hundred and fifty years ago, a little knot of architects were busy with the solution of a new problem. All of them had been educated under the same conditions, had been taught the same rules, had copied the same models, and studied the same methods of construction. Now, to all of them, almost simultaneously, had been presented a new set of conditions, which must be fulfilled, but in the fulfilment of which the models upon which their instruction had been based gave them little assistance. Those models expressed, by their thick walls, heavy piers, horizontal lines, and small, round-arched openings, solidity, calm, dignified seclusion and aristocratic sanctity; and now had suddenly arisen in the community a fever of revolt against aristocratic and sacerdotal exclusiveness, a passion of democratic feeling, to which the narrowness and heaviness of Benedictine architecture were intolerable. Everywhere was heard the demand for air, space and light, for vast, bright, open halls, in place of the gloomy monastic churches in which the laity, for five centuries, had been permitted only to listen, from behind a screen, to the prayers of those holy persons whom alone the Saviour of mankind permitted to approach His altar. In one word, the modern spirit had been born, and upon a few men had fallen the task of expressing it in architecture. You all know how they acquitted themselves of this duty; how, starting with the necessity before them of providing vast and lofty buildings, with slenderer supports and larger windows than had ever been seen before, they not only completely satisfied these requirements, but, almost within one man's lifetime, developed a style of architecture absolutely new, even to its smallest detail, and in this style produced buildings which, speaking to architects trained to appreciate many sorts of architectural beauty, I will not call the most beautiful in the world, but which may be justly described as the most interesting in the world, through the richness of artistic feeling which shows itself everywhere in them.

A comparison of the last decade of the nineteenth century with the era of the emancipation of the communes may seem historically unwarranted, but, architecturally, there are some striking points of similarity. With us, as with the people of Paris and Amiens and Rouen toward the end of the twelfth century, buildings of the sort that our grandfathers erected no longer serve our purposes. It is true that we can use their dwelling-houses comfortably enough, but, for the occupations and amusements which we carry on in common with other people, we need, and must have, stronger, lighter, more wholesome and more enduring structures than any known to our forefathers. As economy of time must be practised to the utmost in our modern system, each sort of business must be as far as possible localized; and this involves collecting near a given spot as many persons, whose interests are connected with that locality, as can safely be accommodated; this requirement alone bringing us inevitably to the modern high building, with its many stories, and its swift-running elevators, standing upon a lot whose situation alone gives it fabulous value.

Notwithstanding all that has been said in ridicule of the "skyscrapers," there is no doubt that these high buildings meet a need that has been urgently felt, and will continue to be felt more and more in our large cities; and, however conservative we may be in our notions of the virtues of six stories of solid wall, we all know that the buildings that the age requires, standing on land worth two hundred dollars a square foot, must be made with protected metallic skeletons, and we have probably prepared ourselves, by earnest study of the subject, to make the best of the new construction, whether it appeals to our artistic sympathies or not. That it should at once appeal to our artistic sympathies is not particularly to be desired. The people who cast off the old love with most alacrity are not those who gain the firmest hold on the affections of the new one; and a regard, based on an appreciation of the many excellent qualities of the new architecture, will be the best foundation for an esteem which, we may hope, will hereafter find artistic expression.

Among these excellent qualities, the greatest ought to be, and will be, if architects choose to have it so, the security of the modern high building against fire. As a rule, fire-engineers are disposed to condemn those already erected, for the reason that they are so lofty that streams of water cannot be thrown into them, and so incautiously built, in many cases, as to present an immense mass of fuel, in a condition for burning comparable with that of a pile of kindlings built up in a chimney; and they are certainly justified in their criticism; but there is no necessity for filling these blast-furnaces with woodwork, and, where the architect is allowed to apply his knowledge, it is easy to make the protected skeleton, of fifteen or twenty stories, not only safe against injury by fire within, but extremely valuable as a bulwark against the course of conflagrations outside it. In the presence of so many of my brethren, much better qualified than myself to treat of the details of the new construction, I will not presume to point out the methods which architects should follow in carrying out designs of the sort here considered, but it will do no harm to suggest certain possibilities, in the way of application of materials, which may contribute in new ways to the diminution of the fire-hazard. It is well understood by architects that no building, however constructed, is safe against fire, unless the amount of

combustible material contained in it is either very small, or is divided into small portions by incombustible partitions; and it is also well known that a building, very safe against internal hazards, may be destroyed by the attack of a fierce conflagration from the outside. Great as has been the progress in the art of incombustible construction within the last ten years, there is still much that can be done, with materials already at hand, in fortifying our lofty buildings against both internal and external risks. Where the fireproof building of ten years ago had its partitions set with wooden studs, filled-in with blocks of hollow plaster, or porous terra-cotta, and its wooden doors and windows trimmed with wooden architraves, the modern structure is divided by partitions of cement, on metallic lath, held by uprights of channel or angle iron, or of wrought-iron pipe, and, in many cases, provides iron frames and casings for its doors and windows; and the fireproof building of the future will undoubtedly add to these, either doors entirely of metal and glass, such as are made in Germany, and occasionally here, or of wood, covered with sheet metal, in the manner recently introduced, which gives a light, handsome and perfectly incombustible door, at a very small expense.

With marble floors, on concrete or terra-cotta arches, between iron beams, plenty of partitions of iron and cement, metal-covered doors and windows hung in iron frames, and bases and wainscoting either of marble or of metal-cased wood, the internal hazard of the high fireproof building can be reduced to almost nothing, as a fire in one room could not spread to the next. There is, however, the external hazard still to provide for, and here, also, there is still some progress to be made. Obviously, the most vulnerable point in such buildings is to be found in the windows, which, as at present made, offer no resistance whatever to a fire outside. For skylights we have found, in the new wire-glass, a material at once transparent and fire-resisting, and there seems to be no reason why a similar material should not be used in the windows in the vertical, as well as the horizontal, walls. Of course, it is not to be expected that the tenants of a great office-building would be satisfied with the ordinary wire-glass for their windows; but there is nothing to prevent us from designing the most beautiful lace-work of which we can conceive, and having it executed in gilded or silvered wire, and embedded in the polished plate-glass of the windows of our "skyscraper" buildings. Such treatment, whether the tenants liked it or not, would add greatly to the external appearance of such buildings, and would render them practically secure, no matter how numerous or ample the openings, against fire from the outside, as the glass, held by the wire network, would keep its place until it was melted away.

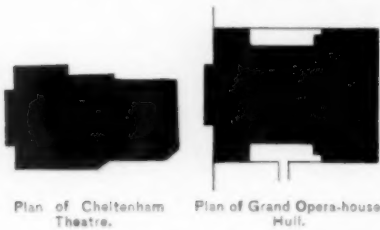
Again, we are told by the fire-engineers that the brick and terra-cotta with which we clothe the steel skeleton of our new buildings are liable to destruction by the combined effect of heat and water, and that, when exposed to a serious conflagration, either from the inside or the outside, they are likely to fall off, and expose the steel structure. Experience has shown that there is truth in this, but it does not follow that high building must be condemned in consequence. Our mediæval brethren, in attempting to adapt their old round-arched models to their new conditions, found that their buildings generally fell down. Did they for this reason desist from their attempts to solve the problem imposed on them? No. They knew, as we know, that the problem must be solved; and to solve it they at last invented a form of arch which had never been seen before since the beginning of the world. So strange and outlandish did this arch appear to them that for years, although they were compelled by constructive necessity to use it, and did use it with great skill, they disguised it, so that no one should notice that their buildings contained anything but the round arch of their forefathers. In the same way, if brick, stone and terra-cotta cannot be made to protect efficiently the metal framework of the buildings which we are trying to make fireproof, something else, that will accomplish this object, will assuredly be employed, no matter how much our traditions may have to be upset for the purpose. For example, there is no practical reason why a steel skeleton should not be clothed first with cement-mortar, on iron lath, and then cased entirely over with copper, or brass, or aluminium, riveted at the joints. With a little grouting between the steel-work and the casing, to give a substantial backing to the sheet metal, a building of this sort would be almost indestructible. Fire and water would expend their force upon it in vain, centuries of exposure to the weather would only increase the beauty of its patina, and, if well anchored to the ground, and cross-braced with moderate skill, no earthquake could bring it down. It would be a queer-looking affair, no doubt, and the critics would have plenty of sport at its expense; but we may remember, in our efforts to accomplish, by the light of our own intelligence, the results that are required of us, that it was the ugliest of the ducklings that grew up to be a swan, and that in the solution of the most important, most difficult, and yet most imperious problem that confronts us certainly lies, to a great extent, the future of the art of architecture in America.

ASHES AS A BUILDING-MATERIAL. — A building has been erected by Mr. Wagner, architect at Limburg, solely of materials formed of ashes, without any admixture of sand. It is claimed that almost any kind of hard natural stones have been successfully imitated with this very cheap material. — *Invention.*

¹ A paper by T. M. Clark, F. A. I. A., read before the American Institute of Architects at their Twenty-eighth Annual Convention.

THEATRES.¹—VI.

THE CHELTENHAM THEATRE AND OPERA-HOUSE, AND GRAND OPERA-HOUSE, HULL.



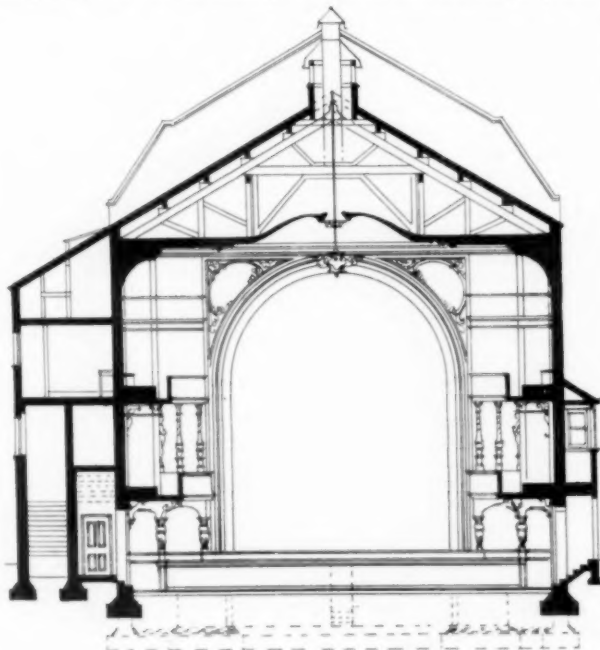
IN the present article, I purpose dealing with two of Mr. Frank Matcham's provincial theatres. The Cheltenham Theatre and the Hull Opera-house may be accepted as examples of some of the smaller theatres which are to be found in English country towns. These buildings have usually to be erected with a limited amount of capital and upon a site which does not always comply with the most advanced requirements for theatres in the chief cities of the world. These two important facts must therefore be borne in mind while examining the plans which are the subject of the present paper.

The usages to which the English provincial theatres are put are multifarious: the old days of stock companies attached to a theatre, the same actors playing in all changes of the "bill," whether pantomime, comedy, or tragedy, are past, and the provincial manager depends upon the travelling companies dispatched from London to occupy his stage during the greater portion of the year, thereby changing his "bill" weekly or oftener. Nearly all theatres in English country towns, however, produce annually a spectacular pantomime which is the only play acted in the year having a long run.

Such, then, is the business carried on in the class of theatre represented by the plans of the Cheltenham and the Hull Opera-houses now before us, and, in planning them, the architect had to be ever mindful of the constant changes in the class of entertainment, the frequent moving in and out of large quantities of baggage, luggage and scenery belonging to the various travelling companies, as well as the class of people dwelling in the town and the probable numbers which would frequent the various parts of the house.

In large manufacturing districts where the factory-hands will most likely be the chief patrons of the house, the cheaper parts, namely, pit and gallery, must be made by the architect of such a size as to render to the manager the major portion of his revenue. In large provincial towns, having wealthy suburban residents, the dress-circle and stalls are treated on the lines of London houses; while, again, in fashionable seaside watering-places, where the favorite actors and actresses follow their more wealthy patrons, the dress parts of the house are the most important.

In designing the stage of this class of play-house, due consideration has to be given to size of the scenery brought by the travelling companies, and as this scenery is removed with the company from



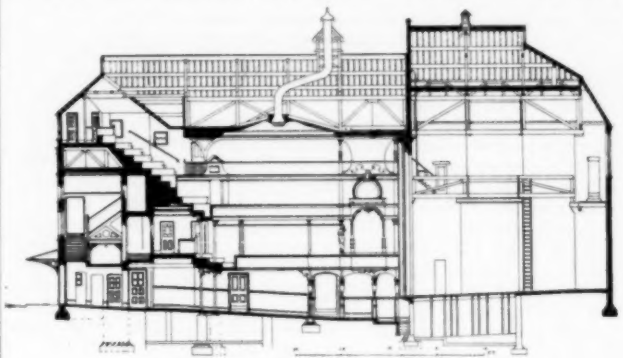
Cheltenham Theatre.

the theatre, there is no need to provide room for the storage of it, and only such scene-docks are required as are requisite for the disposal of the scenery during the play.

¹ Continued from No. 974, page 73.

The Cheltenham Theatre consists of three floors, the ground-floor being occupied by five rows of stalls and sixteen rows of seats in the pit.

On the first floor-level, there are four rows of seats in the dress-

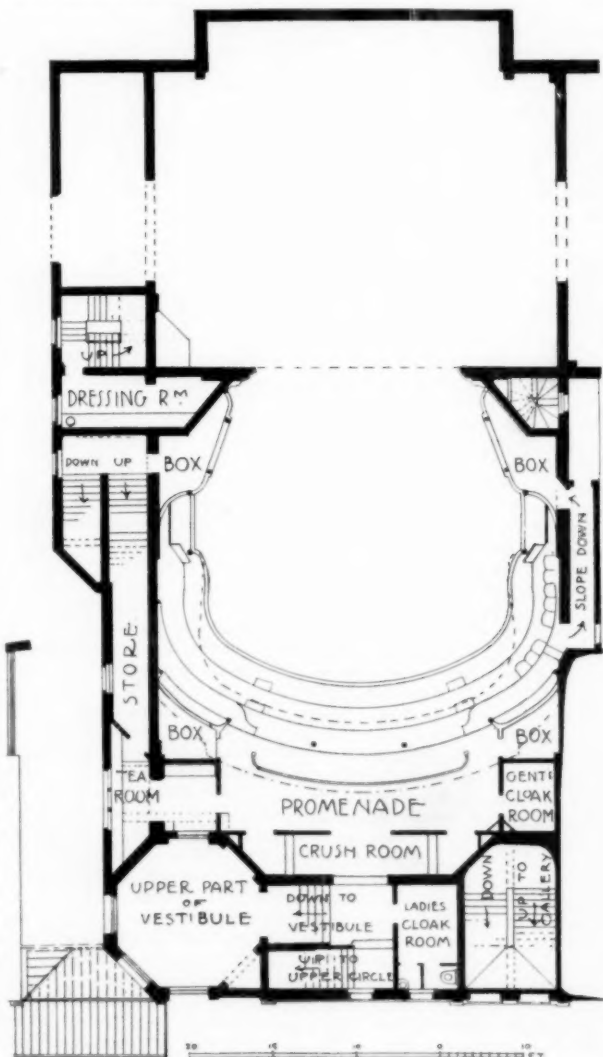


Cheltenham Theatre.

circle and four private boxes, while the gallery contains eleven rows, three of which, in front, are divided off into a higher-priced seat.

The entrance to the dress-circle and stalls is through a small octagonal vestibule from which the grand staircase ascends. The pit-entrance is in the centre of the grand façade with an extra exit into an open space at the side of the house, close to which there is also an extra exit for the stalls.

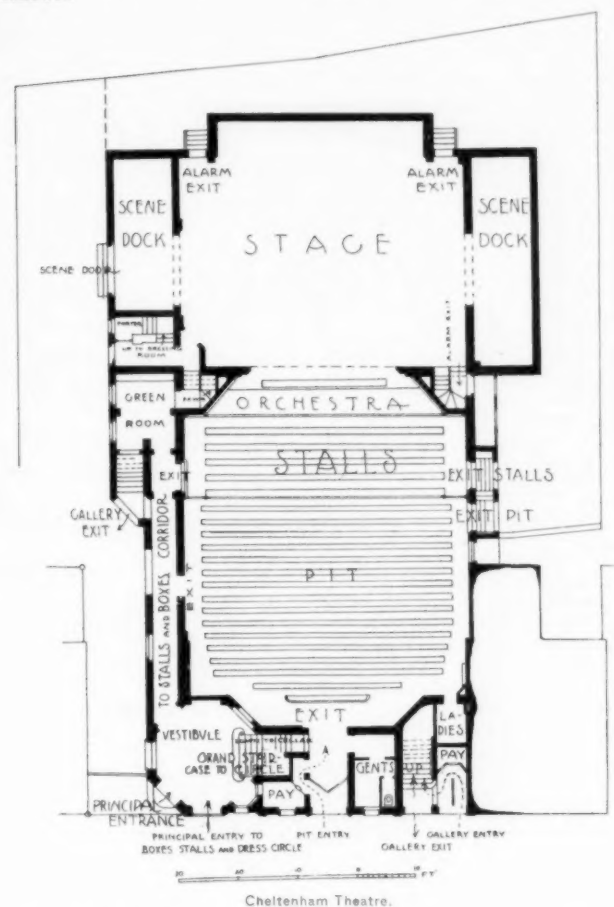
There are two staircases serving the gallery, one for entrance and one for an extra exit.



Cheltenham Theatre.

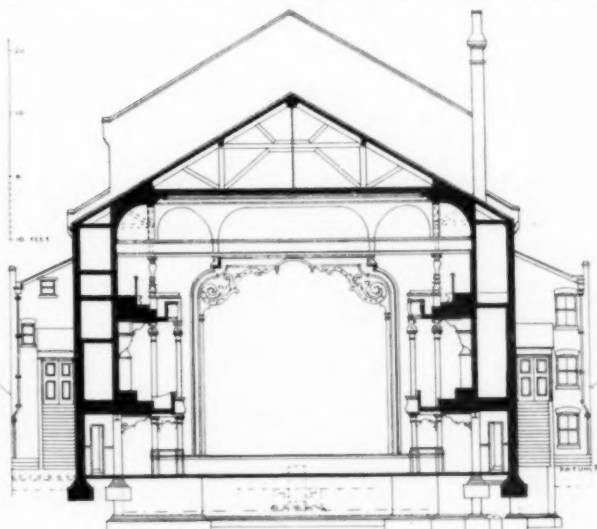
The line of the circle-front for various tiers, both in the Cheltenham and Hull Theatres, is one so frequently adopted by Mr. Matcham, being a modification of the horse-shoe form, as was seen in the plans of his Grand Theatre, Islington.

Some of the chief dimensions of the Cheltenham House are as follows:



Width between main walls of the auditorium.....	48 feet.
Depth between the back wall of the pit and the curtain line.....	60 "
Width of stage.....	48 "
Width of proscenium-opening.....	25 "
Depth of stage from curtain line to back wall.....	41 "
Distance from dress-circle front to curtain line.....	37 "
Distance from gallery front to curtain line.....	42 "
Height of proscenium-arch.....	31 "
Height from stage floor to gridiron.....	43 "
Height from pit floor to sun-burner.....	40 "

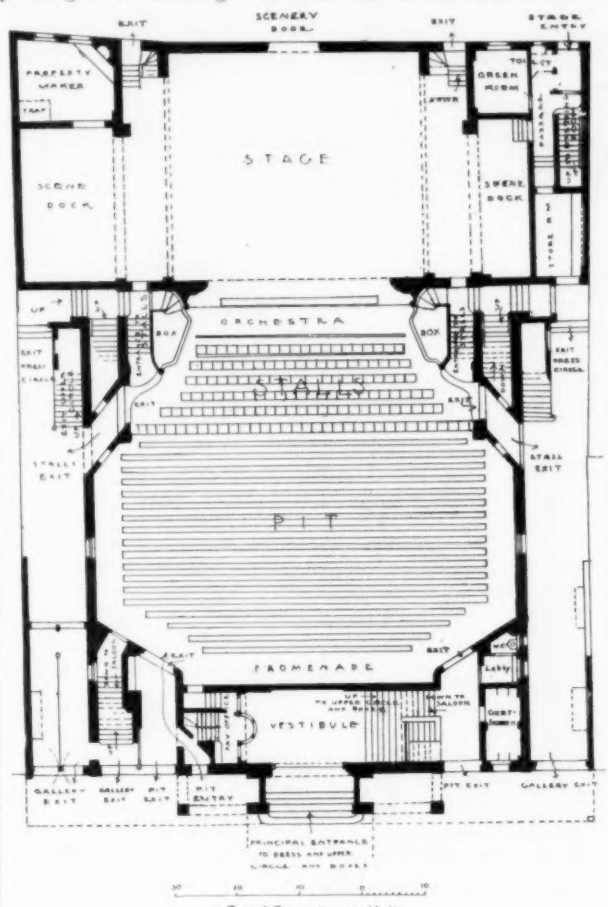
The Grand Opera-house, Hull, is a larger building than the one just described, and from the plans it will be gathered that it is built upon a more suitable site. The ground-floor is divided into pit and stalls, the former entered from the vestibule in the centre of the



Grand Opera-house, Hull.

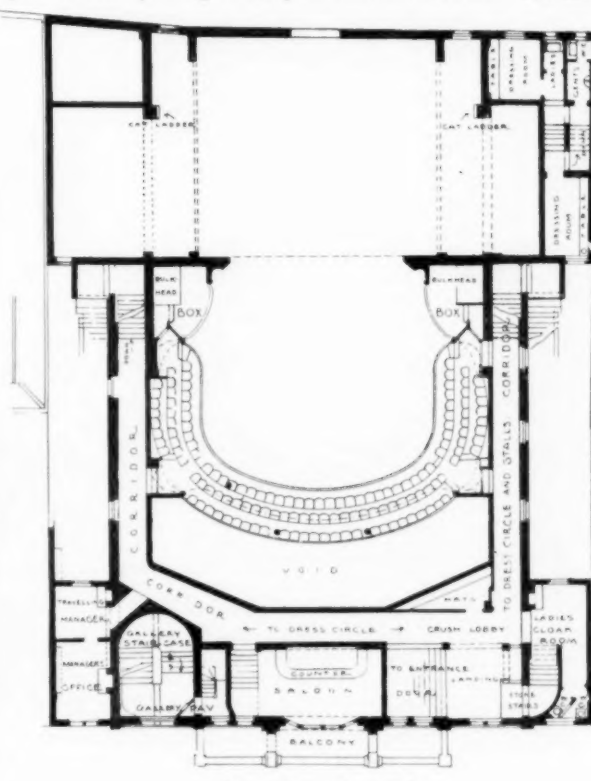
main front, and the latter by specially-arranged queue at one side of the façade with an exit by the side.

The site here allows for special means of exit and a more uniform planning of the building. On either side of the stalls there are



Grand Opera-house, Hull.

special extra exits, while there is an additional exit from the pit in a position corresponding on the plan with the entrance. The same

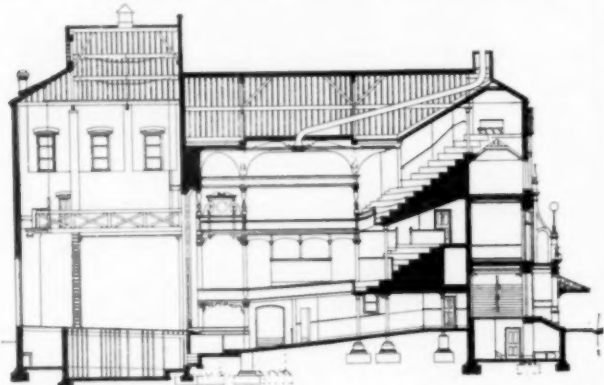


Grand Opera-house, Hull.

symmetrical arrangement of entrances, and exits to correspond, is carried out to all other parts of the house—a plan which is ever

welcome, as it always ensures the easy finding of the "extra" exits by the public.

Following these lines, the dress circle, although only consisting of three rows of seats, has, in addition to the grand entrance in the front, two staircases next the proscenium, one on each side of



Grand Opera-house, Hull.

the house, available for exit. The gallery-entrance and exit staircases are also in duplicate, ensuring every measure of safety possible.

The site being open at the back affords means of rapid egress for the actors, both directly from the stage at either side, and by an exit at the foot of the dressing-room staircase. The stage being a high one for the class of building, the proscenium wall is carried well up above the auditorium-roof, so cutting off the danger of fire spreading from one roof to the other.

A large scene-door is provided in the centre of the back wall of the stage, while the scene-dock room is similar to that of the theatre I have just described above.

Generally the plan of the Hull Grand Opera-house may be considered most satisfactory, especially when bearing in mind the principles which rule the designing of such buildings as these.

I herewith subjoin a table of dimensions by which the two theatres which have formed the subject of this paper may be compared.

Width between main walls of auditorium.....	67 feet.
Depth between back wall of pit and curtain line.....	64 "
Width of stage.....	55 "
Width of proscenium-opening.....	29 "
Depth of stage from curtain line to back wall.....	36 "
Distance from dress-circle front to curtain line.....	38 "
Distance from gallery front to curtain line.....	43 "
Height of proscenium-opening.....	30 "
Height from stage floor to gridiron.....	51 "
Height from stage floor to sun-burner.....	43 "

[To be continued.]



THE SKETCH-CLUB OF NEW YORK.

THE monthly meeting and dinner of the Sketch-Club of New York was held at the Club-rooms Saturday, October 6, 1894. About eighty members were present. The guests of the Club were Mr. Hastings, of Carrère & Hastings, M. Masqueray and Messrs. Garden of the Chicago Sketch-Club. Mr. Hastings read a paper on planning, accompanied by stereopticon views. This was one of the most interesting papers that the Club has ever listened to. M. Masqueray criticised the competition drawings of a "Mountain Inn," placing the drawing by Willard Hirsch first, E. A. Josselyn second. M. Masqueray also criticised the summer sketches which are yearly handed in at this meeting. Some of the sketches receiving favorable mention were by E. A. Josselyn, T. H. Harmon, A. T. Rose, Mr. Pirson, W. Channing Cabot and H. C. Pittman. The meeting adjourned at 11 P. M.

H. C. PITTMAN, *Rec. Sec'y.*

T-SQUARE CLUB OF PHILADELPHIA.

The first regular meeting of the T-Square Club was held on October 3d, at the Club-rooms in the Pennsylvania Museum and School of Industrial Arts. Owing to the amount of business to dispose of, the award for the summer sketches was postponed to the next meeting.

L. C. Hickman, chairman of the committee on the formation of a National Sketch-Club Association, reported that the Boston Architectural Club and the New York Sketch-Club had entered into the agreement and read the programme for the first inter-club competition which was prepared by the committee on education of the Beaux-Arts Society.

The officers elected for this season are: Walter Cope, *President*;

E. V. Seeler, *Vice-President*; A. C. Munoz, *Secretary*; D. K. Boyd, (re-elected) *Treasurer*; Wilson Eyre, Jr., (re-elected) *Executive Committee*; F. A. Hays and L. C. Hickman.

A. C. MUNOZ, *Sec'y.*

BROOKLYN CHAPTER OF THE A. I. A.

THE first annual meeting of Brooklyn Chapter of the American Institute of Architects was held at the residence of Mr. Isaac E. Ditmars, No. 227 Garfield Place, Brooklyn, on Monday evening, October 8th, and the following officers were elected to serve for one year:

President, Louis DeCoppet Berg; *Vice-President*, S. B. Snook; *Secretary*, A. G. Thomson; *Treasurer*, Halstead P. Fowler; *Board of Directors*, (Fellows), George L. Morse, Walter Dickson, Isaac E. Ditmars; *Board of Directors*, (Juniors), Washington Hull.

The *President* and *Secretary* of the Chapter are *ex-officio* *President* and *Secretary* of the *Board of Directors*.

The standing committees elected were as follows:

Exhibition Committee:—Charles T. Mott, George L. Morse, William C. Hough.

Membership Committee:—Walter Dickson, Charles T. Mott, D. C. Ernest Laub.

Professional Practice:—George L. Morse, Walter Dickson, Isaac E. Ditmars.

Current Work:—S. B. Snook, William C. Hough, D. C. Ernest Laub.

Social Intercourse:—Halstead P. Fowler, Charles T. Mott, Washington Hull.

The *President* and *Secretary* are *ex-officio* members of all of the five standing committees.

The various grades and dues of membership in the Chapter are:

Professional Members: (Fellows of the Institute only eligible to this grade), ten dollars a year dues.

Junior Members: (Young architects and draughtsmen not Fellows of the Institute), five dollars a year dues.

Non-Professional Members:—(Amateurs and artists, not practicing architecture), five dollars a year dues.

The membership of the Chapter consists of five Fellows and five members who are up for election before the A. I. A., one Junior, and three Non-Professional Members, as follows: *Professional Members*, Walter Dickson, Louis DeCoppet Berg, S. B. Snook, A. G. Thomson, George L. Morse, D. C. Ernest Laub, Charles T. Mott, Isaac E. Ditmars, Halstead P. Fowler, W. C. Hough; *Junior Member*, Washington Hull; *Non-Professional Members*, George Ingram, Oswald Speir, Gustave A. Jahn.

There are quite a list of names awaiting election to the Chapter in the Junior and Non-Professional grades, but the Membership Committee will await the result of the proposed amendments to the Constitution, at the Annual Convention, before taking action on these names.

After the business meeting, the members repaired to the dining-room and did justice to a generous repast.



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

THE CAPITOL, COLUMBUS, O. REVERSED VIEW FROM THE SOUTHEAST.

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

THE history of the construction of the Ohio Capitol is as follows: In 1838 the Legislature appointed a commission of three who were authorized to begin the work of erecting a new Capitol. The commission advertised for designs, offering three premiums. Fifty or sixty designs were sent in by architects throughout the country. The design of Henry Walter, of Cincinnati, was awarded first place, that of Martin E. Thompson, of New York, the second, and that of Thomas Cole, Catskill, N. Y., the third. After some modifications, the plan of Mr. Walter was adopted. The commission in whose charge the building began seems to have had a proper appreciation of the subject, for in their first report to the Governor, in speaking of their idea of what the building should be, the following language occurs: "In its exterior form and in its interior disposition of apartments there should be united that beauty and grandeur which the rules of art require, and which comport with the dignity and wealth of the State. The degree of civilization and knowledge prevailing in a community is always clearly designated by its works of art, and by none more than its architecture."

Not much was done towards the erection of the building for the first two years, at which time the project was abandoned by the Legislature repealing the act. In 1844 the Legislature again took the matter up and appointed a commission to secure a reduced and modified plan. After investigation, the commission reported in favor of continuing on the plan already adopted. The estimated cost of the building at that time was \$400,000. No active steps were taken

toward actual construction until 1848, by which time Mr. Walter disappeared from the scene, and W. Russell West, of Cincinnati, became the architect. He somewhat modified the detail of the plan and supervised its erection until 1854 (at which time it was up to the square) when he resigned, probably from political pressure, and N. B. Kelley, of Columbus, was appointed architect. Mr. Kelley found that \$900,000 had already been expended and that \$600,000 more would be required to complete it, according to his ideas. When Mr. West resigned he took the plans of the building with him and refused to turn them over to Mr. Kelley, who was compelled to make the drawings for the finish of the building from the time he took charge. He criticised the work of Mr. West to some extent, and his report in regard to the cost seems to have brought forth an inquiry as to whether it was best to complete the building or not. In 1856 Mr. Thomas U. Walter and Mr. Richard Upjohn, of New York, were called in as advisors, and the work progressed under Mr. Kelley's charge for two years. In 1858 a new commission was appointed who displaced Mr. Kelley and employed Isaiah Rogers, who served as architect until 1860, when the building was completed. It had already been dedicated in 1857, being partly ready for occupancy at that time. It eventually cost about \$1,400,000.

There was some controversy between the various architects in regard to the dome or cupola, which has been the subject of criticism ever since. It seems, however, that it has been finished according to Mr. West's and probably in accordance with the original design of Mr. Walter. When Mr. Kelley came in charge of the work he designed a dome as a finish, but this was condemned by Walter and Upjohn as not being in accordance with Grecian Doric architecture, to which Mr. Kelley replied, neither were windows, and that the dome was no more of an innovation, and quite as appropriate as to have windows in the walls. When Mr. Rogers came in charge of the work he designed a colonnade to surround the cupola, which was to retain its conical roof, and also designed projecting porticos on the long façades. But these improvements were never made. The building proper is 304' x 184', 60' high to the square. Interior diameter of rotunda 64' and its height 124'. It stands in a park of ten acres.

THE NEW YORK STATE BUILDING, WORLD'S COLUMBIAN EXHIBITION, CHICAGO, ILL. MESSRS. McKIM, MEAD & WHITE, ARCHITECTS, NEW YORK, N. Y. DRAWN BY MR. W. H. ORCHARD.

ACCEPTED DESIGN FOR BEXAR COUNTY COURT-HOUSE, SAN ANTONIO, TEX. MR. J. RIELY GORDON, ARCHITECT, SAN ANTONIO, TEX.

HOUSE AND STABLE, CHESTNUT HILL, MASS. MESSRS. LONGFELLOW, ALDEN & HARLOW, ARCHITECTS, BOSTON, MASS.

TAYLOR LIBRARY, MILFORD, CONN. MR. J. W. NORTHPROP, ARCHITECT, BRIDGEPORT, CONN.

HOUSE OF MR. FREDERICK WILL, ROCHESTER, N. Y. MESSRS. BLOCK & BARNES, ARCHITECTS, ROCHESTER, N. Y.

[Additional Illustrations in the International Edition.]

DINING-ROOM IN HOUSE OF MR. E. F. SEARLES, GREAT BARRINGTON, MASS.

[Copper-plate Etching.]

STATUE OF THE REPUBLIC, WORLD'S COLUMBIAN EXHIBITION, CHICAGO, ILL. MR. DANIEL CHESTER FRENCH, SCULPTOR.

[Gelatine Print.]

This view, although taken from the rear, gives a good idea of the size of Mr. French's colossal work, which (spared by fire) still stands at the easterly end of the great lagoon. It is made of plaster, gilded, is 65 feet in height to the top of the head and rests upon a pedestal 35 feet high.

NEW PREMISES, OLD SQUARE, BIRMINGHAM, ENG. MESSRS. ESSEX, NICOL & GOODMAN, ARCHITECTS.

AMONG our illustrations this week is a perspective view of the front elevation of the new premises now in course of erection for Messrs. Lunt & Co., warehousemen and haberdashers. The new premises will consist of extensive warehouses in the rear, five stories in height, with a block of shops and offices in the front. The front elevation will have Burmantoft's buff terra-cotta dressings, with Edwards's Ruabon red facing-bricks.

A STREET HOUSE.

This illustration is a reproduction of a design by Mr. John Cash, of Willemsen, which was exhibited this year at the Royal Academy.



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

A QUESTION OF VENTILATION.

NORFOLK, VA., September 11, 1894.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,— Will you kindly decide which of the two following statements is more nearly correct?

Page 57, Billings's "Ventilating and Heating," edition 1889: "In order to secure a thorough distribution of the incoming air, it is usually recommended that the discharge openings should be in the side of the room opposite to that in which the fresh-air openings are, and as far as possible from them. In all dwelling-houses, however, and in rooms not having windows on opposite sides nor containing a sufficient number of occupants to exercise any special influence on the temperature, good ventilation will be secured by placing the fresh warm-air openings on an inner wall, and the discharge openings in the same wall at the same or a lower level. . . . But when we come to deal with rooms having a large floor area in proportion to the height, and containing fifty or more persons, whose heat production is a factor that must be taken into consideration, there is some danger by this method that there will be an unsatisfactory distribution of the fresh air when the temperature of the external air is not below 50° F."

In the pamphlet on "Ventilation and Warming" issued by the Fuller and Warren Company, page 6, we find: "Upon this basis, to attain the best results, the introduction of warmed fresh air should be at a point upon an inside wall adjacent to an outside wall; the point of exhaustion should be well within the room upon the inside wall, and, whenever practicable, upon the same side as the point of introduction." Their position is illustrated by six cuts, all of which tend to show the falsity of the statements first quoted.

Very truly yours,

JOHN KEVAN PEEBLES.

[Both authorities are right, but they are speaking of different things. Dr. Billings is describing the course of warm-air currents in a small room, heated, let us say, by warm air from a furnace register. Suppose such a room to have a register in an inner wall, with an open fireplace near it, in the same wall. In this case, the warm air from the register will ascend first to the ceiling, then creep along the ceiling to the outside wall of the room, and there becoming cooler, will descend to the floor, and will cross the floor back again to the fireplace, through which it will escape. It is obvious that a circulation of this kind moves the air in the whole room, which is what Dr. Billings means; and that this is the actual course of the air currents in such a room, any one can ascertain for himself.]

The Fuller-Warren Company, on the other hand, consider, not dwelling-house rooms, nearly cubical in shape, and with nothing to move the air but the difference in weight between warm and cool air, but school-rooms, with low ceilings, large floor area, and efficient means for producing strong currents inward, or outward, or both; and with requirements, in the way of distribution, quite different from those to be observed in dwelling-houses. Under these conditions, the practice of bringing in a strong current of air, high above the floor, from that part of an inside wall nearest the window-wall, and extracting it at another point in the same wall, as near as may be to the other corner, is simply a modification, suited to the circumstances, of Dr. Billings's plan. No scholars sit near the windows, an aisle, three and one-half to four feet wide, always intervening between the nearest desks and the window-wall, so that a current, projected, as in the Fuller-Warren system, with force enough to carry it horizontally the whole length of the room, when introduced at the corner next the window-wall, is deflected inward by the cold current which always descends, in winter, on the inner surface of the windows, just about enough to include in its route all the desks on the window side. Coming then under the influence of the aspirating shaft, it bends around, following the wall opposite the registers, and returns along the wall opposite the windows, then escaping finally through the aspirating shaft. It is obvious that the placing of both the inlet and outlet registers in the same wall is, in the Fuller-Warren system, as in Dr. Billings's plan, essential to a complete circulation of the air throughout the room. Dr. Billings puts his inlet and outlet in the wall opposite the windows, because, in the rooms of which he treats, the cooling effect of the windows must be depended upon to produce the necessary circulation; while the Fuller-Warren Company put theirs in the wall adjacent to the window-wall, because having plenty of power for driving the air, the currents so arranged produce the best effect upon the pupils as ordinarily seated. — EDS. AMERICAN ARCHITECT.]

ROUGHCAST.

LANCASTER, PA., October 1, 1894.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,— Can you give me any information with reference to the best method of applying roughcast or pebble-dashed plaster-work to the exterior of a brick wall? The desire is to have the finish coat colored before applying. Would hair-mortar, or cement-mortar be the most desirable? Will the cement have any effect (if used) upon the coloring matter.

Any information you can give will be appreciated by

Yours truly,

J. V. D.

[The brick wall should be new. Old walls get a greasy coating, which must be removed by thorough cleaning, and, if possible, hacking the surface, before roughcast can be made to stick to it. Supposing the brick wall to be in proper condition, it must be thoroughly wet, — not slightly

dampened, but soaked, so far as the outside is concerned, by means of a hose, or by throwing water repeatedly against all parts of the surface. The first coat of mortar should be made with at least equal parts of lime and cement. It would be better without any lime, but, of course, much more expensive. Clean, sharp, rather coarse sand should be used, but no hair. The mortar is to be mixed rather thin, and thrown on the wall by means of a sort of wooden paddle. It may be spread with a trowel, but the effect will not be so good, and it will not stick so well. The second coat should be made with best Portland cement and a little sand, and the pebbles mixed with it, and applied in the same way. It is better to put it on before the first coat is dry, but, if this is impracticable, the first coat must be well wet before the second is put on. For coloring the cement, mineral pigments must be used, such as Venetian red, or the ochres. If the natural color of the cement is too dark, a very little lime may be added. — EDS. AMERICAN ARCHITECT.]

COLORING PLASTER CASTS.

PHILADELPHIA, PA., October 6, 1894.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Please inform me through your columns the best way to treat plaster casts, to give them that yellowish (ochre) appearance, also the preparation for treating them for an antique green, and how best to apply.

AR CHI.

[PLASTER casts are said to be colored to resemble old ivory by washing them repeatedly with a warm, weak solution of gelatine, to which some transparent pigment, such as Indian yellow, with, perhaps, Mars yellow or burnt sienna, has been added. The so-called "metallization" process, by which they are made to look like old bronze, with a green patina, was for a long time a secret, and we do not know that it has ever been made public. — EDS. AMERICAN ARCHITECT.]

THE WAGES OF MECHANICS IN THE LAST CENTURY.

PHILADELPHIA, PA., October 9, 1894.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—I wish to procure for comparison with present prices — which I have — the wages paid skilled mechanics in this country about 1750 to 1800, and again before the entire decline of the apprentice system. If you can suggest any means whereby I can find these figures, I shall be greatly indebted to you.

Very sincerely, MINERVA PARKER NICHOLS.

[PROBABLY the library of some Historical Society would be the best place to look for documents of the sort. We published, a few years ago, some notes of the cost of building-materials and labor, at the beginning of the present century, taken from some old family papers of our own; and such papers would form the most authentic source of such information. Some of the gossip town and family histories, many of which are to be found in any large library, would be likely to contain copies of similar documents. — EDS. AMERICAN ARCHITECT.]

WIRING FOR ELECTRIC-LIGHTING FOR BUILDINGS.

OGDENSBURG, N. Y., October 9, 1894.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you tell me of any work from which I can gain such information necessary for specifying intelligently for the installation of wiring for electric-lighting for buildings.

Very respectfully yours, WILLIAMS & JOHNSTON.

[THE best elementary book on electric work in general, that we know, is Philip Atkinson's "Elements of Dynamic Electricity," published by the D. Van Nostrand Co., New York. No book, however, would enable an architect to specify with precision all the parts of a system of wiring, unless he were to keep himself familiar, also, with the improvements which are constantly being made in wires, conduits, switches, cut-outs, meters, lamps, etc. The papers which are in course of publication in this Journal will, we hope, furnish a good deal of information of this sort. The Interior Conduit Insulation Co., of New York, publishes, and will send to architects on request, a specification for electric wiring, which is very incomplete, but may furnish some useful suggestions; and the Underwriters' Associations in most of our large cities print sets of rules to be observed in electric installations, which are particularly useful for consultation, as the building will not be insured unless they are observed. If the architect desires to go more deeply into the subject, he should study, in addition to the more elementary works, Professor S. P. Thomson's book on "Dynamo-Electric Machines," and provide himself with some book of tables, like Kempe's "Electrical Engineer's Pocket-book," or Walker's "Tables for the Electrical Engineer," unless he wishes to work out all the sizes of wire for himself. — EDS. AMERICAN ARCHITECT.]



BOSTON, MASS.—Exhibition of the Works of Adolf Menzel; also, Drawings by John Trumbull: at the Museum of Fine Arts, in October and November.

BRIDGEPORT, CONN.—Exhibition of the Sella collection of photographs of Alpine and Caucasian scenes: at the Public Library Art Gallery, September 8 to October 27.

CHICAGO, ILL.—Seventh Annual Exhibition of American Oil-paintings and Sculpture: at the Art Institute, October 29 to December 17.

NEW YORK, N. Y.—Loan Exhibition of Portraits of American Women: at the National Academy of Design, opens November 1.

Second Annual Summer Exhibition of American Paintings: at the Fifth Avenue Art Galleries.

Twenty-sixth Annual Spring Exhibition: at the Metropolitan Museum of Art, opened May 8.

Group Exhibition by American Painters — William M. Chase, J. Alden Weir, Childe Hassam and others: at the Galleries of the American Fine Arts Society, 215 West 57th Street.

PHILADELPHIA, PA.—Sixth Annual Exhibition of the Art Club of Philadelphia: opens November 19, closes December 6.

ST. LOUIS, MO.—Paintings: at the Exposition, closes October 20.

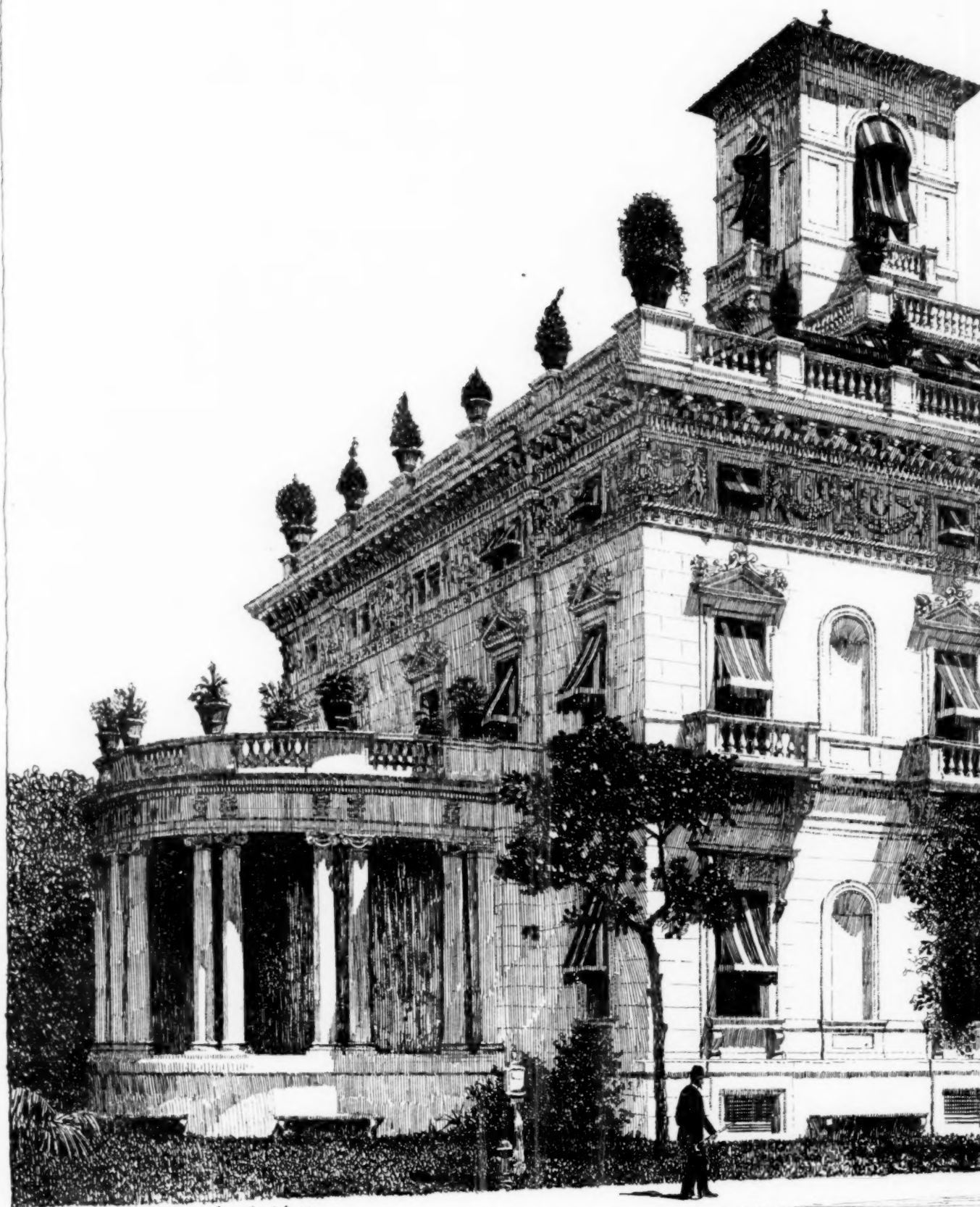


STOWE HOUSE.—Stowe has more history than is generally to be hired with a country house. It stands upon land once owned by the Abbey of Oseney. At the Dissolution, the abbot conformed to the new order, and, for his reward, received as his own, the manor which he had before held for his community. Later, he was made the first Bishop of Oxford, and resigned the lands to his friend, the Crown, when they were granted to Peter Temple, one of whose sons was the ancestor of the Temples of Stowe, and another the forefather of the Viscounts Palmerston. A descendent of the first was created Viscount Cobham — the Cobham of Pope — with remainder to his sister Hester, wife of Richard Grenville. She was the mother of the first Earl Temple, and ancestress of the Dukes of Buckingham; her only daughter became the wife of Chatham and the mother of Pitt. Peter Temple built a house at Stowe, in the time of Elizabeth, and rebuildings and additions followed until the death of the first Marquis of Buckingham in 1779, when Stowe reached its final stage of splendor. The front, including the wings, measures 916 feet, and the gardens cover 400 acres, and are gay with lakes and dismal with grottos, caverns and temples, exactly like the more exalted parks laid out by the trained imagination of Miss Austen. A monument to Congreve stands there also, and in its best days the house contained a famous library and art collection. But in spite of the rather over-confident motto of the family, "How beloved are thy temples!" misfortune came. The treasures were scattered, and Stowe gave a hired hearth to temporary dwellers, the latest being this dynasty of France. — *Pall-Mall Gazette*.

VISITORS TO THE WASHINGTON MONUMENT.—The list of visitors to the Washington Monument has touched the million mark. The column has been open to the public a little less than six years. The date of the opening was October 9, 1888. In less than six years one million men, women and children have gone to the top of the great column and looked out over the city from the little square windows which give so fine a view of the surrounding country. Most of these have gone in the slow-moving elevator. Some hundreds of thousands, though, have tortuously climbed the thousand stairs which wind about the elevator-shaft with long landings at every ten feet of elevation. It is not an evidence of crankiness to be seen climbing these stairs. A great many people of more than average intelligence make the ascent in this way every day, partly for the novelty of the experience and partly for the better view afforded of the memorial tablets which decorate the interior of the shaft on every side. A great many of the people who climb up take the elevator to come down. Their knees are very apt to give way under them if they attempt the descent by the stairway. Originally all visitors went up on foot, for Congress for a time refused to appropriate money to run the elevator. — *Boston Transcript*.

EARTHQUAKE EFFECTS ON BRICK BUILDINGS.—A letter of Messrs. Ende and Boeckmann, of Berlin, to our contemporary, the *Deutsche Bauzeitung*, gives us some interesting particulars of the effects of the late earthquakes on the new public buildings these architects have erected at Tokio. We refer to the earthquake that passed over Japan on June 20 last. It seems that the shock lasted no less than four minutes and fifty seconds, and that the buildings rolled perceptibly. Whilst all the other brick buildings suffered badly, Messrs. Ende and Boeckmann's blocks apparently withstood the shocks without showing a crack. This escape seems to have been mainly due to the precaution of tying in all the brickwork with iron bands, both horizontally and vertically, no part of the building being omitted; and, further, in building the exterior slightly inclined inwards. The walls are built unusually thick. The designs purposely showed no gables, and in vaulting very narrow spans were arranged for. On referring to official information regarding the earthquake we hear that at Tokio and Yokohama together no less than 4,551 buildings were damaged, and that sixty-one persons were killed and 428 hurt by falling houses. Thirty-two buildings collapsed completely, and eighty-one were practically razed; five bridges gave way. Of course, the majority of these buildings were of native construction, but these, as usual, apparently withstood the shock far better than the average "European" structure. — *The Builder*.

REPORTED SALE OF THE EIFFEL TOWER.—A Baltimore newspaper prints a story that a syndicate of Baltimore capitalists has bought the Eiffel Tower, and that the immense iron and steel structure will be brought to Baltimore. The promoters of the Baltimore Centennial Celebration, which is to be held in 1897, are said to be the purchasers of the tower, and the cost, together with that of taking apart and transporting the 7,000 tons of metal of which it is constructed, is said to be about \$500,000. The French Directors of the Paris Exposition, to be held in 1900, agreed about two weeks ago, it is said, to dispense with the tower. They instructed their architects to devise plans for the exposition buildings without reference to the tower. This decision was reached, it is said, as a consequence of the negotiations between the Baltimore capitalists and the French exposition authorities. — *N. Y. Times*.



W. H. Richard Del. 94.

NEW YORK STATE
WORLD'S COLUMBIAN EXHIBITION

McKIM, MEAD & WHITE



NEW YORK STATE BUILDING.

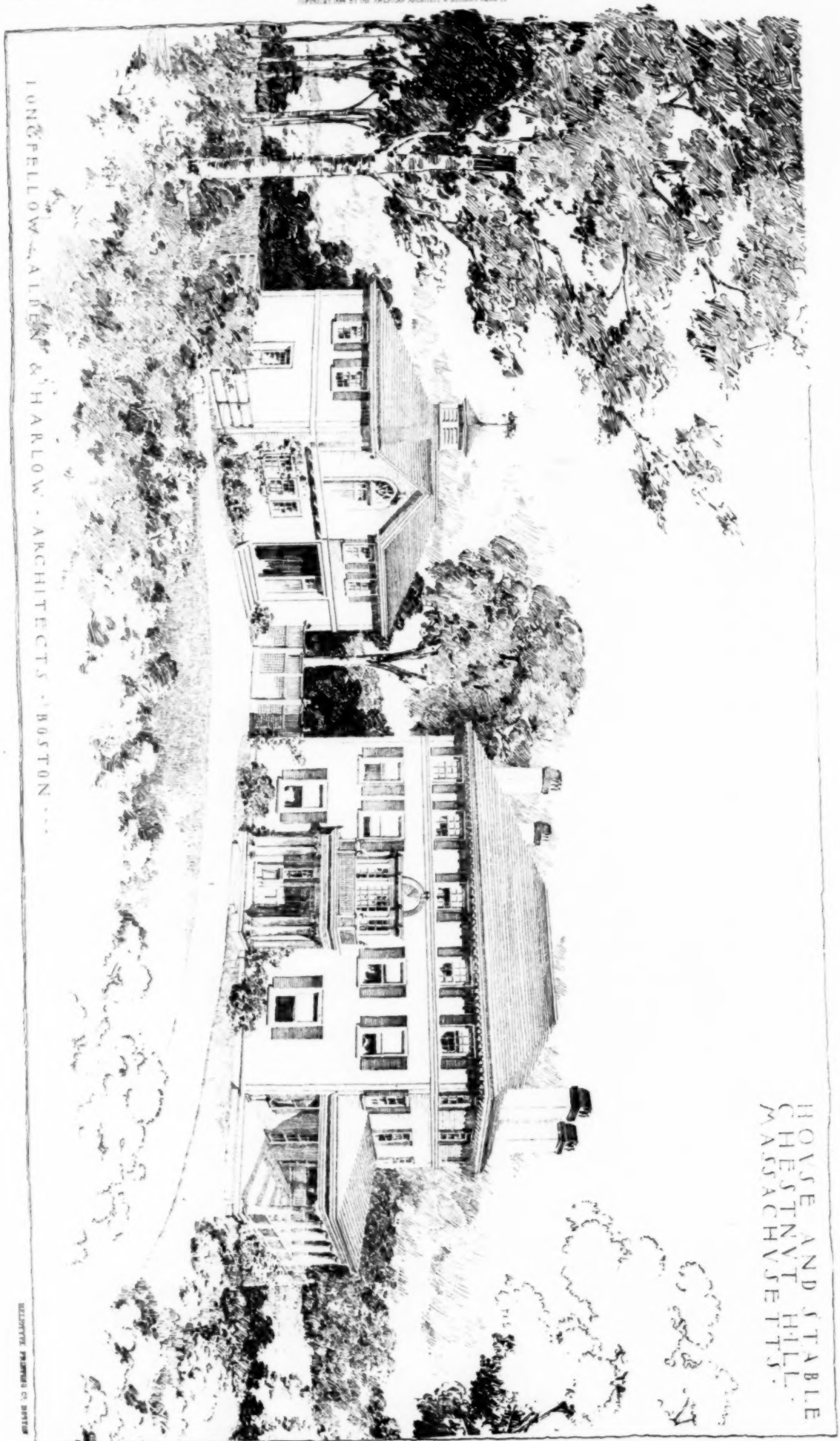
WORLD COLUMBIAN EXPOSITION, CHICAGO, ILLINOIS.

MEAD & WHITE, Architects.

HELIXTYPE PRINTING CO. BOSTON

Copyright 1894 by The American Architect & Building News Co.

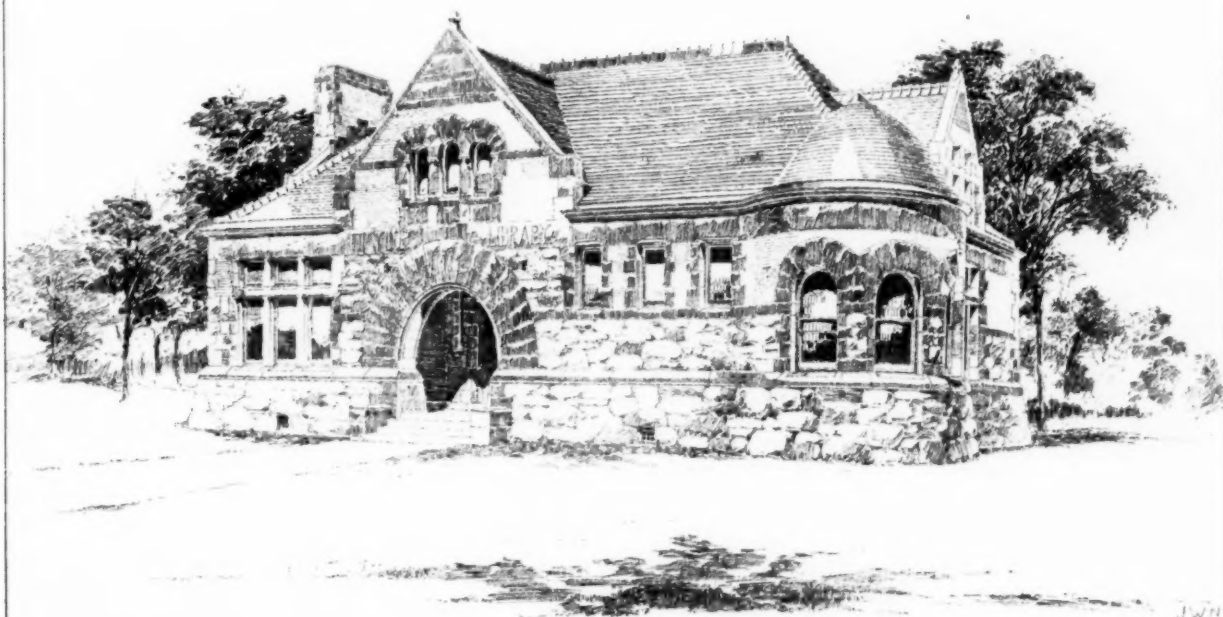
LONGFELLOW, ALDEN & HARLOW, ARCHITECTS, BOSTON.



HOUSE AND STABLE
CHESTNUT HILL,
MASSACHUSETTS.

ILLUSTRATED BY JAMES H. BROWN

RESIDENCE FOR MR. FRED WILL,
PORTSMOUTH TERRACE,
ROCHESTER, N.Y.
BLOCK & BARNES,
ARCHITECTS.



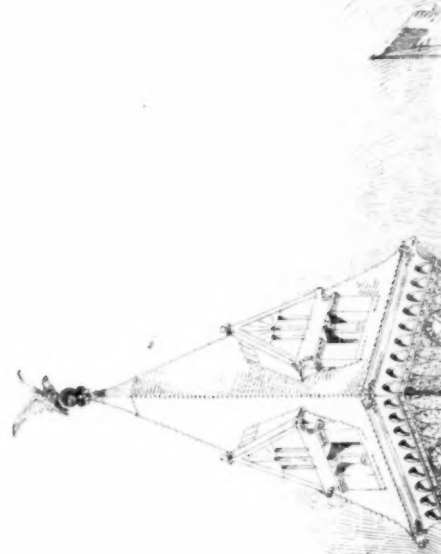
TAYLOR LIBRARY
MILFORD CONN.
JAMES NORTHROP ARCHT.
BRIDGEPORT CONN.

No. 932.

AMERICAN ARCHITECT AND BUILDING NEWS, OCT. 20, 1894.

COPYRIGHT, 1894, BY JAMES R. GORDON, ARCHT.

ACCEPTED COMPETITIVE DESIGN--
BEXAR COUNTY COURT HOUSE
JAMES RIELY GORDON ARCHT.
SAN ANTONIO TEXAS * * *





RELIQUARY, PALMERS CO. BOSTON