Public Library
JUN 24 1901
WASHINGTON, D. C.

THE AMERICAN ARCHITECT AND BUILDING NEWS

VOL. LXXII SATURDAY, JUNE 22, 1901 No. 1330

CONTENTS.

SUMMARY: —
The Utility and Practicability of an American *Salon*. — Control of the Pennsylvania Steel Company obtained by certain Railroads. — Retirement of the Chief of the Chicago Fire-department. — Spontaneous Combustion. — Rejection of Fireproofed Wood by the Navy Department. — The Marquis de Vogüé elected to the Académie des Beaux-Arts. — French Architects befriending the Religious Orders. — Legend of the Convent of Murl. — The Architectural Course at the Ohio State University. — Projected Austrian Canals. — A new Air-ship. — The nervous Susceptibility of Metals. . . 89
EDUCATION IN ARCHITECTURE. 91
ANOTHER UNJUSTIFIABLE STRIKE. 94
SOCIETIES 95
ILLUSTRATIONS: —
Broadway Elevation: United States Post office, Oakland, Cal. — Plan and Sections of the same Building. — Staircase Detail of the same Building. — Concours de Façades: House on the Rue Château d'Eau, Paris, France.
Additional: Entrance-porch: Additions to, and Alterations of, "Greystone," Yonkers, N. Y. — The Vestibule of the same Building. — Detail of the Main Façade: United States Post-office, Oakland, Cal. — Entrance to House of H. T. Haggin, Esq., 441 Madison Ave, New York, N. Y. — The Ball-room: Hoffmann House, New York, N. Y. 95
NOTES AND CLIPPINGS. 95

THE question of the establishment of an American *Salon*, by uniting, or associating, or fraternizing, the various artistic societies of the country, has for some time exercised the New York editors. In most cases, writers on the subject seem to assume that there would be no difficulty in reconciling the different artistic camps, and that the main thing now is to get an appropriation, or contributions, for erecting a suitable building for the exhibition of the works of the united artists. Prof. Russell Sturgis, in the New York *Evening Post*, has been almost the first to point out that the exhibition of the works of a large number of artistic societies together, even if it were practicable, would not be desirable. While it is possible that painters and sculptors of different affiliations might forget their prejudices so far as to submit to the rulings of a single hanging-committee, and join in a single exhibition, it is very unlikely that the mural decorators, the arts and crafts people, the stained-glass workers, and the designers in black-and-white, would consent to occupy the inferior place in a joint exhibition that the votaries of pure art would wish to provide for them; and, as Professor Sturgis says, even in an inferior place, the exhibition of such objects detracts from the interest of pictures and statues shown with them. His solution of the problem would be, while endeavoring to reconcile the differences of the various cliques of artists, to arrange for great annual exhibitions, not in a single hall, but in a series of distinct rooms, or even distinct buildings, where visitors might enjoy the wrought-iron work, and the book-illustrations, and the pictures and sculpture, separately.

THIS is an excellent suggestion, and it might be improved upon by observing that, if the artists can be induced to exhibit together, there will be no difficulty in finding a place for the exhibition, without erecting a special building for it. The Paris *Salon* of last year was held in an old slaughter-house, and the lighting of the pictures was as good as it had been in the old Palais de l'Industrie, while that of the statuary was much better. It is true that a large space is necessary for showing properly the four thousand or more pictures which are generally accepted for the *Salon* exhibition in Paris, but even in Paris, where the hanging-committee is besieged with applications for the admission of pictures from all parts of the world, three-fourths of all the works shown might be rejected without detriment to art, and we should be doing well in this country to get together a thousand new pictures and statues a year which would cast lustre on American art, or do much to educate the public taste. It is not the number of works shown, but the honors which the best works receive, which make the Paris *Salon* famous. Every artist who has a picture or a statue admitted to the *Salon* has a chance of becoming immortal, through the purchase of his or her work for the Luxembourg, or through the award of the Medal of Honor. This chance would not be in the least diminished by the exclusion of three thousand works of hopeless mediocrity, while the effect of the remaining one thousand on visitors would be greatly improved. With us, an annual *Salon* of one thousand first-class pictures and statues, with certain fame and fortune as the reward of the authors of the best ones, would soon attract everything in American art worth attracting, and such an exhibition could be accommodated in many existing galleries. We do not say that a *Salon* building may not be desirable, although we are rather sorry to see so much energy and money spent in the cultivation of the fine-arts in ways which, as we are told, are incompatible; but there is no reason whatever why the American *Salon* should wait for a building, and, in fact, before erecting a *Salon* building, it is quite desirable to know whether the prejudices of American artists can ever be so far reconciled as to make it of any use.

A CURIOUS incident in the iron manufacturing business is the recent purchase of control of the Pennsylvania Steel Company in the interest, as is supposed, of a group of railways, of which the Pennsylvania Railroad is the head. As the Pennsylvania Railroad alone consumes about two million dollars' worth of rails per year, it is presumed that it has made its purchase of one of the best rail-mills in the country in order to supply itself with rails at the actual cost of manufacture, or, at least, to make sure that it is not obliged to pay an exorbitant price to the United States Steel Company through the latter's monopoly of the business. The United States Steel Company has, as yet, shown no disposition to utilize its advantages for purposes of extortion, and it is possible that it intends to keep prices so low as to encourage consumption, even where it has a monopoly of the market; but the rise in the price of anthracite coal which has followed the combination of producers does not indicate that the iron business, in the same hands, will be conducted in the spirit of pure philanthropy. It is more probable that the steel trust sees before it the possibility of the removal next winter by Congress of the tariff duties on manufactured iron, and wishes to disarm in advance the advocates of tariff changes. Whether its moderation of sentiment would survive the rejection by Congress of a proposition for modifying the duties on iron remains to be seen.

MR. DENNIS J. SWENIE, who has been connected with the Chicago Fire Department for more than fifty years, and has been its head for something like half that time, has resigned his post, and retires to enjoy a leisure which few men have better earned. It has been one of our pleasures to serve on a committee with Mr. Swenie, and it would be difficult to speak too warmly of his thorough knowledge of his profession, and his interest in it, as well as of the quiet energy of character which, in a city overrun with politicians, enabled him to keep himself and his department free from all taint of political subservience, and to make the Chicago fire-service perhaps the most efficient in the world.

AN investigation, conducted by Mr. Albert M. Reed, for the Warehousemen's Association, into the causes of spontaneous combustion, has brought to light some interesting facts. It is well known that cotton-rags wet with linseed-oil and rolled together will soon take fire, especially if a little water is sprinkled over them; but few people, probably, are aware that boiled linseed-oil is more than three times as efficient as raw oil in causing spontaneous combustion; that lard oil is as dangerous as raw linseed-oil, and that olive-oil is little less so. Furniture-polish, spread on rags, will often cause spontaneous combustion, as will, also, certain kinds of varnish. Black silks and cottons often take fire spontaneously when rolled or packed tightly together; and it appears that charcoal, when broken into small pieces, and piled up, may take fire of itself, as will, also, occasionally, the compressed briquettes of coal-dust and tar so much used in Europe as fuel.

IT is reported that the use of fireproof wood, which has been extensively employed in the ships of the United States Navy, with excellent results in many respects, is to be discontinued, on account of the brittleness which is imparted to the wood by the process of fireproofing. Apart from this defect, the process seems to be very advantageous for ships to

Copyright, 1901, by the AMERICAN ARCHITECT AND BUILDING NEWS COMPANY, Boston, Mass.
Entered at the Post-Office at Boston as second-class matter

be used in action, and it is to be hoped that the inventors of the material will be able to modify their process, so as to retain for the wood its natural flexibility, and thus adapt it more perfectly to a use for which it has, unquestionably, great dvantages.

THE election of the Marquis de Vogüé as a member of the French Academy, succeeding the Duc de Broglie, has a certain interest for architects, the Academician elect, in his earlier days, as the Count Melchior de Vogüé, having been one of the most accomplished archæologists in Europe, and a particularly intelligent writer on Oriental architecture, or, rather, the Christian Byzantine architecture which the Turks found in Asia Minor at the time of their conquest. As ambassador of France at Constantinople, he had an excellent opportunity for studying this form of art, and the history of architecture owes much to his industry and knowledge in making researches.

M. DAUMET, of the Institute of France, and several other French architects, have signed a petition to the French Government, opposing any interference with the religious orders, on the ground that many of the buildings belonging to these orders are, architecturally, the glory of France, and that they furnish employment to the building-trades, and are likely to continue to do so. It is hardly necessary to point out that the French convents would furnish just as much employment to the building-trades if they were turned into hotels or boarding-schools, and the suggestion is, presumably, one of the conventional expressions which play so large a part in French politics. Nobody pretends now that the secularization of the few remaining monastic establishments in France is an economic necessity, as it probably was in Italy in 1870, and certainly was in France at the time of the Revolution, when the Church owned one-third of the soil of France; but it is an important part of French politics for one party to make demonstrations against the Church, and for another to rush to its defence, and the present movement is probably only a manœuvre in the play.

ARCHITECTURAL tourists in Switzerland this summer may find pleasure in visiting the Normal School of the Canton Aargau, at Muri, a little village on the Limmat, near the town of Baden, in Aargau. This school is established in a Cistercian convent, dating from the thirteenth century, which is practically intact, only such changes having been made in it as were necessary to adapt it to the uses of the school. The convent has its legend, which is to the effect that the knight Heinrich von Rapperswyl, during a pilgrimage to the Holy Sepulchre, was in great danger from a storm, and vowed to establish a convent in honor of the Virgin Mary, if he should be spared to reach home in safety. At that moment a star appeared through the clouds, to signify that his prayer had been heard, and the storm soon abated. Returning home, he looked about for a suitable place for his convent, and, while wandering in the wilderness, the same star, appearing in the sky, showed him that he had reached an acceptable site. He went to work with great energy, and, in 1227, the convent was dedicated. In 1232, a year after the death of his wife, the good knight himself took the vows in his convent, and died there some years later. The Swiss convents, protected, as they were, against warlike alarms, and situated in fertile and peaceful valleys, were not always famous for their piety and austerity, but their occupants knew how to make themselves comfortable, and the Convent of Muri offers a very complete example of a well-organized monastic establishment, certain portions, dating from the early Renaissance, being very richly adorned with the splendid wood-carving of the period.

THE Ohio State University sends us its catalogue for the year. Like most of our universities, the Ohio State has now a Department of Architecture, which, in this particular case, offers a rather unusual amount of interest. It has been common, in the early years of a university Architectural Department, to find the course laid out in a rather hesitating manner, utilizing the engineering instruction in part, adding some general-culture studies, and finishing with various indeterminate branches, lumped together under the name of "Architecture," or "Architectural Design." In the Ohio State University there is, at least, no hesitation or uncertainty in the plan of the course. Our own idea is that architecture should be taught primarily as a fine-art, giving construction not more than an equal place in the curriculum, for the reason that a fine-art cannot be learned without personal teaching, while construction, like science in general, may be acquired from books, and from observation; but there is a place in the world for architects who are primarily constructors, and the Ohio University provides for these a well-considered course, embracing, besides an extended mathematical training, a certain amount of electrical and civil engineering. It is not to be inferred, however, that instruction in design is neglected, for, beginning with the second year, drawing of architectural details, modelling in clay, water-color painting, and architectural designing form a part of the course.

THE latest canal scheme comes from a new source. The Austrian Government, which is a very active one in regard to internal improvements, has under consideration a plan of internal waterways of a very extensive character. One portion of the plan consists in the deepening of the Moldau, and its connection, by means of a short canal, with the Danube, at Linz, forming a continuous water communication from Linz, Vienna, and the other Danube towns, to Prague, Dresden and the North Sea, by way of the Elbe. The second portion of the plan contemplates a double canal, one part extending northeasterly from Vienna, and the other continuing the Elbe southeasterly, until they meet, near Olmütz, thence continuing, as a single canal, by the way of Cracow and Lemberg, to the navigable waters of the Dniester, which forms an extension of the channel through Southwestern Russia to the Black Sea. This would enable loaded canal-boats to pass from Hamburg to Constantinople, and, while the traffic of the country is not likely to be very large at first, the canal, if it is ever built, should do much to develop it.

AN engineer named Kress, in Bohemia, has invented an airship, which, according to his own account, has some remarkable qualities. As he described it a few days ago, at a meeting held to raise funds for experimenting with it, the "dragon-flyer," as he calls it, "contains no joints or complicated mechanism; it swims with its great, immovable dragon-wings quietly and swiftly over the elastic air, and it can start on its flight from the ground or from water, in calm or windy weather." In calm weather it must start with a preliminary run; with sufficient wind the preliminary run may be dispensed with. "The landing is absolutely safe," we are told, and although, like all new-born creations, it must be expected to pass through a period of "childish diseases," its inventor anticipates travelling "more safely in the flying-ship through the air than in a sailing-ship on the water." We are inclined to think that Herr Kress will find his dragon's attacks of red-gum and measles more serious than he expects, but every one will wish him success in his effort to solve the great modern problem of aerial navigation.

ONE of the most brilliant scientific men of the present day is a Hindoo, Dr. Chunder Bose, who is now in England, under the auspices of the Indian Government, and has already attracted great attention by his talent, both as a theorist and a practical man. One of his inventions in the latter capacity is a "coherer," for use in wireless telegraphy, which is said to overcome entirely the lack of recovering-power of the Marconi coherer, and is likely to make of the Marconi invention a simple and manageable system. As a theorist, his most remarkable idea seems to be that of the nervous susceptibility, so to speak, of metals and other inorganic substances. It is known that the conducting resistance of such substances is increased or diminished in various ways by exposing them to electric radiations, and it occurred to Dr. Bose to make charts of the variations in conductivity of different materials under what he calls the "stimulus" of electrical or other action, and to compare them with the physiological charts showing the effect of similar influences on the nerves and muscles of animals. This comparison led to some interesting and striking results. By interposing a liquid between two wires carrying an electric current, and "dosing" the liquid with various substances, he obtained phenomena not unlike the effects of the same substances on living animals, some of them producing stimulation, while others seemed to have a poisonous effect, corrosive sublimate, for example, destroying electric action altogether, just as it would destroy nervous action, by killing the patient.

EDUCATION IN ARCHITECTURE.

FOR discussion at the late Convention of the Architectural League of America, the Committee on Education propounded the following series of questions, each separate question being assigned to the special consideration of two or more clubs — and the conclusions reached by these clubs are here given in their proper sequence. The discussion was opened by a paper in which Mr. C. Howard Walker considers the entire series of questions.

THE QUESTIONS.

1a. *What should be expected of a graduate from an architectural school when he begins office-work?*
b. *What should the schools leave for the offices to teach?*
2. *Is it advisable that the architectural student devote the time necessary to obtain a so-called classical education as a foundation for refined culture and taste, or can the same refinement be gained by studies more closely allied to architecture?*
3a. *How much mathematical and engineering training should an architect have?*
b. *Should design and construction be separated so as to train specialists in each of these lines?*
4. *Should school study of architectural design be limited to monumental problems?*
5a. *Should architectural design and study of historic styles follow and be based upon a knowledge of pure design?*
b. *How can pure design be best studied?*
6. *To what extent and by what methods should an architect acquire a knowledge of the art-industries allied to architecture?*

THE DISCUSSION.

C. HOWARD WALKER: There are two old Oriental proverbs of which I am rather fond: one is, "The strength of the pot begins in the clay!" The other, "To the man with shoes all the world is covered with leather."

My answers are based somewhat on those proverbs.

(*a*) The object of a school is to produce architects or to train them. The training they receive as draughtsmen in a school is only an incidental part; therefore, much the most important part of a graduate's attainments is not called upon for a very considerable time after he has entered an office, and may not be called upon until he starts for himself in his profession. The expectations for attainment from the office when he enters are slight, and can be roughly stated, as follows: Good draughtsmanship, *i. e.*, neatness, speed, and knowledge of how to lay out ½-inch, ¼-inch and ¾-inch scale-drawings. Knowledge of combinations of material and construction, and how to represent them, especially how materials should be assembled, and their points of junction. Ability to use constructive formulas from books. Knowledge of the orders of architecture, and especially a realizing sense that these orders are so organized that fundamental changes in them produce architectural disease.

(*b*) Tradition of the office. The adaptation of ways and means. Eternal vigilance with both the contractor and the client. A high standard of integrity. This last might be begun in the schools.

(2) Note my first proverb. It depends upon the individual, since some men can never obtain refinement, and others cannot be prevented from obtaining it. The classical education is so closely interwoven with many of the studies allied to architecture that either leads to the other. They cannot be divorced. It is merely a question of the relation of time to be devoted to each and that depends upon the man himself. In a general way, I should say that an architectural student in the schools needs more direct teaching from instructors on the studies allied to architecture, and would depend for his classics on his knowledge of how to use books. If the question implies a knowledge of Latin and Greek, they are not necessary.

(3*a*) Enough to prevent him from originating absurd combinations of materials, and to enable him to comprehend where strains and stresses will occur, at what points to anticipate weakness, and when to economize strength under present conditions. No matter how thoroughly trained as a civil-engineer an architect may be, few, if any, have enough constant calculations to make to trust their conclusions as anything more than approximate, and it is almost a duty to have their work gone over by a specialist.

(*b*) That comes naturally. The man falls into either class by predilection. Both classes should be trained.

(4) No. But the principal stress should be laid on monumental problems. Monumental design gives much that tends to restrain and better ordinary hack-work, while hack-work gives absolutely nothing valuable to monumental work, unless it be an accommodation of ways and means. First-rate monumental work is as heedful of conditions as is any other, but is devoid of the exaggeration of pettinesses. Teaching in hack-work is merely the encouragement of common sense, which should, on general principles, be taken for granted, however lacking a large proportion of the students may be in it. I suppose this question is aimed at the teaching of small-house designing, etc., and should say that very little of it was necessary in the schools. The office supplies it.

(5*a*) I see no reason why "pure" design, by which I understand the study of proportioning construction, solids and voids, devoid of ornament and dependent upon constructive requirements and materials should not be carried on together. Every style was naked before it was clothed, and the transitions are instructive. The student who is brought up on a knowledge of disposition of masses needs as much training in beautifying those masses as the student who has a knowledge of styles needs in adapting the styles. It is somewhat as if Sandow tried to make his own clothes, or a fop tried to make himself look like Sandow. Certainly, the constructive organism is the more important; but with students, analytical, subtle study of proportions is a late achievement, not an early one, and while the first year in school may have teaching in simple constructive proportions, little of value can be expected in the results, and if a knowledge of the styles and appreciation of the delights of cultured, *soigné*, accomplished work by the best men of all times is held back from the student, he is lacking stimulus, encouragement and much of the joy of architecture. I see no reason why the two things cannot be taught together to the benefit of both.

(*b*) By comparison of problems, the determining qualities of pure design affect both the reason and the eye. The reason, inasmuch as they must appear stable and must not violate the laws of gravity, and, consequently, must have symmetry. The eye, as they must be agreeable to it. Each person can judge as to how far the reason is satisfied, but there will be a vast difference of opinion in regard to the visual merit. A discrimination in this respect can only be cultivated by constant comparisons which can be obtained through problems. As architecture deals with solids, I am not at all sure that models would not be of great value, for while accomplished architects comprehend, or think they do, what the effect of masses will be as indicated on plans and elevations, the student is completely at sea on the subject. It is the most difficult thing to get him to think in the third dimension.

(6) This hints at the old idea that crops up now and then, that an architectural student should be a competent bricklayer, should wipe plumbing joints, lay matched floors, forge joint-bolts, etc., in order to know how they should be done. If he wants to, let him. The kind of a man who wants to either has a deal of time on his hands, or will never get beyond those details. Business is carried on (no matter how many lapses there may be) on the fundamental principle that good work and honesty are necessary for success — if it were not, there would be no good work — and the architect who spends a large part of his energies in making himself a searching-committee for minor defects is bound to be in hot water all the time and get no better result, nor as good, as the one who insists upon the employment of men of reputation and insists that his specifications be followed. The harping critic immediately asks, "How does he know his specifications are followed?" He knows by the training he gets in a good office, by his constant connection with good work, and by his knowledge that any firm of reputation cannot afford to do bad work. No amount of time devoted to craftsmanship of his own hands will give him any more than an occasional advantage over the student who has devoted himself to the greater things in his profession, and this last student will whip him hands down in many other things. I notice the question says "Art Industries." Perhaps I have misconstrued it. It mentions decoration in all materials, and if wood and stone carving, etc., are implied, the more he can learn about these the better; the schools should teach something in regard to them, and if he is an artist he cannot keep his hands away from them, schools or no schools.

MR. BRUEGGEMAN (for the St. Louis Architectural Club):—

THE two questions, "What should be expected of a graduate of an architectural school when he begins office-work?" "What should schools leave for offices to teach?" to which an answer is attempted in the following paper, seem to hinge so much the one on the other as to make it impossible to answer the one without the other.

It is obvious that when we have outlined, as we shall try to do presently, what we expect a young graduate to be capable of on beginning office-work, at the same time we must indicate what we do not expect him to be capable of until we have taught him.

It is evident that we cannot expect from a graduate any more than from any other person what he has not been taught, or, more strictly, what he has not learned, therefore we are in a manner compelled to bring into the subject what the teaching of a graduate should have been during his college course. We assume as being conceded on all sides, and, therefore, as being outside the range of this discussion, that every architect should have a foundation of a liberal general education whether he be a graduate of an architectural school or no. So we shall proceed to technical matters.

We believe it to be impossible to make courses in architectural schools, in the time that is generally devoted and may reasonably be expected to be devoted to them, comprehensive enough to turn out graduates proficient at draughting in all its branches, mechanical and artistic; at the same time proficient in the knowledge of architecture, its history, its design, and the arts indissolubly connected with it; and at the same time proficient in architectural engineering and all the practical constructional detail that is but imperfectly mastered and is being constantly revised during years of active professional work. It is to be deduced from this that if we intend the student to know something of all these things we do not, and cannot reasonably, expect him to have such familiarity with them on entering an

office as to go on in the practice of them with all the smoothness that is desirable in actual work.

We may assume it possible to have an architectural school with three courses embracing the three heads just previously outlined. A graduate from any one of these departments who had wisely chosen that most suited to his temperament and to his abilities might reasonably be expected to come into an architect's office able to give points all round in his special line of knowledge; to have gone beyond grounding and theory; in short, to have all the working smoothness of a practitioner and to be a valuable man capable of earning a considerable salary, but he would not have as yet the education necessary for the making of an architect.

At the present date the graduate from an architectural school looks forward to being what is known as an "all round" architect, therefore we expect him not to have had a specialized course, but to have been grounded in all branches of architectural training. In this grounding it is possible to give more weight to one department than another, and this seems to be the kernel of the question before us. The question, then, is, what branches may be given less time to, in order that more attention may be paid to others? It seems to us that too much attention cannot be given to such departments as are not likely to be thoroughly and correctly looked after in the experience that comes to the graduate after he enters on office-work.

Of architectural history the student is likely to get nothing in the office, of architectural design he will get some, and in time a great deal, but it will be given in the most unsystematic manner; we believe, therefore, that in those two branches the student should be thoroughly grounded in the school. In office designing he sees the thing done, but most usually without a reason being offered; in the school he should be taught how to discover the reason, how to apply the principles governing design, so as to be able to work out for himself the general scheme, for in the office his mind is only too likely to be contracted to that small portion of the work that falls to his share.

Mechanical draughting is likely to form a large part of his immediate experience in the office and that he will and must become proficient in, in a very short time, so that in the school no special effort need be made in that direction. Free-hand drawing, on the other hand, must be largely developed outside of office-work. We expect a student from a school to be so grounded in this as to have all his natural ability well developed. Modelling, of course, should be part of his training to that end. The student who has not spent considerable time in thus educating the hand, has, at the same time, not had his eye educated for the appreciation of form and proportion. He sees without accuracy and too often fails to see at all. In the office there is but little time for this training, so the graduate should be expected to be proficient here on beginning office-work.

In considering what should be expected of the graduate in the way of construction and constructional detail it is necessary to be rather nice in making a statement. There are certain lines of architectural construction which have gone quite over to the specialist — the architectural engineer. The steel skeleton for the high building, the steel truss, and some of the more complicated forms of built columns and girders lie properly with him.

We still have a grip on wood trusses, girders, posts, etc., and on all forms of construction in stone and brick, and we should expect the graduate to have explored the theory of construction, and to have knowledge of the strength and possibilities of these materials as well as of steel and iron in their simple constructional shapes. When it comes to the detail of construction a very general knowledge only should be expected. The student has been trained to understand general principles which will enable him quickly to follow the office practice in detail making. It would be idle for an architect to expect a graduate to be educated up to his special idea of the correct form of window-box or wood gutter. So he expects him to come with his mind open in that respect.

It is impossible to give answers to the questions under consideration that cover the ground from all points of view. In the large office one thing is looked for, and in the small office something quite different. The graduate who enters an office should be expected to know something about the class of work likely to be done there. In the large office a more general knowledge should suffice, in the small office he should have given more thought to work such as frame houses, but right here comes up a point we wish strongly to insist upon: to a great degree, architects and draughtsmen are of one of two classes — the first, designers with a general knowledge of construction; the second, constructionists and practical men with a general knowledge of design.

The architectural student, early in his college course, must discover to which class he leans, and take up with most care the studies in that class. Having done so up to the time of graduation, he must then look for a position where one of his class is desired. Then we believe that what should be expected of him is something very likely to be fully realized.

Professor White (This paper was prepared by graduates of the University of Illinois): —

"Should design and construction be separated so as to train specialists in each of these lines?"

"Should design and construction be separated so as to train specialists in each of these lines?" is a question on which I have often talked with the younger draughtsmen, and with each year's added experience come more and more to the conclusion that they should receive equal consideration in a college training.

Rarely, if ever, is a student capable of selecting his specialty. More frequently the outside world realizes the strong points of a young man sooner than he himself.

When he has completed his college course and entered the world to take up his life's work he will be compelled to accept whatever work he can find in an office, and the first few years will be somewhat of an experiment until he has acquired at least a little practical experience. Circumstances often determine which line of work he will first be called upon to do, and if he is equally well trained in both design and construction, he will be able to work intelligently until the opportunity presents itself for him to demonstrate to which line of work he is best adapted.

More frequently the employer discovers these facts before the young man does.

I often hear the point raised that design should receive the most attention in school, inasmuch as the construction which the average architect comes in contact with can be acquired in an office with a certain amount of outside study and observation, and that design is rarely ever taught in an office, as an architect generally settles on the points of design before it gets into the hands of the draughtsmen, and what then remains to be done is to put in shape the working-drawings, which, in a greater part, is construction, and in this an architect is more capable of instructing his draughtsmen.

If a young man has no other ambition than to always be a draughtsman, there might be some excuse for his studying along special lines although it would be much more difficult for him to advance in his early experience; but if he has ambition to become a practising architect it is very necessary that he have an all-round college training, in order to settle the many questions which come up in an ordinary practice.

It has been said, and rightfully said, that if the enthusiastic youths who have returned from Paris had paid a trifle more attention to construction their designs would be on a much higher plane than some of the recent fads in which construction is almost completely ignored.

A good design should express the purpose of the building and conform to the practical requirements of its needs, and if it fails to express a simple and rational construction it fails of its purpose as a design. I do not wish to imply that the designers should be able to master every part of the many difficult problems in construction, but I am convinced in my own mind that as far as a college training goes, it should be along a broad line tending more to train a young man to think for himself than to specialize.

Mr. William Rae (for the Toronto Architectural Eighteen Club): —

"How much mathematical and engineering training should an architect have?"

"Should design and construction be separated so as to train specialists in each of these lines?"

(*A*) An architect should have as much mathematical and engineering training as will enable him to solve, by means of formulas derived from the experimental research of scientific experts, every problem the erection of a modern building may involve in the safe and economical use of the materials of its construction, including steel-construction, heating, lighting, ventilation and sanitation.

In considering this question we have borne in mind the difference between education and merely a knowledge of the expedients of modern practice, for these expedients vary so much in different localities, and change so from time to time, so many men devising their own and ever learning fresh ones, that we think no rule may be laid down concerning them.

The use of formulas and tables thus derived we think one of the most justifiable expedients of modern practice.

The architect's work is the harmonious association of all the crafts, which harmony can only be considered complete when the possibilities of each craft in relation to the whole are perfectly developed, and to do this a knowledge of the nature and functions of every material used is necessary.

(*B*) Design and construction should not be separated so as to train specialists in each of these lines, because a specialist is one who, in addition to the ordinary knowledge of his craft, acquires a special knowledge of one line, not one who has acquired a knowledge of one line only of the general knowledge of his craft.

Design in architecture is surely, as seen in the study of the highest design, the human figure, constructing beautifully. Certainly, the most intellectual part of the æsthetic satisfaction derived from the contemplation of the human figure comes from the perception of the harmonious grace of its constructional requirements.

Could we imagine a figure built up of compression-members covered with tension-members and concealed beneath a coat of ornament?

What we understand by architectural design has to be based upon the use of some material; to what material shall we limit it? Stone and wood only? We do not know what the material of the future may be; there may be no stone or wood. Times change, and we must change with them.

If to build with steel-construction is engineering only, then to cover this construction with an architecturally ornamental plaster is decoration only.

Though the expedients of modern practice may involve the use of specialists, we must consider it as an expedient only. The architect is the opposite of a specialist.

JULIUS F. HARDER (for the Architectural League of New York): —

"SHOULD school study of architectural design be limited to monumental problems?"

"Should architectural design and the study of historic styles follow and be based upon a knowledge of pure design?"

"How can pure design be best studied?"

No reason can exist why general study of any art or science should be restricted to any branch or division of it, and, more particularly, not to an unusual and ideal one. Nor is this the case, so far as we know, anywhere in any school. The remedy, if there be any necessary, would be, that instead of architectural design being limited to monumental problems, it is advisable to limit the school-of-architecture design in monumental problems in so far as it causes a sacrifice of time and attention necessary to the acquirement of information, not so pleasantly monumental, but absolutely imperative to professional practice.

The "historic styles" should be studied as solutions of the problems which were presented by them in their time. It is a fact that too much stress is laid upon this matter. It is of very secondary importance. It is the most serious blunder of the schools that the "historic styles" are impressed as of primary importance. The schools are the only influence in the architectural life of to-day which seek to keep these ghosts imbued with artificial life.

Were America free from influence of foreign schools, the conviction is forced home to us, that by this time its people would have made more progress in substantial architecture. All in all, the results might not have been better, but upon the other hand, they could not have been worse or more enslaving and retarding in effect.

This is proved by the universal progress which is recorded in all departments in which "schools" have not existed, and, consequently, have not interfered. The shortcomings, however, are not those of architecture or of archæology, nor is this an argument against schools, but the art of education itself is only in a formative state and but recently has itself become progressive and self-reformatory.

We would much prefer to go to the root of the whole matter and discuss the queries: "Of what does architectural education consist? How can it best be imparted to the student?" The root answer to both would be: "Hereditary disposition on the part of the student; his physical and mental fitness; sympathetic environment." Here we have the school, the system of imparting knowledge, the methods of acquisition, the subject, the materials and the object all combined. The school, the student and the course are but details growing out of this general proposition. The profession of education reaching out to inform itself as to its own functions, looking for light that it may behold the fruition of its own ends, asks itself first of all: "Of what does any kind of education consist? How can the various kinds be imparted to the various individualities of students?"

The problem of architectural-school education applies equally, although with less force perhaps, to other educational departments. In the sciences and in law, for instance, definite and absolute quantities and propositions are dealt with, whereas in architectural art we may only say of what it has consisted in the past, and admit, with more or less reluctance, that the materials, the methods and the forms and organization of modern life make the imitation of the real art of the past but the mockery of the present. We testify to lack of knowledge and inspiration, to wrong analysis, to an education which is worse than none at all, by dogmatic insistence that the art-triumphs of the past must contain the solution of the new problems of to-day. It is all very well to make demands upon the schools. The school itself must have opportunity for healthful life, its own disposition, its own environment. The hereditary disposition of the American school must be the spirit of American institutions and American inventiveness and progressiveness. Its environment must be one free from influences beyond its own, of spectres and of shadows. Its equipment must consist of an understanding that there are real modern problems of architectural necessity to be met with real modern materials as evolved by modern knowledge.

Finally. In order that an art-school may create its own atmosphere, fulfill its purpose, contain in itself an inspiration and an incentive to work and study, all the various art-branches of the colleges and universities of the country should be detached from other branches of study and be amalgamated in one American art-school, thus gaining in scale, volume, influence and effect, through concentration and through singleness of purpose.

Answering the final question, then under these conditions only "can pure design be best studied." Given now a buoyant and vigorous American student-body, under the tutelage of independent and progressive men, and who shall say what are the restrictions set upon the American architectural art of the future?

Respectfully submitted,

The Architectural League of New York, by Committee, { W. E. STONE, F. S. LAMB, J. F. HARDER.

MR. WATTERSON (for the Cleveland Architectural Club): —

"SHOULD school-study of architectural design be limited to monumental problems?"

IF this question means that the student's time should be divided between constructive work and monumental problems, it is one thing, and if it means that his time should be divided between "the theory of design" and monumental problems, it is quite another. The prime object of all education is to fit the student to cope with the problems of his profession in a masterful way. The prime object of an architectural training is to fit the student to be a successful architect in all that the word implies, but it is not at all to the point that he shall become an expert engineer. "At the same time it should be remembered that it is the intent of architecture to beautify structural forms. Consequently, a knowledge of structural forms cannot be ignored."

Modern construction calls for an unusual condition in design, and makes it possible for the untrained mind to do seemingly impossible things, things which the trained mind would utilize to develop proper legitimate design. Mr. Marshall says in an article on the "Education of an Architect," which appeared in the *Record*: —

"It is evident, then, that we must teach our architectural student most emphatically to work in structural forms, but it seems to me equally true, that, in the education of the architect, we should follow the developments of the past, *i. e.*, that we should endeavor to teach the youth the principles of beauty and how to apply them to structural forms which are already settled and commonplace to the race as a race of builders. It were well, as I have said before, to make the education of the architect as wide as possible in every direction, for the broader the man the more effective will be his work so long as his dominant artistic impulse is left full play; but there seems no reason to insist upon the attainment of knowledge of highly technical engineering methods which are useful only in the solution of new structural problems, although it would, of course, be desirable, if possible, for the architect to gain the acquaintance of such methods. Of course, he should know thoroughly the underlying principles of engineering method, the way in which the strength of materials and foundation values are developed, and the most practical forms of construction in stone and brick, wood and iron, especial attention being given to the nature of arch-thrusts, and he should be able to work out the less-complicated problems in each case, but beyond this, all that he needs to know are the general forms within which he may work economically."

Now, on the other hand, it is a choice between monumental problems or the study of the "theory of design," and it would seem that, inferentially, the training in monumental work would so familiarize the mind of the student with the principles of good design that he could easily meet the requirements of any other composition.

It has been said, that "the student is fortunate if his school-training gives him even a beginning of a sense of appreciation of what constitutes good taste." It is essential that the architect, to do good work, must be thoroughly grounded in the rudiments of design, and the student should be taught his design as the child is taught his alphabet. He should learn to use his mouldings, his surfaces and his openings as a child is taught to use his letters in the formation of words, and words in the construction of sentences. If monumental problems embrace a greater number of the principles of design than other problems which are given to the student, then instruction should be limited to the monumental, but it would seem that the mind which had been taught to skilfully handle a composition which embodied the heavier principles, might easily express itself in any style, the principles being the same, the difference being in the manner of expression.

It is the duty of instruction to place high value upon the spirit of design, and it is for those who have in hand the education of the younger generation of architects, to determine what method is best. The student should be taught to think inductively, that his individuality may be expressed in his work. Just the best method to accomplish this end depends largely upon the aptitude of the student, but it would seem that the mind trained upon monumental work and filled with the traditions of the best historic work would put into his problems an interpretation which generally would be correct.

Naturally, from the diversity of human ability, all students trained under the latter system may not become successful practitioners or draughtsmen, but with proper administration in the hands of capable instructors, this system should produce many successes and few failures.

G. B. PAGE (for the T-Square Club): —

"Is it advisable that the architectural student devote the time necessary to obtain a so-called classical education as a foundation for refined culture and taste, or can the same refinement be gained by studies more closely allied to architecture?"

"Should architectural design be based on a knowledge of pure design?"

"How can pure design be best studied?"

ASSUMING that is to be meant by a "classical education" the regular Arts Course of the Universities, it is advisable, because a classical education forms a good foundation to build upon in after life; advisable, however, only if a post-graduate course in some

recognized school of architecture is to follow. The refined culture and taste so gained can hardly be obtained by other means.

Pure design being the logical solution of a given problem, it must follow that the architectural styles of the past are of their day and generation only. They may be studied as stepping-stones to the development of modern architecture, though no contemporaneous problem can be solved without meeting modern requirements in a modern way.

Pure design can best be studied by an unbiased consideration of all the diverse conditions entering into a problem; thus, the dominant conditions will then govern the character and expression of the design.

MR. J. W. CASE (for the Detroit Architectural Club): —

"WHAT should be expected of a graduate from an architectural school when he begins office-work?"

"What should the schools leave for the office to teach?"

ON entering an office after pursuing a course of study in an architectural school, the student should be prepared to execute simple office-work under the direction of an older man, so that he will be of immediate use and value in an architect's office. Besides this he should understand all the general principles of all branches of an architect's practice, so that he may quickly learn the office methods of applying this fundamental knowledge.

The school should teach general principles; the office should teach the technical application of these general principles.

In a four years' course of architecture, there can be no time for specialties. The time is all too short to cover the general knowledge required in all the different branches of an architect's practice.

The student should not find that an excessive amount of his school-time has been taken up in studying monumental problems, whereas in his entire future practice he may never have a monumental problem to solve.

He should not find that an excessive amount of his time has been occupied by historical research, taking in consideration of those principles which would enable him to design architectural forms suited to his own surroundings, and making of him an archæologist, capable of reproducing historical forms, but unable to design new forms suited to his own atmosphere, material and indigenous conditions.

He should not find that an excessive amount of his time has been occupied in perfecting methods of making pictures, which his defective knowledge of constructional forms renders him incapable of constructing.

He should not find that he has given so much time to the study of applied mechanics and its application to architectural engineering, that he is deficient in artistic qualities.

When a student enters an office, he very often finds that his study has been biased by one or another of the above points-of-view, and also that he has not made an adequate study of the arts and crafts, or, in other words, that he does not know anything about the artistic uses of building-materials.

The superior knowledge of the artistic possibilities of building-materials marks the greatest epochs in architectural history. It is the basic principle, the vital and essential quality of Grecian and Gothic architecture.

The artistic chisel, feeling the firm and homogeneous pentelic marble, brought forth those subtle curving forms and refinement of proportions which constitute the greatness of Grecian architecture.

The character of building-material forced the architect to invent the arch, and the vault and buttress, and atmospheric conditions produced Gothic masses silhouetted against the sky.

The Japanese carver studies the grain of his wood, and from its twistings, evolves the creatures of his imagination.

What does the American architect know of the artistic possibilities of building-material, or wish to know!

The student who is expected to understand all the fundamental principles of an architect's future practice will study the subject from three general points-of-view. As an artist, he will study drawing in charcoal, pencil, pen, brush with color, modelling in clay, terra-cotta, cement, metal-castings, carving in stone and wood. Designing, both applied color and form, and imbued colored material, stained-glass, wrought-iron, intarsia, etc. Ornament, historical and creative, based on native flora and fauna.

Architectural design, not only monumental problems, but artistic solutions of practical problems.

History of art, architecture, sculpture and painting as the development of principles.

Building-materials, development of their artistic possibilities.

As a construction, the student will understand the general principles of building-materials; of wood, masonry and steel constructions and their superintendence.

Laboratory work should supplement the abstract consideration of building-materials. The student should pursue courses of shop-work in carpentry, masonry, metal, and spend considerable time in watching building operations.

It might be advised, before allowing an architect to practise, to require him to pass a certain amount of time as clerk-of-works; the gain to himself, to his client and to the future of American architecture would be enormous.

As a business-man, the student should study specifications, contracts, and civil law relating to building contracts and operation.

The school should teach all the fundamental principles which will control the architect in his practice.

The office should teach the practical methods of applying these fundamental principles.

The time of the student should not be taken up in perfecting the practical application of any of these studies of rendering; too much time is taken up in learning to make perfectly graded washes.

Beautifully-rendered drawings are an important factor in competitions, but are properly the work of a specialist.

The study of metal construction should embody principles and methods, and leave abstruse mathematical calculation to the specialist. The application of applied mechanics is the work of a specialist. Post-graduate courses should be arranged to meet the requirements of specialists. The school must form and direct the artistic tendencies of the student, and to that end, the study of classical problems in architectural design is advisable, but the study of design should not be restricted to ideal, classic, or monumental subjects.

A majority, or more, of the students of architectural schools will devote their entire efforts in their practice to solving the requirements of ordinary commercial and domestic problems, and will never have an opportunity to design a monumental structure; students, therefore, should be instructed in the fundamental principles of the problems on which their entire future life will be passed.

They should understand the desirable arrangements and the conditions to be avoided in designing houses, commercial structures, churches, municipal buildings, schools, theatres, libraries, etc.

Their instruction should show them how to satisfy the practical conditions of ordinary problems in an æsthetic manner.

How can the solution of these practical problems be left for the office to teach? for it is generally conceded that the office solution of these problems is unsatisfactory.

For this end, the student must know building-materials, how to use them practically and, especially, how to develop their æsthetic possibilities. He should understand and sympathize with the arts and crafts, and receive instruction in modelling, carving, stained-glass, wrought-iron, etc., not to the extent of manual dexterity, but to gain a knowledge of æsthetic possibilities in using materials.

The most essential requirement of an architectural education is cultivation of the artistic creative faculty.

The creative faculty, the art instinct, the artistic imagination, is the most valuable and most essential quality that the architect can have or acquire; it is the essential element in all great art. To awaken and develop this faculty is the greatest opportunity of the architectural school.

ANOTHER UNJUSTIFIABLE STRIKE.

THE Boston *Herald* a few days ago told the following story of one of the extraordinary industrial pranks which make it so difficult for the business-man who respects law and order to maintain his business and his reputation as a keeper of his business promises: —

"The New York *Sun's* correspondent in Dayton, O., has given a graphic account of the conditions which have caused the shutting down of the National Cash Register Company's plant in that city. The story is not only interesting, but it is a typical illustration of the working of organized labor-forces to the detriment and degradation of working men and women in certain cases where employers undertake to do more for their employés than is ordinarily done. The Dayton establishment was known far and wide, in this country and abroad, as a model establishment in the liberality and thoughtfulness of its concern for the welfare of those whom it employed. The motive was not a merely charitable one. It was believed to be wise business policy to secure comfort and opportunities of improvement to those dependent on the company for wages. There have been few instances, if any, of more excellent methods showing genuine sympathy with the best aspirations of wage-workers. The scheme of advantage has been unappreciatively and rudely thwarted by the workers themselves.

"The manager, J. H. Pattersen, is represented to be greatly discouraged and at present uncertain whether the establishment ever will be reopened. Many of the employés were women. For these a handsome lunch-room was provided, with piano, bookcase, reading-table, dressing-rooms with bath-tubs, and a rest-room supplied with cots. Arrangements were made for street-cars to be at the gate at night in sufficient numbers to take the girls to their homes before the men were released from work. For the men equally complete and serviceable arrangements were made, although in less decorative style. For the children of the families of workers, schools of various kinds were maintained, and means of healthful sport, gardens and a library. Stacks of books from the library were taken to the factory in order to make a selection of books more convenient. Here was a village offering every inducement tending to encourage virtue, improvement and happiness, the proprietors of the business giving large gratuities in addition to liberal wages, literally sharing profits with their help.

"There had been no quarrels, no interruption by strikes, no suggestion of discontent, until the representatives of union-labor broke into the peace of the place to dictate its management. Unionism got some hold upon the workingmen about a year and a half ago. Since then the walking-delegate and shop-committees have made no end of

trouble. The workers had been enjoying free bathing-places, free soap, free towels and opportunity to make themselves clean in working-hours. A walking-delegate discovered that the thousands of soiled towels weekly sent out were washed by a number of poor women having families to support, who were not members of any union. A committee waited upon the manager and demanded that the washing be given to a union laundry. The manager declined longer to furnish towels.

"Then it was discovered that 'non-union' compressed air-springs were used on the doors of the polishing department. A committee demanded their removal. They were removed and the doors allowed to slam. There were three men of whose status, whether carpenters or cabinet-makers, the union was uncertain, and a committee demanded that they should be classified. This made a peculiar dilemma for the manager, which is presented by the *Sun's* correspondent thus: 'If he assigned them to the group of the cabinet-makers, the straightaway carpenters would strike. If he assigned them to the group of the straightaway carpenters, the cabinet-makers would strike. And there you are. It was up to the general manager to get out of the hash the best way he could. After carefully considering the case he decided that, in the present status of work, the factory could, for the time being, dispense better with the services of the straightaway carpenters, so he assigned the three to the cabinet-makers, and the straightaway capenters struck.'

"Then followed several demands as to the employment of union labor, the company complying in some instances, hoping there would be an end of unreasonable exactions. One case involved two men who had been discharged, it is said, for lying and drunkenness. The company was required to take them back, and paid each $15 a week for three months; but would not allow them to come into the factory. They were paid for doing nothing. When the union got control of the foundry it promptly announced that no man should earn more than $4.50 a day. Men had been earning on piece-work $5, $6, $6.50, $7 and, in one case, $8 a day. The company preferred to let competent men make high wages by industry and ambition, rather than enlarge the plant. But the union was determined to force enlargement and employment of more men. This was not accomplished, however. By a substitution of wood for iron in some parts of the cash-registers, the company was able to lay off some foundry-men, and this led to another difficulty, in which the international committee did not support the shop-committee.

"In March two more moulders were laid off, and early in April a third, the last one for cause. This made six who had been discharged. One obtained a job elsewhere. Demand was made by a committee having no connection with the shop that the five be restored. The company refused on the ground that there was no work for them. The rest of the story is best told in the language of the *Sun's* correspondent: —

"'On April 20 all the moulders quit work. The sixteen who originally had been non-union men had been subjected to severe pressure and practically were forced into the union. A few days after this a committee from the polishing department called upon the managers of the company and demanded the restoration of the five moulders. It was in the morning, about 11 o'clock, when it made this demand. It gave the company until 2 o'clock to decide whether to accede to it. The ultimatum was that if it did not accede the polishers would quit work. The general manager of the company replied that he would not yield to the demand, but that he was willing to submit the matter to arbitration by a committee of five — two selected by the company, two by the polishers and one by those four. To this the polishers made no reply whatever. At 2 o'clock in the afternoon they quit their benches and were on a strike. Immediately afterward the company posted a notice to the effect that certain employés of the company having quit work, it would be necessary for the entire factory to shut down indefinitely. It was not a lock-out. With the moulders and polishers both on strike, it was impossible to go on. Two vital links in the chain were broken, and the whole mechanism of the factory was thrown out of gear. In other words, it was the employés of the company themselves, and not the company, that closed down the works.'"

A day or two later the outcome was given thus by the *Herald*: —

"A few days ago the story of the strike of employés of the Cash Register Company in Dayton, O., was told in the *Herald*. It presented an amazing condition of affairs, where a factory employing more than 2,000 persons and treating them with unusual consideration and generosity was closed by a strike of union men in two departments, which forced the discontinuance of all operations. The immediate cause was the refusal of the company to continue the employment of four or five moulders for whom there was no work, owing to a substitution of wood for metal in a part of the registers manufactured. Plainly, it was one of the most senseless and mistaken strikes of which labor was ever guilty, and that is severe condemnation. It has ended, as such a strike had to end, by the yielding of the union, which had no reason in its demand, and discovered that public sentiment condemned its course. Work has been resumed and the discharged moulders are still out. It may be hoped that this is the end of trouble in this model workshop. How much the strike has cost we do not know, but many thousand dollars, certainly, of which a large share has been lost by labor. Public opinion is a large element in determining any strike. The great body of the people desire to have justice done, and when they know the facts their judgment on the merits of the case is apt to be conclusive."

SOCIETIES

THE ARCHITECTURAL LEAGUE OF AMERICA.

THE Architectural League of America having elected as President, for the ensuing year, Mr. Joseph C. Llewellyn, of Chicago, the choice of the remaining members of the Executive Board devolved upon the Executive Committee of that Club of which he is a member.

Said Executive Committee now desires to announce that they have filled the Executive Board by the reappointment of the members who served last year.

The Board is as follows: *President*, Joseph C. Llewellyn (Chicago Architectural Club), 1218 Association Building; *Vice-President*, Richard E. Schmidt (Chicago Architectural Club), 172 Washington St.; *Corresponding Secretary*, Emil Lorch (Detroit and Chicago Architectural Club), Art Institute, Chicago; *Recording Secretary*, Hugh M. G. Garden (Chicago Architectural Club), 172 Washington St.; *Treasurer*, August C. Wilmanns (Chicago Architectural Club), Journal Building; *Member of Executive Board*, Prof. Newton A. Wells (Architects' Club, University of Ill.), Urbana, Ill.; *Member of Executive Board*, Robert C. Spencer, Jr. (Chicago Architectural Club), 1107 Steinway Hall.

ILLUSTRATIONS

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

BROADWAY ELEVATION: UNITED STATES POST-OFFICE, OAKLAND, CAL. MR. JAMES KNOX TAYLOR, SUPERVISING ARCHITECT, WASHINGTON, D. C.

PLAN AND SECTIONS OF THE SAME BUILDING.

STAIRCASE DETAIL OF THE SAME BUILDING.

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

CONCOURS DE FACADES: HOUSE ON THE RUE CHÂTEAU D'EAU, PARIS, FRANCE. M. RIVES, ARCHITECT.

THIS plate is copied from *La Construction Moderne*.

[Additional illustrations in the International Edition.]

ENTRANCE-PORCH: ADDITIONS TO, AND ALTERATIONS OF, "GREYSTONE," YONKERS, N. Y. MR. J. H. FREEDLANDER, ARCHITECT, NEW YORK, N. Y.

THE VESTIBULE OF THE SAME BUILDING.

DETAIL OF THE MAIN FACADE: UNITED STATES POST-OFFICE, OAKLAND, CAL. MR. JAMES KNOX TAYLOR, SUPERVISING ARCHITECT, WASHINGTON, D. C.

ENTRANCE TO HOUSE OF H. T. HAGGIN, ESQ., 441 MADISON AVE., NEW YORK, N. Y. MESSRS. JANES & LEO, ARCHITECTS, NEW YORK, N. Y.

THE BALL-ROOM: HOFFMANN HOUSE, NEW YORK, N. Y. MR. A. ZUCKER, ARCHITECT, NEW YORK, N. Y.

NOTES & CLIPPINGS

REDWOOD. — According to a report received from California a few days ago, a company has been formed on the Pacific Coast, with a capital of $15,000,000, for the purpose of controlling the redwood market. There are not many lumber-merchants in New York who handle this product of the Western forests extensively, and they have little fear regarding the proposed trust. Redwood is shipped from California extensively to Japan, China, Hawaii and England. In those countries it is used for building purposes. Great quantities of shingles are made from the wood, and of these many come to the Eastern part of the United States and are sold in the rural districts. In the United

States the wood is used for coffins, door-jambs, rails, wainscoting, window-sashes and similar house-fittings. "The wood should be more popular than it is," said a dealer, "because the best quality is cheaper than the best pine. It would be more in demand if the dealers in the Far West paid more attention to the Eastern market, but they prefer to sell to China and Japan." A sample of the wood is now in a storage warehouse in the upper part of the city. The piece is 17 feet long, 6 feet wide and 2 inches thick. It weighs more than seven hundred pounds, and was cut with an ordinary hand-saw. Having no blemish, it is considered a remarkable specimen. The commercial redwood is the product of giant trees, but not of the largest class, and the fear that the new corporation may become an additional menace to the big trees of California is said to be unfounded. — *N. Y. Tribune.*

Density of Population of Foreign Countries. — Consul-General Guenther sends from Frankfort the following figures, taken from the Cologne *Gazette*, of the population of various countries and number of persons per square kilometre, based upon the latest census taken: —

Country.	Year.	Population.	Per Square Kilometer.
Russia	1897	128,961,691	5.9
United States	1900	76,215,129	8.4
German Empire	1900	56,345,014	104.2
Japan	1898	43,760,754	114.4
Great Britain and Ireland	1900	40,509,525	132
France	1898	38,745,000	72.2
Italy	1898	31,573,582	106.6
Austria	1900	26,107,304	87
Hungary	1900	19,203,531	59.6
Spain	1897	18,089,500	35.9

A new Discrimination between Movables and Fixtures. — The Appellate Division of the Supreme Court recently handed down a decision reversing the judgment of the lower court in the case of Thomas J. Cosgrove, as assignee for the benefit of creditors of Thomas J. Brennan against Anna Estelle Troescher. Brennan built three apartment-houses at One Hundred and Fifth Street and the Boulevard. He carpeted the halls and stairways and put in ranges and refrigerators and also awnings and seventy-four shades, besides clothes-racks on the roof, ash-cans, etc. The defendant came into possession of the houses on foreclosure, and refused to give up the articles mentioned The plaintiff then brought suit for conversion, but a verdict was rendered for the defendant. That judgment is now reversed and a new trial is ordered. The Court holds that the carpets, window-shades, and ranges were movables as matter of law, also probably the drying-frames and awnings. Some of the other items, including the refrigerators, may have been fixtures, but that would depend on the facts to be ascertained at the trial. Those things which have in their "own nature a determinate legal character" are movables, and for them the plaintiff is entitled to recover. A new trial is therefore ordered. — *N. Y. Times.*

Birch-bark the old Colonial Sheathing-paper. — The Kennebec (Me.) *Journal* says: What carpenters used one hundred years ago in place of sheathing-paper while erecting the better class of buildings was recently shown in Saco while the carpenters were overhauling the Cutts house on the high bluff overlooking Factory Island wharves. At the southwest side it was found best to pull off some of the clapboards. What appeared to be loose pieces of birch-bark were found underneath. It was at first thought one or two pieces had been put in by chance. But on investigation the carpenters saw that the carpenters who built the house in 1782 had laid sheets of birch-bark on the sheathing to close over the cracks. These sheets were held by small hand-made nails of wrought-iron. Over this were laid hand-made clapboards of pumpkin-pine.

Successful Excavations by the French School of Archæology at Delphi. — The French School of Archæology at Athens, in continuing its successful excavations at Delphi, has penetrated a spot where a number of small temples stood in the time of Pausanias, and among them a circular temple which has been handed down by Greek and Latin writers on architecture as the most perfect type of its kind. The first drift struck in this direction has laid bare the foundations of a circular edifice, which may well be the building in question. The French School is also at work at Arcadia on the site of the old city Tegea. The theatre and market-place were identified last year, and efforts are now being made to reach the famous temple of Athenealea, which was reckoned next to that of Olympia, being decorated with sculptures by Scopas, of the island of Paros. On the island of Delos, sacred to Apollo, the French School proposes to lay bare the old town as Pompeii was uncovered, believing that such excavations will reveal an old Greek settlement in all its parts. — *Exchange.*

A Monument to Virgil. — In these times of monument mania the idea of commemorating some new person creates no surprise. One proposal, however, is of exceptional importance, as it is to Virgil. The monument, for which 100,000 lire has been collected, will be erected at Mantua, the birthplace of the author of the "*Æneid.*" This is not the first time that honor has been rendered to the famous poet of ancient Rome. Immediately after his death Emperor Alexander Severus put him next to Plato, and the best artists competed in reproducing his features. Mantua honored him by putting his figure on her new coins, with words "Virgilius Maro." There was also erected a statue, but it was destroyed in 1397, in the war between the houses of Visconti and Gonsaga. One century after, Isabella d'Este, indignant at such vandalism, decided to erect a new monument, but it never got beyond the design, now kept in the Louvre collection in Paris. So for over five hundred years the geatest Latin poet has been without material honor in his own country except for a bust here in Rome on the celebrated Pincio. One interesting fact in connection with the new monument is that hitherto there has been no authentic portrait of Virgil in any form; but two years ago, during excavations in Tunis, a portrait of him was discovered, so that the Mantua monument will at least have the virtue of being correct. — *Pall Mall Gazette.*

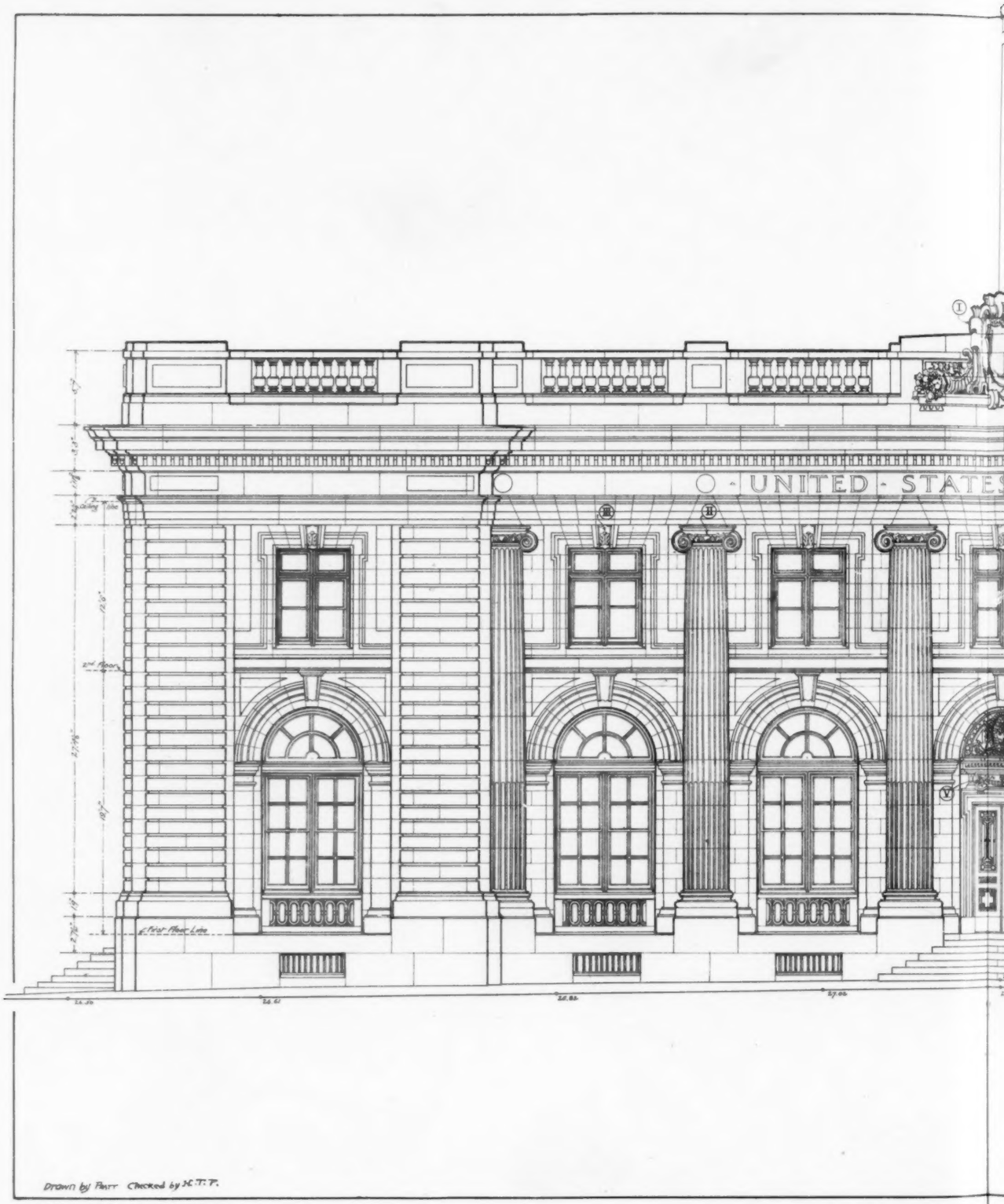
The Movement to preserve Objects of Natural, Artistic or Historic Worth. — The spirit of John Ruskin is abroad in France. There, as both here and in England, protests are heard against the modern vandalism which ruthlessly sacrifices natural charm or historic interest to commercial greed. In the Chamber of Deputies M. Beauquier has introduced a measure, which, although slightly Quixotic and not in the least likely to become law, is, at all events, in the right direction. His proposal is that a special commission of artists be appointed in each Department to draw up a list of buildings and sites to be preserved from mutilation for all time. Upon these experts he would confer the authority of final decision in all questions affecting historic edifices or famous views. Without their permission no owner of such a place could build or pull down, destroy trees, blast rocks, or interfere with picturesque watercourses. All the grosser ends, as gain or convenience, he would subordinate to the soothing, beneficent, and elevating influence of the beautiful. M. Beauquier quotes some lamentable instances of materialistic barbarism, both in France and Switzerland, and he will have many sympathizers, though few would dream of conferring powers so far-reaching upon commissions which, inevitably, would be controlled chiefly by sentiment. — *N. Y. Evening Post.*

The Erosive Antics of the Mississippi. — "I have been very much impressed with the importance of small things in late years," said an old steamboat man to a New Orleans *Times-Democrat* reporter, "and the Mississippi River has furnished me some rather good examples. I can understand now why Cæsar looked out upon the Nile in such curious amazement, and offered all that he stood for to the Egyptian priest if he would show him the source of that wonderful river. But the antics of the Nile look like insignificant nothings to me when compared with the strange conduct of the stream that oozes out of the earth at Itasca and hurries on its murky and devious way toward the Gulf of Mexico. Towns along the Mississippi that once stood right on the brink of the river have been isolated even in my day, and there are, too, all along the course of the stream little empires in view where the river has encroached upon small centres of population, finally eating the earth away and forcing the inhabitants to seek other quarters. There are hundreds of these places that are almost forgotten now even by men who are constantly on the river. What brings about these violent changes along the banks of the river? Not floods It is just the ordinary doings of the stream. In the first place the current of the Mississippi is wonderfully swift, and the sediment deposited at any point where resistance to the flow is offered is very great. Tie a string to the neck of a bottle and sink it with the mouth of the bottle up and open. If held in one place where the flow is normal in an extremely short period of time the bottle will fill with sediment. Stretch a net across the river, a net so finely woven that nothing but the pure water of the river can pass through, and, on account of the rapidity of the flow and the greatness of the deposit of sediment, almost in a twinkling the river would be dammed at that point. Experts have admitted this. This brings me to the point of my narrative. The flow of currents is frequently interfered with by sunken boats, perhaps by a jackstaff sticking up above the surface. The current is diverted by degrees, generally touching the far side of the stream a mile from the point where it again meets resistance and immediately begins the building of a sandbar. I have seen a thousand examples of this sort during my career on the river, and I have known of instances where the root of a tree or the mere twig of a willow have brought about similar conditions. These things have tended to make a riddle out of the river, yet the stream after a while will be handled so as to undo all that it has accomplished in this way."

The Oregon Pine-needle Crop. — The novel pine-needle industry in Oregon is growing, various new uses having been found for the product. These pine-needles in Oregon are much larger than the diminutive pine-leaves familiar to residents of the East. In the Far West they grow sometimes to a length of 30 inches, the average being 20 inches. Both the oil and fibre of the leaves are marketed, the former being extracted by distillation. The oil is used in the making of soap and in the flavoring of candies, and is said to have some medicinal value for pulmonary complaints. Two qualities of fibre are used, the one from which the oil has not been extracted being the most valuable, and selling at about ten cents a pound. This fibre is elastic, and may be woven into fabrics. Mixed with hair, it is said to make an excellent material for mattresses and pillows, while the odor, which is retained indefinitely, is thought to promote sleep. A curious feature in connection with the industry is that the trees are not injured by being denuded of their leaves, but are rather benefited, and the Forestry Commission approves of the practice. Two crops may be gathered yearly from the trees, the second crop being larger than the first. The Oregon factory, said to be the only one outside of Germany, is to have a capacity soon for 8,000 pounds of leaves per day. — *N. Y. Evening Post.*

Museum of the Decorative Arts in the Louvre. — The Pavillon Marsac, in the Louvre, has been turned over to the Decorative Arts Union of Paris, and here the great series of tapestries from Fontainebleau has been placed. Other tapestries and wood-carvings will follow. — *N. Y. Times.*

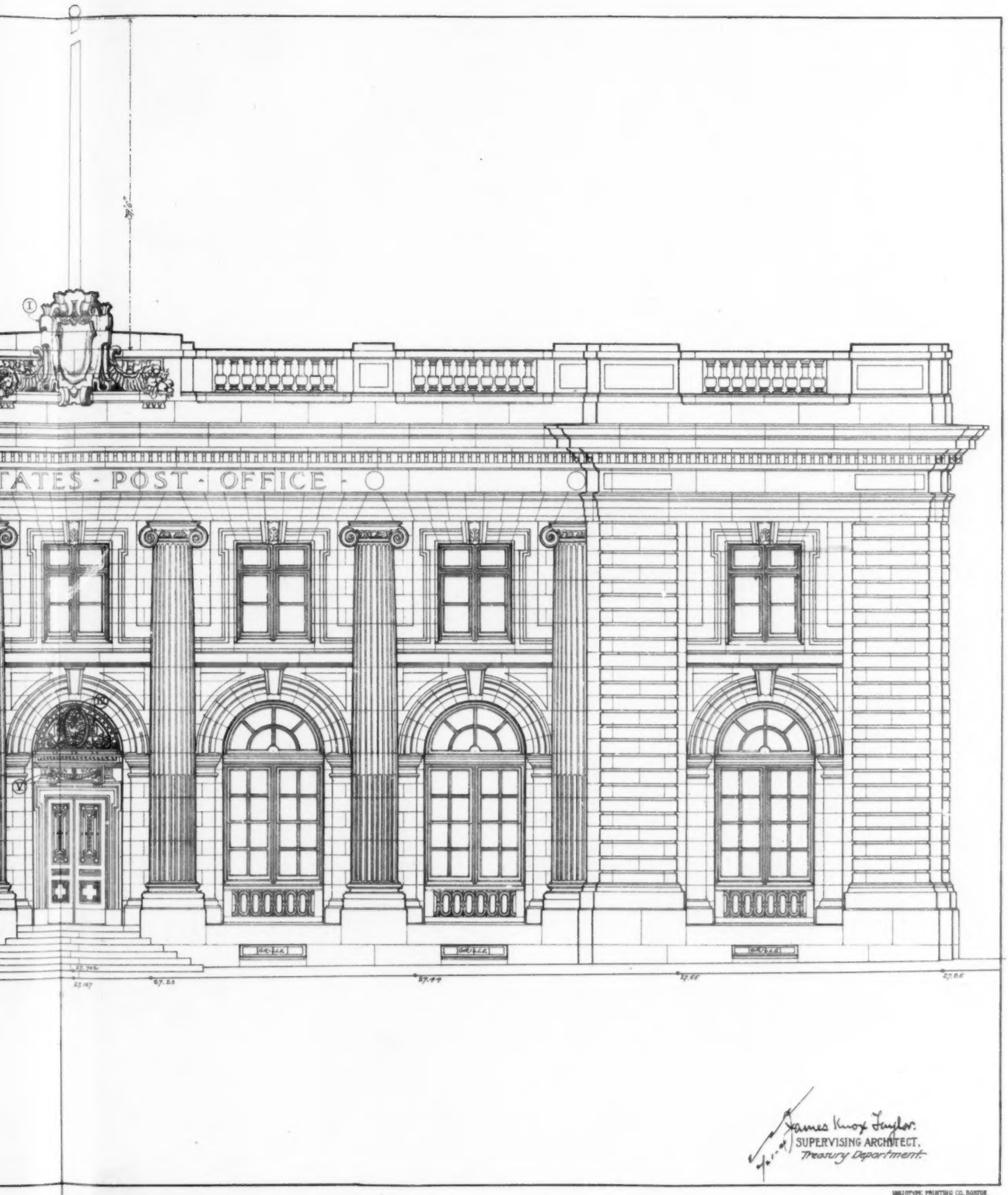
S. J. Parkhill & Co., Printers, Boston, U. S. A.



COPYRIGHT 1908 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO

BROADWAY ELEVATION OF THE UNITED STA

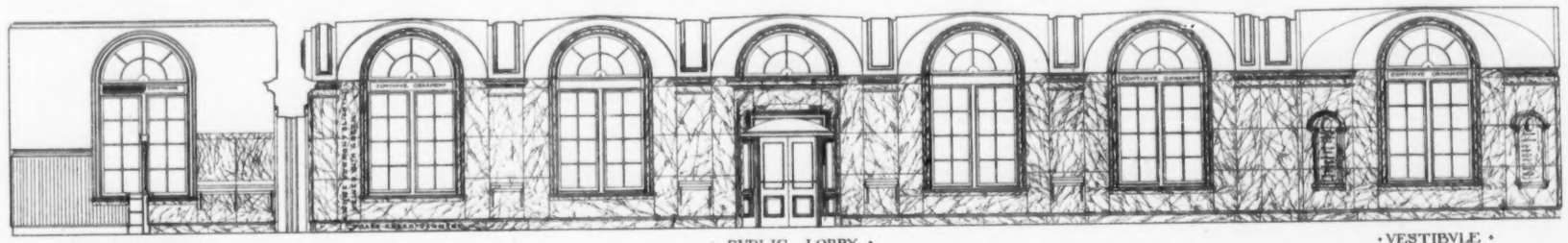
JAMES KNOX TAYLOR, SUPERV

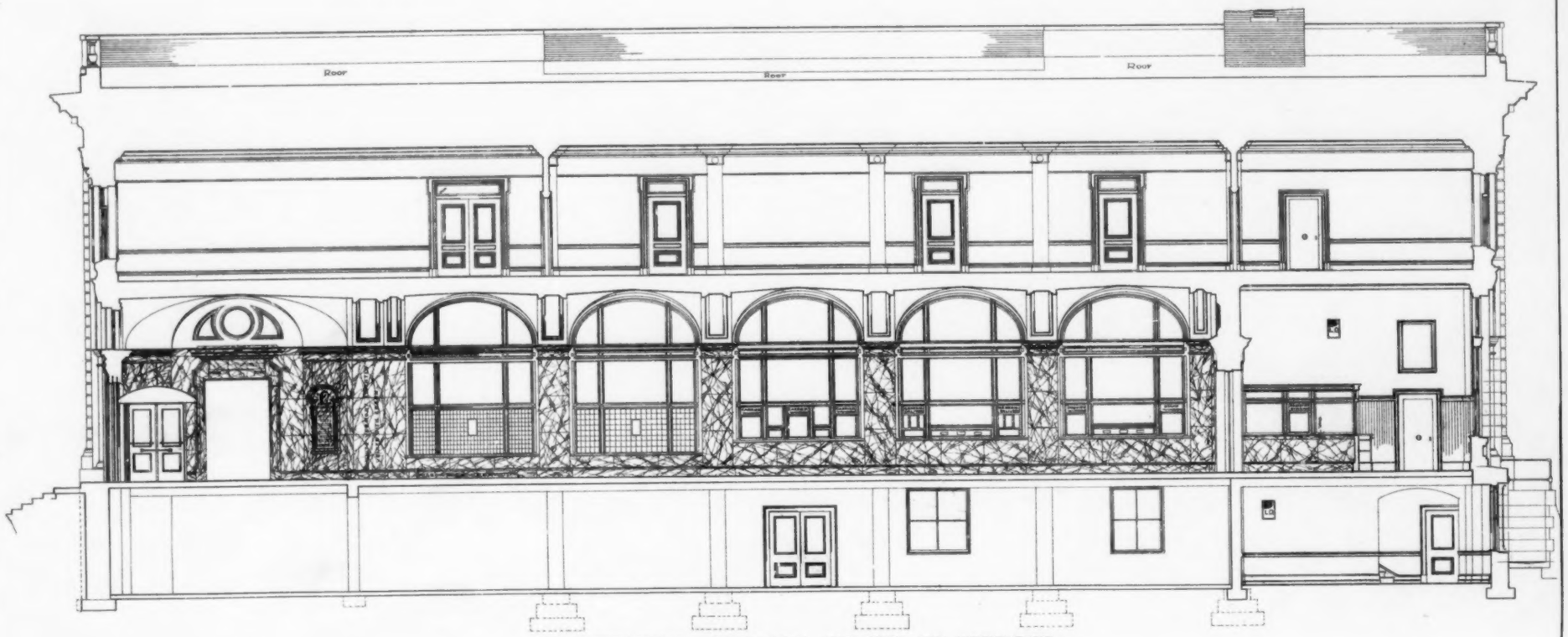


HELIOTYPE PRINTING CO., BOSTON.

UNITED STATES POST OFFICE, OAKLAND, CAL.
AYLOR, SUPERVISING ARCHITECT.

The American Architect
June 22, 1901.
No. 1330.



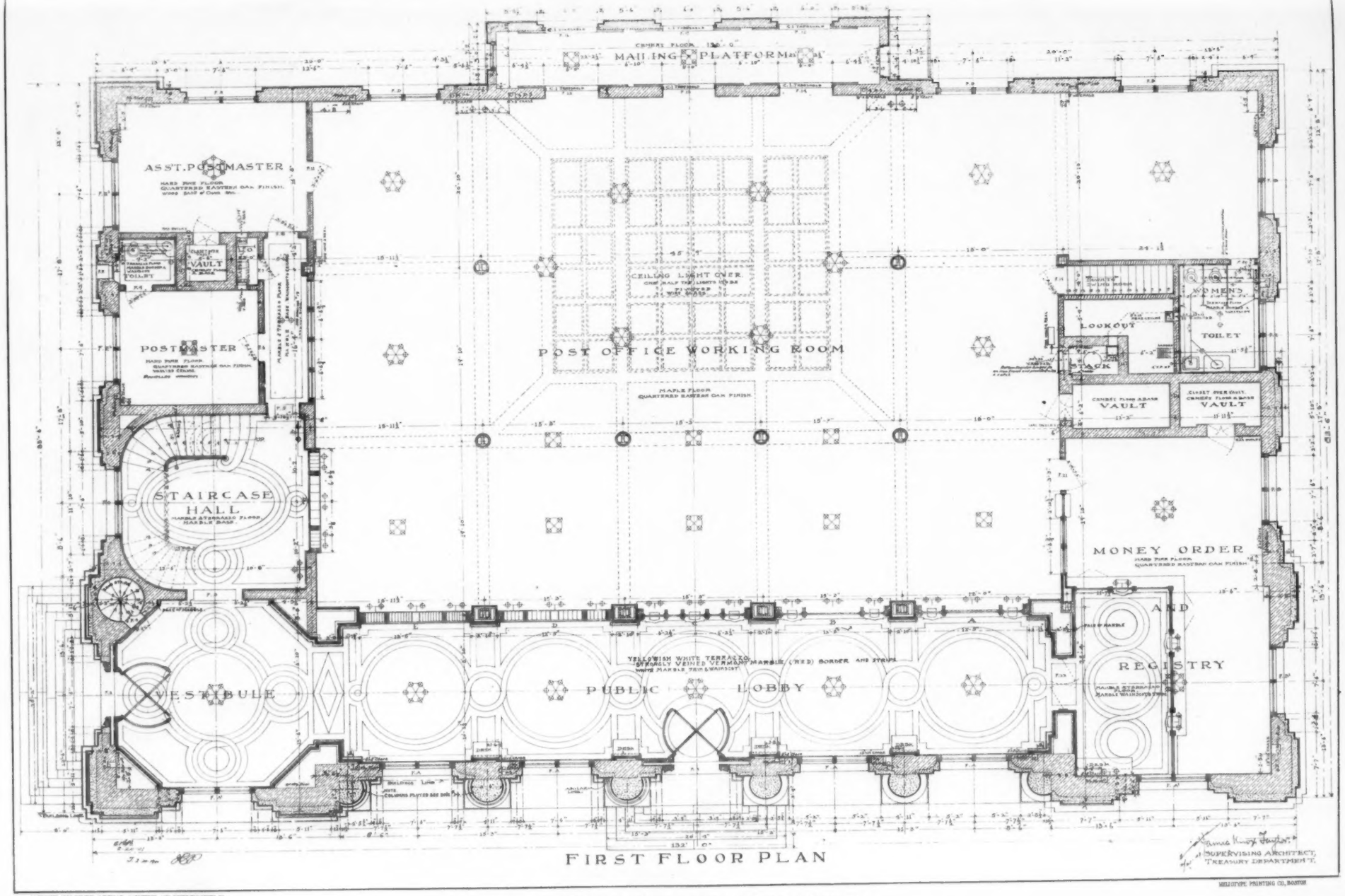


LONGITVDINAL SECTION ON AXIS OF CORRIDOR

SCALE · ONE INCH = FOVR FEET

· LONGITUDINAL SECTION ON LINE OF CORRIDOR ·

· SCALE · ONE INCH = FOUR FEET ·



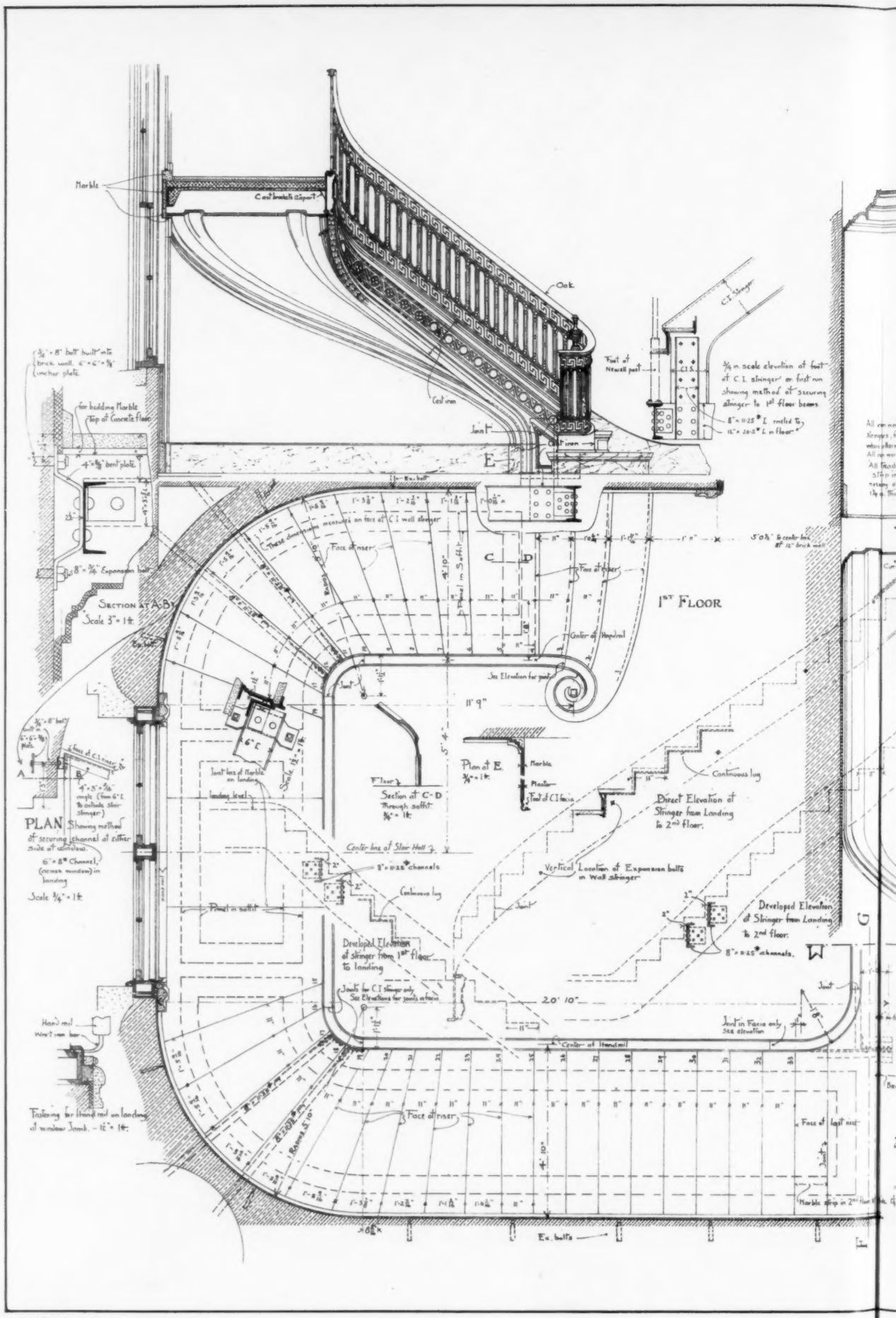
FIRST FLOOR PLAN

COPYRIGHT 1904 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO.

HELIOTYPE PRINTING CO., BOSTON

PLAN AND SECTIONS: U. S. POST OFFICE, OAKLAND, CAL.

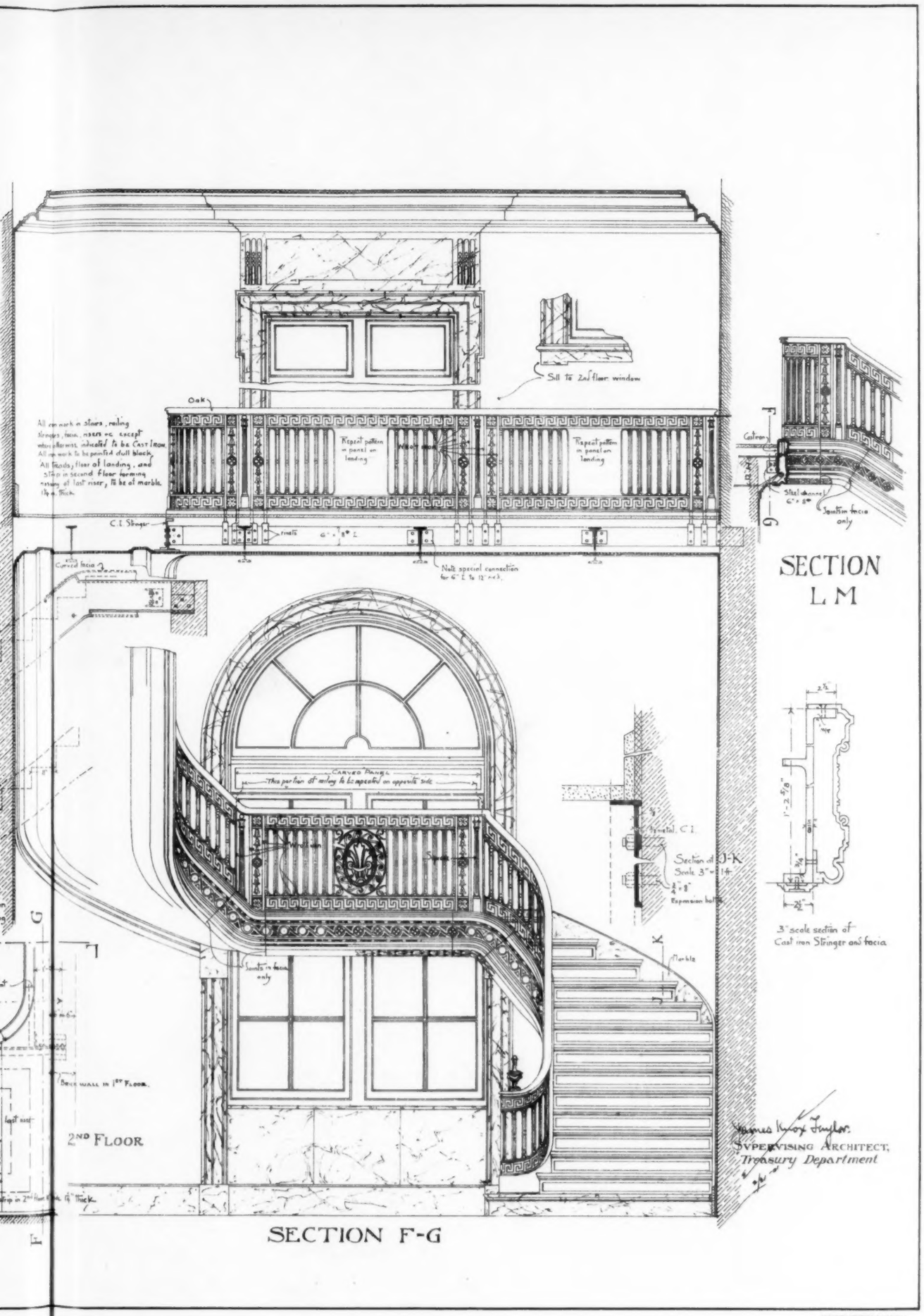
JAMES KNOX TAYLOR, SUPERVISING ARCHITECT.



COPYRIGHT 1908 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO

STAIRCASE DETAIL: U. S. POST O

JAMES KNOX TAYLOR, SUPER



U. S. POST OFFICE, OAKLAND, CAL.
TAYLOR, SUPERVISING ARCHITECT.

The American Architect
June 22, 1901.
No. 1330.

THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

VOL. LXXII. — No. 1330.] SATURDAY, JUNE 22, 1901. PRICE, { INTERNATIONAL ISSUE, 50 CTS / REGULAR " , 15 "

ARCHITECTURAL INSTRUCTION.

BOSTON, MASS.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

DEPARTMENT OF ARCHITECTURE.

Options in *Architectural Engineering* and *Landscape Architecture.*

College graduates and *draughtsmen* admitted as special students.

SUMMER COURSES in Elementary Design and Shades and Shadows. Proficiency in these subjects will enable draughtsmen and students from other colleges to enter third year work.

For catalogues and information apply to
H. W. TYLER, Secretary,
Mass. Institute of Technology, Boston, Mass.

CAMBRIDGE, MASS.

HARVARD UNIVERSITY.

LAWRENCE SCIENTIFIC SCHOOL.

PROF. H. LANGFORD WARREN.

ITHACA, N. Y.

CORNELL UNIVERSITY

COLLEGE OF ARCHITECTURE

Offers a four-year course in Architecture leading to the degree of B. Arch.; also a two-year special course with certificate.
PROF. ALEXANDER BUSH TROWBRIDGE.

NEW YORK, N. Y.

COLUMBIA UNIVERSITY, IN THE CITY OF NEW YORK.

SCHOOL OF MINES.
SCHOOL OF CHEMISTRY.
SCHOOL OF ENGINEERING.
SCHOOL OF ARCHITECTURE.
SCHOOL OF PURE SCIENCE.

Four years' undergraduate courses and special facilities for graduate work in all departments. Circulars forwarded on application to the Secretary of the University.

COLUMBUS, OHIO.

OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

Offers four-year courses in *Architecture*, Civil, Electrical, Mechanical and Mining Engineering, and in Ceramics. Tuition free. For information address,
President W. O. THOMPSON, Columbus, Ohio.

WHITTIER MACHINE CO.,

PASSENGER AND FREIGHT ELEVATORS.

53 STATE STREET - - - BOSTON.

LOOMIS FILTERS.

ESTABLISHED 1880.

Improved System. Simple and Effective.

LOOMIS-MANNING FILTER CO.,

Main Office: 402 CHESTNUT ST., PHILADELPHIA.
Boston. New York. Baltimore. Washington.

PHILADELPHIA, PA.

UNIVERSITY OF PENNSYLVANIA.
SCHOOL OF ARCHITECTURE.
PROF. WARREN P. LAIRD.

SYRACUSE, N. Y.

SYRACUSE UNIVERSITY, Syracuse, N. Y.
DEPARTMENT OF ARCHITECTURE.
PROF. EDWIN H. GAGGIN.

BOOKS:

"Les Concours publics d'Architecture."
(A Monthly Publication.)
Edited by MM. Wulliam and Farge.
Vol. IV. 120 Plates. Price $9.40.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

BOOKS:

"Cathedral of St. John the Divine."
Designs submitted in the First Competition.
57 Plates, folio. Price $5.00.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

BOOKS:

"The Library of Congress."
20 Plates, folio. Price $5.00.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

FLYNT

BUILDING AND CONSTRUCTION CO.

GENERAL OFFICE, PALMER, MASS.

We contract to perform all labor and furnish all material of the different classes required to build complete
CHURCHES, HOTELS, MILLS, PUBLIC BUILDINGS AND RESIDENCES.
Also for the construction of
RAILROADS, DAMS AND BRIDGES.

We solicit correspondence with those wishing to place the construction of any proposed new work under ONE CONTRACT, which shall include all branches connected with the work. To such parties we will furnish satisfactory references from those for whom we have performed similar work.

SCAIFE FILTERS.

10 to 10,000 Gallons per Hour.

NO CHEMICALS REQUIRED.
RESULTS GUARANTEED.

WM. B. SCAIFE & SONS,
Pittsburgh, Pa.

The WINSLOW BROS. COMPANY,

CHICAGO,

Ornamental Iron and Bronze.

BOOKS:

"Ile de France, Picardie."
PART I. I.
A portion of the series of "Archives de la Commission des Monuments Historiques."
25 Plates, folio. Price $6.00.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

BOOKS:

"Croquis d'Architecture."
(Intime Club.)
XXII Year, complete. Price $6.70.
A hiatus of ten years occurs between the date of the 21st and 22nd volumes.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

BOOKS:

"Architectural Masterpieces of Belgium and Holland."
96 Plates, quarto. Price $10.00.
AMERICAN ARCHITECT AND BUILDING NEWS CO.

ROBERT C. FISHER & CO.

Successors to Fisher & Bird,

MARBLE AND GRANITE WORKS,

97, 99, 101 and 103 EAST HOUSTON STREET,
Established 1830 NEW YORK

Heavy Heel Prints

scratch and mar floors finished with ordinary varnish. Specially selected hard gums are essential, such as used in making

I. X. L. FLOOR FINISH

Write for Varnish List

EDWARD SMITH & CO.
Varnish Makers and Color Grinders
45 Broadway, New York

ARCHITECTS

VISITING THE

Pan-American Exposition

ARE INVITED TO INSPECT
IN MANUFACTURERS' BUILDING

Our Exhibit
OF

Ball Bearing Hinges

..IN..

Wrought Steel AND
Wrought Bronze
IN A
Great Variety of Finishes

The Stanley Works
NEW BRITAIN, CONN.
79 Chambers St., NEW YORK

FOR INFORMATION ABOUT

U. S. MAIL CHUTES

WHICH ARE
A necessity in Office Buildings and Hotels,
write to the sole makers.
THE CUTLER MFG. CO., ROCHESTER, N. Y.
PATENTED. AUTHORIZED.

CLINTON WIRE-CLOTH CO.

Sole Proprietors and Manufacturers of

WIRE LATH

DOUBLE TWIST WARP
STIFFENED (Iron Furred)
CLINTON CORRUGAT'D

Plain, Japanned or Galvanized.

The Most Perfect and Economic System of FIREPROOF Construction.

SEND FOR CIRCULAR.

BOSTON,	NEW YORK,	CHICAGO,	FACTORY,
199 Washington St.	76 Beekman St.	137 Lake St.	CLINTON, MASS.

FITCH

SASH LOCKS
LOCK THE WINDOW. RATTLE, COLD AND DUST OUT
SIMPLE, DURABLE, SAFE.
SOLD BY HARDWARE DEALERS EVERYWHERE
TRIAL SAMPLE FREE
THE W. & E. T. FITCH CO. NEW HAVEN, CONN.

"La Construction Moderne,"

A journal of whose merits our readers have had opportunity to judge because of our frequent reference to it and our occasional republication of designs that are published in it, is the most complete and most interesting of the French architectural journals.

The fifteenth annual volume is now in course of publication.

Subscription, including postage. 35 francs.

Each weekly issue contains, besides the illustrations included in the text, two full-page plates, which by themselves are worth double the amount of the annual subscription.

PRICE OF BACK ANNUAL VOLUMES,
:: 40 Francs. ::

Address for subscriptions and catalogues,

LIBRAIRIE DE LA CONSTRUCTION MODERNE,
18 Rue Bonaparte, Paris, France.

"The Georgian Period."

"THIS work is especially pleasing "and valuable to the historian and "to the lover of Colonial associa- "tions. If taken in the spirit of one "of Fiske's histories, and studied "in connection with it, its delight "and charm would be great. As a "setting for incidents in Colonial "history, it is not only consistent "but necessary, in order that a com- "plete idea of the lives of our fore- "fathers may be obtained." — *The Dial.*

Established nearly 40 Years

.. THE ..

ARCHITECT

AND

Contract Reporter

Published Every Friday by P. A. Gilbert Wood

6 TO 11 IMPERIAL BUILDINGS
LUDGATE CIRCUS. LONDON, E. C.

PRICE, FOURPENCE

The "ARCHITECT AND CONTRACT REPORTER" has been established nearly 40 years; has a large and influential circulation; has been proved to be the best medium for advertising to Architects, Builders and Contractors; has the finest illustrations, and has been specially noted for its Art reproductions.

Send us six English 1d. stamps and we will mail you sample copy.

Send us post-office money order for 50 cents and we will send you the last six weeks' issues.

On receipt of $6.25 we will forward for 12 months.

The Ideal

"ARCADIA"

Water-Closet Combination

Unquestionably the Finest Closet that has ever been produced. None other can be compared with this High-Grade, Original and Strictly Sanitary Closet Combination

THE IDEAL MFG. CO.

DETROIT, U. S. A.

CRANE CO.

CHICAGO

ESTABLISHED 1855

MANUFACTURERS OF

VALVES FITTINGS AND PIPE

FOR ALL PRESSURES AND PURPOSES

CRANE DRAINAGE FITTINGS

FOR CLASSIFICATION AND SIZES WRITE FOR OUR POCKET CATALOGUE

IT IS SENT ON REQUEST

BRANCHES

NEW YORK, KANSAS CITY, ST. PAUL, PHILADELPHIA, LOS ANGELES, OMAHA, CINCINNATI, SAN FRANCISCO, SIOUX CITY, ST. LOUIS, PORTLAND, ORE.

BUTCHER'S BOSTON POLISH

is the best finish for

FLOORS, . . .

Interior Woodwork and Furniture.

Circulars Sent on Application.
For Sale by Dealers in Painters' Supplies.

MANUFACTURED BY THE

BUTCHER POLISH CO.,

356 Atlantic Ave., Boston, Mass.

"Cohesive Construction."

An Essay on the Theory and History of Cohesive Construction.

By RAFAEL GUASTAVINO - - - Architect.

Price, $1.25.

For Sale by the AMERICAN ARCHITECT.

THIRD EDITION NOW READY

"RENAISSANCE FIREPLACES"

Forty Gelatine Prints on bond-paper in envelope

Price - $5.00

AMERICAN ARCHITECT AND BUILDING NEWS CO.

211 TREMONT STREET, BOSTON

80-Paged Illustrated Catalogue of over 250 Designs of Superior

WEATHER VANES, TOWER ORNAMENTS, CHURCH CROSSES, FINIALS, Etc., Etc.

Mailed to any address for 2-cent stamp—half the postage.

T. W. JONES, Manufacturer, 18 FLETCHER ST., NEW YORK.

Topographical Index of Advertisers.

[*For pagination, see Alphabetical Index on Cover 2.*]

CONNECTICUT.

New Britain.
The Stanley Works.....[*Wrought-Steel Butts.*

New Haven.
Fitch Co., The W. & E. T.....[*Sash Lock.*

Stamford.
Yale & Towne Mfg. Co.....[*Locks.*

Waterbury.
Benedict & Burnham Mfg. Co.....[*Seamless Nickel-Silver Tubing*.....

ENGLAND.

London.
The Architect and Contract Reporter..[*Magazine*.....

ILLINOIS.

Chicago.
Crane Co.....[*Valves.*
Johnson Co., E. V.....[*Fireproofing.*
Northwestern Terra-Cotta Co.....[*Terra-Cotta.*
Peck Brothers Company.....[*Flush-Valve.*
Stamsen & Blome.....[*Cement Paving.*
Taylor, J. W.....[*Photographs.*
Winslow Bros. Co., The.....[*Ornamental Iron and Bronze*.....

MARYLAND.

Baltimore.
Vaile & Young.....[*Skylights.*

MASSACHUSETTS.

Boston.
Amer. Mason Safety Tread Co...[*Stair Tread.*
Bartlett Lumber Co.....[*Redwood Lumber.*
Butcher Polish Co.....[*Floor Polish.*
Cabot, S.....[*Shingle-Stains.*
Campbell, Walter M.....[*Perspectives.*
Carlisle, Pope & Co.....[*California Redwood.*
Carter Ink Co.....[*Ink.*
Dickey & Co., A.....[*Spiral Mouldings.*
Folsom Snow Guard Co.....[*Snow Guards.*
Gurney Heater Mfg. Co.....[*Hot water, etc.*
Haberstroh & Son, L.....[*Decorators.*
Heliotype Printing Co.....[*Art Printing.*
Lombard & Co.....[*Architectural Ornamentation*.....
Massachusetts Institute of Technology.....[*School.*
New England Felt Roofing Works.....[*Roofing.*
Samson Cordage Works.....[*Sash-Cord.*
Spaulding Print Paper Co.....[*Blue Prints.*
Union Brass Works.....[*Faucets.*
Whittier Machine Co.....[*Elevators.*

MASSSACHUSETTS.

Cambridge.
Lawrence Scientific School.....[*School.*

Clinton.
Clinton Wire Cloth Co.....[*Metallic Lathing.*

Palmer.
Flynt Building & Construction Co...[*Building Contractors*.....

MICHIGAN.

Detroit.
Berry Brothers, Limited.....[*Shingletint.*
Dwight Lumber Co.....[*Hardwood Flooring.*
Ideal Mfg. Co.....[*Sanitary Specialties.*

Grand Rapids.
Grand Rapids Carved Moulding Co.....[*Mouldings.*

MISSOURI.

St. Louis.
Ludlow Saylor Wire Co.....[*Art Metal-Work.*

NEW JERSEY.

Jersey City.
Dixon Crucible Co., Jos.....[*Graphite.*

Paterson.
Passaic Rolling Mill Co.....[*Structural Iron.*

Perth Amboy.
Perth Amboy Terra-Cotta Co....[*Terra-Cotta.*

NEW YORK.

Brooklyn.
Moore, Benjamin.....[*Muresco.*

Irvington-on-Hudson.
Lord & Burnham Co.....[*Conservatories.*

Ithaca.
Cornell University.....[*School*

Jamestown.
Art Metal Construction Co.....[*Art Metal Work*.....

N. Y. City.
Alsen's Cement Works.....[*Cements.*
American Iron Bridge Co...[*Steel Structures.*

NEW YORK.

N. Y. City.
American Sheet Steel Co....[*Galvanized Iron.*
Atlas Cement Co.....[*Cement.*
Bicklehaupt, G.....[*Skylights.*
Columbia University.....[*School.*
Deane, S. Eldon.....[*Colorist.*
Fisher & Co., Robert C.....[*Marble.*
Frink, I. P.....[*Reflectors.*
Gorton & Lidgerwood Co.....[*Boilers.*
Hayes, George.....[*Metallic Lathing.*
Hitchings & Co.....[*Greenhouses.*
Holophane Glass Co.....[*Holophane Glass.*
Jackson & Co., Wm. H.....[*Grates.*
Jenkins Bros.....[*Valves.*
Jones, T. W.....[*Vanes.*
Kent-Costikyan.....[*Rugs (Carpets).*
Laughlin-Hough Co.....[*Drawing Tables.*
Mott Iron Works, The.....[*Iron Work.*
Neuchatel Asphalte Co.....[*Asphalt.*
New Jersey Zinc Co.....[*Zinc White.*
New York Belting and Packing Co., Ltd. .....[*Interlocking Rubber Tiling.*
Lawrence Cement Co., The.....[*Cement.*
New York Mastic Works.....[*Asphalt.*
N. Y. Metal Ceiling Co.....[*Metal Ceilings.*
Ogden & Wallace.....[*Floor Plates.*
Okonite Co. (Ltd.).....[*Insulated Wire.*
Pitt, W. R.....[*Folding-Gates.*
Rider-Ericsson Engine Co [*Hot-Air Engines.*
Sargent & Co.....[*Builders' Hardware.*
Smith Co., H. B.....[*Steam Heat.*
Smith & Co., Edward.....[*Varnishes.*
Thiele, E.....[*Portland Cement.*
U. S. Mineral Wool Co.....[*Mineral Wool.*
Warren Chemical & Mfg. Co..[*Asphalt Roofing.*
Williams, John.....[*Wrought Metal.*
Yale & Towne.....[*Hardware (Art).*

Rochester.
Cutler Mfg. Co.....[*Mail Chutes.*

Syracuse.
Syracuse University.....[*School.*

Troy.
Globe Ventilator Co.....[*Ventilators.*
Troy Laundry Machinery Co...[*Washing Machines*.....

OHIO.

Canton.
Berger Mfg. Co., The.....[*Metal Ceilings.*
Canton Steel Roofing Co., The.[*Metal Ceilings.*

Cincinnati.
American Steel Roofing Co., The..[*Conductors.*
Ohio Marble and Wood Co., The [*Marbles Colored*.....

Cleveland.
Glidden Varnish Co., The.....[*Varnish.*
Tyler Co., The W. S...[*Ornamental Iron and Bronze*.....

Columbus.
Kinnear Mfg. Co.....[*Steel Rolling-Doors.*
Nelson Co., The C. T.....[*Capitals (Carved).*
Ohio State University.....[*School.*

PENNSYLVANIA.

Ambler.
Keasbey & Mattison Co...[*Magnesia Covering*

Philadelphia.
Electric Storage Battery Co.....[*Chloride-Accumulator*.....
French & Co., Samuel H.....[*Mortar Colors.*
Harrison Brothers & Co....[*Protective Paints.*
International Sprinkler Co.....[*Automatic Sprinklers*.....
Loomis Filters Improved System.....[*Filters.*
Merchant & Co., Inc.....[*Ventilation.*
Morse, Williams & Co.....[*Elevators.*
Taylor Co., N. & G.....[*Tar.*
Thorn, J. S. Co.....[*Sheet Metal.*
University of Pennsylvania.....[*School.*

Pittsburgh.
Scaife, Wm. B. & Sons.....[*Filters.*
Wisconsin Graphite Paint...[*Graphite Paints.*

Scranton.
International Correspondence Schools, The.. [*Architecture*.....

York.
Vapor Heating Co.[*Heating Apparatus, Steam*

SCOTLAND.

Glasgow.
Citizen Press.....[*Books.*

VERMONT.

Burlington.
Burlington Venetian Blind Co.....[*Venetian and Sliding Blinds*.....

Artist and Artisan

is the title of an Artistic Brochure issued by the

Yale and Towne

Mfg. Company,

9-11-13 Murray St., New York City.

It deals with the origin of Ornamental Metal Work and its present development and uses. It will be sent to Architects on request.

9360-19

The Search for Work

The man who can do something better than anyone else doesn't search for work. Employers search for him. We teach the theory of engineering and the trades to men already at work. Thousands of our students have secured a

Salary-Raising Education

in Mechanical, Electrical, Steam, Civil or Mining Engineering, Chemistry; Architecture; Plumbing; English Branches.

When writing state subject in which interested.

International Correspondence Schools, Box 986, Scranton, Pa.

THIRD EDITION NOW READY

"Renaissance Fireplaces"

Forty Gelatine Prints on bond-paper in envelope

Price, $5.00

American Architect and Building News Co.

211 Tremont St., Boston

The Heliotype Printing Co.

LITHOGRAPHERS, ETC.

211 Tremont Street

Boston

FAC-SIMILE REPRODUCTIONS IN COLOR

OR MONOCHROME A SPECIALTY

Lithography

Heliotype

Color Printing

Photogravure

Maps, Plans, etc.

BEST WORK ONLY

PROMPT DELIVERY

REASONABLE PRICES

WRITE FOR ESTIMATES

Architects are warned against imitations of

Cabot's
Sheathing and Deafening Quilt

which is suffering the penalty of success. The imitations are made with cow-hair and other putrescible materials which harbor moths and vermin, in place of the absolutely sanitary and uninflammable eel-grass which our patents protect to our sole use.

We like the flattery of imitation, but do not want our patrons to suffer by it.

The genuine article bears our trade-mark

"QUILT."

Samples and full information sent on request.

SAMUEL CABOT, Sole Manufacturer, **BOSTON, MASS.**

28 Dearborn Avenue, Chicago, Illinois.

AGENTS: V. H. Schneider, 8 Wooster St., New York; Samuel H. French & Co., Philadelphia, Pa.; Waterhouse & Price, San Francisco, Cal.; P. H. Mathews, Los Angeles, Cal.; Whitelaw Brothers, St. Louis, Mo.; George H. Lawes & Co., St. Paul and Minneapolis, Minn.; John H. Corning, Washington, D.C.; Brady & Co., Detroit, Mich.; The National Building Supply Co., Baltimore, Md.; Timms, Edwards & Co., Portland, Ore.; Cleveland Builders' Supply Co., Cleveland, O.; Seymour & Co., Montreal; S. W. R. Daily, Seattle, Wash., and at all other central points.

From *La Construction Moderne*

CONCOURS DE FAÇADES: HOUSE ON THE RUE CHÂTEAU D'EAU, PARIS.

M. Rives, Architect.

STANDARD FOR RUBBER INSULATION.

OKONITE

TRADE MARK.

WILLARD L. CANDEE, H. DURANT CHEEVER, } Mgrs. GEO. T. MANSON, Gen'l Supt. W. H. HODGINS, Sec'y.

OKONITE INSULATED ELECTRIC LIGHT WIRES

Are pronounced by leading Architects to be SAFE, DURABLE and EASILY ADJUSTED for the inside wiring of PUBLIC and PRIVATE BUILDINGS.

CANDEE WEATHERPROOF WIRES, OKONITE WATERPROOF TAPE, MANSON PROTECTING TAPE.

—SOLE MANUFACTURERS—

THE OKONITE CO., LTD., 253 BROADWAY, NEW YORK.

DIXON'S SILICA GRAPHITE PAINT

FOR TIN OR SHINGLE ROOFS AND IRON WORK. IT IS ABSOLUTELY WITHOUT AN EQUAL. Tin roofs well painted have not required repainting for 10 to 15 years.

If you need any paint it will pay you to send for circular.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

"NEVERSLIP" WROUGHT STEEL FLOOR PLATES

Diamond Pattern Floor Plate

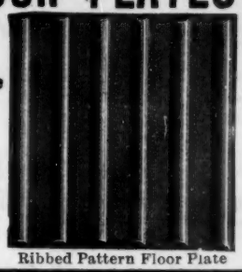
$\frac{1}{8}$ to 1 inch thick

Descriptive Catalogue on Application

OGDEN & WALLACE

577-583 Greenwich St.

NEW YORK



Ribbed Pattern Floor Plate

The *Star* ★ *Ventilator*

STORM-PROOF EFFECTIVE FOR COTTON, WOOLEN AND PAPER MILLS, DYE HOUSES, SLASHERS, ETC.

Send for Illustrated Catalogue

MERCHANT & CO., Inc.

Sole Manufacturers

Phila. New York Chicago Brooklyn Charlotte, N. C.

ESTABLISHED 1868

HAYES METAL SKYLIGHTS, LATHING & C.

71 8TH AVE NEW YORK.

FIREPROOF WIRE-GLASS WINDOWS

"LIBRARY OF CONGRESS."

TWENTY GELATINE PLATES,

14″ x 16½″ in Portfolio.

PRICE, $5.00.

This excellent series of Architectural Illustrations forms No. VI of the Series of Monographs of American Architecture.

Published by

THE AMERICAN ARCHITECT AND BUILDING NEWS CO.

TRADE MARK. ESTABLISHED 1852. Incorporated 1868. Capital $60,000.

LEVI L. WILLCUTT, President. EPHR. C. DAVIS, Treas'r.

NEW ENGLAND FELT ROOFING WORKS,

18 Post Office Sq., BOSTON.

Originators of Felt Roofing in New England.

Inventors and only Manufacturers of the Celebrated "BEEHIVE BRAND."

Fashions Change

and we believe they have changed sufficiently for architects to find now a greater "practical" value in the

"Norman Monuments of Palermo"

than this interesting publication seemed to have at the date of publication, when it was in this country held to be a crime to design a building in any other than the Romanesque style — at that time the architectural "fashion" of the hour.

Originally published at $20.00, unbound, in four parts, it can now be had, bound, for $12.00.

Americ Architect & Bldg. News Co., 211 Tremont St., Boston.

BRONZE JNO. WILLIAMS BRONZE FOUNDRY AND WORKS WROUGHT IRON WORKS 544 to 556 WEST 27th STREET, NEW YORK **WROUGHT IRON**

HITCHINGS & CO., Established 50 years

HORTICULTURAL ARCHITECTS AND BUILDERS and largest Manufacturers of GREENHOUSE HEATING AND VENTILATING APPARATUS.

The highest awards received at the World's Fair for Horticultural Architecture, Greenhouse Construction and Heating Apparatus. Conservatories, Greenhouses, Palmhouses, etc., erected complete with our Patent Iron Frame Construction.

Send four cents for Illustrated Catalogue.

233 MERCER STREET, N. Y. CITY.

Big Four

The 'Buffalo Route' to

1901 Pan-American Exposition

Big Four Route in connection with Lake Shore & Michigan Southern and New York Central R.R. offers the finest equipped train service at frequent intervals to Buffalo from South & West.

M. E. Ingalls, President.
Warren J. Lynch, Genl. Pass. Agt.
W. P. Deppe, A. G. P. A.
Cincinnati.

Send for Samples.

If you SPECIFY

SAMSON SPOT CORD

You can tell at a glance that no other cord is substituted. It is warranted to be of pure Cotton, smooth finish and perfect braid.

Samson Cordage Works, Boston, Mass.

Jenkins Bros.' Valves

are manufactured of the best steam metal, and are fully guaranteed. Why experiment with cheap valves? If you want the *BEST* ask your dealer for valves manufactured by Jenkins Brothers. Remember all genuine are stamped with Trade Mark like cut.

JENKINS BROTHERS, New York, Philadelphia, Chicago, Boston

ASPHALT ROOFING AND PAVING MATERIALS.

WARREN'S "ANCHOR BRAND" NATURAL ASPHALT ROOFING. WARREN'S NATURAL ASPHALT READY ROOFING.
Send for circulars, samples and specification forms to
WARREN CHEMICAL & MFG. CO. • • • 81 & 83 Fulton Street, NEW YORK, U.S.A.

L. Haberstroh & Son,

9 PARK ST., COR. BEACON, BOSTON,

Interior Decorators and Painters.

Decorations in Color and Relief.
Wall Hangings of all Descriptions.
Sketches and Estimates Furnished.

MARBLES COLORED Domestic Marbles colored in exact imitation of imported marbles, without their cracks, flaws, imperfections and patched-up appearance, and at great saving in cost.

We match broken pieces, reproduce varieties from extinct quarries. tint acid, ink-stained or smoked marbles to new effects.

Also, Color Wood Veneering, Etc. Manufacturers of Wooden Wall Paper, equal in finish to that of a piano. Agents wanted to sell our handsome Pedestals, Jardinieres, and Marble Top Kitchen and Dining Room Tables.

THE OHIO MARBLE AND WOOD CO.

130-132 West Front Street - - - CINCINNATI, OHIO

N. & G. TAYLOR CO.
Philadelphia
are the only manufacturers of Tin Plates who manufacture their own brand throughout all its processes from the bar to the finished tin.
The price of the
"TAYLOR OLD STYLE"
brand, therefore, is more reasonable than the price of any of its competitors.

N. & G. TAYLOR CO.

SOLE MANUFACTURERS
.. OF ..

THE "TAYLOR OLD STYLE" BRAND

FOR SALE BY ALL DEALERS

Tinplate Works
PHILADELPHIA

Rolling Mills and Blackplate Plant
CUMBERLAND, MD.

ASPHALT FLOORS, ROOFS, SIDEWALKS AND CARRIAGE-WAYS

Of Public Buildings, Hospitals, Warehouses, Stables, Cellars, etc.

Laid with VAL de TRAVERS ROCK ASPHALT,

DURABLE, FIREPROOF AND IMPERVIOUS.

For estimates and list of works executed, apply to

THE NEUCHATEL ASPHALT CO., Limited.
265 Broadway - - - New York.

Conservatories, Greenhouses, Vineries, Etc.

Designed, erected and heated. Catalogue, also special plans and estimates, on application.

LORD & BURNHAM CO.,
1133 Broadway - - - New York City.

Boston Office: 48 Congress St., Room 23.

NOW READY

THE DOUBLE CHOIR OF GLASGOW CATHEDRAL

A Study of Rib-Vaulting.

By T. L. WATSON, F.R.I.B.A.

Demy Quarto. Profusely Illustrated

"CITIZEN" PRESS

James Hedderwick & Sons, Glasgow

Holophane Glass Co.

No. 15 East 32nd Street, N. Y.

COMPOUND

Prism Globes and Shades.

"Maximum Light—Complete Diffusion—Minimum Glare" for all kinds of light.

Send for catalogue and price lists.

Broomell's

VAPOR SYSTEM

OF HEATING

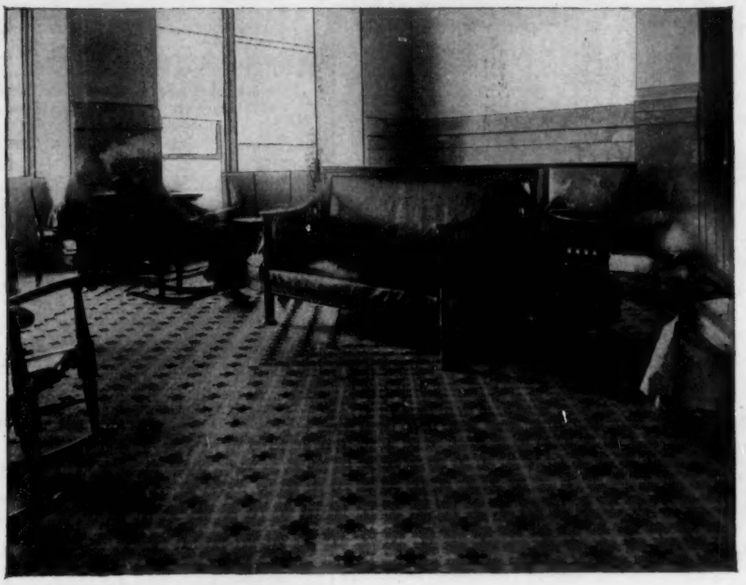
Adapted to buildings of every kind and size.

Superior to hot water heating.
No pressure on radiators.
No air valves.
No noise.
No machinery.
Heat under perfect control.

Easily installed by all steamfitters.

Architects are requested to send blue prints with data. Drawings and specifications will be furnished free. Open to all contractors for bids.

Vapor Heating Co.
YORK, PA.



INTERLOCKING RUBBER TILING

as laid by us in the Ladies' Retiring Room, Broad St. station, Philadelphia.
Noiseless, non-slippery, sanitary. Cleans perfectly; always bright and fresh. The only tile floor that servants can stand on without making the feet sore. A perfect floor for offices, banking-rooms, libraries, hospital wards, cafés, bath-rooms, billiard-rooms, vestibules, halls, church aisles, piazzas, etc. Laid directly on wood, stone, concrete or iron. Call or write.

New York Belting & Packing Co., Ltd.

New York . . . . . 25 Park Place
Philadelphia . . . 724 Chestnut St.
Chicago . . . . . 150 Lake St.
St. Louis . . . . . 411 No. 3d St.
San Francisco . 509-511 Market St.
London, Eng. . The B. & S. Folding Gate Co., 19 to 21 Tower St., Upper St. Martin's Lane, W. C.
Baltimore . . Baltimore Rubber Co. 101 Hopkins Place

PERSPECTIVES RENDERED
IN PEN-AND-INK AND WATER-COLOR,
WALTER M. CAMPBELL,
8 Beacon St., Boston, Mass.

E. ELDON DEANE,
Architectural Colorist and Draughtsman.
63 Seymour Building, Fifth Ave., cor. 42d St.
NEW YORK CITY.

MASON SAFETY TREAD
BEWARE OF INFRINGEMENTS
AMERICAN MASON SAFETY TREAD CO., Boston

J. W. TAYLOR'S PHOTOGRAPH SERIES OF AMERICAN ARCHITECTURE
151 MONROE ST., CHICAGO
Removed to Owings Building.
Send two 5 cent stamps for Catalogue.

R. P. SOUTHARD
General Supt. Building Construction
Takes entire charge of Building Operations
LARGE WORKS A SPECIALTY
Address — 1053 Exchange Building, Boston, Mass.

E. V. JOHNSON CO.
Manufacturers and Contractors
Fire-Proofing for Buildings
Latest Improved Systems
85 HARTFORD BUILDING, CHICAGO

Send for Pamphlet of
Automatic Self-Locking SCUTTLE OPENER
Secure from BURGLARS
Quick escape in case of FIRE

Metallic Skylights
Fire-Proof Windows
For Factories, Warehouses, etc.
G. Bickelhaupt Skylight Works
243 & 245 West 47th St.
Tel., 675—38th. NEW YORK

"HOFFMAN"
CEMENT
HAS AN UNPARALLELED RECORD

PORTLAND **"DRAGON"** CEMENT
Stands Every High Requirement of
ARCHITECTS & ENGINEERS
For 12 Years

16,000,000 BARRELS
USED ON IMPORTANT WORKS IN THE UNITED STATES

THE LAWRENCE CEMENT COMPANY

E. R. ACKERMAN, Pres.
Assoc. Am. Soc. C. E.

Sales Office
No. 1 BROADWAY, NEW YORK

The American Architect and Building News

IS PUBLISHED EVERY SATURDAY BY

The American Architect and Building News Co.,

211 Tremont St., Boston, Mass.

Advance Subscription Rates:

Regular Edition, $6.00 per year; six months, $ 3.50

[Foreign Postage, $2.00 Extra.]

International Edition, per year in advance, 16.00
" quarterly " 18.00

☞ Payment should be made to American Architect and Building News Co. direct, either by draft or post-office order.

Address all business correspondence to the publishers direct.

Advertising Agents:

New York City: —
H. M. Carleton, Temple Court, 5 Beekman St.

Agents at Large: —
F. P. Spokesfield, 211 Tremont St., Boston, Mass.
Burrell & Fowler, 310 New England Bldg., Cleveland, O.

Advertising Rates: For "wants" and "proposals," 15 cents per line [8 words to the line], each insertion. 50 cents the least charge. Other rates on application.

New Advertisements.

MERCHANT & CO., INC. (Philadelphia, Pa.), Ventilation. Page vii.

See last or next issue for the following advertisements: —

Burlington Venetian Blind Co.
Carter's Inks.
Canton Steel Roofing Co., The
Dwight Lumber Co.
Electric Storage Battery Co., The
Glidden Varnish Co.
Kent-Costikyan.
Keasbey & Mattison Co.
Morse, Williams & Co.
Thorn Co., J. S.
Wisconsin Graphite Co.

See the first issue of the month for the following advertisements: —

Alsen's Portland Cement Works.
Atlas Portland Cement Co.
A. Dickey & Co.
Folsom Snow Guard Co.
Grand Rapids Moulding Co.
Ludlow Saylor Wire Co.
Nelson, C. T., & Co.
New Jersey Zinc Co.
Peck Bros. Co.
Pitt, Wm. R.
Thiele, E.
Tyler Co., The W. S.
Union Brass Works.

TO ARCHITECTS.

COMPETITION designs and perspectives by expert colorist and designer; 25 years' superior experience. Designs from sketches or suggestions. Competition work on speculative terms and at architect's offices if required. Address "Artist," Oakwood Ave., Arlington, N. J. 1338

BUILDING PATENTS.

[*Printed specifications of any patents here mentioned together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for five cents.*]

673,613. Metallic Roof-Shingle. — Peter H. Bennett, Trenton, N. J.
673,655. Reversible Window-Sash. — Gottlieb Hoersch, Philadelphia, Pa.
673,729. Sash-Holder. — Martin Sebastian, Graz, Austria-Hungary.
673,762. Basin-Stopper. — James N. Crabb, Indianapolis, Ind.
673,767. Steam-Radiator. — George W. Eycleshymer, Troy, N. Y.
673,780. Concrete Pile. — Gustave L. Mouchel, London, Eng.
673,783. Sash-Lock. — William J. Peters, Chicago, Ill.
673,785. Attachment for Miter-Boxes. — Wm. Potter, New York, N. Y.
673,804. Dumb-Waiter. — Emmit W. Van Fleet, Galena, O.
673,820. Water-Closet. — Frederic S. Perrin, New York, N. Y.
673,840. Reflector. — Restore B. Lamb, Mount Holly, N. J.
673,841. Door-Hanger. — John F. Lydon, Davenport, Ia.
673,890. Inclined Elevator. — Jesse W. Reno, New York, N. Y.
673,937. Brick-Carrier. — John H. Zirckel, Pittsburgh, Pa.
673,968. Adjustable Scaffold. — Julius C. D. Ross, Chicago, Ill.
673,971. Pipe-Joint. — Charles A. Bartliff, St. Louis, Mo.
674,003. Scaffold-Bracket. — Axel N. Helstrom, Tower, Minn.
674,004. Valve for Flushing Tanks. — Oscar R. Hess, Cincinnati, O.
674,065. Sash-Lock. — George W. MacKenzie, Beaver, Pa.
674,071. Transom-Adjuster. — Philip O. Anderson, Boulder, Col.

The Improved Shingle Stain and Preservative. Imparts an artistic finish to shingles and prolongs their life by penetrating the pores of the wood and retarding decay.

Shingletint is made in all desirable shades, is easily applied, the colors are permanent, and money is saved by its use.

Full information and finished samples of wood mailed free for the asking.

BERRY BROTHERS, Limited,

Varnish Manufacturers,

DETROIT, MICH.

New York, 232 Pearl St. Chicago, 15 and 17 Lake St.
Boston, 520 Atlantic Ave. Cincinnati, 304 Main St.
Baltimore, 22 E. Lombard St. St. Louis, 112 S. Fourth St.
Philadelphia, 26 and 28 N. Fourth St.
San Francisco, 12 Front St.

BUILDING PATENTS.

674,089. Brick or Tile Covering for Beams. — Bernard Jacquart, South River, N. J.
674,097. Hollow Tile and Brick. — Orla C. Pixley, Chicago, Ill.
674,166. Water-Closet Seat. — Edgar M. Joralemon, Newark, N. J.
674,170. Roofing-Scaffold. — Francis X. Kuhn, Hanover, Pa.
674,171. Sash-Fastener. — Fredrick Kumber, Pittsburgh, Pa.
674,193. Weather-Strip. — Samuel P. Bricker, Allegheny, Pa.
674,261. Section-Gage for Joists, Columns, etc. — Wilhelm Dohm, Bielefeld, Ger.
674,297. Overflow and Waste Fixture. — Louis Kosiol, Louisville, Ky.
674,301. Sash-Fastener. — Charles E. Lucke, New York, N. Y.
674,304. Column. — Josef A. Ohman, New York, N. Y.
674,348. Flushing Device for Water-Closets. — Glenn W. Wilson and James A. Walker, Rockford, Ill.
674,360. Chimney-Cap. — Samuel N. Le Count, Clark, S. D.
674,439. Water Seal or Trap. — John J. Foy, St. Louis, Mo.
674,463. Refrigerating System. — Elijah C. Hall, Braintree, Mass.
674,490. Window. — George H. Watkins, Milwaukee, Wis.
674,507. Waste-Valve-Regulating Device. — John A. Hollenberger, Hagerstown, Md.
674,536. Rotary Blower. — Thomas W. Green, Philadelphia, Pa.
674,579. Roof. — William H. Grow, Winfield, Kan.

BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

[*Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.*]

ADVANCE RUMORS.

Altoona, Pa. — Mowbray & Uffinger, architects, 47 Liberty St., New York City, have made plans for a large building to be erected at 12th Ave. and 12th St. by a trust company having a capital of $250,000.

Annapolis, Md. — The Admiral Hotel Co. has been incorporated to construct a five-story brick hotel on Maryland Ave. and Navy Pl. Architect, Douglas H. Thomas, Jr., Atlantic Trust Bldg., Baltimore.

Atlanta, Ga. — Work is soon to begin on a five-story brick and terra-cotta business building to be erected on the corner of N. Pryor St. and Auburn Ave. for Mr. Hoke Smith; cost, $50,000. Plans by Bleckly & Tyler.

DIAMOND FINISHES
Inside and Outside

Represent the very acme of varnish making. They are the PUREST, CLEAREST and most TRANSPARENT VARNISHES. Send for Pamphlet.

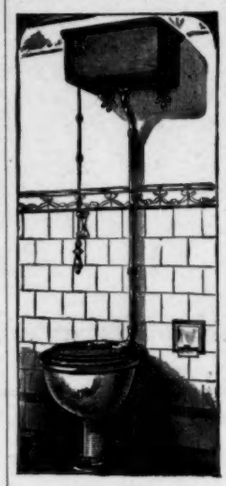
Harrison Bros. & Co., Inc.

White Lead, Colors, Paints, Varnishes and Chemicals
35th Street and Grays Ferry Road,
PHILADELPHIA

27 Lake St. CHICAGO — 117 Fulton St. NEW YORK — 72 Broad St. BOSTON

THE J. L. MOTT IRON WORKS,

88 Beekman Street,
NEW YORK, N. Y.



The Primo Improved Vitro-Adamant.

PLATE 495 R.

No. 33 Design L Cistern with Nickel-plated Brass Brackets, Nickel-plated Brass Flush Pipe, Nickel-plated Chain, Hardwood Pull and Brass Floor Flange.

Copyrighted, 1897.

Copy of circular furnished on application.

Removal to the largest and finest equipped Blue Print Establishment in the world.

SPAULDING PRINT PAPER CO.,
44 Federal St., Boston, Mass.

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

Baltimore, Md. — The Baltimore Athletic Club will erect a new club-house on N. Charles St. and Lafayette Ave.; cost, about $75,000.

Boston, Mass. — Plans for the proposed three-story addition to the Hotel Somerset have been prepared by Architect Arthur H. Bowditch. Over 100 new rooms will be added. Roland G. Hart is supervising architect and work will start at once.

Several three-apartment houses are soon to be erected on land purchased on Columbia Road, Dorchester.

Brunswick, Me. — A new library building, the gift of Gen. Thos. H. Hubbard, to cost $150,000, will be erected for Bowdoin College. The contract for building has been awarded to L. D. Willcut & Son, of Boston, Mass. Plans by Henry Vaughan, architect, of Boston.

Canandaigua, N. Y. — Plans by J. Blaby, of Palmyra, have been accepted by the M. E. Society for a $30,000 church.

Cleveland, O. — A project has recently been announced which includes the tearing down of about 60 dwellings and business places and the erection of six and seven-story power buildings on the site. The Perry-Payne estate, of which H. S. Johnson is agent, is behind the undertaking, which will cost somewhere near $2,000,000. The buildings to come down are on St. Clair, Murison and Oregon Sts. and California Alley.

Dedham, Mass. — Norfolk County is to erect a new registry of deeds building to cost $200,000.

Malden, Mass. — Dr. Fred L. Abbott is to erect immediately, on Russell St., near Pleasant, a large sanitarium with 75 rooms.

Marlboro, Mass. — It is reported that Rice & Hutchins are about to build on Howe St. a four-story wooden shoe-factory, brick engine and boiler house and steel stack. Plans by J. F. Bigelow, 64 Highland St. Cost, $45,000.

Newton Center, Mass. — The Congregational Church Society is to erect a large stone edifice on the site of its present church at corner of Homer and Centre Sts. Shepley, Rutan & Coolidge, architects. Cost, about $100,000.

New York, N. Y. — The Racquet and Tennis Club has bought Nos. 26 and 28 W. 44th St., which plot adjoins the rear of its building on 43d St. An addition to its present home will be built.

The new Chamber of Commerce will occupy the site of the Real Estate Exchange, Nos. 59-65 Liberty St. It will be a four-story structure, built entirely of marble, costing about $500,000. James B. Baker is the architect.

The Maritime Building Co. will erect an eleven-story and basement brick and stone office-building on Bridge, Pearl, State and Whitehall Sts.; cost, $400,000. Plans by H. J. Hardenbergh, 10 W. 23d St.

It is stated that a twelve-story stone and brick hotel will be erected at 12 and 14 W. 44th St. by John G. McCullough and Fred'k B. Jennings after plans by Renwick, Aspinwall & Owen; cost, $200,000.

Norwich, Conn. — $30,000 has been appropriated for a State armory to be erected at this place.

(*Continued on page xii.*)

CALIFORNIA
REDWOOD LUMBER

COSTS NO MORE THAN PINE

and will last for generations. Resists fire. Does not SWELL, SHRINK, CHECK or SPLIT, and EXCELS all other woods for BUILDINGS.

REDWOOD SHINGLES have no equal. Will last 50 to 75 years.

For sale at retail by all the principal dealers in the New England and Middle States. If your dealer cannot supply you, write us and we will inform you of the nearest dealer handling Redwood Lumber. . . . . .

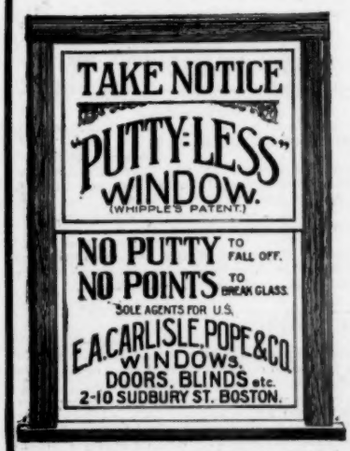
We have in stock and in transit from one to two millions of Redwood and can furnish any sizes required. Read our references from week to week; also write us for descriptive booklet.

BARTLETT LUMBER CO.,

Telephone, Main 1911. **Room 409, Exchange Bldg., State St., Boston, Mass.**

CALIFORNIA REDWOOD DOORS

Stand better than Pine, under all conditions, Painted, Stained or Natural. All regular sizes in stock. WHOLESALE and RETAIL.



Trouble and Expense caused by Putty falling off may be avoided by using "Putty-less" Windows. Send for Booklet. E. A. Carlisle, Pope & Co., 2-10 Sudbury Street, Boston, Mass. New York Office, 101½ W. 74th St.

Re "Topical Architecture."

APPLAUSE FROM THE ARCHITECTURAL SCHOOLS

["MASS. INSTITUTE OF TECHNOLOGY," *Boston, Mass.*]
Represents one of the very best means for comparative study.
F. W. CHANDLER,
Professor of Architecture, Mass. Institute of Technology.

["UNIVERSITY OF ILLINOIS," *Urbana, Ill.*]
You have struck the keynote of what, developed, must prove of immense value.
SETH J. TEMPLE,
Assistant Professor of Architecture.

["SCHOOL OF ARCHITECTURE, COLUMBIA UNIVERSITY," *New York.*]
The "*Topical Architecture*" is precisely what students and practitioners have alike been needing and sighing for for no one knows how many years.
A. D. F. HAMLIN,
Adjunct Professor of Architecture.

["HARVARD UNIVERSITY," *Cambridge, Mass.*]
This scheme seems to me to be an admirable one.
H. LANGFORD WARREN,
Professor of Architecture, Lawrence Scientific School, Harvard University.

["UNIVERSITY OF PENNSYLVANIA," *Phila., Pa.*]
The scheme embodied in your "*Topical Architecture*" is most welcome, because it presents this great abundance of illustrations properly classified for immediate reference.
WARREN P. LAIRD,
Professor of Architecture.

["SYRACUSE UNIVERSITY," *Syracuse, N. Y.*]
Should find its way into the reference room of every public library, as well as into the draughting-rooms of the architects, and the studies of cultured men.
EDWIN H. GAGGIN,
Professor of Architecture, College of Fine Arts, Syracuse University.

["COLLEGE OF ARCHITECTURE, CORNELL UNIVERSITY," *Ithaca, N. Y.*]
I have looked over the plates of "*Topical Architecture*" and think the idea excellent.
ALEX. B. TROWBRIDGE,
Professor in Charge.

Gillender Building, Nassau and Wall Streets, New York City.

STRUCTURAL STEEL SUPPLIED BY THE AMERICAN BRIDGE COMPANY, POST AND MCCORD PLANT.

Bridges, Buildings, Roofs, Trusses.

Steel Frame Work for Mills, Factories, Race Stands, Public Markets, Power Houses, Car Sheds.

Branch offices throughout the country
European Office: LONDON

American Bridge Company

General Offices, 100 Broadway, N.Y.

LILLIBRIDGE, N.Y. 21-164.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Paterson, N. J. — Messrs. Ludlow & Valentine and A. L. Valk, associated architects, have drawn plans for a brick and frame church, 62′ x 62′, for the Bethany Mission of the First Baptist Church.

Providence, R. I. — The cornerstone of the Van Wickle Administration Building is soon to be laid. According to the plans the building will face Prospect St. It will be two stories in height, Colonial design and of brick and Indiana limestone.

St. Paul, Minn. — The City and County Hospital Board proposes to erect this fall a new contagious ward building which will be detached and fireproof. Clarence H. Johnston will prepare the plans. Details are not all worked out yet, but the cost will be $25,000.

Topeka, Kan. — A large woolen mill is to be erected on the north bank of the Kansas River, costing about $50,000.

APARTMENT-HOUSES.

New York, N. Y. — *E. Thirty-fifth St*, *Nos.* 326-330, 2 six-st'y bk. & st. flats, 37′ x 84′; $80,000; o., Miss Laura Billings, 279 Madison Ave.; a., Andrews & Withers, 22 Bellevue Ave., Newport, R. I.

CHURCHES.

Brooklyn, N. Y. — *Russell St.*, nr. Nassau Ave., one-st'y & base. bk. church & Sunday-school, 60′ x 90′, steam heat; $35,000; o., Evangelical Lutheran Church of the Messiah; a., Dodge & Morrison, 41 Wall St., N. Y.

EDUCATIONAL.

Brooklyn, N. Y. — *Sixtieth St.*, nr. 4th Ave., four-st'y bk. public school, 60′ x 142′, gravel roof, steam heat; $150,000; o., City of New York; a., C. B. J. Snyder, 59th St. & Park Ave., N. Y.

FACTORIES.

New York, N. Y. — *E. Twenty-fourth St.*, *Nos.* 213-221, five-st'y bk. factory & stable, 88′ x 107′, gravel & asphalt roof; $50,000; o., James M. Horton, 305 Fourth Ave.; a., Cleverdon & Putzel, 41 Union Sq., W.

HOTELS

New York, N. Y. — *W. Forty-fourth St.*, *Nos.* 12-14, twelve-st'y bk. & st. hotel, 50′ x 88′, tile & copper roof; $200,000; o., John G. McCullough, 21 Courtlandt St. and Frederick B. Jennings, 86 Park Ave.; a., Renwick, Aspinwall & Owen, 367 Fifth Ave.

HOUSES.

Brighton, Mass. — Three 2½-st'y fr. dwells., 28′ x 38′, 32′ x 40′ & 26′ x 40′, shingle roofs, furnaces. $15,000; o., Brooks Walker; a., G. E. Parsons, Tremont Building, Boston.

Brooklyn, N. Y. — *Sixth Ave.*, cor. 57th St., three-st'y bk. store & dwell., 25′ x 65′; $10,000; o., J. Gallagher, 367 Fourteenth St.; a., T. Bennett, 198 Fifty-third St.

Central Falls, R. I. — *Mills St.*, three-st'y bk. dwell., 40′ x 50′, comp. roof, steam; $5,000; o., E. L. Freeman; a., G. A. Simmons.

Dorchester, Mass. — *Geneva Ave.*, nr. Bowdoin St.,

BUILDING INTELLIGENCE.

(Houses Continued.)

3 two-st'y fr. dwells., 29′ x 38′, comp. roofs, furnaces; $15,000; o., Workingmen's Bldg. Asso.; a., G. W. Pope's Sons, 440 Columbus Ave., Boston.

Minneapolis, Minn. — *Colfax Ave.*, bet. 22d & 24th Sts., 2½-st'y fr. dwell., 32′ x 53′, hot water; $8,000; o., C. W. Drew; a., E. P. Overmire.

New York, N. Y. — *Hamilton Terrace*, nr. 144th St., three-st'y bk. & st. dwell., 20′ x 52′; $12,000; o., Louis C. Hahn, 62 Hamilton Terrace; a., Edgar K. Bourne, 18 Broadway.

Boston Road, cor. 166th St., 4 three-st'y bk. dwells., 18′ & 19′ x 44′ & 53′, tin & slate roof; $32,000; o., George Shepperd, 1103 Boston Road; a., M. J. Garvin, 3307 Third Ave.

Fifty-third St., nr. Madison Ave., 2 six-st'y bk. & st. dwells. 25′ x 68′, tile roof; $160,000; o., William E. Diller, 101 W. 66th St.; a., G. A. Schellenger, 130 Fulton St.

Putnam, Conn. — 2½-st'y fr. dwell., 32′ x 48′, steam; $5,000; o., H. L. Burt; b., C. H. Kelley.

Somerville, Mass. — 2½-st'y fr. dwell., 30′ x 58′, shingle roof, hot water; $6 000; o., E. G. Davis; a., Prescott & Sidebottom, 113 Devonshire St., Boston.

South Boston, Mass. — *L St.*, *No.* 213, three-st'y fr. dwell., 23′ x 60′, comp. roof, stoves; $5,000; o., A. H. Flint, 614 Sixth St.

LIBRARIES.

Belmont, Mass. — One-st'y st. library building, 30′ x 80′, slate roof, steam; $40,000; o., H. O. Underwood; a., W. R. Emerson; c., George Dawson, Waltham.

MERCANTILE BUILDINGS.

Cambridge, Mass. — *Main St.*, *Nos.* 144-178, one-st'y steel & bk. manufacturing building, 118′ x 241′, steam; $60,000; o., Edw. Kendall & Sons; a., J. L. Worcester.

Minneapolis, Minn. — *Third Ave.*, cor. 34 St., five-st'y st. building, 52′ x 132′, steam; $60,000; o., National Biscuit Co.; a., J. & E. C. Haley.

OFFICE-BUILDINGS.

New York, N. Y. — *Liberty St.*, *Nos.* 59-63, four-st'y marble Chambers of Commerce & office-building, 83′ x 96′ & 91′, tile roof; $500,000; o., Chamber of Commerce, State of N. Y., 36 Nassau St.; a., James B. Baker, 156 Fifth Ave.

Bridge St., nr. State St., eleven-st'y bk. & st. office-building, 63′ x 132′, tile roof; $400,000; o., The Maritime Building Co., 135 Broadway; a., H. J. Hardenbergh, 10 W. 23d St.; b., George A. Fuller Co., 135 Broadway.

STABLES.

New York, N. Y. — *Ninth St.*, *No.* 612, two-st'y bk. stable, 20′ x 28′; $2,000; o., Emil Elias, 612 E. 9th St.; a., Fred Ebeling, 97 Seventh St.

N. Washington Sq., *No.* 19, *rear*, one-st'y bk. automobile stable, 15′ x 28′; $1,000; o., Albert R. Shattuck, on premises; a., Augustus N. Allen, 35 E. 58th St.

Edgecombe Ave., nr. 145th St., one-st'y bk. stable & office, 25′ x irregular x 21′ 9″ x 100′, asphalt & gravel roof; $20,000; o., Edmund Coffin, 34 Pine St.; a., John H. Hamilton, 32 Broadway.

PASSAIC ROLLING MILL CO.,
PATERSON, N. J.

Steel Beams 4 inches to 20 inches deep.

ALL STRUCTURAL SHAPES.
NEW YORK OFFICE . . 45 BROADWAY.
Boston Office, No. 31 State Street.

BUILDING INTELLIGENCE.

(Stables Continued.)

Somerville, Mass. — Two-st'y fr. stable, 30′ x 42′, shingle roof, hot water; $2,500; o., E. G. Davis; a., Prescott & Sidebottom.

STORES.

Boston, Mass. — *Warren St.*, nr. Blue Hill Ave., Ward 21, one-st'y bk. store, 30′ x 90′, flat roof, stoves; $4,000; o., A. B. Chapin; a. & b., L. W. Eddy, 759 Dudley St., Roxbury Dist.

WAREHOUSES.

Brooklyn, N. Y. — *Navy St.*, nr. Park Ave., six-st'y bk. warehouse, 95′ x 102′, gravel roof; $81,000; o., F. Tousey, 20 Union Sq., N. Y.; a., L. Berger & Co., 300 St. Nicholas Ave.

MISCELLANEOUS.

Boston, Mass. — *South St.*, nr. Arborway, Ward 23, greenhouse, 40′ x 84′, pitch roof, steam; $5,000; o., Harvard College; a., Peabody & Stearns, 53 State St.; b., J. H. Burt & Co.

New York, N. Y. — *Thirty-first St.*, nr. 2d Ave., three & four-st'y bk. & st. parish house, 74′ x 90′, copper, slate & tile roof; $75,000; o., Church of the Incarnation, 16 W. 53th St.; a., Henry Vaughan, 29 Pemberton Sq., Boston, Mass.

COMPETITIONS.

COURT-HOUSE AND JAIL. [At Jackson, Miss.]
Plans and specifications will be received by the Board of Supervisors until July 1 for a court-house, to cost $55,000, and a jail to cost $8,000. 1330

SCHOOL. [At Milwaukee, Wis.]
The Board of Public Works invites plans and specifications for the new school-building for 7th and Prairie Sts. until July 2; cost, $55,000. 1330

COURT-HOUSE. [At Elizabeth, N. J.]
Competitive plans will be received by the Board of Chosen Freeholders until July 1 for a court-house to cost $250,000. J. F. HUBBARD, dir. 1330

COURT-HOUSE. [At Olivia, Minn.]
Plans and specifications will be received by the Board of County Commissioners until June 18 for

["*A Hit, a Palpable Hit!*"] — HAMLET.

"TOPICAL ARCHITECTURE."

Classified Architectural Motives and Details.—Published Monthly.—$3.00 per year.

Applause from the Profession.

ARLINGTON, N. J.

THE issues of "*Topical Architecture*" are very satisfactory and I must congratulate you thereon.
FRANKLIN L. NAYLOR.

BALTIMORE, MD.

WE have, so far, found it a very interesting and attractive publication, and, according to the scheme as laid out for the future, it will probably be one of much use to the profession.
WYATT & NOLTING.

I AM much pleased with "*Topical Architecture*," and think it will be of considerable service to the architectural profession.
BENJ. B. OWENS.

BOSTON, MASS.

"*Topical Architecture*" is extremely valuable in my judgment and I should be sorry to be without it. It comes in exactly the form which makes the plates accessible and of practical value. C. H. BLACKALL.

BRIDGEPORT, CONN.

A VERY useful publication and bound to be a success.
H. A. HOWE, JR.

I FIND "*Topical Architecture*" excellent at the price.
RICHARD D. ANABLE.

BUFFALO, N. Y.

WE consider the issues of "*Topical Architecture*" a valuable reference work in a convenient and easily accessible form.
LANSING & BEIERL.

CEDAR RAPIDS, IA.

WE think that the systematic arrangement of various subjects as planned in your "*Topical Architecture*" will be a very satisfactory and profitable work to own.
JOSSELYN & TAYLOR CO.

CHICAGO, ILL.

THUS far I am fairly well pleased with "*Topical Architecture.*" A. G. ZIMMERMAN.

CINCINNATI, O.

WE think well of "*Topical Architecture*" and think it will prove useful to us.
S. HANNAFORD & SONS.

CLEVELAND, O.

"*Topical Architecture*" will prove a valuable adjunct to a library and draughting-room.
R. ROSENSTOCK & CO.

COLUMBIA, S. C.

WE are very much pleased with the issues of "*Topical Architecture*" which have reached us so far, and we find them of the greatest usefulness.
WILSON & EDWARDS.

DETROIT, MICH.

IT seems that subscribing to "*Topical Architecture*" is practically buying an architectural library on the installment plan. F. CARL POLLMAN.

EAST ST. LOUIS, ILL.

I CONSIDER "*Topical Architecture*" a valuable architectural periodical, and will say that with careful selection of subjects will make an invaluable library for an architect's office.
A. B. FRANKEL.

EL PASO, TEX.

AM pleased with "*Topical Architecture*," and consider your scheme of publication good. EDWARD KNUZELL.

GRAND RAPIDS, MICH.

I THINK "*Topical Architecture*" is a most useful publication, and will make a valuable addition to the office library.
WILLIAM WILLIAMSON.

THE numbers thus far received have been very practical and interesting and cannot help but be useful to the profession. H. A. CREAGER.

HARTFORD, VT.

IT certainly makes a collection of plates well worth the price of publication. LOUIS SHELDON NEWTON.

INDIANAPOLIS, IND.

I THINK "*Topical Architecture*" will succeed.
C. A. WALLINGFORD.

KANSAS CITY, MO.

FOR the draughtsman particularly does "*Topical Architecture*" promise much. It will give him, cheaply, classified and well-selected working material. The simultaneous publication of photographs and scale-drawings of the same objects is highly commendable. It is giving the draughtsman a good library on the installment plan, the ultimate value of which it is now hard to judge.
BENJ. LUBSCHEZ.

I REGARD "*Topical Architecture*" as a useful periodical for myself and also for my son, who is just starting in to learn the profession. G. GARVEY.

MILWAUKEE, WIS.

JUDGING by the numbers I have already received, "*Topical Architecture*" will be a very serviceable work.
CHARLES FITZGERALD.

"*Topical Architecture*" gives promise of being useful. Illustrations are increasing so rapidly that a digest of subjects of some standard dimension is becoming necessary for office use. FERRY & CLAS.

MT. VERNON, N. Y.

I FIND the issues of "*Topical Architecture*" exceedingly interesting. The scheme of the publication I think a most excellent one. H. B. CLEMENT.

NEWBURGH, N. Y.

YOUR present effort is the best I have yet seen.
FREDERICK N. SNEED.

NEW HAVEN, CONN.

JUDGING by the few numbers of the publication that I have received, it will be a useful publication.
L. W. ROBINSON.

NEW ROCHELLE, N. Y.

I AM of the opinion that "*Topical Architecture*" on its present plan will be a valuable publication and useful to both practising architects and students.
FRED E. WINTER.

NEW YORK, N. Y.

I THINK "*Topical Architecture*" a good publication.
CASS GILBERT.

COMPETITIONS.

court-house, including ventilating and heating, to cost about $75,000. J. T. BROOKS, clk. 1330

PROPOSALS.

CITY-HALL.
[At Vicksburg, Miss.]
Bids are wanted **July 1** for a city-hall, to cost about $40,000. J. Rieley Gordon, archt., Dallas, Tex. W. L. TROWBRIDGE, mayor. 1330

SEWERAGE SYSTEM.
[At Melrose, Mass.]
Sealed proposals will be received at the office of the Metropolitan Water and Sewerage Board, 1 Ashburton Pl., Boston, Mass., **until June 27, 1901,** for building parts of section 60 of the North Metropolitan Sewerage System, in Melrose, in accordance with the form of contract and specifications to be furnished by the Board. Plans can be seen and specifications and form of contract can be obtained at the above office, or at the office of the Engineering Department, Pemberton Building, Boston, Mass. Henry H. Sprague, Henry P. Walcott and James A. Bailey, Jr., Metropolitan Water and Sewerage Board. William M. Brown, Engineer Sewerage Works. WILLIAM N. DAVENPORT, secretary. 1330

BANK BUILDING.
[At Goodhue, Minn.]
Sealed proposals will be received by the City Bank at Goodhue, Minn., **until the 5th day of July, 1901,** for the construction of a two-story bank and office building. All bids must be in accordance with the plans and specifications prepared by C. L. Grover, of Zumbrota, which may be seen at the office of Menomonie Hydraulic Press Brick Co., Minneapolis, Minn., or at said bank office building, Goodhue, Minn., on and after June 21st, 1901. 1331

COURT-HOUSE.
[At Bainbridge, Ga.]
Bids are wanted **July 10** for a $35,000 court-house. R. A. LYTLE, Chairman Bd. Commissioners. 1331

COURT-HOUSE.
[At Luthersville, Ga.]
Sealed proposals will be received **until July 10, 1901,** for a two-story brick court-house to cost about $30,000, by L. A. ALLEN, chairman county commissioners. 1331

SEWER.
[At Iona, Minn.]
Sealed proposals will be received by the village recorder of the Village of Iona, Minn., **up to the 8th day of July, 1901,** for furnishing materials and constructing a sewer, according to plans and specifications on file with said recorder, and also on file with M. B. Haynes, engineer, Mankato, Minn. John Krier, President of Council. J. J. GRIFFIN, Recorder. 1331

BUILDING.
[At New York, N. Y.]
Bids are wanted **July 8** for furnishing materials and performing work for the finishing and equipment of the erection of the Hall of Records Building. ROBT. A. VAN WYCK, mayor. 1331

Treasury Department, Office Supervising Architect, Washington, D. C., June 6th, 1901. Sealed proposals will be received at this office until 2 o'clock P. M. on

Applause from the Profession.

New York, N. Y.

"*Topical Architecture*" promises to be a very valuable collection of prints. It is only a matter of time.
Stowe Phelps.

I think the plan of "*Topical Architecture*" a good one, and the execution so far equally good. I hope "*Topical Architecture*" will grow into a complete dictionary of historic architecture. Arne Dehli.

I consider "*Topical Architecture*" a very useful publication. Richard K. Mosley.

We consider "*Topical Architecture*" a publication of great interest and value, not only to us individually, but also, as we believe, to the profession at large, and we look with pleasure to its continuation. DeLemos & Cordes.

It is a useful and interesting periodical, and should receive the indorsement of the profession. J. A. Hays.

I hope you will continue the issues of "*Topical Architecture*," as I find it useful and interesting.
Arnold W. Brunner.

"*Topical Architecture*" will be of valuable service to all architects. G. A. Schellenger.

The form, make-up and scope of subjects in "*Topical Architecture*" seem to promise a most useful aid to all architects, draughtsmen and others fortunate enough to have the volumes. George Martin Huss.

We think "*Topical Architecture*" is being conducted upon the right lines. Welch, Smith & Provot.

Orangeburg, S. C.

This admirable scheme bids fair to reach great success and supply a long-felt need.
W. Wilson Cook,
Professor Manual Arts,
Claflin University.

Oshkosh, Wis.

I consider that the publication "*Topical Architecture*" as it becomes more complete will become *extremely* useful.
George A. Rockwell.

Philadelphia, Pa.

The character and presentation of the various subjects treated in issues of "*Topical Architecture*" so far received by me are such as to insure — to me, at least, and no doubt, to many — the continued usefulness of the publication.
S. R. Morgan.

"*Topical Architecture*" will prove a very valuable addition to any architectural library. Charles H. Roberts.

"The general scheme of arrangement is most excellent and just what an architect needs." Wilson Eyre, Jr.

We find "*Topical Architecture*" quite satisfactory.
Rankin & Kellogg.

Your periodical is everything I could have expected.
S. Austin Allen.

Philadelphia, Pa.

It seems to me that you are on the right track with "*Topical Architecture*."

It is, no doubt, a very difficult matter to make such a publication to suit the requirements of the majority; even when the principal examples of architecture of admitted merit are included, there still remains to satisfy the matter of personal taste, which, from a commercial point-of-view, is very important.

I cannot help but think that, to the architect whose time is completely taken up with the details of his practice, your publication, containing the best examples of the best things that show the fruit of the work and experiment of those that have gone before, and put into the most concise and clear shape, without unnecessary comment or speculation, will be of great value. Even with a larger library to turn to than most architects can have, much labor is necessary to select the useful and appropriate things according to the notion of the searcher. Charles L. Hillman.

Pittsburgh, Pa.

We are much pleased with "*Topical Architecture*" and the publication is worthy of a favorable reception in every architect's office. Beezer Bros.

I have found "*Topical Architecture*" most useful and interesting and trust it will continue along the line which has been planned for it. A. B. Harlow.

Providence, R. I.

I have been very glad so far to receive the "*Topical Architecture*," as I like to get my architectural material classified, and shall value the future numbers so far as I find them comprehensive and covering examples of best known and interesting things that are not found in other sources.
Edmund R. Willson.

As a student of architecture, I am very much pleased with the publication. Wilfred A. Paine.

Rochester, N. Y.

Thus far the selections have been admirable and of great value to all interested in architecture. The classification of subjects saves time and temper, and also encourages investigation of first-class matter, when otherwise the annoyance arising from searching in miscellaneous matter is at least a temptation, and oft-times the real reason, for not giving due consideration to subjects in hand. The more complete you can make this work as a ready handbook, the better, especially for young men who have a library to acquire, for it will give them at the start something quickly available and a wide field. George T. Otis.

San Francisco, Cal.

The scheme seems to me the best means of ready reference under classified heads of any journal yet published.
J. Eugene Freeman.

Am well pleased with the issues of "*Topical Architecture*" so far received, and consider them a valuable addition to my architectural library. E. A. Hermann.

York, Pa.

"Destined to become an architectural encyclopædia of great value to the profession, as it takes a place in architectural literature which has been too long neglected."
Reinhardt Dempwolf.

The Other Side.

To the following objections, whether trivial or serious, the observation that "Rome was not built in a day" is, perhaps, a sufficient answer. In the few numbers already issued it would be, of course, an impossibility to satisfy all personal preferences or meet all practical desirabilities.

Baltimore, Md.

"Its field is limited and the number of examples hardly as much as one could find in one's own collection."
Thos. C. Kennedy.

Bridgeport, Conn.

"I can't seem to work-in any of these 'Domical Buildings' in my cottages or city houses." J. W. Northrop.

Chicago, Ill.

"So far I have found no use for '*Topical Architecture*' for the reason that I previously possessed the illustrations. Nevertheless, I shall continue taking it, and will, no doubt, soon find it useful." George Beaumont.

Cincinnati, O.

"Personally it is not beneficial; to the profession at large I think it will be of value." Louis Belmont.

New York, N. Y.

"The idea is excellent, the publication helpful, but the selection of matter falls short of what it could easily be."
W. W. Kent.

"Apart from the very evident disadvantages of the library in formation, I think '*Topical Architecture*' likely to be useful." Walter Cook.

"It does not seem to possess any special features not already covered in the other publications."
Carrere & Hastings.

Philadelphia, Pa.

"The publication itself is excellent, but I have already over 75 per cent of the plates published." Guy King.

Toledo, O.

"Am not particularly pleased with '*Topical Architecture*.'"
Geo. S. Mills.

PROPOSALS.

the 15th day of July, 1901, and then opened, for the new boiler plant and new feed pumps, etc., for the U. S. Branch Mint at San Francisco, Cal., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent at San Francisco, Cal., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1330

Treasury Department, Office of the Supervising Architect, Washington, D. C., June 10th, 1901. Sealed

PROPOSALS.

proposals will be received at this office until 2 o'clock P. M. on the 11th day of July, 1901, and then opened for the construction (except heating apparatus, electric wiring and conduits) of the U. S. Post-office at Hot Springs, Arkansas, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Postmaster at Hot Springs, Arkansas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1330

PROPOSALS.

SEWERS.

[At Redwood Falls, Minn.]

Sealed proposals will be received by the Common Council of the City of Redwood Falls, Minnesota, until 8 o'clock P. M., July 2d, 1901, for furnishing the materials and constructing sewers in accordance with the plans and specifications on file at the office of the City Recorder of said city. By order of the Council, H. M. Aune, mayor. THOS. C. JONES, city recorder. 1330

MINERAL WOOL

FIRE, SOUND and VERMIN PROOF INSULATOR.

Samples and Circulars Free.

U. S. Mineral Wool Co., 143 Liberty Street, NEW YORK.

LARGE STOCK OF FOREIGN & DOMESTIC Photographs

H. Herbert Sidman

Architectural Photographer

FOR THE AMERICAN ARCHITECT

FINE INTERIORS DETAIL EFFECTS COPYING

8 East 42 Street NEW YORK

Permanent Prints in PLATINUM OR CARBON

"COHESIVE CONSTRUCTION."

An Essay on the Theory and History of Cohesive Construction.

By RAFAEL GUASTAVINO, Architect.

Price, $1.25.

THE ARTIST

An Illustrated Monthly Record of Arts, Crafts, and Industries

35 Cents. Yearly, $3.50

A beautifully illustrated Magazine, which covers in its survey the field of Art in European countries and is devoted to the Arts and Crafts' movement in America.

THE DIAL

"THE ARTIST is one of the best of the art journals."

THE CRITIC

"THE ARTIST is a handsome cosmopolitan magazine, very profusely illustrated."

THE ARGUS

"One of the handsomest magazines published is THE ARTIST."

LITERARY WORLD

". . . Handsome and engaging candidate for the favor of those whose tastes or occupations center in the world of applied art. . . . We recommend it warmly to all art students and to all artisans who desire to rise in their professions."

BOOK AND NEWSDEALER

"We see in THE ARTIST a publication of constantly increasing merit. The classically artistic exterior is the equal of anything we have seen."

PUBLISHED BY

TRUSLOVE, HANSON & COMBA, Ltd.

67 Fifth Avenue, New York

NEW ENGLAND

MATERIAL-MEN & CONTRACTORS.

BLUE PRINTING.

CHAS. E. MOSS,
Rapid Printing Papers.
14 Broad St., Boston.
Telephone: Boston, 2751-2.

CONTRACTOR & BUILDERS.

WILLIAM L RUTAN,
1016 Tremont Bldg., Boston.

ROOFING DUCK.

C. H. BATCHELDER & CO.,
135 State St.,
Cor. India St., Boston, Mass.

SASH CORD.

SILVER LAKE CO.,
78 Chauncy St., Boston.

SEAM-FACE GRANITE.

GILBRETH SEAM-FACE GRANITE CO.,
Park Row Building, New York
85 Water St., Boston.

WATERPROOF CELLARS.

FRANK B. GILBRETH,
Park Row Bldg., New York.
176 Federal St., Boston.

Professional Ethics.

The following . . .
. . . CODE OF ETHICS . . .
Prepared in Conformity with the Best Standards of Practice, and Recommended to its Members by the Boston Society of Architects, was . . . . . .

ADOPTED BY THE SOCIETY, FEBRUARY 1, . . 1895. . .

SECTION 1. No Member should enter into partnership, in any form or degree, with any builder, contractor, or manufacturer.

*

SECTION 2. A Member having any ownership in any building material, device or invention, proposed to be used on work for which he is architect, should inform his employer of the fact of such ownership.

*

SECTION 3. No Member should be a party to a building contract except as "owner."

*

SECTION 4. No Member should guarantee an estimate or contract by personal bond.

*

SECTION 5. It is unprofessional to offer drawings or other services "on approval" and without adequate pecuniary compensation

*

SECTION 6. It is unprofessional to advertise in any other way than by a notice giving name, address, profession, and office hours, and special branch (if such) of practice.

*

SECTION 7. It is unprofessional to make alterations of a building designed by another architect, within ten years of its completion, without ascertaining that the owner refuses to employ the original designer, or, in event of the property having changed hands, without due notice to the said designer.

*

SECTION 8. It is unprofessional to attempt to supplant an architect after definite steps have been taken toward his employment.

*

SECTION 9. It is unprofessional for a Member to criticise in the public prints the professional conduct or work of another architect except over his own name or under the authority of a professional journal.

*

SECTION 10. It is unprofessional to furnish designs in competition for private work or for public work, unless for proper compensation, and unless a competent professional adviser is employed to draw up the "conditions" and assist in the award.

*

SECTION 11. No Member should submit drawings except as an original contributor in any duly instituted competition, or attempt to secure any work for which such a competition remains undecided.

*

SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot give proper personal attention.

*

SECTION 13. No Member shall compete in amount of commission, or offer to work for less than another, in order to secure the work.

*

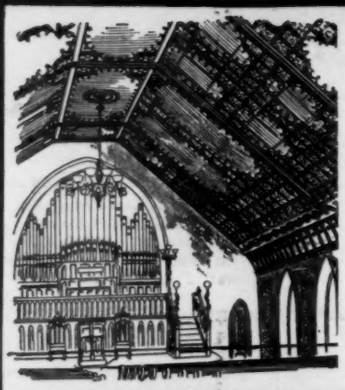
SECTION 14. It is unprofessional to enter into competition with or to consult with an architect who has been dishonorably expelled from the "Institute" or "Society."

*

SECTION 15. The assumption of the title of "Architect" should be held to mean that the bearer has the professional knowledge and natural ability needed for the proper invention, illustration and supervision of all building operations which he may undertake.

*

SECTION 16. A Member should so conduct his practice as to forward the cause of professional education and render all possible help to juniors, draughtsmen and students.



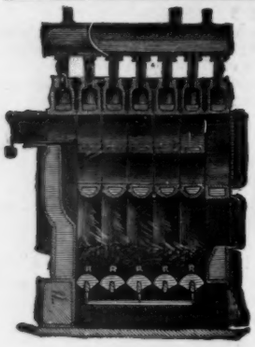
For Richness of Design, Beauty of Finish and Harmonious Effects,

..Berger's..
Classic Metal Ceilings

ARE UNSURPASSED.

Send for our booklet "A NEW IDEA IN METAL CEILINGS," — 'tis free.

THE BERGER MANUFACTURING COMPANY,
CANTON, OHIO.



THE H. B. SMITH CO. 133-135 ... Centre Street, New York.

MANUFACTURERS.

Steam and Water

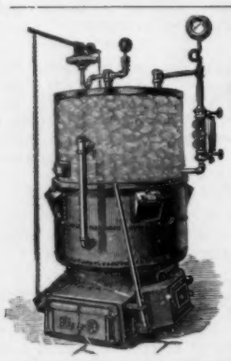
Heating Apparatus,

Factory: Westfield, Mass.

Established 1853.

Send for Catalogue.

NEW YORK, PROVIDENCE, PHILADELPHIA.



THE

Gorton Side-Feed Boilers

Insure a warm building day and night in coldest weather.

Our Book, MODERN HOUSE HEATING, gives the information. Mailed free.

Send for a copy, and investigate for yourself.

GORTON & LIDGERWOOD COMPANY

96 Liberty Street NEW YORK — 77 Oliver Street BOSTON — Old Colony Building CHICAGO

"MINOR FOUNTAINS,"

Being No. 3 of a Series of "Architectural Odds and Ends,"

40 GELATINE PRINTS - - $5.00 PER COPY.

American Architect and Building News Co.

SEYSSEL ROCK ASPHALT
and Bitumen Damp Course,
NEW YORK MASTIC WORKS,
11 Broadway, New York.

THE
Northwestern Terra-Cotta Co.
Manufacturers of
Architectural Terra-Cotta.

WORKS & MAIN OFFICE: Cor. Clybourn & Wrightwood Avenues.

CITY OFFICES: Room 1118 Rookery Bldg. cor. La Salle & Adams St.

CHICAGO.

Estimates given on application. Send for Catalogue and Samples.

PERTH AMBOY
TERRA-COTTA COMPANY,
— OF —
PERTH AMBOY, NEW JERSEY.
OFFICE, 160 Fifth Ave., NEW YORK.

BOSTON AGENTS:
WALDO BROS., 102 MILK STREET.

Polygon
Conductor
Pipes
Won't Burst.

The twist in the corrugation checks the sudden fall of ice and water, thus protecting the joints. It stands hard knocks because it is corrugated. Again, it is much handsomer than plain pipe. Made in copper and galvanized iron.

Catalogue and information free.
Address Dept. A,
The American Steel Roofing Co.,
Cincinnati, O.

[*See Alphabetical Index on Cover 2 for Pagination.*]

CLASSIFIED ADVERTISEMENTS.

[Advertisers can be indexed only under a single head free of charge.]

ARCHITECT'L ORNAMENTATION.
Lombard & Co., A. P., Boston.....

ART METAL WORK.
Ludlow Saylor Wire Co., St. Louis, Mo .....(mon)

ASPHALT.
Neuchatel Asphalte Co., New York..
New York Mastic Works, New York.

ASPHALT ROOFING.
Warren Chemical & Mfg. Co., N. Y.

AUTOMATIC SPRINKLER.
Internat'l Sprinkler Co., Phila., Pa...

BLINDS (Venetian).
Burlington Venetian Blind Co., Burlington, Vt.....

BLUE PRINTS
Moss, Chas. E., Boston.....
Spaulding Print Paper Co., Boston .....(eow)

BOILERS (Side-Feed).
Gorton & Lidgerwood Co., New York.

BOOKS.
Citizen Press, Glasgow, Scotland.....

BRICKS (Red Oxide).
Wisconsin Graphite Co., Pittsb'g, Pa.

CALIFORNIA REDWOOD.
Carlisle, Pope & Co., E. A., New York.

CAPITALS.
Lombard & Co. A. P., Boston . ....

CAPITALS (Carved).
G. T. Nelson Co., The, Columbus, Ohio

CARVING.
Lombard & Co., A. P., Boston.....

CEMENT.
Alsen's Cement Works, N. Y....(eow)
Atlas Cement Co., New York.....
Lawrence Cement Co., The, New York
Thiele, E. New York.....

CEMENT PAVING.
Stamsen & Blome, Chicago, Ill.....

CHLORIDE ACCUMULATOR.
Electric Storage Battery Co., Philadelphia, Pa.....

COMPOSITION ORNAMENT.
Lombard & Co., A. P., Boston.....

CONDUCTORS.
American Steel Roofing Co., The, Cincinnati, Ohio.....

CONSERVATORIES.
Lord & Burnham Co., Irvington-on-Hudson, N. Y.....

CONTRACTING.
Flynt Building & Construction Co., Palmer, Mass.....
Rutan, William L., Boston.....
Southard, R. P.....

CONTRACTOR AND BUILDER.
Rutan, William L., Boston.....

CORDAGE.
Samson Cordage Works, Boston..(eow)

CREOSOTE STAINS.
S. Cabot, Boston.....

CUTLER PAT. MAILING SYSTEM.
Cutler Mfg. Co., Rochester, N. Y.....

DEAFENING QUILT.
Samuel Cabot, Boston, Mass.....

DECORATORS.
L. Haberstroh & Son, Boston.....

DOORS.
Kinnear Mfg. Co., The, Columbus, O.

DOORS (Interior Finish).
Carlisle, Pope & Co., E. A., New York.

DRAUGHTSMAN.
E. Eldon Deane, New York.....

ELEVATORS, ETC.
Morse, Williams & Co., Philadelphia.
Whittier Machine Co., Boston.....

ENGINES (Hot-Air).
Rider-Ericsson Engine Co., New York.

FAUCETS.
Union Brass Works, Boston, Mass...

FILING DEVICES.
Art Metal Construction Co., Jamestown, N. Y.....

FILTER.
Loomis-Manning Filter Co., Phila., Pa.
Scaife & Sons, Wm. B., Pittsb'g, Pa..

FIREPROOF DOORS.
Kinnear Mfg. Co., The, Columbus, O.

FIREPROOFING.
Johnson Co., E. V., Chicago, Ill.....

FIREPROOF LATHING.
Hayes, Geo., New York.....

FIREPROOF SHUTTERS.
Kinnear Mfg. Co., The, Columbus, O.

FLOOR-PLATES.
Ogden & Wallace, New York... .....

FLOOR POLISH.
Butcher Polish Co., Boston.....

FLUSH-VALVE.
Peck Brothers Co., Chicago, Ill.....

GALVANIZED IRON.
American Sheet Steel Co., New York

GATES.
Wm. R. Pitt, New York .. ....(mon)

GRATES, ETC.
Wm. H. Jackson & Co., New York....

GREASE (Graphite).
Wisconsin Graphite Co., Pittsb'g, Pa.