

Public Library  
 RECEIVED  
 DEC 16 1901  
 WASHINGTON, D. C.

# THE AMERICAN ARCHITECT AND BUILDING NEWS

Vol. LXXIV

SATURDAY, DECEMBER 14, 1901

No. 1355

## CONTENTS.

### SUMMARY:—

Mr. Reginald Bolton on Mechanical Installation in Office-buildings. — The Replacing of Boilers and Smoke-stacks. — Leaky Window-frames. — Water Economy in Modern Buildings. — The Portico of the Pabst Hotel in New York at length to be removed. — Disregard of the Building-line in Cities. — Some of the Practical Difficulties in which the Artistic Architect involves Himself and His Client.

THE SENTIMENT OF DOMESTIC ARCHITECTURE. . . . .	81
DORCHESTER, ENGLAND. . . . .	83
THE PRESIDENT ON FOREST PRESERVATION. . . . .	84
THE ART STUDENTS' LEAGUE OF NEW YORK. . . . .	85
THE TYRANNY OF ENGLISH TRADE-UNIONS. . . . .	86
THE MENTAL ATMOSPHERE OF BOSTON. . . . .	87

### ILLUSTRATIONS:—

Detail of the Soldiers' and Sailors' Monument, Brooklyn, N. Y.:  
 Two Plates.—A Competitive Design for the Carnegie Library, Montgomery, Ala.

Details from the Gare de Lyon, Paris, France.

Additional: Detail of the "Geraldine," East 16th St., New York, N. Y.—The Soldiers' and Sailors' Monument, Brooklyn, N. Y.—The Noyes Memorial Building, Litchfield, Conn.—Historical Room and Reading-room in the same Building—Orleans, France: House of Diane de Poitiers; Entrance to the Hôtel de Ville.—French Cathedrals: Limoges; Angoulême.

NOTES AND CLIPPINGS. . . . .	88
------------------------------	----

**MR. REGINALD PELHAM BOLTON**, whom many of our readers know as an engineer, made some remarks the other day, before the American Society of Civil Engineers, on "Mechanical Installation in the Modern Office Building," which architects would do well to read. It is hardly necessary to say that a modern office-building is such a highly organized structure that no one man can understand all its parts thoroughly; but it is very desirable for the architect to know something about the work of the heating-engineers, mechanical-engineers and electricians who must cooperate with him, so that he can arrange to give accommodations for each of them, without encroaching on the space needed by the others, or injuring the convenience or beauty of the building. All this can, by an intelligent architect, sufficiently experienced to foresee approximately what will be needed, prudent enough to consult, before it is too late, with the specialists interested, and firm enough to insist on keeping the general control in his own hands, be successfully accomplished; but it is, in practice, rarely accomplished, and architects have before them an ample field for perfecting themselves in this branch of their profession.

**IT** ought not to be necessary to say that every building in which a steam-boiler is to be used should have provision for getting in a new boiler when the old one is worn out, which will generally be in twenty years or less, even with the best boilers, yet it is common to see boilers hoisted over the roofs of buildings, or sidewalks excavated to get them through the basement wall, or other costly operations undertaken as a result of the want of foresight of the architect or the owner. In the same way, where a steel-plate smoke-stack is used, as is now very common, provision should be made for replacing it when it decays. Many such stacks are built into brick walls, where they cannot be reached for repairs, or for cleaning out the old stack and substituting a new one; so that the decay of a stack involves the construction of another somewhere else, often at great expense. Where such a stack is built in a brick casing, the brick flue should be so large that a man can easily go up and down the whole length, on a ladder, and can get at all the joints of the iron stack, for repairing it, or for setting a new one. Some architects build in permanent ladders of iron bars or pipes in the brick shaft, for such purposes. As the space between the steel stack and the brickwork can be used for ventilation, the floor-room required to accommodate it is well utilized, a little forced ventilation, for the lavatories and basement rooms, being very advantageous in an office-building.

**BESIDES** accommodating properly the boiler-plant, the elevator engines and dynamos required, the model office-building should afford room for storing sufficient coal to meet contingencies. One of the most costly office-buildings in New York has coal room for only one day's supply. Of course, coal must be delivered every day, and a heavy fall of snow, or a teamsters' or coal-handlers' strike, might leave the building without heat, power or artificial light. For warming

a modern office-building, in which there is a large supply of exhaust steam from the elevator engines and dynamos, the exhaust is generally used, and is usually sufficient for the purpose in ordinary weather, unless the building is very much exposed, and is loosely built, as is, unfortunately, often the case. Mr. Bolton speaks of finding spaces between the stone sills of windows and the wooden stools of the frames, into which he could put his fingers. He was told that these were to be "plastered up" later; but every architect knows that plastering in such places is of little value; and an enormous amount of cold air will come in winter through such crevices. Mr. Bolton does not mention what any architect could have told him, that, in most buildings, the wind blows freely around the sides of the window-frames, and over the top, as well as under the stool. We have seen snow blow into a room around the sides of a boxed window-frame; and it may be imagined that the owners of office-buildings constructed in this way pay heavily in winter, in the form of coal bills, for these deficiencies. It seems to be impossible to get bricklayers to set a boxed window-frame in a wall without leaving vacancies everywhere about it, through which the wind blows freely, and the only way to have such a frame built in tightly is to set a skeleton frame first, and have the joints built around it, so that the architect can see them, and push the finished frame into its place afterwards, caulking crevices, if necessary, with cotton wool. Of course, all this adds to the expense, but the saving in cost of heating, and in the greater rental value of rooms so constructed that the tenants can sit by the windows in comfort in cold weather, soon pays the extra expense many times over. Mr. Bolton speaks favorably, and with reason, of the vacuum system of steam-heating for office-buildings, which not only secures a better circulation of steam, but enables tenants, by nearly closing the steam-valve, to keep the radiators filled with "wiredrawn" steam, or rather vapor, at a pressure far below atmosphere, and at a temperature, in consequence, which may be regulated to suit mild weather. He mentions also, with approval, what he calls the "Chicago system" of steam-heating with one pipe, which consists in running the main riser directly to the top of the building, and distributing the steam downward, as is often done with hot water. The advantage of this system is that the condensed water and the steam travel in the same direction in the pipes, so that there is none of the hammering characteristic of one-pipe systems where the steam and the condensed water meet in the pipe; while, as the steam cools on its way downward, instead of upward, the loss of heat in the radiator hastens, instead of checking, the circulation. For exhaust steam heating, particularly where there is not, or should not be, pressure enough to force the hot steam upward against the weight of cooler steam and water in the same pipe, the "Chicago system," which, to our knowledge, was used in Boston fifteen years ago, has great merits, and the roof-space required for the mains can easily be provided by an ingenious architect, who knows where the mains should run.

**A**NOTHER suggestion which Mr. Bolton makes is that the water used for cooling in refrigerating plants and for other purposes, particularly in hotels, instead of being wasted, should be pumped into the hot-water tank, and, after further heating, distributed among the bath-rooms and lavatories. The water bill is a large item in the cost of carrying on a hotel, and it may be materially reduced in this way. In a large building in New York, as he tells us, a further economy is to be practised by pumping the water from a swimming-tank into the bath-rooms and lavatories, for use in flushing water-closets and urinals. As the water in the swimming-tank is to be warmed, we should think the use of it for flushing closets and urinals decidedly objectionable, to say nothing of the fact that swimming-tanks, to be kept in good condition, must be entirely emptied at least once a week, and the bottom and sides scrubbed, and that, during this process, the closets and urinals must, apparently, go without flushing; but this is not the only way in which a saving can be made in the water-bills. Many office-buildings in New York use for flushing the water from pipe wells sunk in the basement floor. This water, in the lower part of the city, is brackish from the sea, but it is otherwise suitable, so far as experience has shown, and costs nothing but the expense of pumping.

**E**XPERIENCED architects will be interested in the story of the portico in front of the Pabst Hotel, at the corner of Broadway and Forty-second Street, New York, which was built out over the sidewalk in front of the hotel, some years ago, but which its owners have now, by decree of the Supreme Court, been ordered to take down and remove, at their own expense, on the petition of the city authorities. It was proved by the defence, and admitted by the representatives of the city, that other buildings in the neighborhood projected over the sidewalk, but the Court naturally declined to consider this fact a justification for the acts of the defendants. As a matter of fact, however, a very large number of buildings in all parts of New York have projections of some sort extending into the public street, and the history of these projections would form a very curious chapter in the account of municipal government in the metropolis. In most parts of the city there are really two street lines, one known as the house line, beyond which the main front walls of buildings can extend only by special permission of the City Council, and the other, parallel with the first, and about five feet from it, called the area line. Owners may construct within the space comprised between the house line and the area line the basement entrances which, in New York, are almost always in front of the house; and, in the mercantile districts, this privilege usually includes the maintenance of sidewalk elevators in the area space. On the streets in the newer parts of the city, where high basements prevail, a third line is usually recognized, known as the "stoop line," which is laid out two or three feet, or sometimes more, beyond the area line, so that the flights of stone steps leading to the front door, extending to the "stoop line," may give room under them for a convenient basement entrance, reached from the area space.

**A**LTHOUGH architects in New York have always been obliged to consider in their plans the exact location of these various lines, the restrictions implied by them have been made known to the general public mainly by the controversies incident to their violation. It used to be said, we do not know with how much truth, that the front steps of the great majority of the houses on the principal "up-town" streets projected a foot or more beyond the "stoop-line," and that the city officials, after winking at this infraction of the law, derived a handsome income from changing their minds, and giving at intervals to the owners a hint that nothing but a substantial sum in cash would prevent them from making a complaint, the result of which would be an order requiring the removal of all steps projecting over the line. As the art of domestic architecture advanced in the city, the inducements for a liberal construction of the restrictions were multiplied. At one time, a fashion set in for copying the Boston device of "swell fronts"; and polygonal projections the whole height of the house began, at first timidly, but afterwards more boldly, to advance into the area space. The "stoop," too, which, at first, meant simply a flight of steps such as the people of Amsterdam and those of the older portions of Philadelphia and New York still find such delight in scrubbing, was assumed to include also some sort of shelter at the top, in the form of an iron porch, or of the richly-carved brown-stone porticos which still lend dignity to the mansions of Fifth Avenue. As this innovation was received without opposition, the "stoop" portico ventured farther, sometimes extending to the limit intended for steps alone. Naturally, such obvious violations of the intent of the law attracted attention, but, by keeping on good terms with the officials, no harm usually came of them beyond an occasional unimportant fine. In the mercantile districts, where sidewalk room was scanty, the construction of "porticos" was more hazardous; but, even there, a night or two of rapid work, favored by the amiable absence on important duty of the patrolmen from that portion of their beat, would generally put the structure beyond the reach of injunctions from neighboring owners. In this way, and in others, a large number of technical obstructions and nuisances have been created in New York, which will form one of the most difficult subjects with which an honest administration will have to deal. To allow them, by formal permission, to stand as they are will be to condone, in most cases, impudent violations of the law, while to order their removal will be to cause a very large amount of annoyance and expense to people who, in most cases, are quite innocent of any complicity in the original misdemeanor; and the third alternative, of leaving things as they are, would be the worst of all, as it would afford the politicians of the defeated party an opportunity

for extracting from people afraid of the enforcement of the law a large campaign fund, as well as influential support, by promises of immunity in case of their success two years hence.

**M**R. W. E. DAVIS read at a recent meeting of the English Architectural Association a paper on the practical side of finishing dwelling-houses which is worthy of attention from American as well as English architects. It is true that the practical architect is at present rather neglected in the profession, and among the newspaper reporters, but he has his uses, and even the artistic architect may not be any worse off for the possession of such knowledge as will enable him to explain to his clients the exact advantages and disadvantages of the departures from the usual methods which he or they contemplate. More than one American architect has been discarded by a wealthy and influential client, and another employed in his place, because he failed to explain that the mullioned windows, which his client and he found so attractive in Elizabethan mansions, could not be fitted with outside blinds, and were therefore unsuited to our hot summer climate; and we remember instances where vindictive housekeepers, remembering the consequences of some charming novelties in the construction of their houses, have made large subscriptions to churches or other public buildings in which they were interested, subject to the condition that their former friend and architect should have nothing to do with the structure. There is no reason, apart from the general incompatibility of beauty and utility, why pretty houses should be leaky and inconvenient, but there is no doubt that they very frequently are so; and it is quite as true now as it ever was that the successful man in the architectural, as well as other professions, is the one who understands best how to mix the useful with the agreeable; to introduce into his houses just enough picturesqueness to charm visitors, without making it difficult to wash the windows; to break up his roofs without interfering with the attic space, or introducing objectionable valleys, and to combine sunshine for winter, and shade for summer, in just the proper proportions.

**M**R. DAVIS mentions the common English problems with which the practical artistic architect has to deal, and among them we find many which are familiar here. For the casement-window, that charming pest, he can find no extenuation; and, like all other experienced architects, he thinks that it should only be used with a warning that it cannot be made tight if it opens inward, and cannot be used with blinds if it opens outward. In the same way, the picturesque windows which cannot be washed should be clearly explained to the housekeeper, and expressly approved by her, before they are incorporated in the contract-drawings. As to closets, the architect who has once received "a piece of her mind" from an employer of the gentle sex, soon after she has moved into a new house, built after the English fashion, without any, is never likely to forget them again; but the housekeeper will generally expect to be consulted in regard to their arrangement. In regard to plumbing, the case is different, housekeepers usually professing an inability to understand the details of so abstract a matter, which is only tempered by the right to visit on the luckless head of the architect any annoyances which may occur in connection with it. With a simple system, and a good plumber, nothing worse is likely to occur, perhaps, than the familiar difficulty in getting hot water in the bath-rooms when there is no fire in the range; but, as Mr. Davis observes, gas-stoves are now so extensively used for cooking in the summer that the architect will do well to inquire into the practice of the family in this respect, and, if necessary, make provision for a special water-heater, using either gas or coal, which can be connected with the plumbing system when the range is not in use. If such an arrangement is foreseen from the beginning, the cost of putting a small water-heater in the hot-water system is not serious. Whether it uses gas or coal, it should have a flue in the chimney to itself; but, if once properly arranged, the fire in it can be lighted at any time, without turning valves, or making any other changes in the pipes, and the water throughout the hot-water system of the house will then be heated by it. When the gas-stove is used for cooking, the water-heater will, alone, be sufficient for supplying all the hot water required; or, if the consumption of hot water is greater than the range can supply, the heater will make up the deficiency; and, in any house with more than two bath-rooms, it is extremely desirable to have such reinforcement, both for summer and winter use.

THE SENTIMENT OF DOMESTIC ARCHITECTURE.<sup>1</sup>

TWO young English architects, partners, have, within a few years, written or lectured very acceptably on the æsthetics of house-planning and furnishing; and their lectures and essays are now collected, with the addition of drawings and photographs as illustrations, into a very interesting book. We must confess that modern English art does not, as a rule, give us much pleasure, while modern English writing on art generally gives us still less; but in Messrs. Parker and Unwin's book<sup>2</sup> we find, almost for the first time in recent years, a clear conception of the sentiment which should inspire domestic architecture, and some extremely useful suggestions as to the way in which the disposition of plan and the details of construction may be made to assist in expressing that sentiment. We cannot say that all the ideas put forward appear to us likely to find wide acceptance, and the young architect who may feel himself inspired by the book will do well, before putting the suggestions of its authors into practice, to ascertain whether his clients share his views as to letting the interior surface of the walls of their rooms "go untouched in all the rich variety of color and tone, of light and shade, of the naked brickwork"; or whether they approve the notion of dining in the kitchen, either for the sake of living "a life of less artificiality" than that involved in having a dining-room, or on account of the æsthetic importance of having "bright pans and crockery" around them at their meals. At the same time, there

neither architects nor laymen have, as yet, any idea. Another suggestion which the book makes, or, rather, borrows from Morris, is that rooms should be designed with reference to the people who are to live in them. Architects of middle age will remember that William Morris introduced the fashion, then considered very eccentric, of putting olive-green wall-papers on dining-rooms, for the express purpose, as he said, of making ladies and children look pretty at meal-times, with their pink cheeks contrasting with the soft green background. A certain shade of dark-red is nearly as useful for this purpose, and suits a miscellaneous collection of dinner-dresses better than an olive-green does; while it might be possible still further to heighten the beauty of youthful complexions by introducing a little pink in the ceiling or carpet, just as a painter echoes, in other parts of his picture, the colors in the central group to which he wishes to give special value. It is obvious that the study of effects of this kind opens to architects an almost unlimited field, and, although sunshine, simplicity and honesty are the cardinal virtues of a house, as they are of those who live in the house, it is possible to add to these infinite graces of refinement and taste.

As to the way in which the refined charm which is, we may hope, to characterize the domestic architecture of the future can be attained, our authors give some excellent suggestions, mingled with some not quite so commendable. For example, to talk, as they do in speaking of furniture, about the "abominations of the Renaissance" sounds more like a bid for the applause of the Ruskinite



The Champ de Mars from the Eiffel Tower: Paris Exposition of 1900.

will always be some people capable of appreciating the charm of houses where, as Mr. Parker says, "there shall be space to carry on the business of life freely and with pleasure, with furniture made for use; rooms where a drop of water spilled is not fatal, where the life of a child is not made a burden to it by unnecessary restraint; plain, simple and ungarnished if necessary, but honest"; and a true artist will find special pleasure in serving such clients.

It must not be supposed, however, that the plain, simple and ungarnished house is an inexpensive one; the building speculators have not been trying for three thousand years to build cheaply without discovering that pretentious sham is less costly than honest simplicity; and Messrs. Parker and Unwin's plans and sketches, while they show charming interiors, would involve much more expense in execution than plans covering the same floor-space, but without the bays and ingles and cosy-corners which are so delightful, but so costly. However, these features should perhaps be considered as a part of the decoration of the house, taking the place, very advantageously, of rugs, marble mantelpieces and pictures. After all, no picture can give half so much pleasure in a house as a ray of sunshine entering every day, through an ingeniously contrived window, into a room which would otherwise be without it; and the study of such effects, in the spirit which Messrs. Parker and Unwin suggest, is, undoubtedly, capable of being carried to a perfection of which

sect, which has already nearly destroyed English art, than the sober expression of the judgment of trained architects. Mr. Ruskin thought that the Renaissance was "the architecture of pride," and perhaps it was, but a certain form of pride is a valuable quality in human beings, and the expression of it may be equally valuable in their dwellings. We must remember that during the Middle Ages, that period, as Mr. Ruskin and his disciples tell us, when "simple, natural beauty was the rule," there was hardly a rudiment of family life, as we now understand it; there was nothing like society, and, if it had not been for the terrors which the Church, the custodian of Roman tradition, held out before the superstitious of the community, it is doubtful whether any pretence of respect for law or sacraments, or anything but brute force, would have survived. During the fifteenth century, a change came over the manners of the people of Europe, as well as over their architecture. Lords and ladies began to think that there might be something better than taking their drunken sleep every night on the rush-straw floor of their castle hall, amid the débris of their feasts, and surrounded by their retainers, men-at-arms, grooms and dogs, and a taste for the decorum and delicacy of the Italians made its appearance north of the Alps. With Italian refinement came, naturally enough, the expression of it, in a revival of the architecture which has always best suited aristocratic distinction. It is true that the Renaissance, like the aristocratic feeling with which it was connected, fell into abuses. The vulgar and domineering among the rich found a Renaissance to suit their taste; but, at the same time, the true aristocrats, a class

<sup>1</sup> "The Art of Building a Home": A Collection of Lectures and Illustrations by Barry Parker and Raymond Unwin. Longmans, Green & Co. London, New York and Bombay. 1901. Price \$3.75.

for which there is still a place in the world, found in the Renaissance the expression of that gentle reserve which was perhaps necessary to the development of the nobler qualities of courtesy and high-bred thoughtfulness. No doubt, the detail in Renaissance architecture is not suggested by the material, and is, to a great extent, independent of the construction; but, in the same way, aristocratic manners are, necessarily, to a certain extent artificial, and what the cheap novel-writers call the "varnish" of society, which serves to repel impertinence, without forming any barrier between people of the same class, answers very well to the unconstructive and "useless" Renaissance pilasters and cornices which, being pure ornaments, serve frankly to mark the house on which they are employed as the dwelling of people accustomed to artificial graces. With us the ceremonious politeness of the eighteenth century has gone out of fashion, together with the architectural style of Versailles or the Trianons which accompanied it; but the traditions of aristocratic reserve, as well as of aristocratic courtesy and honor, still persist, and the architect who aids in perpetuating them by helping to express them in building renders a service to society, as well as to art. It may be observed, however, that modern aristocracy, bereft, in most countries, of its legal privileges, is a matter of natural character and education, rather than inheritance. Although ancestry, family tradition and social surroundings assist in developing the courageous readiness to sacrifice one's-self for others which we call the mark of high breeding, they cannot create it; and, while there are no viler curs on earth than many people who bear ancient names, there are many others of comparatively modest origin in whom, let us say, Louis the Ninth, the Chevalier Bayard, Sir Philip Sidney, Fra Cristoforo and Beatrice Cenci would find congenial spirits. It will, perhaps, be the work of modern society to reduce to their proper place those who are recreant to the obligations which birth and rank should impose, and to raise those capable of fulfilling the duties of rank to a position in which their capacity can be utilized; in this way substituting, by degrees, the aristocracy of the heart for that resting on external accidents. Such a change would bring with it a new architecture in conformity with it, the architecture of pride, perhaps, but of the pride of true aristocracy, which scorns to take advantage of the weakness or ignorance of another, or to shrink from any personal sacrifice by which another may be benefited. How the Renaissance, if that is still to be the style of aristocratic architecture, can be modified in conformity with the modifications in aristocratic sentiment, Messrs. Parker and Unwin suggest in some admirable observations on the study of detail in design. After making the assertion, which those familiar with French work of the sixteenth century will hardly consider justified, that the Renaissance is a purely imitative style, they say that the young architect, in whatever style he wishes to design, should begin, not by studying the history of ornament, or trying to compose in the Byzantine or Persian, or Greek or Gothic, or any other historical manner, but by sketching, drawing and painting natural forms. After these are thoroughly familiar, but not until then, he can conventionalize them, to adapt them to the restrictions of architectural symmetry, with success. He may, at this point, as Mr. Parker says, compare his work with that of other artists, of past ages, to see how they overcame the difficulties which he is beginning to encounter; but until he, like them, has saturated his mind with natural forms, his study of their conventionalization of such forms will teach him nothing, and will close his mind to the true source of beauty in every art. This is most excellent advice, which cannot be kept too constantly in mind, or followed too implicitly. With nature for a guide in art, as with simplicity and kindness in manners, it is impossible to go far wrong, whatever may be the language used for expression; and the palace and the cottage will be equally lovable if they are both made, by the aid of art, to indicate sincerity and courtesy, each in its proper sphere.

MOSQUITOES AND MALARIA.—The connection between mosquitoes and malaria was suspected as long ago as the time of Lancisi, the great Italian physician, who flourished at the end of the seventeenth and the beginning of the eighteenth century.—*Exchange.*

## DORCHESTER, ENGLAND.

THE four intersecting streets of the town, as well as its old name, *Dormoaraceaster* (the *castra* of the earlier *Dwrin* people), denote its Roman origin. It is encircled by its "walks," the original earthwork walls turned into *boulevards*, for all the world like a foreign town. Wareham, in the same county (Dorset), has even a more perfect series of "walls," they being still unlevelled and of a considerable height.

Dorchester figures in several of Mr. Thomas Hardy's books as *Casterbridge* ("*The Mayor of Casterbridge*" and "*The Trumpet Major*," that charming idyl of soldier-life). It is bounded on nearly all sides by an open tract of 3,400 acres, called Fordington Field, held under the Duchy of Cornwall in farthings, or fourthings—the quarter of a hide. The various holdings are known as a *whole-place*, a *half-place*, and a *farthing*. Fordington also is answerable for the

"vagabond" of the old rhyme who stole the bells of the neighboring Binden Abbey and set them up in the church of St. George. This has been terribly mutilated by the restorers, but the tympanum of the south door remains. The subject of the bas-relief is the vision of St. George before the Battle of Antioch. It is a most interesting example of early work, but, being within the porch and very dark, it was impossible to photograph it. The stone pulpit is dated 1592.

Clarendon, in his "*History of the Rebellion*," says that no place was more disaffected to the king than Dorchester. In 1642 it was fortified, but a year later surrendered, with all its arms and ammunition, to the Earl of Carnarvon. In 1644 the

Parliament next year. But a more notorious person held his court here in 1685—the brutal Judge Jeffreys, who lodged at a house in High West Street which is still existing. His chair may also be seen by the curious in the Town-hall.

St. Peter's Church has an interesting Perpendicular tower, but during the restoration of the church sad havoc was done to the tombs. One cross-legged knight is slipping off the window-sill of the south aisle, and another is banished behind the organ. Still worse, a very fine Jacobean canopied monument to Sir J. Williams, of Herrington, and his wife, 1628, has been erected against the east window of the north aisle, and quite in the dark. The two kneeling figures are under arched canopies facing each other.



St. George's, Fordington.



The House of Judge Jeffreys.

In the museum are some fine specimens of Roman mosaic pavement and a large number of fossils, the great treasure being the fore-paddle, nearly 7 feet long, of the *Pliosaurus macromerus*.

Maenbury, or Maumbury, Rings is a famous Roman amphitheatre, first brought to notice by Sir Christopher Wren: the oval measures

218' x 163'. It has terraced seats, now grass-grown, some 30 feet above the arena, capable of accommodating over 12,000 persons for the wild-beast battles. Up to 1767 it was a place of execution, and here in 1705 a woman named Mary Channing was strangled and then burned, for the murder of her husband, before an enormous crowd of 10,000 persons, who doubtless considered themselves far more civilized than, and in all ways superior to, the sanguinary Romans. Maiden Castle (*Mew Dun*, "the great hill") is one of the largest British camps. It is a perfect labyrinth of fosses and high entrenchments, occupying 120 acres. The *valla* measures 60 feet from the base to the apex. On one side are eight or nine distinct ramparts, and at the other there is a partially filled-up cave behind, to communicate with the river — probably the water-supply of the garrison. Mr. T. Hardy, in his "*Mayor of Casterbridge*," speaks of the hill as "varied in its protuberances, which from hereabouts have the animal aspect of warts, wens, knuckles, and hips . . . lying lifeless, and covered with a thin green cloth, which hides its substance while revealing its general contour." Although of Celtic origin, the Romans, no doubt, occupied it as a camp and city, and it is supposed to have been the capital of the *Durotriges*, the *Dunium* of Ptolemy. The Romans did not apply their own quadrangular system of entrenchment where they found sufficient works all ready to their hand; and they were not likely to have found many such forbidding fortifications as those of the "Hill of Strength."

From Dorchester several Roman roads diverge to Bath, Silchester, and other camps. The whole neighborhood is full of remains of Roman Britain. S. BEALE.

#### THE PRESIDENT ON FOREST PRESERVATION.

"PUBLIC opinion throughout the United States has moved steadily toward a just appreciation of the value of forests, whether planted or of natural growth. The great part played by them in the creation and maintenance of the national wealth is now more fully realized than ever before.

"Wise forest protection does not mean the withdrawal of forest resources, whether of wood, water or grass, from contributing their full share to the welfare of the people, but, on the contrary, gives the assurance of larger and more certain supplies. The fundamental idea of forestry is the perpetuation of forests by use. Forest protection is not an end of itself; it is a means to increase and sustain the resources of our country and the industries which depend upon them. The preservation of our forests is an imperative business necessity. We have come to see clearly that whatever destroys the forest, except to make way for agriculture, threatens our well-being.

"The practical usefulness of the national forest-reserves to the mining, grazing, irrigation and other interests of the regions in which the reserves lie has led to a widespread demand by the people of the West for their protection and extension. The forest-reserves will inevitably be of still greater use in the future than in the past. Additions should be made to them whenever practicable, and their usefulness should be increased by a thoroughly businesslike management.

"At present the protection of the forest-reserves rests with the General Land-office, the mapping and description of their timber with the United States Geological Survey, and the preparation of plans for their conservative use with the Bureau of Forestry, which is also charged with the general advancement of practical forestry in the United States. These various functions should be united in the Bureau of Forestry, to which they properly belong. The present diffusion of responsibility is bad from every standpoint. It prevents that effective cooperation between the Government and the men who utilize the resources of the reserves, without which the interests of both must suffer. The scientific bureaus generally should be put under the Department of Agriculture. The President should have by law the power of transferring lands for use as forest-reserves to the Department of Agriculture. He already has such power in the case of lands needed by the Departments of War and the Navy.

"The wise administration of the forest-reserves will be not less helpful to the interests which depend on water than to those which depend on wood and grass. The water-supply itself depends upon

the forest. In the arid region it is water, not land, which measures production. The western half of the United States would sustain a population greater than that of our whole country to-day if the waters that now run to waste were saved and used for irrigation. The forest and water problems are, perhaps, the most vital internal questions of the United States.

"Certain of the forest-reserves should also be made preserves for the wild forest creatures. All of the reserves should be better protected from fires. Many of them need special protection because of the great injury done by live-stock, above all by sheep. The increase in deer, elk and other animals in the Yellowstone Park shows what may be expected when other mountain forests are properly protected by law and properly guarded. Some of these areas have been so denuded of surface vegetation by overgrazing that the ground-breeding birds, including grouse and quail, and many mammals, including deer, have been exterminated or driven away. At the same time the water-storing capacity of the surface has been decreased or destroyed, thus promoting floods in times of rain and diminishing the flow of streams between rains.

"In cases where natural conditions have been restored for a few years, vegetation has again carpeted the ground, birds and deer are coming back, and hundreds of persons, especially from the immediate neighborhood, come each summer to enjoy the privilege of camping. Some, at least, of the forest-reserves should afford perpetual protection to the native fauna and flora, safe havens of refuge to our rapidly diminishing wild animals of the larger kinds, and free camping-grounds for the ever-increasing numbers of men and women who have learned to find rest, health and recreation in the splendid forests and flower-clad meadows of our mountains. The forest-reserves should be set apart forever for the use and benefit of our people as a whole, and not sacrificed to the shortsighted greed of a few." — *President Roosevelt's Annual Message.*

#### THE ART STUDENTS' LEAGUE OF NEW YORK.

A SPECIAL exhibition of sculpture, including works in clay, plaster, bronze and marble, opens at the rooms of the Art Students' League of New York, in the American Fine-Arts Building, 215 West 57th Street, on Tuesday, December 3, and continues until the evening of December 10. The purpose of the exhibition is to show the work of the instructors and students of the League School of Sculpture since its beginning in 1891. The exhibition will open on Tuesday evening with a private view. The reception committee for this evening include Mr. and Mrs. George Grey Barnard, Mr. and Mrs. Kenyon Cox, Mr. and Mrs. Augustus St. Gaudens, Mr. and Mrs. Edwin F. Elwell, Mr. and Mrs. H. Siddons Mowbray, Mr. John LaFarge, Mr. and Mrs. Daniel Chester French, Mr. and Mrs. C. R. Lamb, Mr. Robert F. Bloodgood, Miss Martha Jackson Cornwell, Mr. Eugene C. Cramer, Miss Carrie Gardner Helm, Mr. Arthur N. Fuller, Miss Susan M. Ketcham, Mr. B. N. Mitchill, Mr. C. Y. Turner, and Miss Ethel Jarvis Wheeler.

Among the sculptors represented in the collection are Augustus St. Gaudens, George Grey Barnard, Daniel Chester French, Winthrop Earle, Mrs. Edith Woodman Burroughs, Mrs. Mary T. Tonetti, Miss Caroline Peddle, A. Phimister Proctor, Miss Martha Jackson Cornwell, Adolph Weinmann, Miss Elsie Ward, C. Y. Harvey, Antonin Skodik, Jonathan Scott Hartley, George T. Brewster, F. Edwin Elwell, Abastonia Eberle, Edith B. Stevens, John Burdick, Frederick Macmonnies, Miss Gail Sherman, Miss Helen F. Mears, Miss Rumbold, and Miss Harriet F. Clark.

Among the works loaned were several bronzes by Frederick Macmonnies from the collection of Theodore B. Starr.

Several new features are just announced in the course of study at the Art Students' League. One of these is the arrangement by which students in the morning Antique class, of which Bryson Burroughs is instructor, are to have the opportunity of drawing from the living model during one week in each month. This season the students of the evening Antique and Life classes have the privilege of working from the costume model in the Illustration classes on Saturday evening.



St. Peter's, Dorchester.

Among the prizes and scholarships offered to students working in the League classes during the season of 1901-1902 are the Saltus Antique Prize of \$50 given by J. Sanford Saltus for the best drawing made in crayon or charcoal of a full-length figure from cast made by a student in the Antique class of 1901-1902; the Milhau Composition Prize of \$50 given by Miss Zella Milhau for the best composition made by a student in the Illustration classes; the Evans Prize of \$50 given by William T. Evans for the encouragement of the practical side of art; the Architectural Prize of \$50 given by an architect for the best historical architectural composition made by a student of the Architectural class. In addition to these, announcement has just been made that through the generosity of a member of the League, a prize of \$100 will be awarded for the best work done in the Men's and Women's Sculpture classes during the season of 1901-1902.

This season scholarships, consisting of one year's free tuition in the classes of the League, are to be awarded for the best work done in each of the following classes: Men's and Women's Life, Antique, Sculpture, Sketch, Illustration and classes of the summer school. These, with the school scholarships to be awarded this season, make a total of seventeen free scholarships.

A change will be made in the system of awarding scholarships for the season of 1901-1902. Heretofore scholarships have been offered to certain schools selected from those who have applied for the privilege. In future a competition will be held open to all art-schools and art-departments of colleges in the United States with the exception of those in New York City. Ten scholarships will be offered, five upon drawings from the antique and five from drawings from life. Not more than one scholarship in each of these classes will be awarded to any single art-school. The drawings submitted will be judged by a jury composed of the President and the corps of instructors of the League. The competition, which it is hoped will be a large and representative one, will be held in May, 1902. These scholarships will give the winners the privilege of free tuition in the classes of the League during the season of 1902-1903.

Travelling-exhibitions of work done in the League are to be arranged for during the season. The exhibition of 1901-1902 will be sent out in December and will be shown in cities in Connecticut, Massachusetts, Colorado, Virginia, Washington, California and other States.

The continuance of the classes of the League during the summer of 1900 proved so successful that it was decided to reopen the same classes again during the past summer, arranging so that the school should remain open continuously throughout the year. Practically the same arrangements of classes are to be carried out during the season of 1902.

The summer term gives an opportunity to teachers who wish to continue their academic art-studies or to take up new branches, and also to students whose work makes it impossible for them to take advantage of the winter classes.

During next summer, classes will be in session daily from 9 A. M. to 4 P. M. during June, July, August and September. Criticisms are given on Tuesday and Friday. The course of study will include drawing from life and cast, painting and composition with life or costume models four hours daily. There will be a Still-Life painting class working in all mediums, oil, water color, etc. In the Illustration, Composition and Painting classes, instruction in practical technical methods for designing and for book, magazine or newspaper illustrations in all mediums, oil, water-color, pastel, pen-and-ink, gouache, etching and dry-point.

The special Saturday classes which have been formed to meet the requirements of teachers and scholars wishing to study drawing and painting, and who are unable to attend during the other days of the week, are very well attended this season. Some of these students are young children just beginning the study of art; others are teachers in public or private schools who are pursuing special branches in water-color, designing, illustrating or drawing in the Life classes.

While the membership of the League is limited to artists and students who intend to make art a profession, the classes are open to all who show the required proficiency. Although a high standard of work is maintained in the Life and Painting classes, no examination or previous instruction in drawing is required of applicants for admission to the morning, afternoon or evening Antique classes, or the junior Sketch classes. Students are admitted to the other classes at once during any month of the year upon submitting examples of work indicating that they have attained the required standard.

There is to be an exhibition of school-work by the students of the League, which will be open from Saturday, November 30, until Monday, December 2, Sunday included. This collection will include not only school-work of the students, but studies, sketches, compositions, illustrations, designs or paintings made outside the school. This exhibition is open to all interested in the work of the school.

#### THE TYRANNY OF ENGLISH TRADE-UNIONS.

I HAVE already spoken of the immense hold that trades-unionism has secured in Great Britain. The publication of these returns has been followed up by a well-planned attack, led by the *Times*, upon the whole trades-union position. Two articles have recently appeared in what is evidently intended to be a comprehensive survey, and although the trade-unionist is able to discover a strong capitalist

bias running through the articles, the facts they embody have made considerable impression upon public opinion. It is only necessary to quote a few of these facts to make their significance clear.

In the case of the building-trade it is shown that whereas thirty years ago a bricklayer would lay 1,000 or 1,200 bricks in a day, and in America the figure is said to be even higher, trades-union laws decree that in England the maximum shall be 400 bricks, and if he works for the London County Council — that is, for the ratepayers — the laborer must not lay more than 330. So the *Times* correspondent alleges, and Lord Welby, as Chairman of the Finance Committee of the London County Council, has undertaken a full investigation and explanation. Yet, as is shown, these workmen receive the highest of current wages, a rate very greatly in excess of that paid when 1,000 bricks were laid per day. One of the union rules, binding the bricklayer under the gravest penalties, is quoted by the *Daily Mail* from a bricklayer's laborer's card, and reads thus: —

"Rule 5. You are strictly cautioned — that is, for the ratepayers by doing double the work you are required, and causing others to do the same, in order to gain a smile from your master. Such foolhardy and deceitful actions leave a great number of good members out of employment the year round. Certain individuals have been guilty who will be expelled if they do not refrain."

Not dissimilar methods of restriction of output are shown by the *Times* correspondent to prevail in the engineering, boiler-making, and ship-building industries. In the case of the boiler-makers, there is seen the old familiar resentment of new tools and machines such as are now universal in the United States; and, even where the use of the machines is agreed to, "the output will be restricted to the same amount as would be done by hand, the result being that one man in three will have nothing to do but watch the other two do the work. In the United States the use of these very machines enables the ship-builders to effect a saving of from 30 to 60 per cent in the cost of labor. Here, owing to the restrictions imposed, there will be no saving in them at all." And, it might be added, no expansion of business such as would increase the number of the employed, and at the same time enable the employer to enlarge his share of the new business of the world, which, failing him, is now going in larger proportion to American and German rivals.

The printing-trade, like most other branches of British industry, is also permeated with the idea that with a restricted output there must be more work to go round. A bookbinder who is printing for you a cloth book-cover in several colors will not (it is related) — indeed, dare not — go on to work off a few hundred copies of the same design in the same colors on paper for poster use. The taking down and restarting of the job elsewhere is a source of very considerable delay and expense to you; but what matter? Is not the one a bookbinder's business, and the other a printer's? and would it not, argues the union, simplify and lessen labor were the one man to go on and do both jobs while his hand was on the machine? A typical case is taken from the ship-building trade. The deck-planking is 1½ inches thick; it is the carpenter's work; let it pass one hair's-breadth beyond the 1½ inch, and the employer must clear out the carpenters and bring in the joiners, be the additional cost and delay and inconvenience what they may. Equally fine and arbitrary distinctions appear when it comes to a question of roofing houses with tiles, until, as one journal puts it, it is evident that the trades-unions have modelled their regulations upon War-Office principles.

Yet one other case may be quoted on the authority of a Manchester man. "I know," he says, "of a case in Manchester where an employer purchased a machine-tool from an American which was guaranteed to effect a saving of 75 per cent on the cost of production of a certain article. The tool was fixed and started and it did not come up to expectations. The seller came and demonstrated that it would do the work in the guaranteed time. After a few weeks had elapsed the employer wrote the American: 'The machine is doing no better than when first fixed.' The American called at the works, and said: 'Your foreman will not permit it to be worked properly.' 'What evidence have you of this?' 'Well,' said the American, 'I have been working (under an assumed name) in your shop as a mechanic for two or three weeks on my own machine, and I was ordered by the foreman to restrict the output of it to one-fourth of what it is capable of doing.' I could give many other cases. I have had labor-saving tools wilfully damaged and interfered with in every possible way in my own engineering-works" — so says the Manchester employer.

When it comes to remedies, then the *Times* and other capitalist organs are somewhat at a loss. Of course, the engineers' strike of five years ago proved that courageous employers acting in coöperation may defeat trades-unionism in its more aggressive moods, but comparatively few employers are bold enough, nor have they the means, to undertake so gigantic a fight. No help is to be looked for from Parliament, for Ministers, like the humble M. P., cannot afford to act in hostility towards so compact a fighting-machine as trades-unionism has become. There remains little else to be done but to appeal to the trades-unionists themselves to observe a more reasonable attitude in the interests of Britain's industrial position — a position in which they are obviously as much concerned as is the employer. The *Times's* articles are directing attention to some of the most salient abuses of the trades-union system, and while only the most benighted capitalists would attempt to deny the great benefits that trades-unionism confers upon the individual worker, there is a strong and growing feeling that the time has come to check unwarrantable excesses. — P. A. H. in N. Y. *Evening Post*.

THE MENTAL ATMOSPHERE OF BOSTON.



HAT gives to Boston its peculiar mental atmosphere, with which the visitor, though a wayfaring man, sojourning there but a few days, even a few hours, cannot fail to be impressed, especially if he be a visitor from New York?

That there is such an atmosphere cannot be denied. It pervades the streets and those who go up and down in them. The forms of the buildings, be they public or private, official, religious, residential, or business buildings, betray it. They are more sober than in New York. They seem more considered and thought out, and have a distinct character of their own, both individual and in "ensemble." There is a remarkable number of them clothed with associations, not merely the greater and more public, but the lesser. A striking proportion of them are old, but not decayed or neglected, and the more recent are constructed to last, and in their turn to put on the like raiment of associations. Whether on the heights of Beacon Street or along the noble plain traversed by Commonwealth Avenue, or down in the heart of the crowded and narrow streets of the old city, there is everywhere perceptible to the New Yorker this expression of stability and permanence and of the deliberate thought that plans for lasting things.

The structures and sites that intentionally invite attention are most fortunately distributed. The State House, from its commanding hill, bears above its broad and harmonious façade with much dignity the gilded dome that in other conditions might seem garish. The buildings about Copley Square, the tranquil front of the Renaissance Library, the majestic pile of Trinity Church, the Norman fortress occupied by a grocery firm, even the uneasy colors of the Museum, are grouped about a space so ample and so bounded that the vision is never fretted or tired how often soever it turns from one to another. And wherever one goes, the evidences are constant of a mental disposition affectionate and cherishing toward things that are old or fine and worthy to last. One is constantly coming upon statues, fountains, tablets. Of the works of art, whether commemorative or decorative, there are not many that in themselves are superior to the monotonous level of other cities, excepting always the superb Shaw Memorial, than which there is nothing finer in any city in any land with which we are familiar. It is not the artistic element that appeals to the visitor, but the spirit in which the monuments are erected and disposed in the public places. And it is notable that these monuments are by no means attractive solely to the visitors, as in many a European town, but form a considerable part in the daily interest of the people of the city. These, indeed, as they pass and linger, are as distinct a feature of the charm of the city as are the objects that attract them.

It is hardly too much to say that the objects referred to are about the only things that induce the denizens of Boston to linger at all, especially the women. We have a notion that New York is energetic, but its people in the streets are idlers compared to those of Boston. The latter do not hurry particularly. On the contrary, their usual gait is active and steady, but not swift. Its characteristic is what Dr. Paxon, of Princeton, once defined as the aspiration for

ultimate arrival. This is more noteworthy in the women than in the men, perhaps because the contrast with New York is more marked in their case. There is nothing feverish in their expression or manner, and no detectable trace of the severity, not to say sourness, with which the belated "comic" papers charge them. Their air is one of entire cheerfulness and gentle content, but they look more interested, and more interesting, than their sisters of like station in life in many other towns. Of course such generalizations are defective and hazardous, but there is an undoubted basis for them.

Probably, in a general way, it is safe to infer that the mental atmosphere of which Boston gives evidence to a visitor is due to heredity, size and climate, which causes work with and for each other. Roughly speaking, the men and women who came in the

early times gave the stamp that their descendants have inherited, and which those who have been joined to them have, more or less completely and willingly, adopted. Then the city has been in a sense protected by its climate, which, often most delightful, has fatal periods of great and desolating severity; this has contributed to the relatively slow growth of population, and made a certain assimilation more practicable. With all the additions from the surrounding country — which have so intimately been incorporated that the popular pleasantry that designates them as "sub-hubs" is not without its truth — Boston has still but one-fifth the population of Greater New York. Such a rate of growth is consistent with a vital unity, a real corporate character, a civic spirit in which common pride and respect for standards held in common and held half unconsciously unite for energy and persistence. Whatever the causes, it cannot be questioned that there is an individuality in Boston which few other cities possess, and though we New



The Chateau d'Eau: Paris Exposition, 1900.

Yorkers like to have our inexpensive sport with it, it is an individuality of which those who contribute to it and share it have no reason to be ashamed. — *N. Y. Times Saturday Review.*



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

DETAIL OF THE SOLDIERS' AND SAILORS' MONUMENT, BROOKLYN, N. Y.: TWO PLATES. MR. J. H. DUNCAN, ARCHITECT, AND MR. FREDERICK W. MACMONNIES, SCULPTOR.

A COMPETITIVE DESIGN FOR THE CARNEGIE LIBRARY, MONTGOMERY, ALA. MESSRS. BURNETT, HAYNES & BURNETT, ARCHITECTS, ST. LOUIS, MO.

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

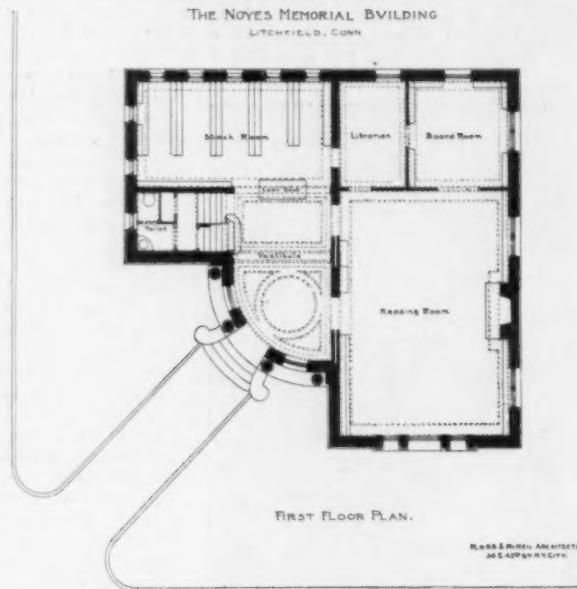
DETAILS FROM THE GARE DE LYON, PARIS, FRANCE. This plate is copied from *La Construction Moderne.*

## [Additional illustrations in the International Edition.]

DETAIL OF THE "GERALDINE," EAST 16TH ST., NEW YORK, N. Y.  
MR. ALFRED ZUCKER, ARCHITECT, NEW YORK, N. Y.

THE SOLDIERS' AND SAILORS' MONUMENT, BROOKLYN, N. Y.  
MR. J. H. DUNCAN, ARCHITECT; MR. FREDERICK W. MAC-MONNIES, SCULPTOR.

THE NOYES MEMORIAL BUILDING, LITCHFIELD, CONN. MESSRS.  
ROSS & McNEIL, ARCHITECTS.



THE building is of pressed-brick with limestone trimmings. Construction is fireproof throughout; steel beams and brick arches; mosaic and "terrazzo" floors. Cost, including heating and shelving complete, was \$20,000.

HISTORICAL ROOM IN THE SAME BUILDING.—READING-ROOM IN THE SAME BUILDING.

ORLEANS, FRANCE: HOUSE OF DIANE DE POITIERS; ENTRANCE TO THE HÔTEL DE VILLE.

FRENCH CATHEDRALS: LIMOGES; ANGOULEME.



DETAILS AND THE REVIVAL OF ARTISTIC SHOP SIGNS.—Edouard Detaille, the eminent military painter, backed by a group of well-known Parisian artists, has submitted to M. Lépine, the Prefect of Police, a plan which, if adopted by the Municipal Council, will add greatly to the beauty of the city. M. Detaille's project consists in establishing prizes for the most artistic street-signs for shops, restaurants and taverns, and causing a revival of the famous iron or wooden signs which were obligatory in Paris during the sixteenth century, and which became optional during the reign of Louis XIV, when the decree for naming the streets rendered the signboards over shops unnecessary as topographical landmarks. M. Detaille, in conversation, recently expressed himself enthusiastically in regard to his plan for beautifying Paris, and inquired whether any similar project had ever been considered by the municipal governments of New York and Chicago. He expressed his intention of designing and painting signs, which, he said, was rather the work of the sculptor than the painter. Among many instances cited by M. Detaille of eminent artists who did not consider it beneath their dignity occasionally to devote themselves to this handwork were Watteau, who painted a famous sign for a milliner's shop near Pont Notre Dame; Gericault, who painted a magnificent white horse for a hanging sign for an inn of that name, and Carolus Duran, one of whose cleverest paintings is a signboard for a fencing-master's establishment, exhibited at the Salon last spring. M. Detaille feels highly encouraged by the approval already met with. His idea seems to captivate Parisian taste, and he does not hesitate to predict that it will be adopted by the Prefect of Police and by the municipal authorities.—*N. Y. Tribune.*

A CASE OF SUCCESSFUL MUNICIPAL OWNERSHIP.—The annual report of the Board of Electrical Commissioners of South Norwalk, the only city in Connecticut which both owns and operates a municipal lighting-plant, shows that during the fiscal year ending October 12, gross profits of \$7,496 were realized from the operation of the plant. Street and commercial lighting and commercial power are supplied. The commercial service has practically doubled during the year, and the commissioners advise that an enlargement of the plant will shortly be necessary. The success of municipal ownership, as indicated by South Norwalk's experience of nine years, is affirmed, and it is contended that the rates are much lower than they would be under a system of private control.—*Exchange.*

A KATE GREENAWAY MEMORIAL.—A committee has been formed to raise funds for a memorial to the late Kate Greenaway, the artist.—*Exchange.*

COMPOSITION OF NERNST GLOWERS.—An article recently published in *Lightning* gives the following interesting facts in regard to Nernst glowers: "With earths like lime, magnesia, zirconia, and thoria, the greater the purity the greater the conductivity at high temperatures, but by adding small quantities of certain oxides, such as those of chromium, manganese, uranium, titanium, and niobium, glow-bodies are produced which are more stable, can be excited at a lower temperature, and have a high illuminating power. A suitable mixture is: Zirconia, 90; magnesia, 5; lime, 4; sesquioxide of manganese, 1; made into a paste with syrup and squirted into rods. The Nernst Electric-light Company, Westminster, English patent 13,839, 1900, hardens its filaments by baking at a high temperature in an electric-arc between carbons separated about three-eighths of an inch. The radiating surface is increased by making the cross-section elliptical or flat, with rounded or square edges. Another form is ribbed, with or without a central hole."

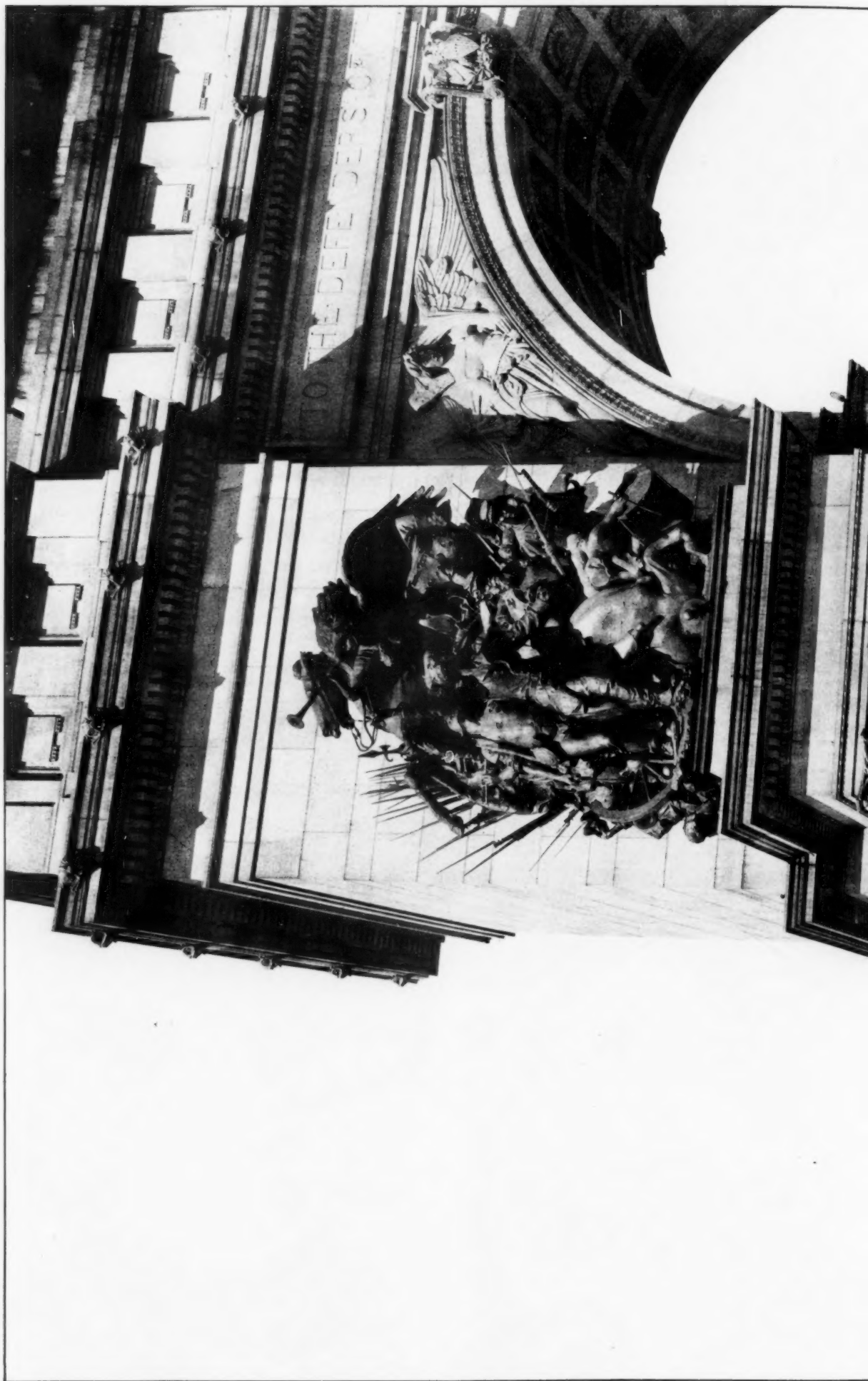
THE FINANCIAL STATUS OF THE PAN-AMERICAN EXHIBITION.—The directors of the Pan-American Exposition Company and a number of creditors conferred November 14 and listened to the reading of the financial report of the Company. The report shows the total liabilities of the Company at present to be \$3,326,114.69 net, assuming that the assets of \$146,454.15 are collectable at face. The Company owes for operating-expenses and on construction-work \$577,945.73, which item is, of course, embodied in the figures of total liabilities. An interesting fact shown by the report is the total cost to the Exposition Company of the Exposition. The cost, according to the report, was \$8,860,757.20. The total receipts from admissions after May 1 were \$2,467,066.58, and the receipts from concessions were \$3,011,522.79. The balance due to first-mortgage bondholders is \$174,979 and to the second-mortgage bondholders \$500,000, both of which are included in the liabilities as given.—*Scientific American.*

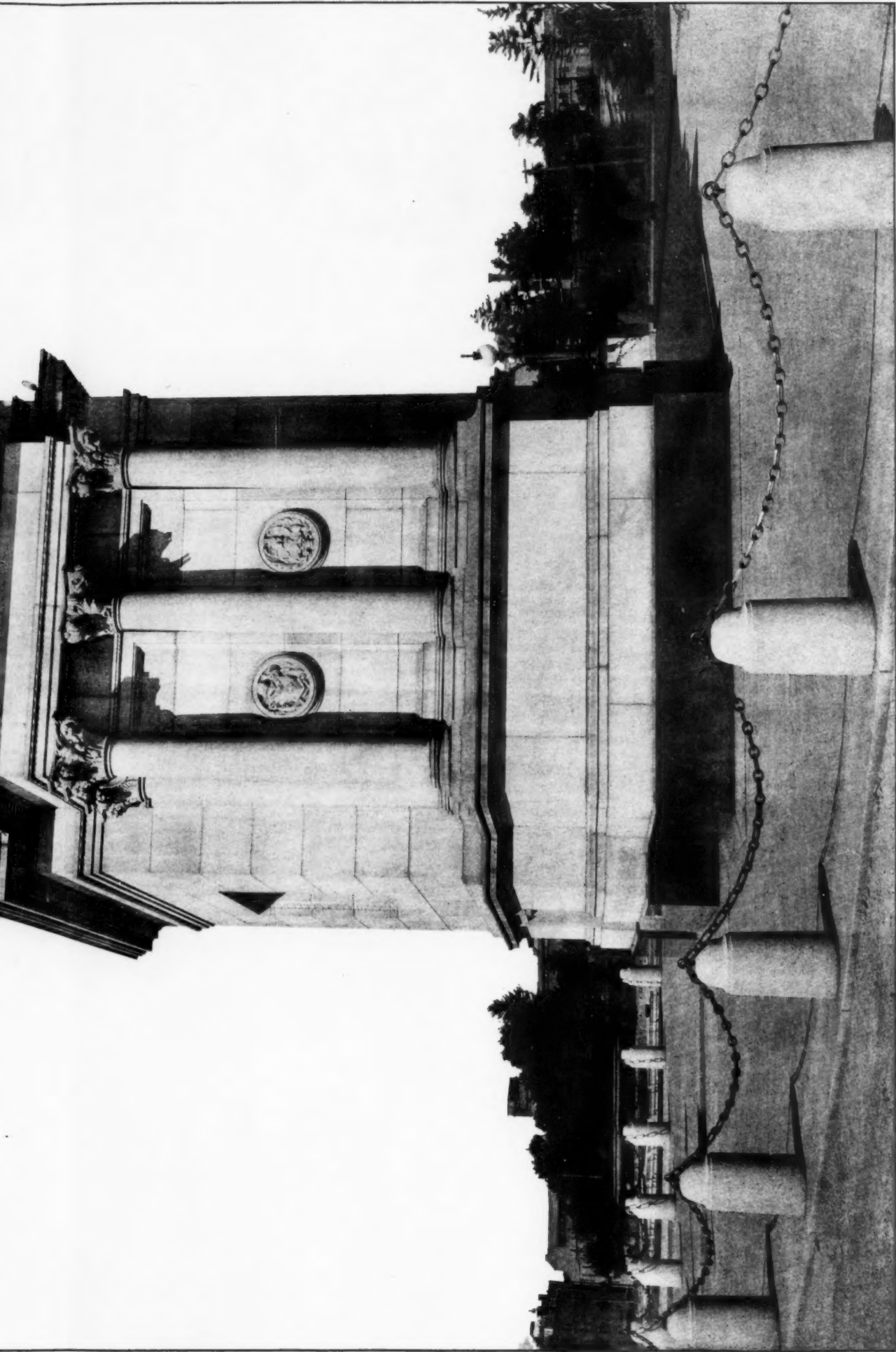
LONDON BOOKSELLERS.—It is curious how badly the booksellers of London have always fared, considering that London must contain the largest reading public in the world. In St. Paul's Churchyard, where the booksellers formed part of the immense population for whom 200 gallons of beer were provided daily, they were driven out by the Reformation, and had to take refuge in Paternoster Row; then came the Great Fire, which destroyed St. Faith's Church and all the books which had been placed within it for safety. The fire also destroyed the houses on London Bridge, where for generations the booksellers had exposed their wares to catch the eye of the countryman who led his pack-horse into the city. Only the other day we saw Holywell Street and its bookstalls go down before the advance of the municipal reformer; and now they are to be driven off the pavement of Charing Cross Road. He who runs will soon be quite unable to read.—*London Chronicle.*

TO COOL THE AIR AT THE ST. LOUIS FAIR.—It is proposed to try an experiment in the way of cooling the air at the St. Louis Fair grounds, the proposition being to reduce the high temperature during the summer months by drawing down cool currents from an altitude 800 to 1,000 feet above the ground, and flooding the grounds with air from 10 to 15 degrees cooler than the surface temperature. The plan comprehends the construction of an aerial tower or stand-pipe of the aforesaid height, with lower termination about 50 feet above the ground, where large fans or blowers are attached that will draw a current downward at the rate of 20 or 30 miles an hour, equivalent to a pumping-capacity of half a million cubic feet of air per minute. This volume of air will cover an acre 10 feet deep—in an hour 60 acres, and in six hours 360 acres. It is expected that calefaction through the action of the sun's rays will be counterbalanced and neutralized by the constancy of the current during the daytime. After sundown the temperature, it is claimed, can be held below 80 degrees Fahr. The fans are to be started at 4 A. M., when the air is coolest. By ten o'clock the buildings and grounds would be filled with fresh air and so maintained during the day.—*N. Y. Evening Post.*

LONDON-BRIGHTON HIGH-SPEED ROAD.—The *London Daily News* the other day contained a long interview with Mr. Cheesewright on the scheme for constructing a high-speed electric-railway between London and Brighton. The system proposed to be adopted is not described, but it is stated that the monorail, of which so much has been heard of late, is not to be used, and that each car will carry its own motor. A speed of 90 miles an hour is aimed at, so that the whole journey of 47 miles will only occupy thirty-two minutes. This high speed is to be made possible partly by having no intermediate stations, and partly by avoiding all curves and gradients by tunnelling wherever hills occur along the route. In addition to the benefit conferred by a half-hourly service of express-trains, the public is to be attracted by the cheapness of the fares. The bill will, without doubt, meet with serious opposition in Parliament from the London, Brighton and South Coast Railway, but we wish the promoters of the scheme every success. We feel sure that the public have only to be taught by a few striking examples the immense improvements that electric traction can effect in railway travelling to insist upon its adoption in suitable cases by our existing steam-railroads. It is only by healthy competition of the kind that such railways as this will introduce that it will ever be possible to eradicate the often very primitive ideas of comfort and convenience that seem to be possessed by the great railway monopolists; and we hope and believe that it will be the function of electric traction to produce as great a change in the comfort of travelling in the present century as did steam-railways in that which has just closed.

s  
e  
n  
f  
A  
7  
e  
y  
r  
y  
a  
n  
,  
e  
y  
g  
t  
o  
e  
e  
o-  
t

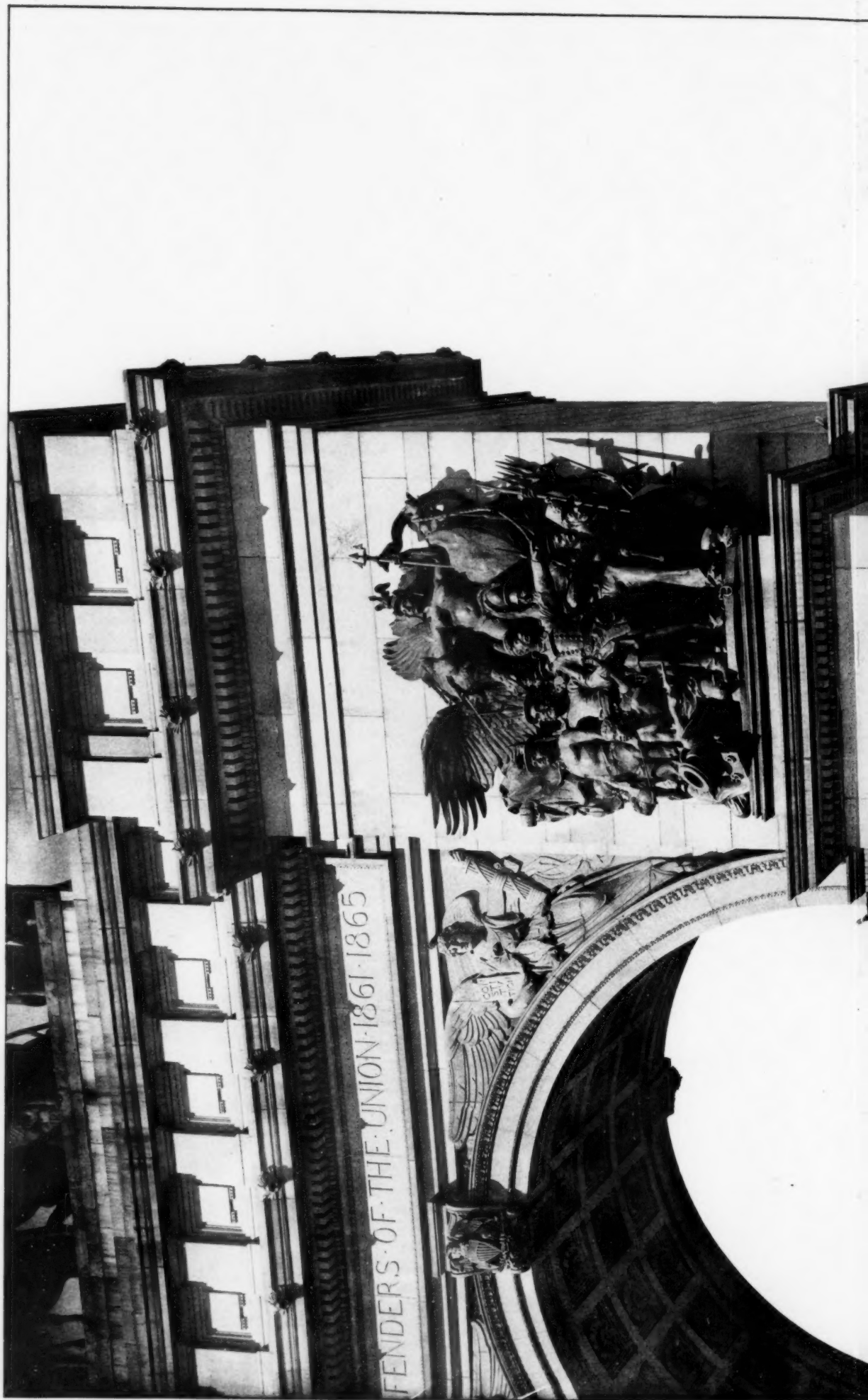


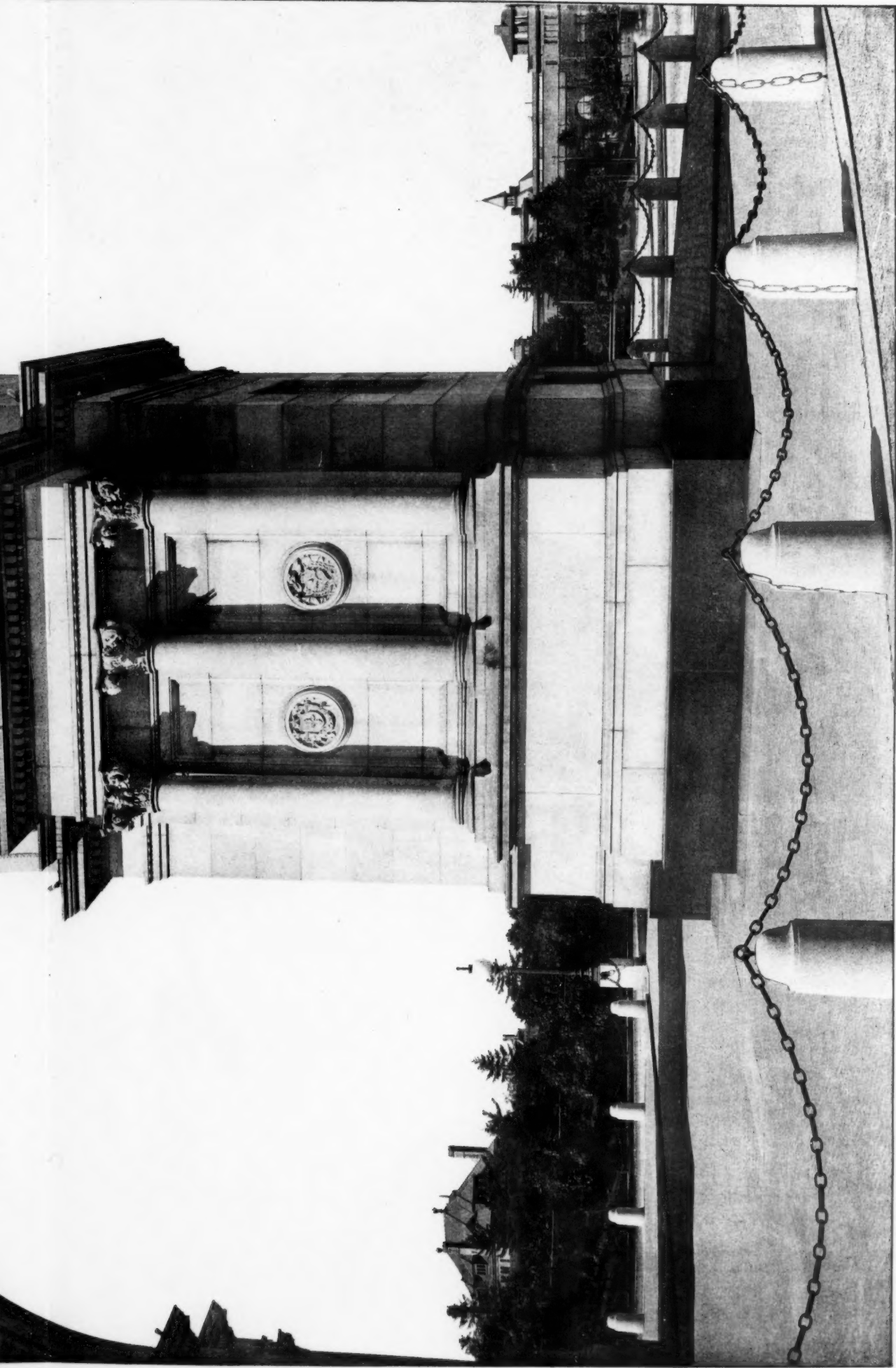


Copyright 1901 by The American Architect and Building News Co.

DETAILS OF THE SOLDIERS' AND SAILORS' MONUMENT, BROOKLYN, N. Y.  
JOHN H. DUNCAN, ARCHITECT. FREDERICK W. MACMONNIES, SCULPTOR.

LIBRARY OF THE AMERICAN ARCHITECT

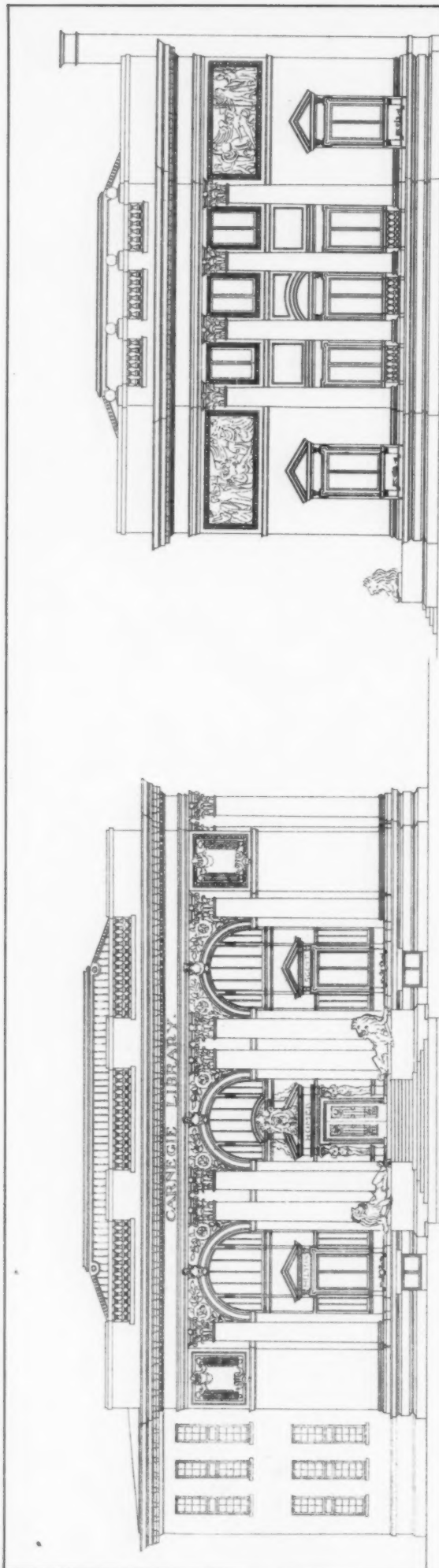




REPRODUCED BY THE AMERICAN ARCHITECTURE AND BUILDING PRESS CO.

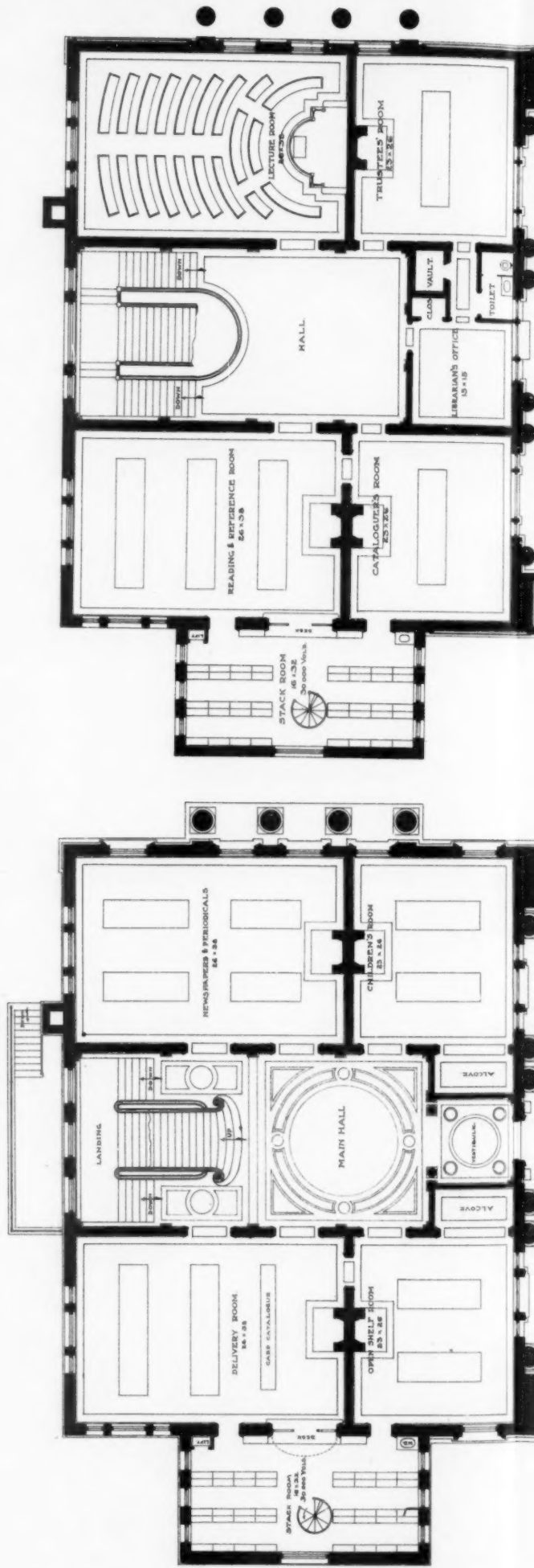
REPRODUCED BY THE AMERICAN ARCHITECTURE AND BUILDING PRESS CO.

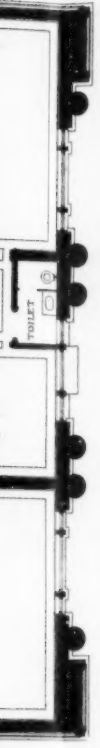
DETAILS OF THE SOLDIERS' AND SAILORS' MONUMENT, BROOKLYN, N. Y.  
JOHN H. DUNCAN, ARCHITECT. FREDERICK W. MACMONNIES, SCULPTOR.



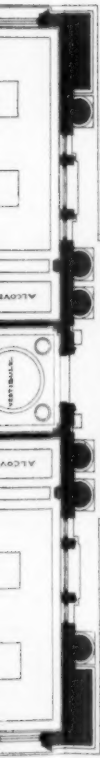
WEST ELEVATION.

SOUTH ELEVATION.

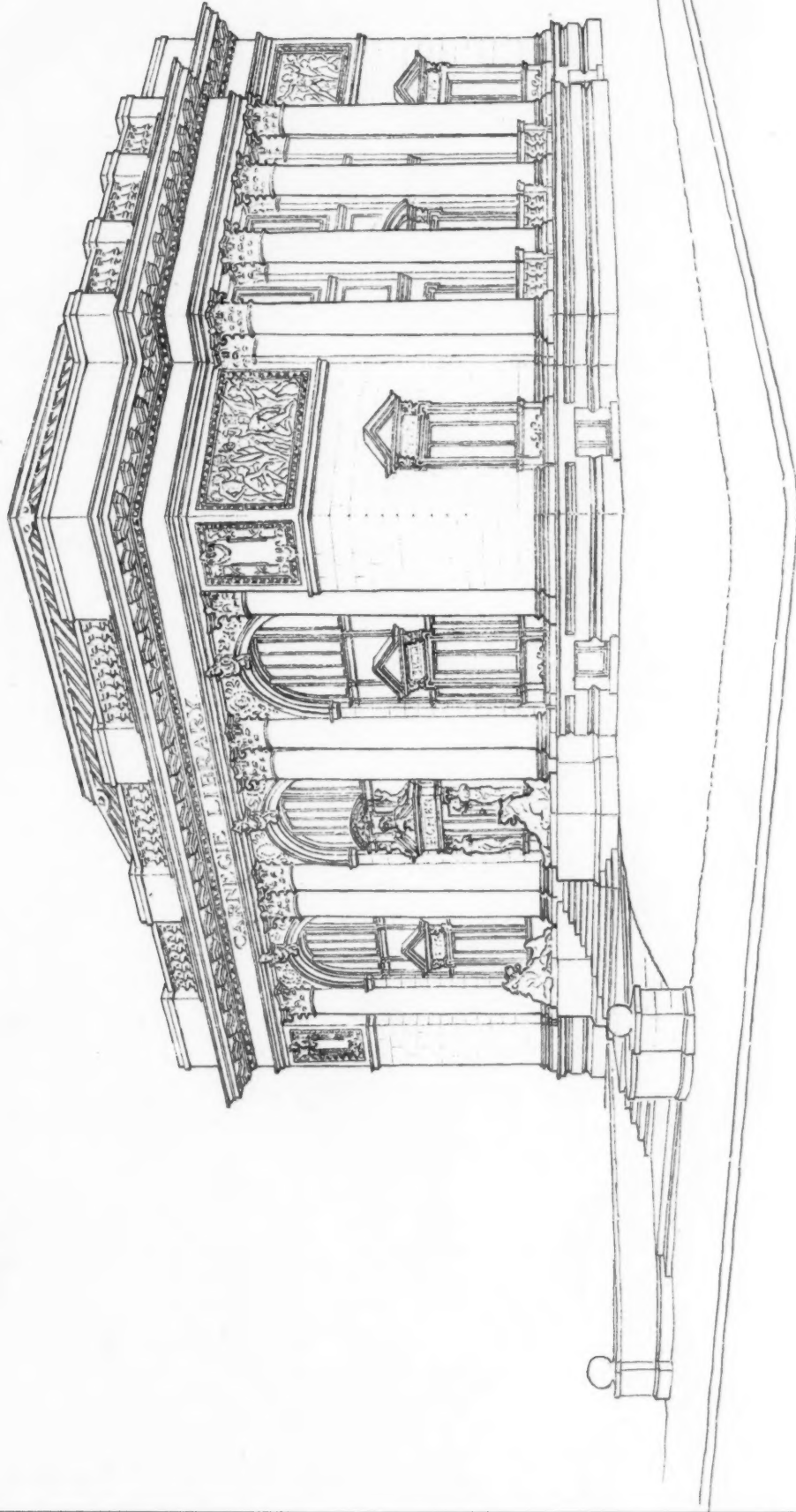




SECOND-FLOOR PLAN.



FIRST-STORY PLAN.



COURTESY: THE AMERICAN ARCHITECTURE AND INTERIOR DESIGN CO.

REPRODUCED BY THE AMERICAN ARCHITECTURE AND INTERIOR DESIGN CO.

A COMPETITIVE DESIGN FOR THE CARNEGIE LIBRARY, MONTGOMERY, ALA.  
BARNETT, HAYNES & BARNETT, ARCHITECTS.

The American Architect  
Dec. 14, 1901.  
No. 1355.



# THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

VOL. LXXIV. — No. 1355.] SATURDAY, DECEMBER 14, 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 BUEL 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.

### ATELIER MASQUERAY

123 EAST 23D STREET, NEW YORK CITY  
9th Year

Architecture and Decorative Composition  
Rendering

MONSIEUR E. L. MASQUERAY

## WHITTIER MACHINE CO.,

PASSENGER AND FREIGHT  
ELEVATORS.

53 STATE STREET - - - BOSTON.

## LOOMIS FILTERS.

ESTABLISHED 1890.

Improved System. Simple and Effective.

LOOMIS-MANNING FILTER CO.,

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

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.

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:

"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 1890. NEW YORK

## When you see our trade-mark



On a can of Varnish, it invariably indicates the best varnish of that grade that can be produced by careful selection of materials and the experience of seventy-five years in the manufacture of

HIGH GRADE VARNISHES

Write for Catalogue.

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,  
199 Washington St.

NEW YORK,  
76 Beckman St.

CHICAGO,  
137 Lake St.

FACTORY,  
CLINTON, MASS.

**FITCH**  
**SASH LOCKS**   
ADJUST THE SASHES.  
PREVENT RATTLE AND SECURELY Lock the Window.  
Sold by Hardware Dealers Everywhere.  
CATALOGUE AND 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 seventeenth 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.

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 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.*



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 FITTINGS ESTABLISHED 1855

"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.

THE LIBRARY of CONGRESS,

WASHINGTON, D. C. Architects: Smithmyer & Pelz: P. J. Pelz; E. P. Casey. Twenty Gelatine Plates, in Portfolio, 14" x 16 1/2". PRICE - - \$5.00. AMERICAN ARCHITECT AND BUILDING NEWS CO

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. F. A. Cincinnati.

Topographical Index of Advertisers.

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

Table listing advertisers by state: CONNECTICUT, MASSACHUSETTS, NEW YORK, OHIO, ILLINOIS, MICHIGAN, PENNSYLVANIA, MARYLAND, NEW JERSEY, VERMONT, etc.

"The Chloride Accumulator" In Electric Lighting Installations Saves coal and labor; reduces engine hours; increases reliability of service

SALES OFFICES: NEW YORK: 100 Broadway; BOSTON: 80 State Street; CHICAGO: Marquette Building; BALTIMORE: Equitable Bldg.; ST. LOUIS: Wainwright Bldg.; SAN FRANCISCO: Nevada Bldg. THE ELECTRIC STORAGE BATTERY CO. Allegheny Avenue and 19th Street, Philadelphia

# "The Georgian Period"

THIS publication, which now consists of eight Parts, contains more than a hundred pages of text, illustrated by over three hundred text-cuts, and two hundred and ninety-seven full-page plates, of which one-third are gelatine or half-tone prints. It is in truth a work of superior excellence and great usefulness.

The matter already illustrated may in small part be classified thus:

## PUBLIC BUILDINGS

City Hall, New York, N. Y.	Date	1803-12
Old State House, Boston, Mass.	"	1748
Pennsylvania Hospital, Philadelphia, Pa.	"	1755
Carpenters' Hall, Philadelphia, Pa.	"	1770
Independence Hall, Philadelphia, Pa.	"	1729
Faneuil Hall, Boston, Mass.	"	1741
and others.		

## CHURCHES

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

## IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date	1636
Royall Mansion, Dedham, Mass.	"	1737
Philipse Manor House, Yonkers, N. Y.	"	1745
Tudor Place, Georgetown, D. C.	"	179-
Mappa House, Trenton, N. Y.	"	1809
Woodlawn, Va.	"	1799
Mount Vernon, Va.	"	1743
and others.		

Incidentally there are shown special measured drawings or large views of the following features and details:

Porches and Doorways	67	Subjects
Staircases	21	"
Mantelpieces	81	"
Pulpits	6	"
Fanlights	60	"

In addition to the subjects enumerated above there is a large quantity of measured and detailed drawings of Cornices, Ironwork, Gateposts, Windows, Interior Finish, Ceiling Decoration, Capitals, etc., together with elevational and sectional views of entire buildings.

AMERICAN ARCHITECT & BUILDING NEWS CO., Publishers



RESIDENCE OF MR. A. B. PROAL, MONMOUTH BEACH, N. J.  
CHARLES W. ROMEYN, ARCHITECT, N. Y.

## Cabot's Shingle Stains

Artistic  
Economical  
Reliable

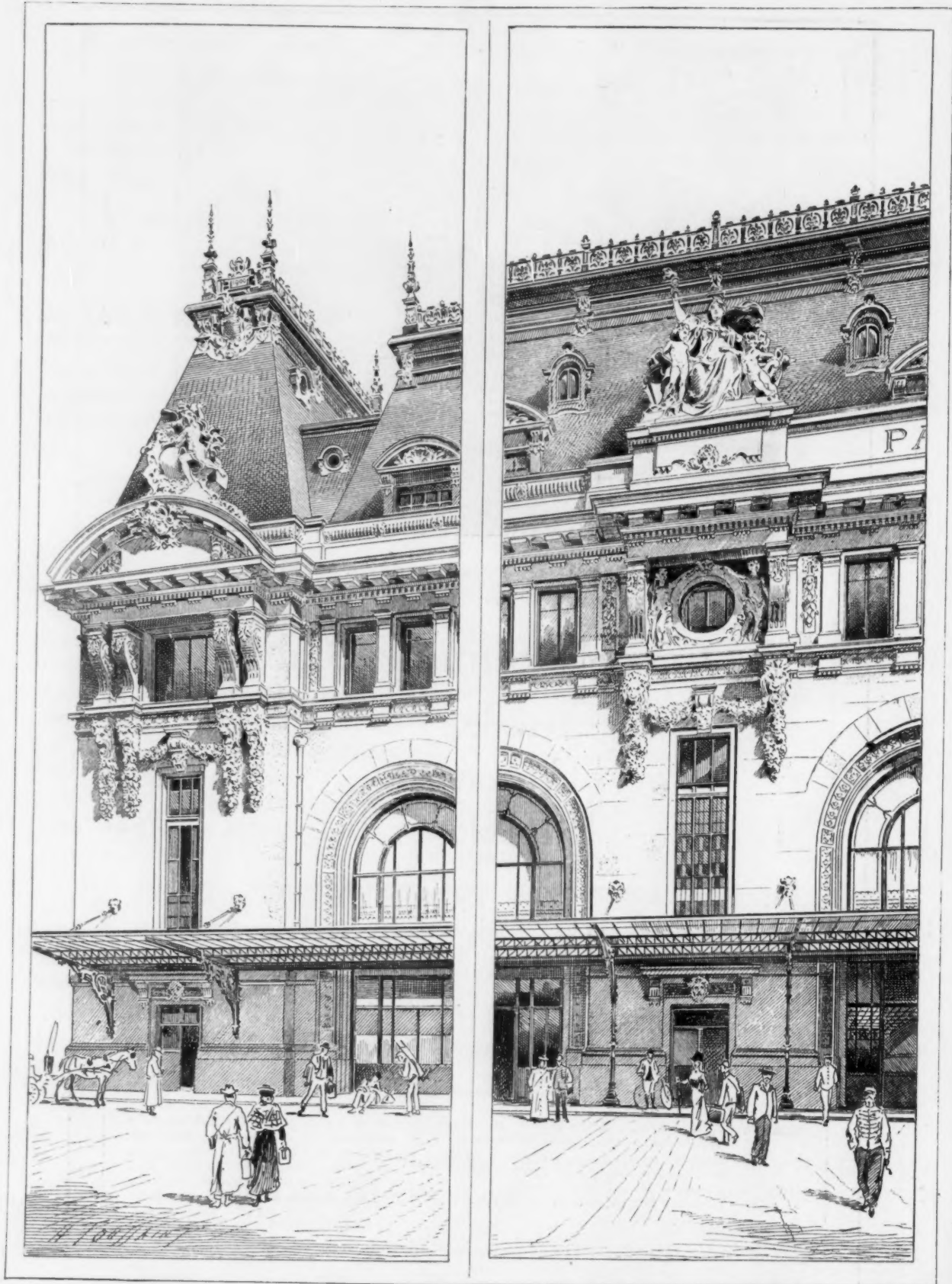
Imitators try to get business by copying our colors, numbers and advertising matter; showing that they know ours to be the standard Stains.

---

**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. Matthews, 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. Dally, Seattle, Wash., and at all other central points.



From *La Construction Moderne*.

DETAILS FROM THE GARE DE LYON, PARIS.

ESTABLISHED 1868  
**SKYLIGHTS, LATHING & S**  
**HAYES METAL**  
 71 8<sup>TH</sup> AVE. NEW YORK.  
 FIREPROOF WIRE-GLASS WINDOWS.

**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."

**ESTABLISHED 1852.**  
 Incorporated 1868.  
 Capital \$60,000.  
 LEVI L. WILLOUGHBY, Pres't  
 EPHR. C. DAVIS, Treas'r.

**DRAWING**

**CARTER'S LIQUID INDIA INK**



POSTAL FOR COLOR CARD AND CIRCULAR.  
**THE CARTER'S INK COMPANY**  
 BOSTON, MASS.

**DIXON'S SILICA GRAPHITE PAINT**

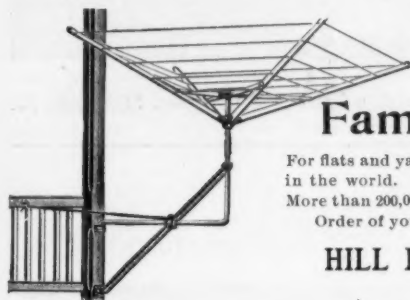
FOR TIN OR SHINGLE ROOFS AND IRON WORK. Tin roofs well painted have not required repainting for 10 to 15 years.  
**IT IS ABSOLUTELY WITHOUT AN EQUAL.**  
 If you need any paint it will pay you to send for circular.  
**JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.**

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

**INK**



**CRANE VALVES**  
 ESTABLISHED 1855



**HILL'S Famous Clothes Dryers**

For flats and yards of private dwellings. The most popular dryer in the world. Endorsed and specified by architects everywhere. More than 200,000 in use. Sold by the hardware trade. Order of your jobber or direct.

**HILL DRYER CO., Worcester, Mass.**  
 Send for Catalogue F

The **Yale Lock.**  
 The Yale Cylinder.

Its operation and development are interestingly described in a little folder which will be sent on request.

**The Yale & Towne Mfg. Co.**  
 9, 11 and 13 Murray St.,  
 New York City.

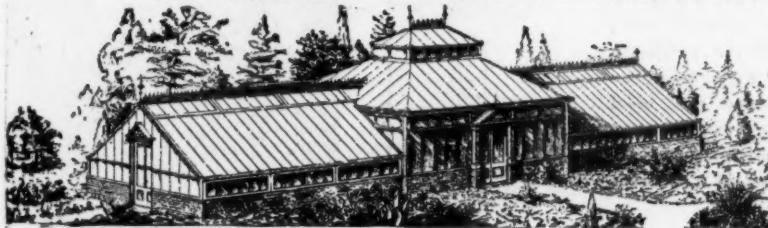
**Masonry in Modern Work.**

A "PROLEGOMENOS" ON THE FUNCTION OF MASONRY IN MODERN ARCHITECTURAL STRUCTURES.

BY **R. GUASTAVINO** - - - Architect. Price, Paper Cover - - 30 Cents.

FOR SALE BY THE **AMERICAN ARCHITECT.**

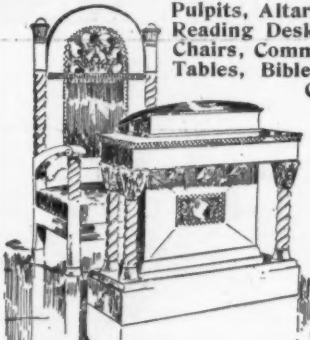
**HITCHINGS & CO.,** Established 50 years  
**HORTICULTURAL ARCHITECTS AND BUILDERS**  
 and largest Manufacturers of  
**GREENHOUSE HEATING AND VENTILATING APPARATUS.**



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.**

**Pulpits, Altars, Fonts, Reading Desks, Pulpit Chairs, Communion Tables, Bible Stands, Collection Plates,**  
 and Special Furniture for Pulpit and Chancel. Memorial Pieces. Private Designs executed.  
 Makers of Fine Lodge Furniture.



**RETTING & SWEET, Makers, 11 B St., Grand Rapids, Mich.**



**GRILLES.** Original designs, beautifully Carved to fit any space.

Also Carved and Embossed Mouldings, Capitals, Newel Post Tops, Rope and Twist Balusters.

**Waddell Manufacturing Co.**  
 No. 3 Plainfield Ave. Grand Rapids, Mich., U.S.A.  
 Illustrated General Catalogue No. 18. Over 1,000 designs. Mailed for ten cents in stamps.

**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.

# ELEVATORS

PASSENGER AND FREIGHT.

**Morse, Williams & Company**

Philadelphia,  
Boston,

New York,  
Baltimore,

New Haven,  
Atlanta.

## JENKINS IMPROVED AUTOMATIC AIR VALVES



Suitable for high or low pressure. Take no more room than an ordinary air cock. Endorsed by the leading steam experts as the best made and the quickest working. All genuine stamped with our Trade Mark.

JENKINS BROTHERS, New York, Boston, Chicago, Philadelphia

## 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.

**Venetian & Sliding Blinds**  
**MADE ON HONOR**  
**Our Aim** → **Perfection in Goods**  
**Moderation in Prices**  
**Burlington Venetian Blind Co. Write for Catalog B**  
**BURLINGTON, VT.**

THE IDEAL "VOLUMETER" NOT AN INFRINGEMENT OF THE KENNEY COMPANY'S FLUSHOMETER PATENTS.

READERS of this paper may remember having seen a notice, published in December, 1900, that The Kenney Company, of New York, had commenced suit against The Ideal Manufacturing Company to restrain an alleged infringement of The Kenney Company's patents. The claim was that the Ideal "Volumeter" was an infringement of the patents covering the "Flushometer," a flushing device.

After the testimony was taken in the case, The Kenney Company consented to a decree dismissing its bill, without a hearing in court, conceding that on the proofs the Volumeter was not an infringement of its patents. The testimony conclusively showed the Ideal "Volumeter" was in structure and operation entirely different from The Kenney Company's flushing-valve — in fact, of a different type or class.

## 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,  
205 BROADWAY - - - NEW YORK.

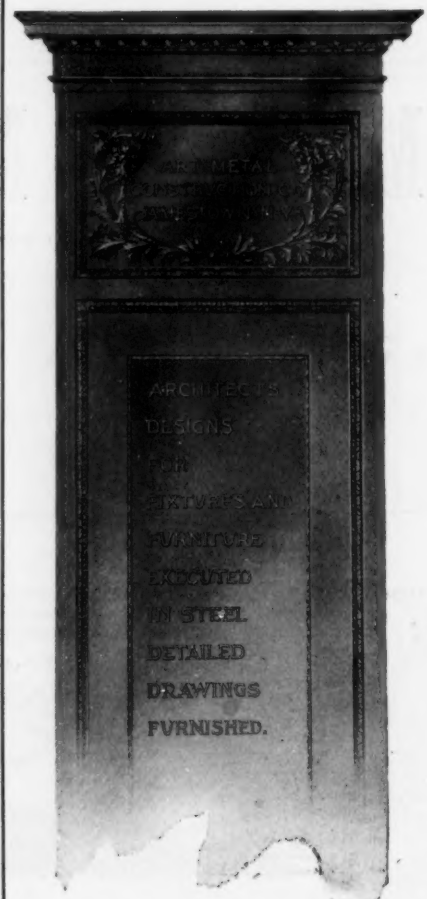
## Conservatories, Greenhouses, Vineries, Etc.

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

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

**METAL CEILINGS**  
Suitable for Residences, Offices, Stores, Schools, Hospitals & Churches  
Can be applied over old plaster  
Give Measurements for estimate  
N.Y. METAL CEILING CO.  
21<sup>ST</sup> ST. AND 13<sup>TH</sup> AVE.  
NEW YORK, N.Y.

Boston Office: 48 Congress St., Room 23.



## Important Litigation Relating to Magnesia Covering Patents

**THE KEASBEY & MATTISON CO.,** the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford & Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf and Jesse W. Starr, to restrain the defendants from making and selling magnesia covering for boilers and steam pipes containing more than 50 per cent of magnesia, and especially coverings containing 85 per cent magnesia.

The Bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereof to be made perpetual, and also demands an accounting and damages.

☞ All persons are respectfully requested to refrain from purchasing covering infringing these patents, as such purchasing must of necessity lead to suit. ☞

Beware of Fraudulent so-called "Magnesia" Coverings as well as those infringing on patents.

### KEASBEY & MATTISON COMPANY AMBLER, PENNA.

**New York Boston Chicago Washington Atlanta New Orleans**

**Cleveland Cincinnati Milwaukee  
AUTHORIZED SELLING AGENTS**

Boston . . . S. C. Nightingale & Childs  
New York . . . Robert A. Keasbey  
Philadelphia . . . Magnesia Covering Co.  
Baltimore . . . Wallace & Gale  
Richmond . . . Smith-Courtney Co.

Norfolk . . . Henry Walke Co.  
Charleston . . . W. M. Bird & Co.  
St. Louis . . . F. Bocler  
Omaha . . . Spencer Otis  
Kansas City . . . Spencer Otis

Chicago . . . Walch & Wyeth  
Detroit . . . S. P. Conkling  
San Francisco . . . DeSolla-Deussing Co.  
Seattle . . . DeSolla-Deussing Co.

**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., 675-88th. **NEW YORK**

# "Topical Architecture"

Classified Architectural Motives and Details.

Published Monthly.

NUMBER.

1. Renaissance Doorways.—I.
2. Renaissance Doorways.—II.
3. Renaissance Capitals.—I.
4. Renaissance Capitals.—II.
5. Iron Gates and Railings.—I.
6. Iron Gates and Railings.—II.
7. Renaissance Chimneypieces.
8. Tombs.
9. Arabesques.
10. Sgraffito.
11. Ecclesiastical Domes.—I.

NUMBER.

12. Ecclesiastical Domes.—II.
13. Renaissance Cornices.—I.
14. Iron Gates and Railings.—III.
15. Iron Gates and Railings.—IV.
16. Ecclesiastical Domes.—III.
17. Lions.
18. Ecclesiastical Domes.—IV.
19. Renaissance Pulpits.
20. Ecclesiastical Domes.—V.
21. Renaissance Capitals.—III.
22. Iron Gates and Railings.—V.

23. Renaissance Cornices.—II.

**40 cents per copy. 3 copies, \$1.00. Per year, \$3.00.**

AMERICAN ARCHITECT AND BUILDING NEWS CO.



**"Wears Like Iron"**  
**JAP-A-LAC**  
 THE BEST FINISH FOR  
 FLOORS AND INTERIOR WOODWORK  
 The Glidden Varnish Co.  
 Cleveland, Ohio



**WISCONSIN  
 GRAPHITE  
 PAINT**

Is a foe to rust, a challenger of weather, wet or dry, warm or cold. It is suitable for any purpose, applicable to any surface, wood, stone, brick, metallic, tile or leather. It is a preservative; does not peel off, scale, chip, or burn. It is a safeguard against fire when applied to wooden surfaces—a slow burner. It defies the influence of smoke, alkali, acid. It endures for decades; it does not change color and become rusty-looking; it is the best and cheapest of protective coatings.

SAMPLE IF YOU  
 LET US KNOW

WISCONSIN GRAPHITE COMPANY  
 421 Market Street, Pittsburg, Pa.

**BUILDING INTELLIGENCE.**

(Advance Rumors Continued.)

- Fort William, Ont.**—The C. P. R. proposes to construct a large coal dock here with all modern appliances for coal-handling. The cost of this and other improvements will amount to \$400,000.
- Galveston, Tex.**—Plans have been drawn by C. W. Bulger, Levy Building, for a two-story brick edifice to be erected on 22d St. and Avenue I for the First Baptist Church, to cost about \$20,000.
- Greenwich, Conn.**—A fine three and one-half story brick summer residence, 38' x 60' (Colonial style), will be erected for Fred L. Froment, Esq., of 151 Bank St., New York, from plans furnished by F. G. C. Smith, architect; cost, \$40,000.
- Hackensack, N. J.**—The corner-stone of St. Mark's German Evangelical Lutheran Church, in Essex St., was laid December 1st by the pastor, the Rev. Max Voelker.
- Hancock, Mich.**—William Kerridge will erect a modern theatre in the spring at a cost of \$75,000, after plans by Oscar Cobb & Son, of Chicago.
- Harrisburg, Pa.**—It is reported that plans are being prepared by A. Hutton, 400 Chestnut St., Philadelphia, for new buildings to be erected at the State Insane Hospital next spring. Two ward buildings, a kitchen and a mortuary building, to cost about \$140,000, will be erected.
- Holyoke, Mass.**—Rumor has it that the Merrick Thread Co. contemplates the erection of a new \$150,000 brick mill, 110' x 450', next spring.
- Hubbardston, Vt.**—It is said that Henry O. Pearce of Boston, who purchased the Fern Glen Farm a year ago, is expending thousands of dollars in buildings, driveways and grading, and next season will erect a new summer residence.
- Indianapolis, Ind.**—The First Christian Church will erect a \$20,000 edifice. Address, Rev. J. F. Burnett.
- Knoxville, Tenn.**—L. C. Waters has completed plans for a six-story brick and stone business block to be erected on Gay St. and Jackson Ave. for Geo. W. Peckel; cost, \$80,000.
- Lawrence, Mass.**—Architect Geo. G. Adams of the Adams Building, has drawn plans for the new court-house annex, to cost \$100,000. The exterior will be of red pressed brick and granite. It will have copper roof and cornices, terrazzo floors and

**"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.

**BUILDING INTELLIGENCE**

(Advance Rumors Continued.)

- much marble work. The building will be heated by steam, will be 55' x 100', and three stories in height.
- Manchester, N. H.**—Miss Fanny F. A. Biddle has bequeathed to this city \$15,000 for the erection of a chapel in Pine Grove Cemetery as a memorial to herself and her mother.
- Mattoon, Ill.**—Van Ryn & DeGelleke, architects, of Milwaukee, Wis., have plans for a Carnegie library to be erected here of stone and pressed brick with terra-cotta trimmings; cost, \$30,000.
- Maynard, Mass.**—A three-story frame structure, 77' x 120', to be occupied as a mill boarding house, will be erected at a cost of from \$15,000 to \$20,000 for the American Woolen Co. Plans furnished by T. F. Gilbert, architect, Hildreth Building, Lowell. Heating steam, to be supplied from mill. Shingled roof. Architect has entire charge of all details.
- Merrill, Wis.**—Van Ryn & DeGelleke, 211 Grand Ave., Milwaukee, have been selected to prepare plans for an \$85,000 court-house for Lincoln County.
- Narragansett Pier, R. I.**—J. G. Burns has bought the Continental Hotel and will have it moved from Ocean Drive to the site of the Rockingham, which was burned a year ago, and its lower floor changed into a casino. This will be added to by a terrace facing the ocean, upon which tables may be laid to accommodate several hundred guests. The upper floors will be used for hotel purposes.
- Newark, N. J.**—The Young Women's Christian Association has purchased the building at 12 and 14 E. Park St. out of a building fund of \$10,000, and it is proposed to erect upon the site a new and handsome hall.
- New Bedford, Mass.**—The contract for the two-story brick addition on Page St. to St. Luke's Hospital has been awarded to H. T. Bulman. George Ingraham, of Boston, is the architect. Plans have been completed by S. C. Hunt for a three and a half story frame hotel to be built on County St. for John Cordera. It will be 28' x 80', have steam heat and shingled roof. The first floor will be arranged for an office, restaurant, etc., and the upper stories for lodging apartments.
- New Britain, Conn.**—Work on the proposed new Polish Catholic Church will begin early in the spring. It will be pressed brick with brownstone and will seat 1,300; cost, \$60,000.
- New Haven, Conn.**—A \$15,000 addition will be made to present factory of the Winchester Repeating Arms Co. Bids are now being received.

**BUILDING INTELLIGENCE**

(Advance Rumors Continued.)

- Architects Cram, Goodhue & Ferguson, 53 State St., Boston, have completed plans for the proposed new residence to be erected on Humphrey St. for F. W. Kingsbury, Jr., secretary of the Bridgeport Brass Co.; cost, \$15,000.
- Newport, R. I.**—Architects Hebbard & Gill, of San Diego, Cal., have prepared plans and are receiving estimates for a fine residence costing \$50,000 to be located in this city. It will be two stories, 49' x 90', and will be equipped with all modern improvements.
- Mrs. Ellen F. Mason is to have a brick and frame villa erected on Rhode Island Ave. The structure will cost \$50,000. Work will be begun at once.
- New York, N. Y.**—Plans were filed at the Department of Buildings for an eleven-story bachelor apartment-house and loft building to be located at 210 Fifth Ave., and run through to 1132 Broadway. The building will be 23.2 feet front and 123.7 feet deep. The Rev. Dr. E. A. Hoffman, dean of the General Theological Seminary, is the owner, and James B. Snook & Son, of 261 Broadway, are the contractors. The estimated cost is \$100,000. Plans for a two and one-half story frame dwelling house, with chapel, have been filed by the Church of the Holy Spirit Corporation at the Buildings Department. E. S. Child is the architect. The building will cost \$10,000, and will be built on a plot, 41' x 85', on the east side of Burnside Ave., 381 feet south of Aqueduct Ave. The Secretary of the Treasury has accepted the bid of John Peirce for the construction up to and including the first story of the New York Custom-house at \$495,645, the building to be constructed of Fox Island granite. He has conditionally accepted the bid of Mr. Peirce for the construction of the whole building, provided Congress makes a further appropriation sufficient to cover the increased cost.
- North Adams, Mass.**—Fred F. Dowlin, who is building a large \$150,000 block on Main St., announces that in the spring he will break ground for one considerably larger on the opposite side of the street. The new building, which will be known as the Central, will be six stories high, 80' x 175'. The construction will be the best, and the building will cost \$225,000. The plans will be drawn by Architect E. T. Barlow and the work of construction will be in charge of L. Woodman, of the contracting firm of H. C. Wood & Co.
- Norwich, Conn.**—Theodore Irving Coe, Hartford, has been commissioned to prepare plans and specifications for a State Armory building to be erected here.

# American Bridge Company

OF NEW YORK.

Engineers and Contractors.

BRIDGES, BUILDINGS, ROOFS, TRUSSES.

Structural Steel and Iron.

Steel Frame Work for Factories, Sheds, Public Markets, Power Houses, Etc.

General Offices: 100 Broadway, N. Y.

European Office: London

L. L. BRIDGE, N. Y., 21-215.

## BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

**Omaha, Neb.**—The Burlington Ry. has plans prepared by T. R. Kimball, for a freight depot to be erected on 8th St., between Farnam and Howard Sts. The building is to be of brick, 140' x 600', one-story; cost, \$100,000.

The Richardson Drug Co. is considering the erection of a new six-story fireproof brick building, 100' x 132'; cost, \$80,000.

Report states that a local wholesale house is taking bids for the erection of a four-story brick and stone building, 60' x 132', to be erected at 16th and Leavenworth Sts., on a site owned by J. F. Fitzgerald, of South Omaha. The building will cost \$60,000.

Efforts will be made to secure an additional appropriation of \$75,000 for the completion of the Omaha federal building.

Report states that the Paxton Hotel will be enlarged and improved at a cost of \$55,000.

**Oskaloosa, Ia.**—Of the \$40,000 required, the sum of \$37,000 has been subscribed for the erection of a new home for the Y. M. C. A.

**Parker, S. D.**—The Turner County Commissioners have decided to secure plans for a \$30,000 courthouse.

**Pawtucket, R. I.**—From their own plans, the Lorraine Mfg. Co. will soon award the contract for extensive alterations and additions to their plant on Mineral Spring Ave. The improvements will cost \$30,000.

**Philadelphia, Pa.**—The contract for erecting 3 buildings for the Philadelphia Hospital is reported to have been awarded to John H. Jordan, 2118 Oxford St., for \$75,950.

Architect James H. Windrim has designed a new white marble gymnasium which will be built on the Girard College grounds, in the rear of the present chapel. It is to be one-story high, with basement, and in the Classic style of architecture. It will occupy ground 74' x 105'. The gymnasium will occupy the first floor, and will be 70' x 100', with maple floor, surrounded by running track. The basement will contain officer and cadet quarters, together with play and locker rooms, shower-baths, etc.

A large bonded warehouse is to be built on the site at 510 to 524 W. 34th St., running through to 509 to 521 W. 33d St. The parcels in 33d St. comprise a five-story brick building, a five-story brick factory, and a four-story brick factory of the Central Land Co. These parcels are thought to have been bought by the Pennsylvania Railroad Co.

The corner-stone of the Home for Protestant Children and the Aged and Infirm of the Loyal Orange Institution was laid recently at Hatboro, a suburb of this city.

**Pipestone, Minn.**—Efforts, it is said, are being made to secure a government appropriation to establish an industrial department in connection with the local Indian school. An appropriation of \$35,000 will be asked for additional buildings.

**Poughkeepsie, N. Y.**—The Supervisors have decided to erect a court-house and county jail, at a cost not to exceed \$150,000, also a county almshouse at a cost of \$50,000.

**Racine, Wis.**—The plans of Guilbert & Rugb, architects, were adopted for the new \$30,000 school-building for the 1st Ward. It will be three stories high, 79' x 149'.

**Salem, Mass.**—E. S. Whiting, 39 Church St., has finished plans for the erection of frame residence on Lafayette St. for C. F. A. Morse; cost, \$6,000. Heating, hot air. Roofing, shingled.

**Salt Lake City, Utah.**—A new edifice will be built by the First Presbyterian Church at Brigham and C Sts., at a cost of \$100,000.

**Seattle, Wash.**—It is stated that Commandant W. T. Burwell, of the Puget Sound navy yard, will take bids for the construction of the naval equipment building, to cost \$80,000.

W. E. Stevens has plans for a ten-story modern hotel building to be erected at 3d Ave. and James St.; cost, \$500,000. Saunders & Lawton, architects.

Report states that P. J. Donohoe and Jas. J. Donnellan have made plans for a building for St. Mary's Catholic Society to cost about \$60,000.

**Springfield, Ill.**—Mauran, Russell & Garden, Chemical Building, St. Louis, Mo., have been selected to prepare plans for the new Lincoln Memorial Library endowed by Andrew Carnegie.

**Stanford University, Cal.**—It is stated that the contract for erecting the Mechanical Engineering Building at the Stanford University will be let February 1. Chas. E. Hodges, resident architect.

**St. Louis, Mo.**—The old building of the St. Louis Stamping Co., Cass Ave., 2d and 3d Sts., is in the hands of artisans to be revamped to suit the needs

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.

(Advance Rumors Continued.)

of the National Enamelling and Stamping Co., which will begin to re-fit the structure with new machinery for the manufacture of tinware as soon as the reconstruction is complete. The changes are being made under the supervision of Frederick C. Bonsack, architect, and the contract for reconstruction has been awarded to Gilbert Anderson. About \$25,000 will be spent in the improvements.

Mr. F. R. Tobin, president of the Frank R. Tobin Painting Co., has bought the lot 1317 Pine St., Mr. Tobin will proceed at once to erect a building on the premises to cost \$20,000, to conform with the five-story building which he owns next west of the lot.

One of the most extensive building projects now under way is the building for the Ferguson-McKinney Dry Goods Co., to be erected by the Lesser Cotton Co. at the northwest corner of 12th St. and Washington Ave. The structure will be one of the largest wholesale buildings in the city, and probably the most expensive one of its class ever erected here. It will front on three streets, giving it excellent shipping facilities, as well as securing ample light and ventilation. For some time past a force of workmen has been engaged in wrecking the buildings that occupy the site, and within ten days the entire lot will be cleared and ready for the building contractors. Plans and specifications for the new building have been drawn by Eames & Young, and bids on the erection of the structure will soon be opened. It is the intention of the architects to have the work begin without delay, and to have the building complete in about a year. The estimated cost is \$400,000.

The commissioners of St. Louis County at Clayton are stated to have granted a franchise on December 2 to the St. Louis, Kirkwood & Manchester Ry. Co. to operate a double-track electric line between this city and Manchester.

Plans have been drawn by W. A. Lucas, Odd Fellows Building, for a three-story brick, stone and terra-cotta building, 61' x 93', to be built at Boyle Ave. and Olive St., to be used for stores, hall and apartments; cost, \$35,000.

E. C. Janssen, 506 Olive St., has made plans for a two-story and attic residence for G. A. Finkelnberg; cost, \$25,000.

J. B. Leggs, Koken Building, has plans for a new home for the Cabanne Methodist Episcopal Church, to cost \$30,000.

Isaac S. Taylor has prepared plans for remodeling the Old Republic building for the Drummond Realty Co.; cost, \$50,000. Plans call for steam heat, electric light and bells and fireproof walls.

It is reported that Murch Bros. Construction Co., 425 Odd Fellows Building, have the contract for the Stipel Building at 4th St. and Washington Ave. It will be a six-story structure, to be occupied by Norvell-Shapleigh Hardware Co.; cost, \$230,000. They also have contract for a three-story warehouse for Simmons Hardware Co., to cost \$30,000.

A. E. Cook & Son, Odd Fellows Building, have contract for a new residence for Rev. Dr. S. J. Nicolls; cost, \$20,000.

Report states that the Antikamnia Chemical Co. will erect a new laboratory building at 22d and Pine Sts. The building will be five stories, 60' x 190'; cost, \$30,000.

**Stonington, Me.**—Architect W. H. Hunt, 333 Union St., Lynn, Mass., has drawn plans for a \$7,000 residence to be erected here, of which the owner's name is at present withheld. It will have open plumbing, gas, fireplaces, mantels, and either steam or hot water heat.

**St. Paul, Minn.**—The Commercial Club are agitating the question of a new public auditorium, to cost \$100,000. H. P. Hall, J. W. Shepard and C. E. Hasson, committee.

**Vancouver, B. C.**—It is reported that the C. P. Ry. will erect an immense hotel here to cost \$500,000.

**Waco, Tex.**—Subscriptions are being solicited for a \$25,000 building for the Y. M. C. A. E. Rotan is chairman of the committee.



Architectural Sheet Metal  
Ornamental Work  
Cornices, Skylights  
Tile Roofing  
Statuary

Send for illustrated catalogue.  
Architects' special designs accurately produced in sheet metal.  
Write for our prices.

W. H. MULLINS  
107 Depot St.  
SALEM, - OHIO

J. S. THORN CO.,  
Architectural Sheet-Metal Works.Metal Building Trimmings, Ventilating Skylights  
Metallic Roofing Tiles, Building Specialties, Builders  
Light Iron Work of every description.Nos. 1325 to 1329 Callowhill Street,  
PHILADELPHIA, PA.

## BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

**Washington, D. C.**—The erection of a four-story business building, 29' x 160', on F St., near 12th, is contemplated by A. V. Grimes; cost, \$75,000.

**Watertown, N. Y.**—A \$20,000 brick business block is to be built on Arcade St. by Peter Bergerin, after plans by D. D. Kieff, Flower Building.

**Wausau, Wis.**—Report states that W. G. King, formerly manager of the Plankinton House at Milwaukee, proposes building a hotel in this city to cost \$60,000.

**Westerly, R. I.**—The contract for erecting the high school has been awarded to G. M. Pratt, of Weymouth, Mass., for \$43,000. Ross & Seabury, of Boston, secured the contract for the ventilating and plumbing at \$5,380.

**Whiteom, Wash.**—J. Beck has had work started on a theatre to cost \$30,000.

**Wheeling, W. Va.**—The Unceada Brewing Co. have had plans drawn by Mueller & Mildner, 313 Ferguson Building, Detroit, for a brewery plant. Nine buildings will be erected—brick, fireproof, with slate and gravel roofs, steam heating, electric lighting, mosaic marble tile floors, asphalt floors, complete outfit of most approved brewing machinery, etc.; cost, \$150,000.

Michael Emsheimer is chairman of a committee that will erect a Masonic home in West Virginia to cost \$80,000.

**Williamsport, Pa.**—Perot & Bissell, Bourse Building, Philadelphia, have plans for a \$30,000 three-story school-house to be erected here.

**Windom, Minn.**—The corner-stone has been laid for the new church for the M. E. Society.

**Worcester, Mass.**—H. C. Fisher is to erect four modern dwellings that will represent an aggregate cost of \$17,000. The houses are to be located on Hackfield, Schussler and Institute Roads. Three are to be single dwellings equipped with steam and all modern improvements, the other is to be a two-tenement house, size 26' x 50'.

Mr. Francis H. Dewey is to erect a fine business block on south corner of Main and Exchange Sts. in the spring. The building will be 27' x 120', and five stories high. Will contain store and offices above. \$36,000 was paid for the property.

**Youngstown, O.**—A press report states that the Peninsula-Devitt syndicate of New York and Chicago, has purchased a site adjoining the Tod House, for the erection of a ten-story fireproof office-building. Plans have been prepared and contracts for the construction will be let at once. The block complete will cost about \$1,000,000.

## ALTERATIONS AND ADDITIONS.

**Worcester, Mass.**—South St., two-story addition, 22' x 30'; \$4,300; o., Mrs. Esther O'Reilly; c., T. F. Melican.

**JUST PUBLISHED**

The FIRST Volume of the "TOPICAL ARCHITECTURE" Library

No part of which has been, or will be, published in the Monthly issues of "Topical Architecture."

**"ITALIAN RENAISSANCE DOORWAYS"**

104 Plates, 10 x 14, one-half SCALE DRAWINGS  
one-half PHOTOGRAPHIC REPRODUCTIONS

Price, bound in cloth, \$10.00

"I am delighted with the make-up, logical selection and general utility of the scheme."

GEORGE MARTIN HUSS, Architect.

"For the student of Architecture it is an advantage to have special series of different parts of buildings like that just issued. . . The selection has been inspired by knowledge and good taste."

THE ARCHITECT, London.

SPECIAL NOTICE:—The volumes of this Library (in Portfolio form) will also be sold on the Installment Plan at the same price (\$10.00), under agreement to pay in quarterly payments of \$2.50 each, the volumes being delivered to the purchaser on payment of the first quarter.

The Second Volume of this Library, now in press, is devoted to

**"DOOR AND WINDOW GRILLES"**  
(in bronze or iron.)

American Architect and Building News Company

**BUILDING INTELLIGENCE.**

**EDUCATIONAL.**

**Boston, Mass.**—*St. Alphonsus St.*, Ward 10, four-st'y bk. school, 40' x 104', flat roof, steam; \$45,000; o., Redemptorist Fathers; b., Mead, Mason & Co., 520 Tremont Building.

**FACTORIES.**

**Brooklyn, N. Y.**—*Kent Ave.*, nr. De Kalb Ave., four-st'y bk. hat factory, 49' x 131', gravel roof, steam; \$25,000; o., Morris Building Co., 26 Broadway, N. Y.; a., W. B. Tubby & Bro., 81 Fulton St., N. Y.

**HOSPITALS.**

**Boston, Mass.**—*Fruit St.*, No. 81, Ward 8, four-st'y bk. hospital, 50' x 205', flat roof, steam; \$125,000; o., Massachusetts General Hospital; a., Wheelwright & Haven; b., Thompson Co., 183 Essex St.

**Worcester, Mass.**—*Belmont St.*, bk. surgical ward, 48' x 61'; \$16,000; o., Trustees of Memorial Hospital; a., Fuller & Delano Co.

**HOUSES.**

**Arverne, L. I.**—Four 2½-st'y fr. dwells., 28' x 43'; \$24,000; o., O. B. Weil, care Standard Cloak & Suit Co., 539 Broadway, N. Y. City; a., Werner & Windolph, 94 Liberty St., N. Y. City; gen'l c., L. A. Jensen, Richmond Hill, L. I.

**Bayswater, Far Rockaway, L. I.**—Two-st'y fr. dwell., 36' x 56'; \$7,000; o., Mrs. Richard Mott; a., A. J. Bogart.

**Boston, Mass.**—*Geneva Ave.*, Nos. 517-21, Ward 20, 3 three-st'y fr. dwells., 26' x 41', flat roofs, stoves; \$150,000; o., a. & b., F. J. Rockwell, 22 Learned St., Dorchester.

*Geneva Ave.*, nr. Westville St., Ward 20, two-st'y fr. dwell., 28' x 42', pitch roof, furnace; \$5,500; o., Sarah M. Ray; a. & b., Wm. Weiler, 174 Webster St., W. Newton.

*Miles St.*, cor. Bragdon St., Ward 22, three-st'y bk. dwell., 19' x 64', flat roof, furnace; \$7,000; o., a. & b., A. Belofsky, 30 Court St.

*Ernest St.*, cor. Bragdon St., Ward 22, three-st'y bk. dwell., 23' x 64', flat roof, furnace; \$7,000; o., a. & b., A. Belofsky.

**Brooklyn, N. Y.**—*Fifteenth Ave.*, nr. Bath Ave., two-st'y & attic fr. dwell., 26' x 38', shingle roof; \$5,000; o., J. H. Quall, 16th & Bath Aves.; a., J. C. Niebal, 59 Court St.

**BUILDING INTELLIGENCE.**

(Houses Continued.)

*Atlantic Ave.*, cor. Beach 44th St., two-st'y & attic fr. dwell., 31' x 42', shingle roof; \$8,000; o., C. H. Eagle, 1 E. 35th St., N. Y.; a., F. F. Cornell, 125 Twenty-third St.

*E. Eighteenth St.*, nr. Ditmas Ave., two-st'y & attic fr. dwell., 30' x 42', shingle roof, steam; \$6,500; o., G. W. Egbert, 126 E. 19th St.; a., A. D. Isham, 220 Broadway.

*E. Eighteenth St.*, nr. Ditmas Ave., two-st'y & attic fr. dwell., 31' x 41', shingle roof, steam; \$6,500; o., G. W. Egbert, 126 E. 19th St.; a., A. D. Isham, 220 Broadway.

*N. Sixth St.*, nr. Kent Ave., three-st'y bk. shop & dwell., 22' x 55', gravel roof; \$5,800; o., M. Gowan, 162 N. 8th St.; a., P. Tillon, 121 Meserole Ave.

*St. John's Pl.*, nr. Bedford Ave., 10 three-st'y bk. dwells., 20' x 46'; \$52,000; o., F. O. Norman, 239 State St.; a., G. F. Rosen, 189 Montague St.

**Cambridge, Mass.**—*Harvard St.*, No. 6, three st'y bk. & st. dwell., 25' x 60', furnaces; \$5,800; o., Annie V. White; a., C. K. Greco.

*Hampshire St.*, No. 245, three-st'y bk. & st. dwell. & store; 28' x 50'; \$8,000; o., Misses Hamilton & Lemay; a., H. D. Joll.

**Cedarhurst, L. I.**—2½-st'y fr. dwell.; \$40,000; o., Albert J. Talbot; a., Chas. A. Rich, 35 Nassau St., N. Y. City; gen'l c., Jno. H. Smith, Lawrence.

**Newton Centre, Mass.**—*Hancock Ave.*, 2½-st'y fr. dwell., 30' x 50', hip roof, furnace; \$10,000; o., H. Frederick Lesh; b., E. N. Hutchins; a., Gay & Proctor, Boston.

**Newton, Mass.**—*New St.*, nr. Grey Cliff Road, Ward 6, two-st'y dwell., 34' x 56', furnace; \$9,500; o., H. J. Carlson; a., Coolidge & Carlson; b., H. H. Hunt, W. Newton.

**New York, N. Y.**—*Thirteenth St.*, nr. Avenue C, 2½-st'y fr. dwell., 20' x 39'; \$5,500; o., T. B. Construction Co., Avenue C & E. 15th St.; a., J. A. Davidson, 46 Cedar St.

*Fourteenth St.*, nr. Avenue C, 2½-st'y fr. dwell., 20' x 33'; \$5,500; o., T. B. Ackerson Construction Co., Avenue C & E. 15th St.; a., J. A. Davidson, 46 Cedar St.

**Woodmere, L. I.**—Two fr. dwells.; \$40,000; o., Cedarhurst Association, represented by Rob't Burton, 384 Broadway, N. Y. City; a., Ernest Flagg, 35 Wall St., N. Y. City.

**BUILDING INTELLIGENCE.**

(Houses Continued.)

**Worcester, Mass.**—*Gates St.*, two-st'y fr. dwell., 24' x 27' x 61'; \$4,800; o., J. N. Durkee; o., Joseph Tebrueit.

*Gates St.*, 2½-st'y fr. dwell., 27' x 60'; \$5,500; b., Clarence E. Anderson.

*Newton Sq.*, two-family dwell., 30' x 60'; \$7,000; o., Everett H. Warren; a., Frost, Briggs & Chamberlain.

*Kendall St.*, three-family dwell.; \$4,300; o., Mrs. Leroy Cook; c. & b., C. A. Colburn; a., Barker & Nourse.

**OFFICE-BUILDINGS.**

**Boston, Mass.**—*Summer St.*, No. 81, Ward 7, eleven-st'y bk. office-building, 56' x 80', flat roof, steam; \$200,000; o., Municipal Trust Co.; a., A. H. Bowditch, 112 Water St.

**STABLES.**

**Boston, Mass.**—*Albany St.*, No. 509, Ward 9, two-st'y fr. stable, 50' x 150', flat roof, stoves; \$12,000; o., David Kimball Est.; b., Benzason & Essena; a., H. H. Atwood, 61 Albion St., Dorchester.

*E. First St.*, nr. I St., Ward 14, two-st'y fr. stable, 64' x 95', flat roof; \$7,000; o., Cath. G. Hannon; a. & b., Watson & Waite, 536 First St.

**Somerville, Mass.**—*Walnut St.*, nr. Broadway, two-st'y stable, 40' x 55', flat roof, stoves; \$1,700; o., C. A. Kennison; b., John Stackpole, 242 Broadway.

**STORES.**

**New York, N. Y.**—*Broadway*, nr. 34th St., seven-st'y bk. & st. store, 150' x 203', gravel roof; \$700,000; o., Herald Square Realty Co., 135 Broadway; a., Buchman & Fox, 11 E. 59th St.; b., Geo. A. Fuller Co., 135 Broadway.

**TENEMENT-HOUSES.**

**Worcester, Mass.**—*Pink St.*, fr. tenement, 27' x 50'; \$4,200; o., Kachadoor Monoogun; b., F. J. Yates; a., Chapin & Topalian.

*Tower St.*, fr. tenement, 28' x 56'; \$4,500; o., Carl J. Carlson.

**WAREHOUSES.**

**Boston, Mass.**—*Summer St.*, nr. Melcher St., Ward 13, five & six-st'y bk. warehouse, 100' x 349', steam; \$300,000; o., Boston Wharf Co.; a., M. D. Safford, 274 A St.

**New York, N. Y.**—*Christopher St.*, No. 115, seven-st'y bk. loft building, 25' x 82', concrete & tar roof;

# 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

BUILDING INTELLIGENCE.	PROPOSALS.	PROPOSALS.
(Warehouses Continued.) \$40,000; o., Lizzie L. Chamberlain, 156 Broadway; a., E. G. Gollner, 156 Broadway. Hudson St., No. 137, six-st'y bk. warehouse, 28' x 70'; \$30,000; o., Samuel Well, 196 Franklin St.; a., Louis Korn, 37 Maiden Lane.	<b>SCHOOL-HOUSE.</b> [At New York, N. Y.] Bids are wanted December 23 for erecting school No. 188. RICH'D H. ADAMS, Chmn. Com. on Bldgs., Bd. Educ. 1355	county auditor of Polk County, Iowa, until Decem- ber 20 for the erection and completion of the mason work and cut stone for the new Polk County court- house, according to plans and specifications prepared by Proudfoot & Bird, architects for the same. Plans and specifications may be seen at the auditor's office and at the office of the architects, 712 Crocker Build- ing, Des Moines, Ia. Copies of the plans and speci- fications may be obtained of the architects. Proposals must be addressed to the Board of Supervisors and filed with the county auditor, Des Moines, Ia. 1355
<b>MISCELLANEOUS.</b> Newton, Mass. — Washington St., Ward 1, two-st'y police station, 31' x 46', steam; \$9,000; o., City of Newton; a., W. R. Forbush; b., John Hagedon, W. Newton.	<b>STOREHOUSE.</b> [At Ft. Morgan, Ala.] Bids are wanted December 25 for constructing a brick storehouse at Ft. Morgan. CAPT. SPENCER COSBY, Corps Engrs., U. S. A., Mobile, Ala. 1355	<b>BUILDING.</b> [At Springfield, Ill.] Bids are wanted December 19 for erecting a build- ing for armory, arsenal and museum purposes. Sam'l A. Bullard, architect. JAS. A. ROSE, Sec. Bd. of Commissioners. 1355
<b>COMPETITIONS.</b>	<b>SCHOOL-HOUSE.</b> [At Hamilton, O.] It is stated that bids are wanted by the Board of Education until January 1 for erecting a school, to cost about \$35,000. 1356	U. S. Engineer Office, 735 N. Capitol St., Washing- ton, D. C., November 27, 1901. Sealed proposals will be received here until noon, December 27, 1901, and then publicly opened, for Hardwood and Tile or Mosaic Floors, complete in position, for New Build- ing for Government Printing Office. Information fur- nished on application. JOHN STEPHEN SEWELL, capt., engr. 1356
<b>SOLDIERS' MONUMENT.</b> [At Philadelphia, Pa.] Office of Clerks of Common Council, Room No. 494, City-hall, Philadelphia, Pa. Competitive designs for the erection of a monument in honor of the Soldiers, Sailors and Marines who served in the War for the suppression of the Rebellion are invited; to be sub- mitted on or before March 3d, 1902. Competition open to any architect who is a citizen of the United States. Copy of a printed programme will be fur- nished on application to GAVIN NEILSON, Clerk of Committee on Soldiers' Monument. 1357	<b>FIRE-STATION.</b> [At South Bend, Ind.] Bids are wanted December 31 for the construc- tion of central fire station; cost, \$13,000. 1356	
	<b>MASON WORK.</b> [At Des Moines, Ia.] Sealed proposals will be received at the office of the	

# MINERAL WOOL

FIRE, SOUND and VERMIN PROOF INSULATOR.

Samples and Circulars Free.

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

Now that the Leaves have fallen

## Photographs of Country Houses

Can be made to good advantage

If you want very fine Interiors or Architectural Photos made, I can give you the finest results possible by reason of my long experience as photographer for this paper

*A. Hubert Sidman*

8 East 42d Street, NEW YORK

# "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,  
38 Broad St., Boston.  
Telephone: Boston, 2751-2.

**CONTRACTOR & BUILDERS.**

WILLIAM L. RUTAN,  
1016 Tremont Bldg., Boston.

**ROOFING DUCK.**

C. H. BATCHELDER & CO.,  
234 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.

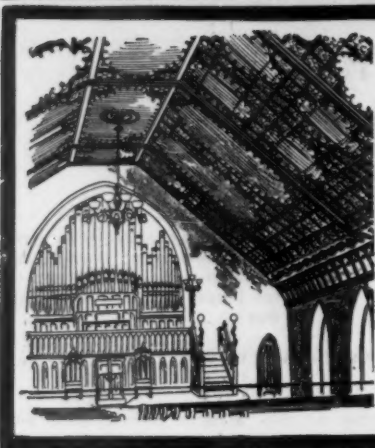
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot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



**BEAUTIFUL**

Canton Steel Ceilings are beautiful. They attract attention wherever you see them. They are easy sellers and you can make a good profit on them.

We are headquarters for Cornice, Skylights, Fire-proof Doors and Shutters.

WRITE FOR CATALOGUE OF DESIGNS AND PRICES.

**The Canton Steel Roofing Company,  
CANTON, OHIO.**

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

WORKS & MAIN OFFICE: Cor. Olybourn & Wright-wood Avenues.  
CITY OFFICES: Room 1118 Bookery 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.

**BOOKS:**

"Norman Monuments of Palermo and Environs."

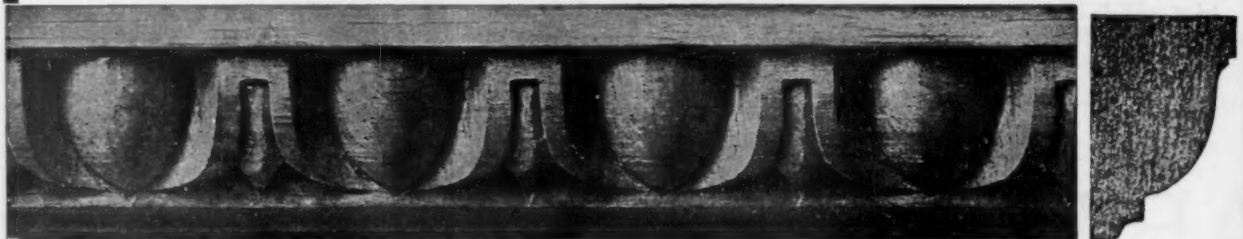
81 Plates, folio and text. Price \$12.00.

AMERICAN ARCHITECT AND BUILDING NEWS CO.

**MARLES' CARVED MOULDINGS**

**A Remarkable Invention!** Endorsed by the foremost Architects of the country

Elaborately Carved Mouldings Produced at Moderate Cost. Send for Catalogue.



**DWIGHT LUMBER CO., Sole Manufacturers  
DETROIT, MICH.**

[See Alphabetical Index on Cover 2 for Pagination.]

**CLASSIFIED ADVERTISEMENTS.**

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

- |   |   |   |   |
|---|---|---|---|
| <p><b>ARCHITECTURAL METALWORK.</b><br/>Mullins, W. H., Salem, O.....</p> <p><b>ART METALWORK.</b><br/>Art Metal Construction Co., James-<br/>town, N. Y.....<br/>Ludlow Saylor Wire Co., St. Louis,<br/>Mo..... (mon)</p> <p><b>ARCHITECT'L ORNAMENTATION.</b><br/>Lombard &amp; Co., A. P., Boston .....</p> <p><b>ASPHALT.</b><br/>Neuchatel Asphalte Co., New York..</p> <p><b>ASPHALT ROOFING.</b><br/>Warren Chemical &amp; Mfg. Co., N. Y.</p> <p><b>AUTOMATIC SPRINKLER.</b><br/>Internat'l Sprinkler Co., Phila., Pa..</p> <p><b>BLINDS (Venetian).</b><br/>Burlington Venetian Blind Co., Bur-<br/>lington, Vt.....</p> <p><b>BLUE PRINTS.</b><br/>Moss, Chas. E., Boston.....<br/>Spaulding Print Paper Co., Boston<br/>..... (eow)</p> <p><b>BOILER (Steam and Hot-Water).</b><br/>Walker &amp; Pratt Mfg. Co., Boston....</p> <p><b>BOILERS (Side-Feed).</b><br/>Gorton &amp; Lidgerwood Co., New York.</p> <p><b>BOOKS.</b><br/>Houghton, Mifflin &amp; Co., Boston.....</p> <p><b>BRICKS (Red Oxide).</b><br/>Wisconsin Graphite Co., Pittsb'g, Pa.</p> | <p><b>CALIFORNIA REDWOOD.</b><br/>Carlisle, Pope &amp; Co., E. A., New York.</p> <p><b>CAPITALS.</b><br/>Lombard &amp; Co., A. P., Boston.....</p> <p><b>CAPITALS (Carved).</b><br/>U. T. Nelson Co., The, Columbus, Ohio</p> <p><b>CARVING.</b><br/>Lombard &amp; Co., A. P., Boston.....<br/>Waduell Mfg. Co., Grand Rapids, Mich.</p> <p><b>CEMENT.</b><br/>Alsen's Cement Works, N. Y.... (eow)<br/>Atlas Cement Co., New York.....<br/>Thiele, E., New York .....</p> <p><b>CEMENT PAVING.</b><br/>Stamsen &amp; Blome, Chicago, Ill.....</p> <p><b>CHLORIDE ACCUMULATOR.</b><br/>Electric Storage Battery Co., Phila-<br/>delphia, Pa.....</p> <p><b>CLOTHES-DRYER.</b><br/>Hill Dryer Co., Worcester, Mass.....</p> <p><b>COMPOSITION ORNAMENT.</b><br/>Lombard &amp; Co., A. P., Boston.....</p> <p><b>CONDUCTORS.</b><br/>American Steel Roofing Co., The,<br/>Cincinnati, Ohio.....</p> <p><b>CONSERVATORIES.</b><br/>Lord &amp; Burnham Co., Irvington-on-<br/>Hudson, N. Y.....</p> <p><b>CONTRACTING.</b><br/>Flynt Building &amp; Construction Co.,<br/>Palmer, Mass.....</p> | <p><b>CONTRACTING.</b><br/>Rutan, William L., Boston.....<br/>Southard, R. P.....</p> <p><b>CONTRACTOR AND BUILDER.</b><br/>Rutan, William L., Boston.....</p> <p><b>CORDAGE.</b><br/>Samson Cordage Works, Boston. (eow)</p> <p><b>CREOSOTE STAINS.</b><br/>S. Cabot, Boston.....</p> <p><b>CUTLER PAT. MAILING SYSTEM.</b><br/>Cutler Mfg. Co., Rochester, N. Y.....</p> <p><b>DEAFENING QUILT.</b><br/>Samuel Cabot, Boston, Mass.....</p> <p><b>DECORATORS.</b><br/>L. Haberstroh &amp; Son, Boston.....</p> <p><b>DOORS.</b><br/>Kinnear Mfg. Co., The, Columbus, O.</p> <p><b>DOORS (Interior Finish).</b><br/>Carlisle, Pope &amp; Co., E. A., New York.</p> <p><b>DRAUGHTSMAN.</b><br/>E. Eldon Deane, New York.....</p> <p><b>ELECTRIC SIGNALS.</b><br/>Elevator Supply &amp; Repair Co., New<br/>York.....</p> <p><b>ELEVATORS, ETC.</b><br/>Morse, Williams &amp; Co., Philadelphia.<br/>Whittier Machine Co., Boston.....</p> <p><b>ENGINES (Hot-Air).</b><br/>Rider-Ericsson Engine Co., New York.</p> | <p><b>FAUCETS.</b><br/>Union Brass Works, Boston, Mass....</p> <p><b>FLUSHING DEVICES.</b><br/>Art Metal Construction Co., James-<br/>town, N. Y.....</p> <p><b>FILTER.</b><br/>Loomis-Manning Filter Co., Phila., Pa.<br/>Seafie &amp; Sons, Wm. B., Pittsb'g, Pa.</p> <p><b>FIREPROOF DOORS.</b><br/>Kinnear Mfg. Co., The, Columbus, O.</p> <p><b>FIREPROOFING.</b><br/>Johnson Co., E. V., Chicago, Ill.....</p> <p><b>FIREPROOF LATHING.</b><br/>Hayes, Geo., New York.....</p> <p><b>FIREPROOF SHUTTERS.</b><br/>Kinnear Mfg. Co., The, Columbus, O.</p> <p><b>FLOOR POLISH.</b><br/>Butcher Polish Co., Boston.....</p> <p><b>FLUSHMETER.</b><br/>Kenney Co., The, New York.....</p> <p><b>FLUSH-VALVE.</b><br/>Peck Brothers Co., Chicago, Ill.....</p> <p><b>GALVANIZED IRON.</b><br/>American Sheet Steel Co., New York</p> <p><b>GATES.</b><br/>Wm. E. Pitt, New York .....</p> <p><b>GRATES, ETC.</b><br/>Wm. H. Jackson &amp; Co., New York....</p> <p><b>GREASE (Graphite).</b><br/>Wisconsin Graphite Co., Pittsb'g, Pa.</p> |
|---|---|---|---|