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**T**HE famous Westminster Chambers case in Massachusetts has come up again, the Supreme Court of the United States having given a decision on one point in this singular tangle. It will be remembered that when the hotel known as Westminster Chambers, which was intended to be eleven stories high, was partly built, the Massachusetts Legislature passed a special law, providing that no building on the street on which the hotel was situated, for a few hundred feet in either direction, should be more than ninety feet high; and providing also that the city of Boston should pay any damages that might be incurred by complying with the law. The owners of the hotel revised their plans, and changed their contracts, and applied to the city of Boston for the damages which the statute specified, but were met by the plea that the statute was unconstitutional and void, and that, therefore, no damages were due, or would be paid. The unfortunate owners then, relying, as is claimed, on an official interpretation of the statute, completed the building with an ornamental top, about ninety-six feet from the ground. The courts were then appealed to, and the owners of the hotel were commanded to remove the upper six feet within a specified time. On the plea that this order was premature, inasmuch as it required the owners to incur further damage while it was still undecided whether the city of Boston could be held liable for the damage, an appeal was taken to the United State Supreme Court, which, as an incident in its decision of this point, held that the original statute was not unconstitutional.

**T**HE immediate effect of this decision will be to compel the city of Boston to pay a very large sum, not only to the owners of the hotel, whose investment is practically valueless, from lack of the extra stories which would have paid the profit on it, after the expenses had been met by the rent of the existing stories, but to all the other owners of property abutting on the streets covered by the statute. In the case of the lot formerly belonging to the Museum of Fine-Arts, the damage cannot fairly be estimated at less than a million dollars; and several millions more will be claimed by owners of the other estates affected. Having this prospect before it, the city is said to be anxious to have the statute repealed, and the estates involved put again under the general limitation of height, applicable to the whole city; but it is easier to get into difficulties of this sort than it is to get out of them. As a matter of fact, the restriction of the height of buildings on Copley Square and the neighboring streets constituted a gift to the owners of property just behind the abutting estates, of light and air over their neighbors' roofs, which cannot now be taken away from them without raising a fresh crop of damage claims. Taking, as an example, the property just behind the Pierce Building, on Dartmouth Street and Huntington Avenue, it is evident that the restriction of height on the Pierce Building, which is specially mentioned in the statute, offers to the adjoining owners on Huntington Avenue and Dartmouth Street, whose property is not covered by the statute, a view into Copley Square from the upper three stories of buildings erected on

their land under the general law, which would be of very considerable value for a hotel, or office-building, or store. In the same way, the estates just west of the Public Library lot have gained materially in value, as sites for the hotels and theatres of the future, from the perpetual restriction of height placed by the statute on the Public Library lot, but not on those adjoining it; and the repeal of the statute, particularly where estates affected by it have changed hands since it was enacted, will give a legitimate claim for damages. As to the æsthetic advantage of a law for surrounding Copley Square, which will soon be the busiest centre in the city, with low buildings, relieved against a miscellaneous background of lofty party-walls of second-hand brick, galvanized-iron smoke-flues, fire-escapes and iron shutters, we have already spoken; but the financial dilemma presented by the matter has not hitherto received much attention.

**W**E are not without hope that one result of the Westminster Chambers discussion may be a revision of the present general law restricting the height of buildings in Boston. The present limit, under the general law, is one hundred and twenty-five feet. This limit is purely arbitrary, and seems to have been selected by inspiration, rather than from any study of the conditions involved. As it is unnecessarily high for ten stories of an ordinary office-building or hotel, it is usually made to accommodate eleven stories of low, ill-ventilated rooms. Meanwhile, the streets in which the value of land is greatest, and the temptation to build as high as the law will permit is the strongest, are narrow, and are rapidly becoming dark and gloomy alleys, lined with buildings which must have artificial light all day long, and which darken remorselessly the buildings fronting on the still narrower streets behind them. Without copying the tyrannical English law regarding ancient lights, it seems as if the owners of existing buildings, who find themselves surrounded on all sides by structures a hundred and twenty-five feet high, at a distance of from ten to twenty feet, and whose tenants are driven out in consequence, ought to have some redress, and that legislation might, with justice to owners, as well as advantage to the public, intervene to prevent such obvious encroachment on the rights of others. So far as the public is concerned, great advantage would be gained by the change of the limit of height to one hundred feet, instead of one hundred and twenty-five. This change would cut down the number of stories that could be reasonably introduced in a building to nine; and would, undoubtedly, reduce the value of land on State, Congress and the neighboring streets, since no one would pay two hundred and twenty-five dollars a square foot—the latest State-Street quotation—for land on which to place a nine-story building; but the loss would be more than made up by the increase in value of neighboring land, which would then become available for office-buildings, and by the rescue of property on the narrow streets from the fate which now awaits it. Besides the restriction of height, limitations should also be placed on the projection of cornices. The present law in Boston limits the projection of all cornices to three feet. Even supposing that this limit is strictly observed, which is by no means always the case, a cornice three feet wide, at the top of a building one hundred and twenty-five feet high, bounded by a street forty feet wide, will cut off as much light as thirteen feet extra height of wall; and, on a street twenty feet wide, of which there are many in the business part of Boston, it will cut off as much light as twenty-eight feet extra height of wall. As a cornice is worse than useless on a high building, there is no reason why it should not be prohibited altogether at a greater height than ninety feet from the ground. In Paris, where a building on any street of the ordinary width may be ninety-eight feet high, the cornice must be put thirty-three feet below the top, and the portion of the building above the cornice must be inclined back, according to certain rules, so as to give light and air in the streets, without diminishing too much the capacity of the building. The Parisian mansards are, in some respects, unsuited to our climate; but where a French architect, as has been done in a recent case, can get fourteen well-lighted stories into a building without obstructing the light and air in the street in front of it half as much as it would be obstructed by an eleven-story

Boston office-building, it must be acknowledged that this country has something yet to learn in the way of reconciling the public interest with private rights.

THE New York *Evening Post* explains the dangerous character of the assaults upon the tenement laws by observing that the builders, who are credited with them, have really very little financial interest in the houses which they construct; and are, in the present case, merely put forward as screens for the influential capitalists and financial institutions which furnish the money to build them. In almost all cases, in New York, tenement-houses, apartment-houses and office-buildings are carried out with borrowed money. Usually, some capitalist, or group of capitalists, begins by securing an eligible lot, at a reasonable price, and paying for it. The lot is then put into the market, with the understanding that money will be advanced for building on it. The professional builders are always on the lookout for such property, and the offer of one believed to be honest and efficient is readily accepted, at a good profit over the cost of the lot, it being always understood that purchasers who expect a building-loan pay more for land than cash purchasers. Generally, no money changes hands, but the lot is transferred, subject to a mortgage nearly equal in amount to the value of the land and the future building together, drawn in such a way as to secure advances to be made from time to time as the work goes on. The builder then goes on to complete the building. If he is honest, and has a little capital, he can usually manage, with this, and his credit, to pay all the bills; and, if he is fortunate, he sells the house before taxes and mortgage interest sweep away not only his profits, but his capital; but, if he is dishonest, he gets his materials and labor on credit, takes his advances, and puts them in his pocket, or conceals them in some way; and, when creditors get too pressing, abandons the building, leaving the mortgagee to finish it, and the sub-contractors and material-men, whose claim is subsequent to that of the mortgagee, to learn wisdom from their experience. In any case, whether from the rascality of the dishonest contractors, or the misfortunes of the honest ones, a very large proportion of the houses constructed on building-loans comes into the hands of mortgagees. Strictly, it is for the interest of these to have the buildings which come into their possession as well-built, light and airy as possible, as they depreciate less if left vacant, and attract a better and more permanent class of tenants, but most people, capitalists included, are short-sighted, and they desire to be able to build cheaply, so that they can get rid of their property quickly. Hence, a certain class of capitalists, including, it is said, some important financial institutions, which invest money in building-loans, have joined with material-men, sub-contractors and others in a movement which, although carried on in the name of the builders, is secretly supported by a much more powerful element.

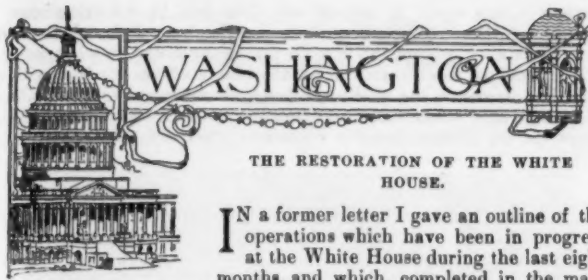
DR. T. GLOVER LYON, Physician to the City of London Hospital for Diseases of the Chest, has published some ideas on ventilation which are interesting, if not altogether new. It is well known now, even to school-children, that carbonic acid is not the injurious ingredient in the air of unventilated rooms, but that the poison of bad air consists of organic substances, the quantity of which in a given atmosphere is only approximately indicated by the proportion of carbonic acid. Dr. Lyon, in experimenting with these "spirotoxines," as he calls them, has found that they act on the nervous system; and he has also discovered that they are not destroyed by diffusion; and that the only way for a crowd of people to get good air to breathe is to have it brought directly to them, unmixed with any other air. It would be impracticable, at least in this climate, to blow fresh air directly into people's faces, on account of the chill which would be produced by evaporation from the skin; and he proposes to soften the current, by bringing in the fresh air through a conical pipe running along the side of the room, open toward the room, and covered with wire netting. By this device the area of the inlet is made many times greater than the section of the pipe which supplies it, and the velocity is correspondingly reduced. A similar pipe, on the other side of the room, serves as an outlet; and, the two pipes being placed about four feet from the ground, the heads of people sitting in the room are kept immersed in a stratum of pure air. It is probable that Dr. Lyon is unacquainted with the difficulties of securing even delivery of air through such an opening, and the disturbance of the course of the air by the upward current from the warm bodies of the

people in the room; so that the application of his system to audience-rooms would be a rather doubtful experiment; but it seems well adapted for supplying hospital beds; and the device of opening the side of a longitudinal pipe to diminish velocity, instead of widening at the mouth a pipe opening directly into the room, seems worth trying in many cases.

ACCORDING to the newspapers, the old House of Representatives, in the Capitol at Washington, now converted into a Hall of Statuary, is rapidly assuming anything but an artistic appearance, and the New York *Evening Post* calls for the appointment of a permanent commission of some sort, to decide, not only upon the admission of statues, but on their proportions. Among the statues already in place are some little ones of Washington and other heroes of the Revolution, overshadowed by the colossal effigies of distinguished modern politicians which stand beside them. It seems to have been tacitly agreed that each State may send two statues of its "favorite sons," and Virginia, with characteristic Bourbonism, proposes to present a big Robert E. Lee, to stand beside the little Washington; while Utah is said to be preparing to send a bronze effigy of Brigham Young. It is to be hoped that a place will be reserved for Benedict Arnold and Captain Wirtz in this choice society of benefactors of their country. As forty-five States, under the present rule, would be entitled to ninety statues, without counting those previously placed in the Statuary Hall as representing the entire Republic, it is obvious that, large as the room is, it will soon become inconveniently crowded with "favorite sons"; and it has been seriously proposed to put some of them in the gallery. The objection to this plan is, of course, that the statues in the gallery would be invisible to people walking on the floor below; but this difficulty might, perhaps, be met by inclining the gallery figures forward, so that their heads, at least, would be visible. In this way the little Washington might be rescued from his insignificant position among the coat-tails of the giants, and made useful by leaning him with his nose on the gallery railing, and letting him look down on the colossal Brigham Young below.

A RATHER complicated case is likely to come before the French courts. Most tourists remember the rather gloomy-looking, but elegantly proportioned, Chapelle Expiatoire, which stands by itself in a little park on the Boulevard Haussmann, very near the Saint-Lazare station. This chapel, now no longer used as a church, is in what is rapidly becoming a great business quarter, and it is estimated that the building, with the little park on which it stands, which is surrounded by four streets, could easily be sold for more than two million dollars. Such a sum, naturally, tempts the economists; and an order is now pending in the French Legislature for selling the building and ground. Unfortunately for the economists, a paper, made nearly ninety years ago, stands in their way. In 1793 Louis the Sixteenth and Queen Marie Antoinette suffered death by the guillotine in the Place de la Concorde, and their bodies were buried in what was then the cemetery of the Madeleine. A year or two later, the Republic of France sold the cemetery, as "national property," and it was purchased by a certain M. Desclozeau, who lived near by, and who found it prudent to utilize the ground containing the corpses of so many aristocrats as a garden. He took private note, however, of the graves of the King and Queen, and for more than twenty years cherished them with pious care. In 1815, when Louis the Eighteenth was on the throne, and there was no one left to oppose the ceremony, the remains of the King and Queen were transferred to the crypt of Saint Denis, where they still lie; and M. Desclozeau, relieved of his pious duties, formally presented his garden to the new King, on the express condition that it should be used for the erection of an expiatory chapel; and that if the land should ever, at any time, be used for any other purpose, it should revert to the legal heirs of the donor. Louis the Eighteenth fulfilled his part of the contract, and employed Fontaine, one of the architects of the Arch of the Carrousel, to design the existing structure, the crypt of which occupies the place of the graves of Louis the Sixteenth and Marie Antoinette. It is not impossible that the pending bill may be a mere pretence, introduced only to stir up the Legitimist and Clerical people to do or say something foolish; but, if it should really be passed, the heirs of M. Desclozeau, about whom nobody appears to know anything, will, if the deed of gift is sustained, receive a very substantial fortune; or, if there are no heirs, the money will be claimed by the State, as the universal heir of property to which there are no other heirs.





### THE RESTORATION OF THE WHITE HOUSE.

**I**N a former letter I gave an outline of the operations which have been in progress at the White House during the last eight months, and which, completed in the main some time since, are just now in minor parts receiving their final touches. I am now able to set forth in more detail an account of what has been done.

I am sorry that the architects' plans are not now obtainable, but trust that with the aid of Latrobe's plan of 1803 it will not be difficult to follow the description.

I have already called the work a restoration, and although it has been much more than that, yet in a certain sense the word covers the ground fairly well. It is evident that the idea upon which the architects, Messrs. McKim, Mead & White, decided to proceed was a restoration of the house, as nearly as possible, interiorly, to its first state, removing the incongruous features which had grown within it in the course of time. But as these uglinesses were many and had invaded practically the whole house it was but a short step farther to tearing out the whole interior, floors, woodwork, plaster, everything, in short, but the walls, to be replaced with modern fire-proof material and construction. And this was done.

The house had also long needed improved sanitation and increase of plumbing facilities, an enlarged installation of electric-lights, and other practical modernization, all of which has been carried out in the most thorough manner.

In plan there has been no radical change. The enlargement of the State dining-room, which will be explained later, could scarcely be so considered.

The removal of the glasshouses from the west terrace restores that wing to its ancient aspect, and the building of the east terrace to balance it was by no means an innovation, but only the putting back of something that was there in former times, as old prints amply prove.

But the new east terrace—I use the word for want of a better term to describe these long and narrow wings which have the height of the basement-story and have a promenade upon their roofs at the

■ These terraces have a charming effect from the south, on which side they show colonnades under which are walks, paved with red brick, whence one looks out over the naturally beautiful south grounds. At their outer ends they turn at right angles southward three or four bays. This feature of the east terrace becomes a pavilion or portico where the people enter from Executive Avenue, by a semicircular sweep with gates to the street. They then pass through a long corridor lined on either side with boxes for wraps—the terraces are each 136 feet long—and enter the basement corridor which runs east and west through the middle of the house. On either hand are rooms for ushers, for men, for women, for especially distinguished guests—who have also a separate entrance beneath the "Blue Room"—and for other purposes. All these rooms are now well provided with toilet facilities.

At the end of this corridor doors lead into the western part of the basement, where, beneath the dining-rooms, are the kitchens and offices. A private stair ascends to the second floor.

The floor of the basement lobby is of sandstone and the broad

stair to the main floor is in the same material. This stair swings across from partition-wall to partition-wall, and finishes on a stone landing, with a window to the north, and double mahogany doors opening into the "East Room" on the right hand and into the entrance-hall of the house on the left. There is a cord carried on brass standards down the middle of this stair to separate the mounting from the descending guests, on occasions of great State functions or public receptions. One enters from the stair at the very north end of the East Room. The view down its length, which is 80 feet, is imposing. The width is 40 feet and the height 22 feet. The walls are panelled in wood to their full height, and painted a clear white, with rubbed-down enamelled finish.

There is a marble base—a red Numidian—a low dado and, above, tall panels between pilasters with filled flutes and rich Italian caps carrying a frieze and cornice of some elaboration of carving, but very refined. Panels above the doors and elsewhere are carved in low-relief with goddesses and mythological emblems. The openings are symmetrically placed—three tall windows at either end, and five down the side, with fine mahogany doors in the opposite wall, the central door being a high one giving into the lobby, and the central window a triple one with a round head, a very handsome

feature from within or without. This window opens upon the roof promenade or terrace of the east wing.

Down the length of this terrace—136 feet—a goodly throng might pour out from the overcrowded room. It may be made very beautiful with large plants in tubs, some benches, and an occasional awning stretched. Along the parapet are placed frequent electric-



Fireplace in the "Green Room."



The North Front of the White House.

level of the main floor—the new east terrace has been admirably utilized to give a separate entrance to the White House for the general public at times of reception and State ceremony.

lights and between their standards, whose scale might well be more generous, small colored lamps may be strung effectively for a fête. I wonder there is no permanent stair down from this terrace, at least

to the porter's and police lodge in the portico at the east end — as there is from the west terrace going down to the Office. The ceiling of the East Room, in plaster without coloring, is divided into three panels — within a border in strong relief — from which three great lustres, of crystal and firegilt brass, hang low.

The windows are severely draped in heavy stuff of golden tone. Of furniture there are only low seats set at regular intervals along

room is a fine oval. It has an oak floor laid in "herring-bone" within a border. There is a white marble base and a dado and other woodwork, except the fine old mahogany doors, in white paint. The mantel in marble and metal, the blue stuff on the wall with a gold fret across it, the shallow, refined plaster cornices, the ceiling with some light stucco relief and pendent lustre of crystal and firegilt brass, the big Roman chairs in white and brass with blue covers and



Reception Entrance and East Terrace.



The White House, after Willis's "Picturesque America."

the walls. These are covered in the color of the hangings. The floor is patterned in oak. The four large mantels are in native marbles of different colors. Their fireplaces are lined with cast-iron ornamented with cartouches, amorettes, and festoons in relief.

For side-lights there are tall candelabra, standing in the corners, effectively designed in brass and crystal. These candelabra are to be found elsewhere throughout the main floor.

The "Green Room," entered by the two southward doors from the great white *salon*, is hung in a very pleasant-colored green stuff, has its woodwork in white, ceiling in white with slight reliefs and a brass and crystal lustre, an oak floor in a basket pattern, white furniture upholstered in green, and a very delicate mantel in white marble. The entablature of the latter, ornamented with a carved bit of Greek

footstools to match, the sconces, the tall candelabra, the clock: all these things are of the art of Percier and Fontaine, those versatile masters of the Napoleonic revival of the antique. The walls of the Blue Room are absolutely bare of pictures, those of the East Room as well, as there are none in possession of the White House which would be at all suitable as decoration in those places. In the Green Room and in the "Red Room" are portraits of the Presidents.

The few portraits of former ladies of the White House, owned or loaned to hang here, are now in the basement lobby. Among them hangs a brilliant canvas, by Chartran, of Mrs. Roosevelt. Of the others there is little to be said from the point-of-view of art.

There has been some talk of transferring the large canvas "Love and Youth," a work by the English painter G. F. Watts, which was



Entrance Corridor.

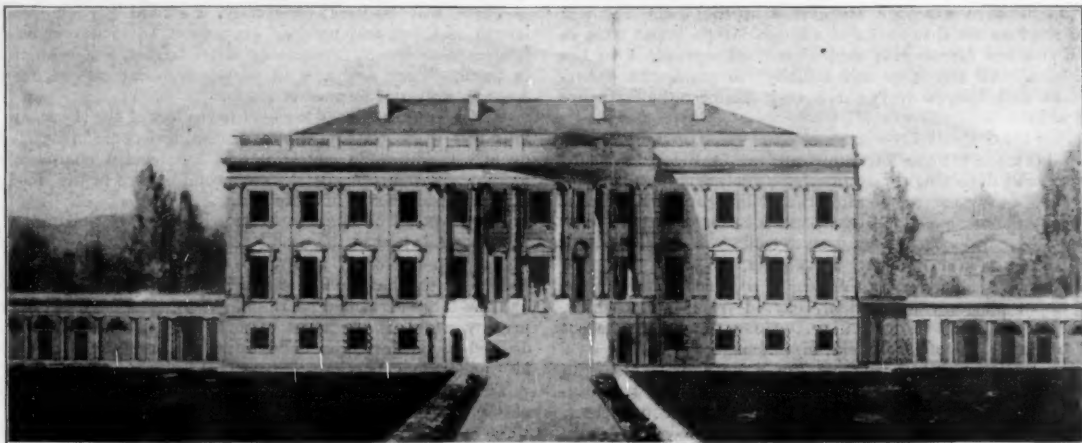
honeysuckle, is borne on a pair of gables, in this case very dainty female busts on good pedestals. This is a sort of ante-room to the Blue Room, next. In this last the President always stands for State functions, receptions of the public, of ambassadors and important delegations, etc. Both these rooms are carried out in a style inspired by French fashions of the Directory and the Empire. The Blue Room is the more severe. Its details are well looked after. The

presented by the painter to the United States, from the Corcoran Art Gallery to the White House, but it would seem that it will better fulfil its mission and the intention of the donor in its present place. It would be easy to suggest the sort of pictures, medals, busts, arms, prints, and decorative objects generally wanted to give a lived-in look to the house, of which any number and of appropriate character might — with an appropriation — be found in the country.

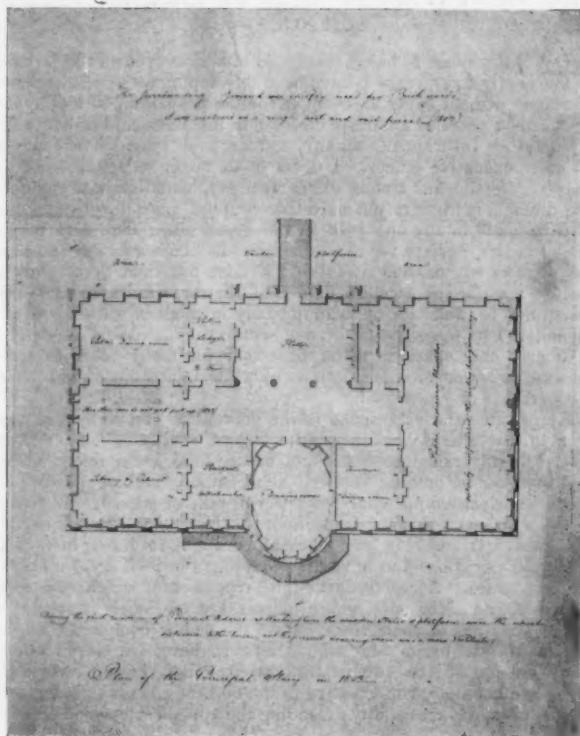


A better way, however, would be that some of our famous collectors should offer such things — and fitly through the discriminating good offices of Mr. McKim — were it only as a loan.

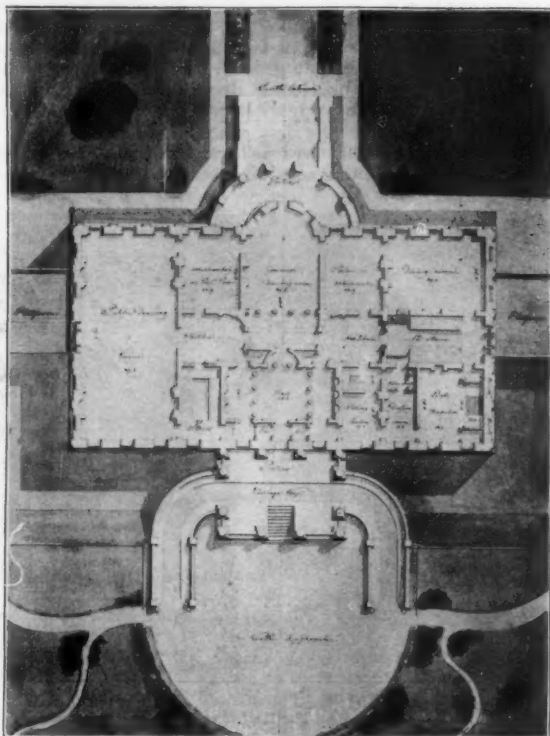
In the Red Room furnishings there is apparent a relaxation in stylistic rigidity. The room is warm, in tone of walls, in rich floor-covering, in cushiony easy-chairs. It is the parlor of the house.



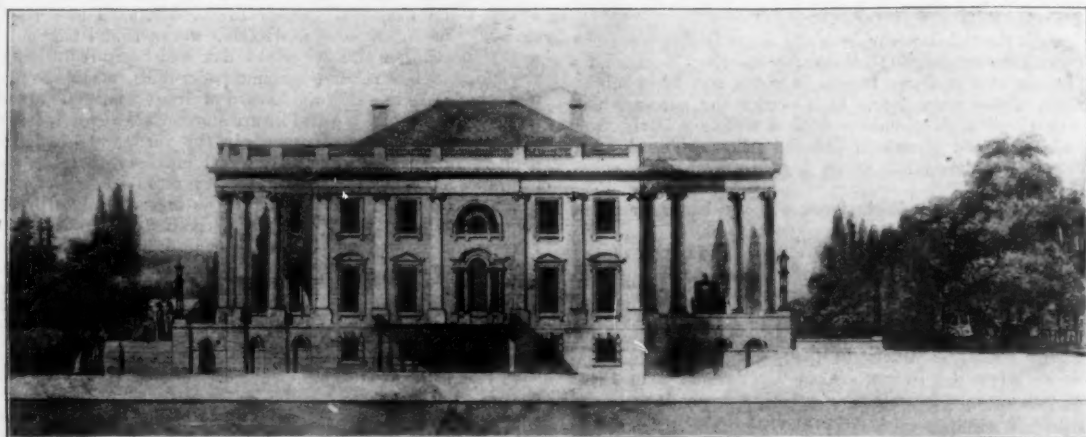
Alteration to South Front of the President's House proposed in 1807. B. H. Latrobe, Architect.



Plan of Principal Story in 1803.<sup>1</sup>



Plan of Principal Story as proposed to be altered in 1807, by B. H. Latrobe.



Design for Alterations in 1807, showing Porticos added on North and South. B. H. Latrobe, Architect.

<sup>1</sup>During the short residence of President Adams at Washington the wooden stairs and platform were the usual entrance to the house, and the present draw-

ing-room was a mere vestibule. The surrounding ground was chiefly used for brick-yards. It was inclosed in a rough post-and-rail fence. — B. H. L.

The dinner-guests are greeted here. For State functions it is the assembly-room of the Diplomatic Corps. The woodwork again is white.

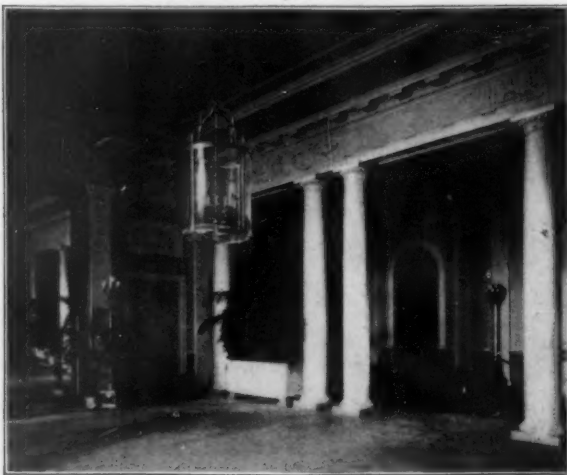
In all these rooms, rightly held in the refurbishing to their traditional colors, there is a notable taste in the matter of the window-hangings, which have a proper stateliness in the folds of their draperies carried on metal supports of special design. The rods in the Blue Room are fasces with eagles perched, spread, upon the middle of them. All are large and sufficient in scale. In candelabra, sconces and lustres everywhere very handsome effects are reached as well.

In extending the State dining-room across the width of the corridor, Mr. McKim has made his one important change in the old plan of the main floor, and the change is admirable. The room, now of noble spaciousness, is in the southwest end of the building. As finished it is rather the dominant note of the work, and is really very handsome. Finished above a marble base, from floor to ceiling in rich panelling of English oak of the utmost beauty as to grain, the walls give off a sumptuous warmth of color, which the floor of patterned oak reflects. There are broad pilasters and a richly carved frieze and cornice, the oak being carried up to the ceiling. Along the frieze are set some fine trophies, heads of moose, elk, bison, cougar, etc.

The ceiling, as elsewhere throughout the State apartments, is in the pure white of the plaster, which shows to the best advantage the delicate modelling of their panels and relief ornament. This and the stucco-work of enrichment, the panels of goddesses in the East Room, and the sculptural ornament generally throughout, have been done by the Brothers Picciarelli with a charming refinement and skill.

I should like to give the names of others who have been engaged upon the work, upon the metalwork for instance, where a good deal of artistry has been displayed, but I am unfortunately without information. As to the decoration in general, I am of the impression that it has been carried out by Herter Brothers, from Mr. McKim's sketches and under his close supervision. The general contractors for the building were Norcross Brothers.

Anent the architect's supervision, I wonder if it would be out of the way to tell here that the piece of old Flemish tapestry over the



The Hall.

mantel in the State Dining-room, where it is eminently the very thing for the place, comes there under that head. The mantel in question, of white marble, is very successful, and the fire-irons are worth attention.

Passing through the tall doorway from the State Dining-room one has a vista down the corridor, 80 feet long, to the East Room doors *vis-à-vis*. The corridor is about 18 feet in width and 22 in height, the story-height of the main floor. It is—with the entrance-hall, which opens into it through columns—done in mutulary Doric, after Vignola, on a background of wall in Colonial yellow. The dull-red carpet stretched down the middle of its flags is a strong, fine color-note.

Here again are seats of simple form, without backs or arms, ranged in order against the wall, and fine candelabra.

Before closing this letter I want to call attention to the copies of old plans and elevations by Latrobe which have been obtained through the courtesy of the Library of Congress. The plan of 1803 is Hoban's building, of which the corner-stone was laid in 1792 by General Washington in "David Burns's Old Field," and which was first occupied by President Adams in 1800, the East Room being still unfinished. After the British sacked and burned it in 1814, the fire being put out by a fortuitous rain before much damage was done, it was restored, and, the stone about the windows being scorched and damaged, the original sandstone of the outer walls was covered by a coat of white paint, which has been since renewed, in terms of tons, no doubt. It was reoccupied in 1818. Meanwhile, Latrobe had made several plans, in 1807 one, in 1817 another, for alterations, of which the north and south porticos and the wings were carried out.

In the east elevation one notes a section through the wing; and thus has Mr. McKim put things back into their old aspect. From the south, the long colonnades stretching east and west from the building are very charming, which I have already said, but it is worth reiterating.

There will be here, eventually, a formal garden stretching the length of them, and possibly sunk some 18 inches or so, and some landscape-architect, presumably Mr. Olmsted, will take the grounds in hand. They are now in parts somewhat ragged, on the north front as well, and in need of study.

It will be unnecessary to recall to readers of the *American Architect* how this work on the White House has come about. As is frequently the case in our affairs, it has been a compromise. Most fortunately, the terms of the compromise were in the capable hands of the President and Mr. McKim.

The erection of a separate office-building at the end of the west wing has released to the use of the family of the President the whole of the upper floor of the White House, where they have now ten bedrooms, five bath-rooms, a family sitting-room over the Blue Room, and the large furnished corridor. Here they may, at last, enjoy that privacy which is the right of all and which the country has long desired to ensure to its chief citizen. This part of the house has also undergone complete renovation and new decoration.

The appropriations for these operations were: for the renovation of the White House \$475,000, for the new Office of the President \$65,000, and it is estimated that the annual cost of maintenance of the two buildings will be \$110,000.

#### THE PREVENTION OF LOSS BY FIRE, AN APPLIED SCIENCE.<sup>1</sup>—I.

I OWE the honor of being permitted to address you to the fact that for nearly forty years I have been developing an applied science, almost without being aware of it, for the prevention of loss by fire, for thirteen years as an active director in the Boston Manufacturers' Mutual Fire Insurance Company, and for over twenty-five years as its chief executive officer. I deem it an honor to speak to men in whose profession and among whose members, including both engineers and firemen, more heroism, more true courage, more devotion to duty is to be found in any one year in our great cities than is to be witnessed in any warfare for the same period. This courage and heroism attracts but passing attention; it does not yield great glory or position; while the heroism exhibited in war, admirable as it may sometimes be, finds its opportunity only in modern wars which are engendered by the survival of the brute in man. Wars in defence of liberty may continue to be necessary for many years to come, because predatory nations still exist which aim at conquest under the incentive of greed.

My practice and experience in the prevention of loss by fire have been in the administration of the largest of the so-called factory mutual fire-insurance companies, of which there are nineteen associated together for mutual service, each company making its own independent decision on what risks it will take or what it will refuse, by coöperating in making inspections, in the employment of experts of highest attainment in every branch of applied science, in making plans and valuations and in settling losses at the joint expense of all the companies. Aside from the nineteen, most of which companies consist of the older ones, whose officers are extremely conservative in the selection of their risks, called the senior companies, all but one in Massachusetts and Rhode Island, there are eleven others, many outside of the two States named, called junior companies, which are not quite conservative in the class of risks taken and cover a wider area, but are rapidly extending the applied science of preventing loss.

The present amount of risks carried by all these companies is about \$1,200,000,000, of which between \$800,000,000 and \$900,000,000 constitute the senior class of risks. Of that sum the Company of which I am President carries \$160,000,000. These risks consist of textile-factories, cotton, woollen, worsted and silk mills, print-works, bleacheries and dye-works, flax and hemp factories, to which are added in less relative amount paper-mills, machine-shops, and a few other risks in which the hazard of fire is analogous to that of the larger proportion. We also insure storehouses at the factories under the protection of the safeguards in the yard, and the factory tenements. In a rough and ready way I may say that the amount of insurance carried in all these factory mutual companies does not probably exceed five per cent of the insured values of the whole country. The scope of our work is limited to buildings subject to very slight, if any, neighborhood hazard, which can be protected within their own yards. All are furnished with adequate fire-apparatus under the control of a well-trained and well-drilled mill fire-department. Without such a department private fire-apparatus is apt to be useless. At the time when I became President, in 1878, the amount carried by the seven factory mutual companies then existing was less than \$200,000,000, of which my company then carried \$40,000,000.

The principal purpose of these organizations is to prevent loss from the fires which of necessity occur in all these specially hazardous risks. Hardly a day ever passes without my receiving notice of a fire in some one of my risks. The average hazard of these risks is

<sup>1</sup> A paper by Mr. Edward Atkinson read at the Convention of the International Association of Fire Engineers, New York, September, 1902.



admitted to be greater than the average hazard of the risks which are not combined in the mutual companies, although a very few risks, like powder-mills and oil-refineries, are more hazardous. It may be noticed that, while fires must occur in our risks causing a loss, yet, if any considerable loss happens at the present time, it is held to be the fault of the owner or agent in not having made suitable provision to stop the fire at the beginning, or else it is held to be the fault of the mutual underwriters in not having anticipated the special hazard by making provision to stop the fire within thirty seconds to five minutes, from its origin, either by extinguishing it, or by holding it so that the mill fire-department may put it out.

The first company devoted to this work was organized in Rhode Island in the year 1835 by the late Zachariah Allen. He had fitted up a cotton-mill with every appliance for putting out a fire that he could find. He applied to the stock-underwriters for a reduction of premium. The answer was, "We can make no reduction. A cotton-mill is a cotton-mill. The rate is 2½ per cent," or some other very high rate. "Then" (said Mr. Allen) "we will combine together and insure ourselves." In my early experience as a treasurer of a cotton-mill, back in the fifties, when the mutual companies were not strong enough to carry the whole of a large risk, I made application to a president of one of the old insurance-companies of Boston by asking him, "Do you insure cotton-mills, Mr. Clark?" "Oh, yes, sir, at a very low rate of premium." I began to unroll my plans, when he interrupted me: "I think you misunderstood me, Mr. Atkinson; we will insure them to burn up at a very low rate of premium, but we will not insure them against loss at any rate whatever." That company went up in the Boston fire; that cotton-mill is still standing, and has never met a considerable loss.

For a long period the system was conducted on what might be called the empirical method, developed by experience, but without much reference to science or statistics. The inspectors were all mill-men; men of very great capacity and of wonderful memory; but they were few in number. They visited the risks but once a year, and there was no general distribution of special information. In the lapse of time the size of mills increased; the new hazards of petroleum, of high speed, of spontaneous combustion of chemicals, and of electricity had to be met. If a fire got a good headway, a total loss or a very heavy loss was apt to occur. When I became President, I was convinced that the whole system must be reorganized; apparatus must be standardized; inspections must be frequent; reports to owners must be made at least three times a year; and the methods of science must displace the observations even of the trained mill-men. I had no scientific training myself. I may, perhaps, claim a good scientific method. For several years past my Vice-president, Mr. Joseph P. Gray, C. E., has supplied the science in the conduct of our Company, in which I am lacking. On the underwriting side Mr. R. W. Toppan, formerly Secretary of the Company, now President of the Arkwright Mutual, gives the benefit of long experience.

One of the first great problems was the misuse of volatile, mineral or paraffin oil for lubrication, spreading by evaporation combustible vapors through the air. I discovered the source, and, after bringing men of the highest scientific attainments to my aid, notably Prof. John M. Ordway, then of the Massachusetts Institute of Technology, I succeeded in standardizing the oil made by the Standard Oil Company and in compelling it to make a safe oil, — but that is another story.

Then came electricity. The naked wires of arc-lights were put up one above another upon the same beam or wall. Of course, we began to have fires, and at one time I feared that we should be obliged to refuse to insure the electric-hazard. No one knew much about it. I called to my assistance Mr. C. J. H. Woodbury, now in charge of important departments in the American Bell Telephone Company, and presently we established rules for putting in electric-plants and brought the makers of electric-apparatus to adopt our standard. These primary rules have never been changed; they have been extended and adapted to the increasing knowledge of the subject. In coöperation with the stock-underwriters, uniform standards have been established for all electric-plants based on these rules. Although we probably insure risks from electrical-hazard in larger proportion to our total amount than any other underwriters in the world, we have yet to meet the first considerable loss that could be positively imputed to electricity.

Next came the pump, pipe and hose question. I knew nothing about it. I went to my friend with whom I had been coöperating in founding the Institute of Technology, the late William B. Rogers, who gave me an explanation of the friction of water in pipes and in hose. He explained to me how a pipe might be laid for a sufficient distance as to make it impossible to force the water through it under any considerable pressure, and yet through which a cat might run. There were many such small pipes in our risks. I found pipes in many mill-yards deficient merely from being corroded with rust. I then called into our service Mr. John R. Freeman, whose reputation as a hydraulic-engineer is well known here in New York. He has been consulting-engineer on your great water-supply. He is now one of my most valued coadjutors, president of three companies in the mutual system. We standardized the size of water-pipes for fire purposes. We acted under the rule laid down by the late engineer, Mr. Till, of Woburn, that any man who should put as small a pipe as four-inch into an important fire-service should be hung. We couldn't hang the engineers, but we hung up the risks. We tested hose, and found out the enormous difference in friction between a coarse weave and a fine weave. We standardized hose and playpipes. Mr. Free-

man then took up the steam-pipe, brought that to perfection, and standardized the underwriter-pump. No manufacturer in our combination can now make a mistake in laying out his pipe-lines or in buying his steam-pump or hose, he never need be cheated in buying hose, unless he cheats himself by being only willing to pay the price of hose which is cheap, and also nasty. Our list of makers of repute of hose on our standard is known to all our members, and any of them can at any time send a section of hose to us to be tested.

One of the first problems presented to me most difficult of solution was whether or not the automatic sprinkler had come to stay and whether it could be depended upon either for immediate service or after lapse of time. Picker-departments were then generally protected by perfected pipe-sprinklers; but there were few sprinklers in the main works. I took up the automatic sprinkler. Fortunately, Col. Thomas J. Borden, of Fall River, now my coadjutor in the factory mutual system, as president of several companies, had already satisfied himself that the automatic sprinkler had come to stay, and so had Mr. Edward Kilborn, both then cotton-manufacturers of high repute. With their backing, I began the arduous work of persuading our members that automatic sprinklers would put out fires or hold them at bay until the apparatus in chief could be set to work, and that the solder would not change in lapse of time. Many of my own associate underwriters were against me. Almost every manufacturer distrusted the apparatus, thinking that it was the "new broom for the new man." I was asked whether I expected to "put out a fire in a factory with a tea-pot or a water-pot." I have even been warned that my special work may not be ended when I pass on. One of our members who distrusted automatic sprinklers and at whom I had been nagging for a long time, broke out: "Mr. Atkinson, when you go over into another world you had better take a sprinkler along, you will be sure to need it." To which I replied that, if he would assure me a good static supply of water, I would tackle even that job.

[To be continued.]

#### FIREPROOF WOOD.<sup>1</sup>

TO remove the many misapprehensions as to "fireproof" wood, to improve the methods of inspection, and to create a standard test for rating the value of a treatment that will give uniform results, an advisory committee of experts was appointed. The woods to be tested were to be selected as much as possible from stock already treated for commercial purposes; when not so possible, the company short of such stock shall treat a sufficient quantity for test purposes. The woods to be tested comprise red-oak, long-leaf yellow-pine, spruce, cherry, birch, cypress, mahogany, hard and soft maple, and white and black ash. On the committee to make the tests were Professor Woolson, Columbia University; Professor Bliss, University of New York, and Dr. McKenna, Edward Atkinson, of Boston, being also consulted. The understanding was that the word "fireproof" should be used only in the sense of fire-resisting — i. e., the wood to be so treated as not to spread flame.

The companies whose methods were tested were as follows: The Electric Company, whose so-called "Electric process" received an unconditional approval in the Building-department some years ago; the American Wood Fireproofing Company; the Fireproofing Manufacturing Company; and the New York Fireproof Wood Company — the last three receiving an approval on the following condition: "That, whenever wood was supplied to any building, or any orders were received from any architects or builders, the Department was to be notified, so that further test could be applied under the discretion and direction of the Department before any of the material should be delivered at the building." The tests are conducted according to a system which lays down that, whenever a company receives an order to ship treated wood to a building, the Department is notified, and the inspector takes a sample (marked for identification) of every 2,000 feet. These samples are sent to Professor Woolson, who tests them at Columbia University and sends the results to the Department, which passes favorably or unfavorably upon them, according as they come up to, or fall short of, the required standard. One notable result of this was that the public was disabused of the false notion as to the word "fireproof," so far as concerned the building-code, and learned not to expect so much of treated wood.

Some companies not approved by the Department use "surface fireproofing" — i. e., apply so-called fireproof paints and washes with a brush or similar means.

The chemicals used are as follows: Ammonia chloride, ammonia phosphate, zinc chloride, alum and similar salts — the proportions varying according to the different companies' secret formulas. No two formulas are alike, and the tests hitherto made have been chiefly spectacular and for advertising purposes, and made by the companies themselves, of whom only the four already mentioned are known to the Department as doing a commercial business.

In a general way the treatment of the wood to be tested is the same. Lumber is piled on small cars and run into large iron or steel hermetically sealed cylinders, 50 to 150 feet long. Sometimes steam is first introduced into the cylinder, and the wood thoroughly heated; then a vacuum is produced, and all possible moisture removed from the wood by this means. Some processes omit the steam, and start with a vacuum on the wood at its normal temperature. After removing all the moisture possible, the cylinders are filled with the

<sup>1</sup> Paper by Mr. Perez M. Stewart, read at the Convention of the International Association of Fire Engineers, New York, September, 1902.

fireproof liquid or chemical solution, and held under hydraulic pressure for a number of hours. When the wood is impregnated to a greater or less degree, the liquid is drawn off, and the wood kiln-dried for use. The length of time under pressure varies from a few hours to several days, depending upon the process and the variety of wood. Some companies use a very heavy pressure for a short time; others favor a lower pressure and a longer time. The only scientific tests made before those by the Department were at the Stevens Institute, Cornell University, United States Navy Yard, Columbia University, and the Boston Institute of Technology. The treated and untreated woods were subjected (1) by Professor Woolson to fire-tests, and (2) by Professor Bliss to tests for strength, comprising the relative brittleness, stiffness, and elasticity of each, as well as a compression test. The strength tests included also exposure of the woods to the weather for a considerable period, so as to detect any deterioration; chemical tests by Dr. McKenna, to test the normal rate of decomposition in each variety of wood at each degree of heat—this, under distillation tests; comparing the toxic effects of the products of decomposition of the natural woods with those of the woods treated by each process—every product being tested; hard and soft wood samples under each process, each sample being prepared for varnishing and then varnished with spirit varnish.

The only test required by the Department is a fire or ignition test, as no wood would be allowed to be used for structural purposes in buildings over 150 feet in height, but merely for ornamental and decorative purposes. The result of all tests proved conclusively that, while treated wood is in no sense fireproof, but is of a very slow-burning nature and is a fire-retardant, such wood, if treated properly, does not smoke, or, if it does, smokes only to a very slight degree. It does not spread flame, and, after the flame has been removed from contact with the wood, there is no perceptible glow, or should there be any, it is perceptible only for a few seconds. Therefore, from the experiments made, the danger in regard to the spread of fire in a building trimmed and equipped with wood that has been treated is mitigated to a certain degree. It is inconsistent, however, to have wood thus thoroughly impregnated with a chemical solution, and made into trim, covered with five or six coats of varnish—one of the most combustible substances known.

Esthetically the demand for natural-wood finish is all very well; but, when it comes to buildings over 150 feet high and difficult to reach with fire-apparatus, there is something besides an educated taste to be considered—namely, the safety and preservation of human life and also fire-losses on the building and adjacent buildings and property. Everything should be done in every single respect to make a building as nearly incombustible as possible. There are many substitutes for wood, but they are not pleasing to the æsthetic eye of the architect. Among these is wood covered with metal, which has been approved by the Board of Fire Underwriters, and is used in a fifteen-story building in this city, where, also, every partition is of fireproof material. Other materials, whose basis is magnesite, asbestos, cement and other incombustibles, can be made into doors, trim, wainscoting, and, in fact, everything used in the interior finish of a building, while the decoration of the building is not diminished at all, or, if at all, to a very slight extent. It may also be added that there is one thing that can be said in regard to this manner of decoration and the trim of buildings: if these materials, which are incombustible, should be used, it might interfere to a certain extent with the interior architectural finish of the building; it might offend the æsthetic eye, but it would not decrease the commercial value of the building when it came to a financial test. It would increase the revenue of the building on account of the small rate of insurance upon a building of this character.



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

THE MONKS BUILDING, NOS. 31-5 CONGRESS ST., BOSTON, MASS.  
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THE "BLUE ROOM" IN THE WHITE HOUSE, WASHINGTON, D. C.  
FOR description see "Washington Letter" elsewhere in this issue.

Additional Illustrations in the International Edition.

THE SOUTH FRONT, WEST TERRACE AND THE PRESIDENT'S OFFICE: WHITE HOUSE, WASHINGTON, D. C.

FIREPLACES IN THE "RED ROOM" AND "EAST ROOM": THE WHITE HOUSE, WASHINGTON, D. C.

THE STATE DINING-ROOM: THE WHITE HOUSE, WASHINGTON, D. C.

FIREPLACE IN THE SAME ROOM.

THE "EAST ROOM": THE WHITE HOUSE, WASHINGTON, D. C.

THE WHITE HOUSE FROM THE SOUTHEAST, WASHINGTON D. C.



**ARMORED GLASS.**—Up to the present time the employment of glass reinforced, or armored, by metallic network has been more general in the United States than in any other country. On the Continent this combination is largely used in Germany, and to a smaller extent in France, Austria, Belgium and Switzerland. A paper on the subject recently read before the Société des Ingénieurs-Civils, in Paris, presents a convenient summary of facts relating to the manufacture, strength and uses of this material of construction. In the production of armored glass, or *verre armé*, as it is more elegantly termed in the French language, advantage is taken of the property possessed by glass of welding, so to speak, to metals, and the combination results in a product having characteristics which are of distinct value in constructive architectural work. The reinforcement is employed in the form of a network of fine wire, only slightly modifying the appearance and transparency of the glass in which it is imbedded; the properties given by the incorporation being cohesion and tenacity. From the first of these it results that if a pane of armored glass be broken or cut, the fragments remain joined one to the other, and cannot be separated unless the iron network be cut by a suitable tool or broken by repeated bendings. From the second property it follows that a relatively high resistance to flexure is imparted, a result similarly obtained by the reinforcement of cement and concrete. Moreover, while ordinary glass breaks suddenly without giving any indication of impending failure, reinforced glass cracks or splits, but the pieces remain always joined together by the metal network. The resistance of the combination when rapidly heated is not less remarkable. Instead of suddenly "flying," the new material merely cracks, and the continuity of the sheet or pane is not destroyed. It will, therefore, be seen that reinforced glass is of great value in fire-resisting construction. It is quite suitable for employment as a substitute for sheet-iron, or sheet-iron with a filling of timber, in the construction of doors and shutters intended to prevent the spread of fire, and it really affords greater security than either of the materials mentioned. By reason of its tenacity, it offers a safeguard of another kind which may be utilized as a protection against burglary or theft from the windows of shops.—*The Builder*.

**SOME ARTIFICIAL BUILDING-MATERIALS.**—Mineral substances are not the only ones utilized; sawdust, waste paper, etc., have also been made into compressed blocks.

**Cork.**—The material is residue from manufacture of corks, etc. In the first place, it must be reduced to bits about the size of a pen, and this coarse powder is mixed with a thin paste of clay and lime in water. When well mixed, the material is moulded in a press and dried at 120 degrees to 150 degrees Centigrade. Such bricks are very light and porous; the weight of German-made bricks is only about 21 ounces and the specific gravity three-tenths. Average resistance to compression is 6 pounds per .115 square inch. Being a poor conductor of heat this material makes an excellent insulator; it can be cut, adheres well to mortar and is fireproof.

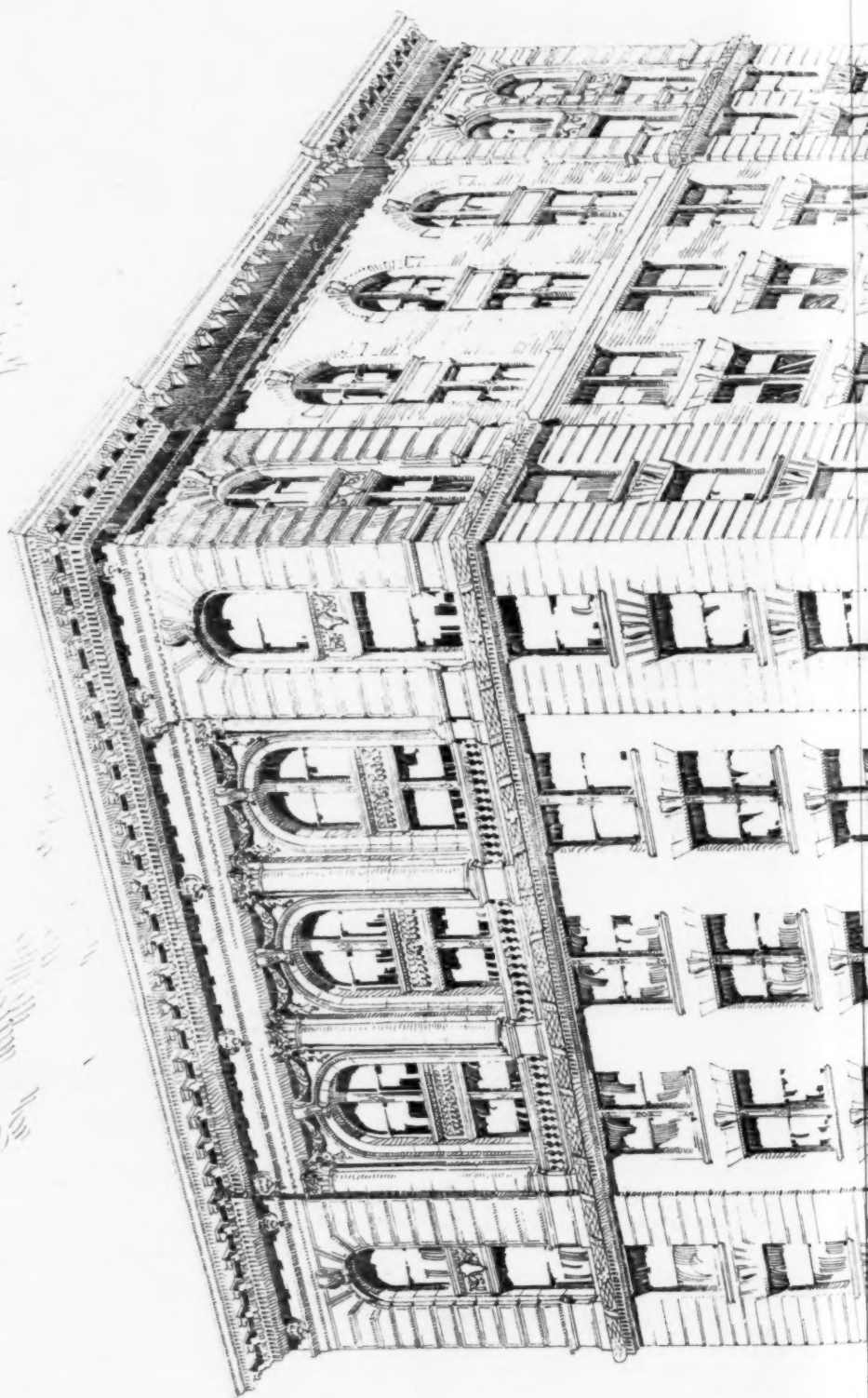
**Papier-mâché.**—Under this name waste paper is employed. It is torn to pieces and thrown into water for some time, and subsequently compressed to drive out the water. Then it is beaten into a pulp and again freed from water. The lumps thus obtained are placed in the sun or under shelter, and when perfectly dried are rasped. The raspings are mixed with flour-paste and made into a pulp, which, when well mixed, receives an addition of two-thirds of its weight of fine ashes, preferably hardwood ashes, and again mixed. The paper-pulp is now ready for use; it can be kept moist when not utilized at once. Without being absolutely destined for stones *papier mâché* is useful to make reliefs and ornaments in buildings. We have been compelled to limit ourselves to a few examples in this article, but the various compositions for stones can be varied considerably, and the number of patents is not small. We selected what seemed most typical, in order to give an idea of the subject.—*Moniteur Scientifique*.

**DAUBIGNY'S ETCHINGS.**—Daubigny seems to have been an incessant worker as illustrator and etcher. His plates cover all sorts of subjects, from the illustrations of Chateaubriand's poems to the record of street scenes in Paris, from woodcuts for the "*Mystères de Paris*" of Eugène Sue to splendid etchings of his own pictures. His etchings of good pictures by other men, such as Lorrain's "*Abreuvoir*," and some tree studies by Ruysdael, are simply admirable. Everything served his purpose, whether it was a glorious view of Westminster Abbey or a comic sketch of Seine fishermen—old gentlemen who willingly spend days in catching half-a-dozen minnows the length of one's finger. Daubigny depicts the excitement among the fraternity when a little fish is brought to the surface. Under a splendid view of Westminster, the artist has written in musical notation the carol of the chimneys. Among the etchings of Daubigny's pictures by other men is a superb "*Solitude*" by Chauvel, a lonely pond surrounded by forest trees.—*N. Y. Evening Post*.

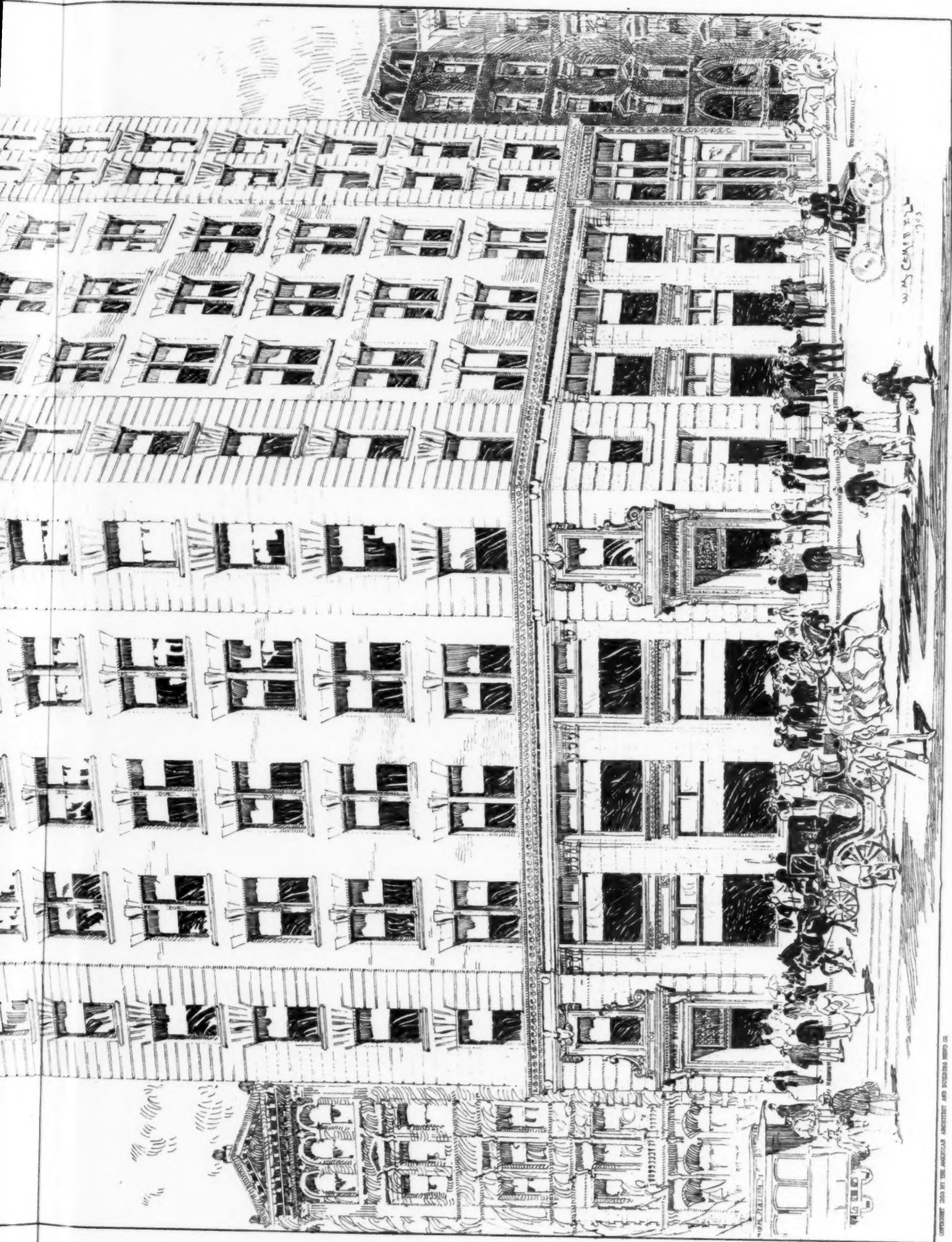


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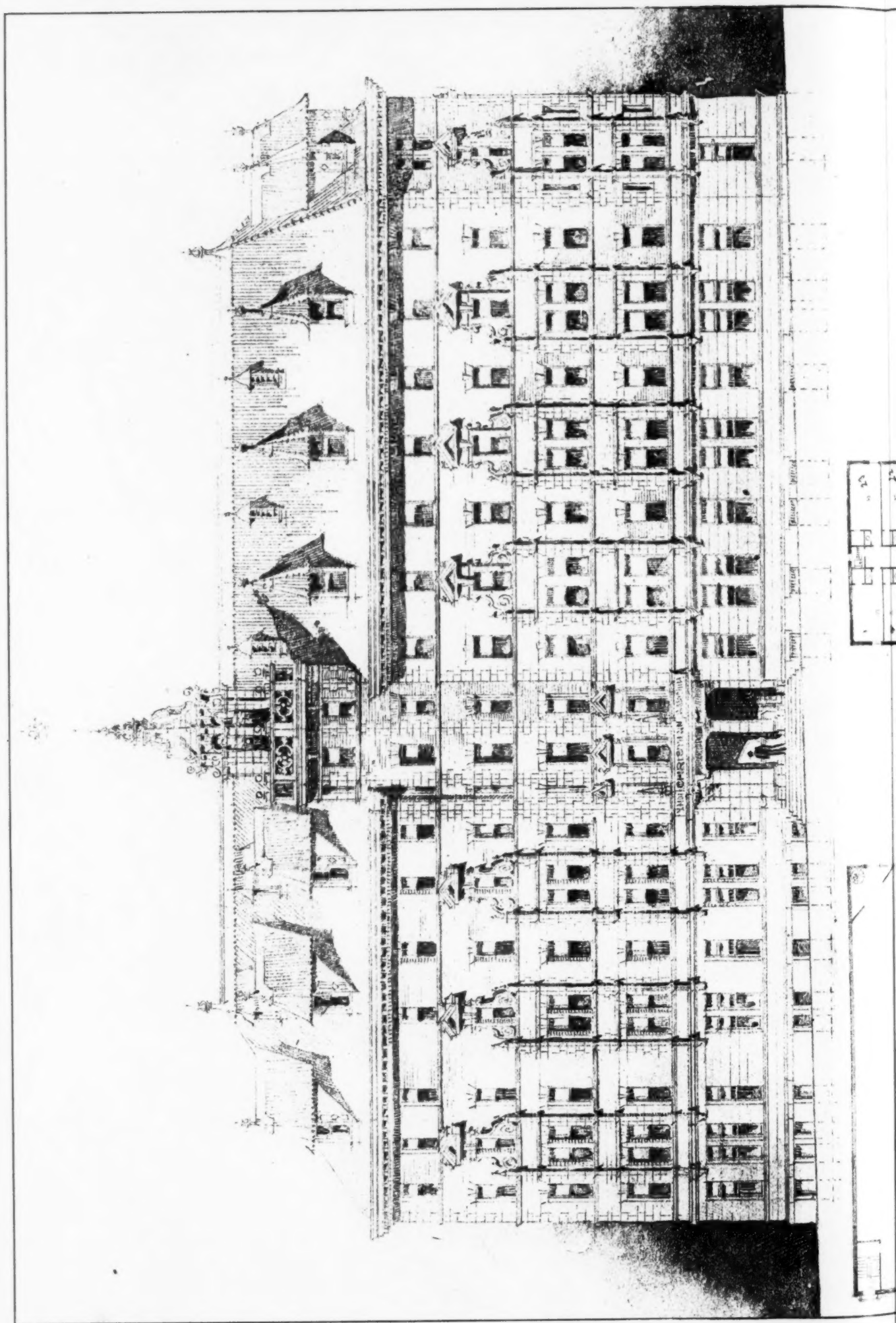
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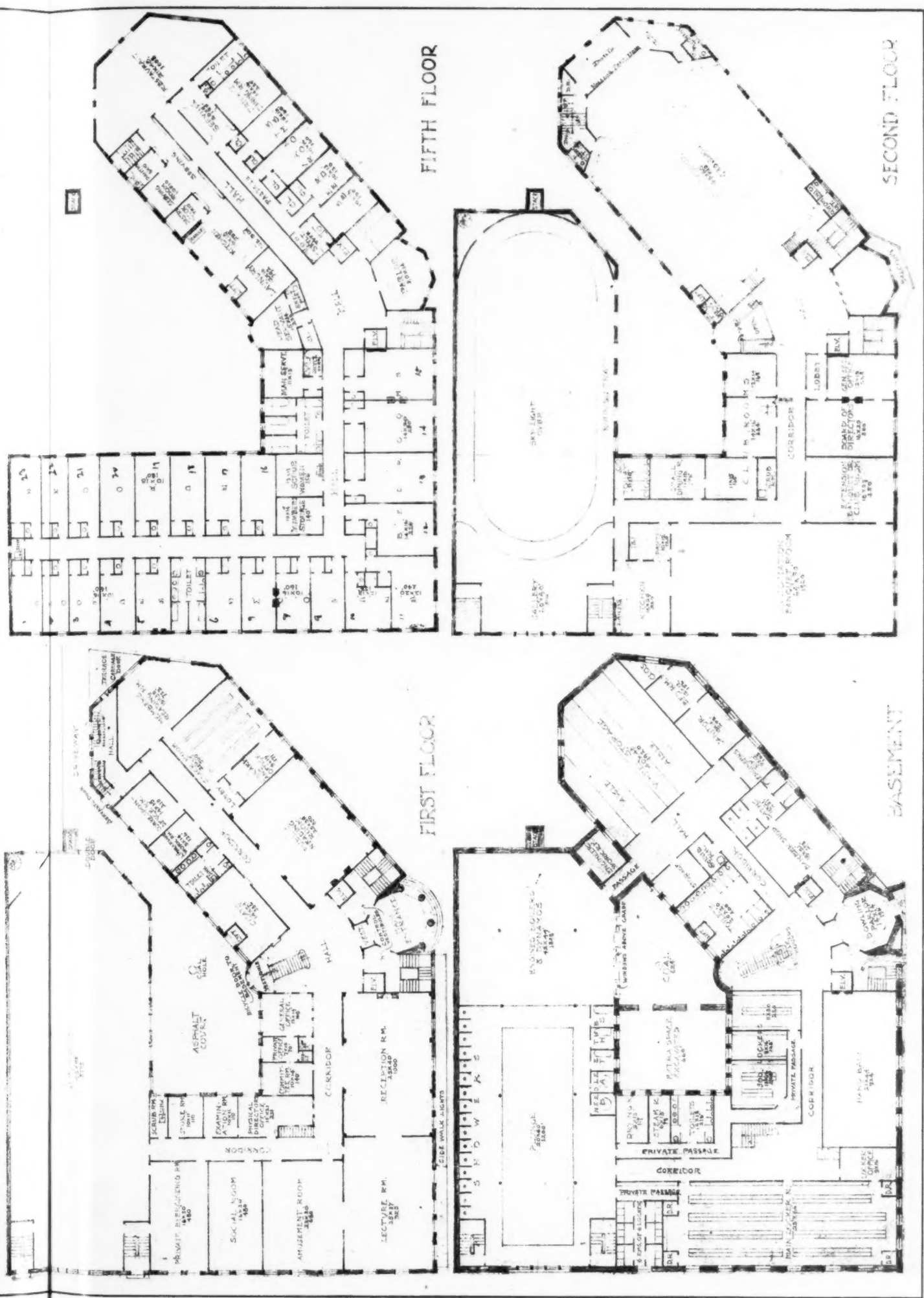




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The American Architect  
Feb. 28, 1903.

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THE "BLUE ROOM" IN THE WHITE HOUSE





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THE WHITE HOUSE, WASHINGTON, D. C.





# THE AMERICAN ARCHITECT AND BUILDING NEWS

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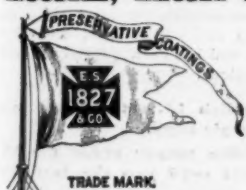
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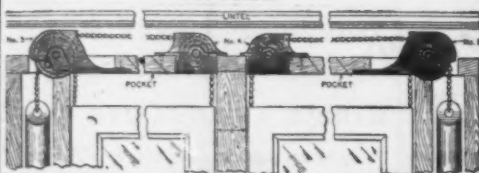
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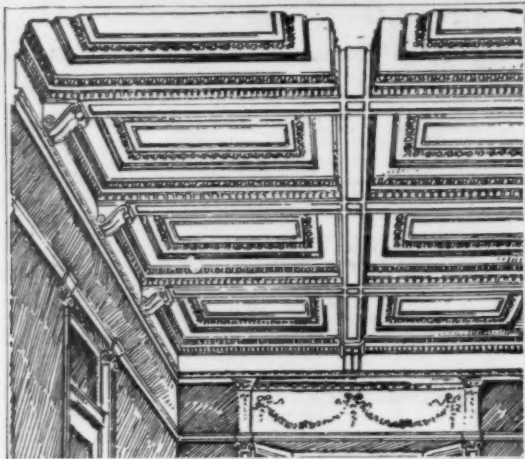
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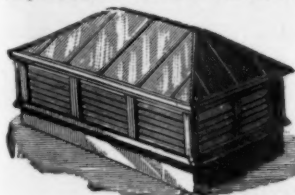
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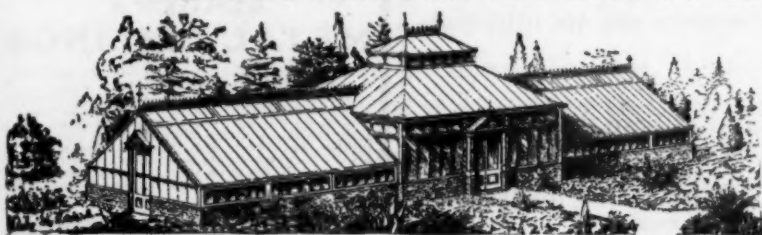
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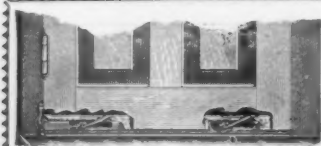
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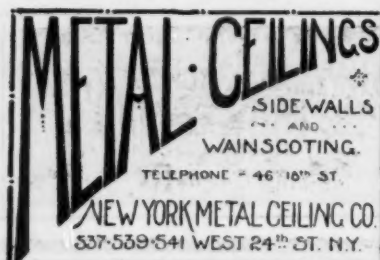
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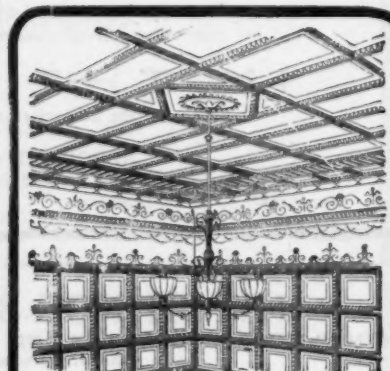
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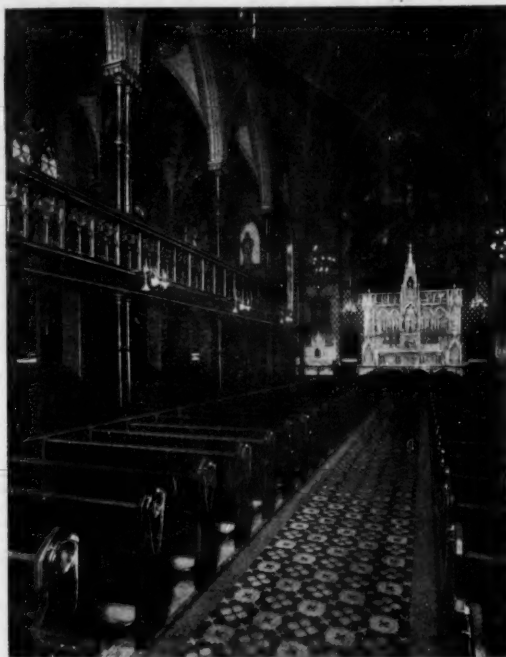
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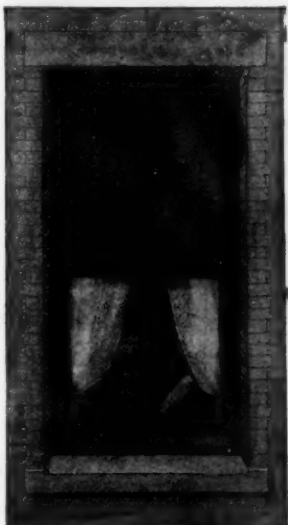
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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>(Advance Rumors Continued.)</div> <div>favorably on the appropriation of \$100,000 for a site, for the Eastern Female High School.</div> <div>Barre, Mass. — This town is to have a new hotel, which will probably cost \$65,000. An association of the business men of the town is behind the scheme and C. L. Greenleaf will be the architect.</div> <div>Bedford, N. Y. — A new club-house is to be built here for a country club. Tennis courts, golf links and other advantages of suburban clubs are to be provided. Among those interested are Col. William Jay and Richard P. Lounsbury. The new club-house is to cost \$50,000.</div> <div>Bismarck, N. D. — The legislature has authorized \$100,000 bonds for enlarging the capitol building. A new wing is to be built to accommodate the house of representatives, a new heating plant installed and an electric-light plant.</div> | <div>(Advance Rumors Continued.)</div> <div>Boston, Mass. — Announcement is made that \$76,000 has been given toward the establishment of an infants' hospital in connection with the new medical buildings to be erected for Harvard University. Plans have been drawn by Shepley, Rutan &amp; Coolidge, and architecturally this building will harmonize with the others. The gift is in memory of Thomas Morgan Rotch, of the class of 1901 of Harvard. To follow out present plans, \$60,000 more is necessary.</div> <div>Shepley, Rutan &amp; Coolidge have drawn the plans for the new school-building to be erected on Heath St., Ward 19. It will be of brick and limestone, the floors being laid on terra-cotta arch blocks. Cost, \$207,000.</div> <div>Brandon, Man. — It is reported that the provincial government will erect a wing to the asylum here to cost \$70,000.</div> | <div>(Advance Rumors Continued.)</div> <div>Bridgeport, Conn. — It is reported that the Eaton, Cole &amp; Burnham Co., manufacturers of hardware, has acquired land next to its plant and has formulated plans for the erection of four additional factories.</div> <div>The Connecticut Clasp Co. will erect a brick building, 93' x 123'.</div> <div>It is reported that H. C. Bradley is to erect a brick and stone factory on Seaview Ave., for his wood-turning business, which has outgrown its present plant on George St. The new plant will be ready for occupancy in the fall.</div> <div>The Bryant Electric Co. has bought land at each end of its plant and will extend its factory in both directions.</div> <div>The Hathaway Manufacturing Co., makers of tools, dies and sheet-metal goods, has purchased a site near Railroad and Bostwick Aves. Plans have been drawn for a large plant, work on which will be started at once.</div> |

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NEW MILFORD, CONN.

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Chicago, Ill. — A handsome private residence will be erected at the corner of Sheridan Road and Alameda Ave. for Charles C. Cretors from plans and specifications by Architects Huehl & Schmidt. Estimated cost, \$20,000.

The Whitman & Barnes Manufacturing Co. will extend its store and warehouse at 79-85 W. Monroe St. by a five-story brick addition, 80' x 101', which will cost \$60,000.

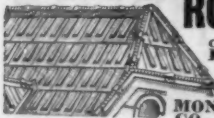
Plans have been completed by Architects J. F. & J. P. Doerr for the new picture-frame factory to be erected at the corner of W. Polk St. and Washtenaw Ave. for the Miller Bros. Art Manufacturing Co. It will be a two-story building, covering 109' x 217', of brick and stone, to cost about \$50,000.

Extensive improvements and alterations will be made to the building at 213 and 215 State St., owned by Henry C. Lytton, from plans and specifications by Architect S. N. Crown, 85 Dearborn St. Cost, \$20,000.

The plant of the Goss Printing Press Manufacturing Co. at Ashland Ave. and 15th St. is to be enlarged by an addition, for which Huehl & Schmidt have made the plans. The building will be three



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### BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

stories high, 85' x 243', of stone and brick, and will cost \$50,000.

Architect Fritz Foltz, 69 Dearborn St., is about to let subcontracts for the large addition which will be built to the plant of the Allen Chalmers Co. on Elston Ave., near Redfield St. at a cost of \$250,000.

Colorado Springs, Col.—Mayor Robinson has written to Andrew Carnegie that the city will accept his proposition to give \$50,000 for a library on condition that the Council appropriate \$5,000 annually for its maintenance.

Columbia, Mo.—A new \$25,000 M. E. Church will be erected here this spring.

Corydon, Ia.—The Y. M. C. A. has plans for a new building to be erected in the spring.

Denison, Ia.—The plans of George A. Berlinghof, of Beatrice, Neb., have been adopted for the \$70,000 court-house.

Des Moines, Ia.—L. Harbach & Sons will erect a wholesale furniture warehouse on lower 6th Ave., brick, slow-burning construction, 88' x 132'.

Hallett & Rawson, have drawn plans for a building to be erected near the B. & O. tracks on 4th St. for the Rumley Mfg. Co. Cost, \$65,000.

Hallett & Rawson have drawn plans for an edifice to be erected by the Society of the First Church of Christ, Scientist. Cost, \$20,000.

Detroit, Mich.—A. C. Varney & Co. are the architects for the new six-story brick warehouse for Standard Bros., wholesale hardware, to be constructed corner of 1st St. and Jefferson Ave. Cost, about \$90,000.

Rumr has it that S. C. Falkinburg is preparing plans for a twelve story apartment of 60 families to be built corner Madison Ave. and Grand Circus and Adams Ave.

Pollmar & Ropes are preparing plans for a \$10,000 residence for Virginia Ave.

A. Kahn is the architect for the improvements to the Joy Building corner Jefferson and Bates Sts. Four stories will be added to the present building.

Dillon, S. C.—The Maple Cotton Mills have been granted articles of incorporation, its capital stock being \$100,000. Details as to plant have not been decided.

Articles of incorporation have been filed here for the Hamer Cotton Mills, with capital stock placed at \$100,000.

Douglas, Mass.—This town has been given a new public library by James Fairfield of Lawrence, whose home was formerly here. The building will be built of brick and freestone and located on Main St. Work will be begun as soon as weather is suitable.

San Claire, Wis.—The Bd. of School Comrs. have decided to erect a \$25,000 addition to the high school.

Evanston, Wyo.—The bill extending the limit of cost of the public building to \$179,000 has passed the Senate.

Exeter, N. H.—An "athletic house" is needed at Phillips-Exeter Academy, and such a building is to



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### BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

be erected this year. Plans have been drawn and accepted, and the building will be called the Newell Athletic House, in memory of Marshall Newell, an athlete and an alumnus of the school.

Fall River, Mass.—The city proposes erecting 3 new schools this spring, at a probable cost of \$150,000.

Fargo, N. D.—M. E. Beebe has drawn plans for a store and office building to be erected for Stern Bros. It will be three-story and basement, 110' x 160', of pressed and common brick and will have steam heat, maple flooring, iron beams, metal ceiling, ventilators, etc. Cost, \$60,000.

Fremont, Neb.—It is reported that the Y. M. C. A. will erect a building, two-story and basement, to cost \$25,000.

Green Castle, Ind.—The citizens of Putnam County have voted to build a \$200,000 court-house. The county commissioners will prepare plans and specifications and advertise for bids.

Hell Gate, N. Y.—Official announcement is made of the building of the new bridge across the East River at this place by the Pennsylvania Railroad Co. It is estimated that the new bridge will cost over \$6,000,000. When work will be started has not been definitely decided on. It will require about three years to complete the work. The bridge and approaches will be two miles long. The central span will be 810 feet in length. The bridge will be 135 feet above the water and will extend from Fort Morris, Harlem, to Randall's Island, thence to Ward's Island, and from that point to Long Island.

Houghton, Mich.—Report states that the college of mines is raising funds for the erection of a \$50,000 gymnasium and club-house.

Houston, Tex.—It is stated that the Oriental Textile Co. has increased capital stock from \$50,000 to \$100,000, in order to enlarge its plant. Land has been purchased for additional buildings. The character of the improvement is yet to be announced.

Hudson, Mass.—Mrs. Grace Whittemore, librarian of the Public Library, has received a letter from Andrew Carnegie stating that he would contribute \$12,500 toward the new public library have provided the town will vote to appropriate \$1,250 annually for its maintenance.

Huron, S. D.—The Masons propose the erection of a three-story lodge building, 50' x 100'. Cost, \$30,000.

Hutchinson, Minn.—The new Ansar college building has been burned; insurance \$30,000. It will be rebuilt.

Indianapolis, Ind.—Plans for the five pressed brick school-buildings for this city are being prepared by the following architects: Vonnegut & Bohn, 608 Indiana Trust Building; Clarence Martindale, 503 Indiana Trust Building; Herbert W. Foltz, 49 Ingalls Block; T. A. Winterrowd, 75 Lombard Building. Approximate cost, \$375,000. Bids received about April 1.

Ithaca, N. Y.—The University of Cornell, aroused by the increasing spread of typhoid fever, has offered this town \$150,000 for a water-filtration

### BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

plant. Impure water is thought by the physicians of Cornell to be the certain cause of the epidemic.

Kenwood, Minn.—The residents of this place are to erect and maintain a club-house. The building will contain dining, parlors, reading-room, billiard and card rooms, bowling alleys, gymnasium and a large assembly hall. Cost, \$15,000.

Lewistown, Idaho.—J. Eichenberger will erect a two-story brick block, 30' x 80', and O. A. Kjos will erect a \$25,000 store building.

Lincolnton, N. C.—J. A. Abernethy will build a \$200,000 cotton factory. The D. A. Tompkins Co., of Charlotte, are the architect-engineers in charge and they will immediately contract for the erection of buildings and installation of machinery.

Middletown, Conn.—A gift of \$25,000 from Ohas. Scott, Sr., and Charles Scott, Jr., of Philadelphia, has been announced by the trustees of Wesleyan University. The money, in addition to \$75,000 recently given by Mr. Scott and his son, is to be used for the construction of the Scott laboratory of physics, a memorial to John D. Scott of the class of '01. Work on the new building will commence at once.

Minneapolis, Minn.—The Senate has passed a bill authorizing the issue of \$200,000 bonds for public schools.

Moline, Ill.—It is reported that Hon. C. H. Deere offers half the value of a site if business men will pay the other half and erect a \$40,000 theatre.

New York, N. Y.—Plans have been filed at the Bureau of Buildings for a three and four-story brick theatre and a six-story office building to be erected at the northwest corner of Broadway and 45th St. The cost is placed at \$150,000. Milton I. Borden is the owner. Koehler & Farnsworth the architects.

The Board of Trustees of Bellevue Hospital are looking forward to the building of a noble institution for the relief of the sick and the sufferers from accidents which will cost \$5,000,000 and require several years for completion.

The North Church is to replace its wooden structure with a splendid edifice. Marble, limestone and sandstone will be used in its structure. A feature of the auditorium will be a dome, glazed with cathedral glass.

The Salvation Army proposes to erect, somewhere near E. 26th St. and the East Ferry, a building for discharged prisoners who have no homes to go to, where they will be fed and clothed until employment can be found.

Plans have been filed for alterations to No. 120 E. 56th St., the home of Mrs. Geo. Hoadly. A three-story extension is to be built in the rear, an elevator, new staircase and new entrance, at a cost of \$20,000. Carrère & Hastings are the architects.

The Reform Club has sold its present home at the corner of 27th St. and 5th Ave. The organization is looking for an aptown site upon which to build a new club-house.

Oakdale, Pa.—Plans have been submitted for the erection of 2 two-story buildings for a college for the Boys' Industrial Home, to cost about \$40,000 and \$12,000 each.



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**BUILDING INTELLIGENCE.**

(Advance Rumors Continued.)

**Paterson, N. J.**—The Barnes Chemical Works were partly burned recently. The fire is attributed to the explosion of some chemical. The main storage house was destroyed, as well as several smaller buildings. Loss about \$30,000, fully covered by insurance. The works will doubtless be rebuilt at once.

**APARTMENT-HOUSES.**

**Chicago, Ill.**—*Lawrence Ave.*, nr. Winthrop Ave., five-sty' bk. & st. apart., 35' x 120', steam; \$25,000; o., Harry Weymouth; a., W. M. Walter.  
*Pine Grove Ave.*, nr. Waveland St., three-sty' bk. & st. apart., 50' x 64', steam; \$25,000; o., Capt. J. J. Bradley; a., S. S. Beman, 135 Adams St.  
*Jackson Boulevard and Sacramento Ave.*, three-sty' bk. apart., 72' x 105', steam; \$35,000; a., H. J. McMullen.

**HOTELS.**

**Willmar, Minn.**—Three-sty' bk. & st. hotel, 100' x 120', comp. roof, steam; \$40,000; o., D. N. Tallman and others; a., Boehme & Cordella.

**HOUSES.**

**Minneapolis, Minn.**—*Tenth Ave.*, No. 1517, two-sty' bk. dwell., 32' x 64', furnace; \$7,500; o., A. B. Johnson, 256 Thirteenth Ave.

**MERCANTILE BUILDINGS.**

**Osakis, Minn.**—Two-sty' bk. & st. business building, 75' x 100', comp. roof, steam; \$39,000; o., J. A. Coughran; a., A. F. Gauger, St. Paul.

**OFFICE BUILDINGS.**

**Minneapolis, Minn.**—*Eleventh St. and Hennepin Ave.*, two-sty' & base. bk. & terra-cotta office-building, 80' x 153', comp. roof, steam; \$55,000; o., Street Railway Co.; a., Chas. Farren.

**STORES.**

**Ferry, Ia.**—Three-sty' bk. store building, 50' x 100', gravel roof; \$15,000; o., Allen Reed; a., C. C. Cross & Son.

**TENEMENT-HOUSES.**

**New York, N. Y.**—*E. Second St.*, Nos. 264-266, six-sty' bk. & st. tenement & stores, 47' 10" x 93'; \$35,000; o., Max Weinstein, 151 E. 31st St.; a., Horenburger & Straub, 122 Bowery.  
*One Hundred and Twelfth St.*, nr. 8th Ave., six-sty' bk. tenement, 50' x 37' 11"; \$65,000; o. & b., Henry and Robert Arnstein, 2115 Eighth Ave.; a., Geo. F. Pelham, 503 Fifth Ave.  
*Cannon St.*, Nos. 119-121, six-sty' bk. tenement, 41' 8" x 87'; \$42,000; o., Samuel Klein, 5 Manhattan St.; a., Geo. F. Pelham, 503 Fifth Ave.  
*E. Third St.*, Nos. 230-234, 2 six-sty' bk. tenements & stores, 37' 2" x 92' 11"; \$70,000; o., Baum & Lapin, 167 Livingston St.; a., Bernstein & Bernstein, 111 Broadway.

**WAREHOUSES.**

**Chicago, Ill.**—*Grand Ave.*, Nos. 130-141, two-sty' bk. warehouse, 40' x 100'; \$20,000; o., Louis Sievers Sons Co., 47 Fifth Ave.; a., Frank O. De Money, 141 S. Water St.; b., Philip Lotz, 610, 60 Wabash Ave.

**MISCELLANEOUS.**

**Brooklyn, N. Y.**—*Nassau Ave.*, ne cor. Guernsey St., two-sty' bk. telephone exchange, 35' x 78' 7", gravel roof, steam; \$60,000; o., New York & New Jersey Telephone Co., 81 Willoughby St.; a., W. B. Claflin, 81 Willoughby St.

**St. Paul, Minn.**—*Fifth and St. Peter Sts.*, six-sty' & base. Y. M. C. A. Building, 68' x 90'; \$300,000; a., Clarence H. Johnston.

**PROPOSALS.**

**ELECTRIC WORK.** [At Ward's Island, N. Y.] Sealed proposals for electric work, rewiring and fixtures in offices, Wards Nos. 1 to 21, inclusive. Annex building, Wards 31, 32, 33 and 34, and Staff House, may be sent by mail or delivered in person until the 4th day of March, 1903, to the State Commission in Lunacy, at the Capitol, Albany, N. Y. Drawings

**PROPOSALS.**

and specifications may be consulted and blank forms of proposal obtained at the office of F. A. Wheeler, Purchasing Steward, No. 309 Broadway, New York City, or by applicant to G. L. Heins, State Architect, in the Capitol at Albany, N. Y. T. E. McGARR, Secretary, State Commission in Lunacy. 1418

**ROADS.**

[At Jefferson Barracks, Mo.] Depot Quartermaster's Office, St. Louis, Mo. Sealed proposals will be received here until March 19, 1903, for construction of roads at Jefferson Barracks, Mo. Information furnished on application. LIEUT. COL. J. W. JACOBS, depot quartermaster. 1418

**CONSTRUCTION, PLUMBING, ETC.**

[At Fort Wright, Wash.] Bids will be received until March 11 for constructing, plumbing, gas fitting and steam heating at Fort Wright, of one single and one double set officers' quarters, and constructing one quartermaster's and one ordnance storehouse. W. C. WREN, captain, Seventeenth infantry, constructing quartermaster. 1418

**SCHOOL.**

[At Seymour, Wis.] F. R. Dittmer, district clerk, will receive bids until March 16 for the erection of an eight-room school-building, from plans by Chandler & Park, architects, Racine, Wis. 1419

**GRANITE.**

[At Ram Island, Me.] Sealed proposals will be received at the office of the Light-house Engineer, 25 Pemberton Sq., Room 1017, Boston, Mass., until March 16, 1903, for furnishing and delivering granite for the proposed light and fog signal tower on Ram Island Ledge, entrance to Portland Harbor, Me., in accordance with specifications, copies of which, with blank proposals and other information may be had upon application to LIEUT. COL. W. S. STANTON, U. S. A., Engineer First Light-house District. 1419

**REPAIRING BREAKWATER.**

[At Burlington, Vt.] U. S. Engineer Office, Winthrop Building, Boston, Mass. Sealed proposals for repairing breakwater at Burlington, Vt., will be received until March 16, 1903, and then publicly opened. Information furnished on application. HARRY TAYLOR, Capt. Engrs. 1419

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 17, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 24th day of March, 1903, and then opened, for the construction of the extension to the U. S. Post-office at Kalamazoo, Michigan, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at Kalamazoo, Michigan, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1419

**HACKLEY HOSPITAL BUILDINGS.**

[At Muskegon, Mich.] Sealed proposals will be received at the office of Harry Sawyer, secretary, Muskegon, Mich., until noon, April 1, 1903, for furnishing the necessary labor and materials required to construct and complete the Hackley Hospital buildings at Muskegon, Mich. Plans may be seen at the office of Harry Sawyer, secretary, Muskegon, Mich., or at the office of A. W. Fuller and W. A. Pether, architects, Albany, N. Y. The work will be divided as follows: Mason, iron, carpenter, roofing, painting, glazing and elevator work will be included in one estimate. Electric work, separate estimate. Plumbing work, separate estimate. Heating work, separate estimate. Contractors will be required to deposit a certified check or surety company's bond with their bid as a guarantee that they will sign the contract in case it should be awarded to them, all as provided for in the specifications. For further information, address HARRY SAWYER, secretary, Muskegon, Mich. 1419

**HOSPITAL.**

[At Fort Lincoln, N. D.] Office of Chief Q. M., St. Paul, Minn. Sealed proposals will be received at this office until March 23, 1903, for the construction of a hospital at Fort Lin-

**PROPOSALS.**

coln, N. D. Plans and specifications may be seen and blank proposals with full instructions, had upon application here, or at the office of the Constructing Quartermaster, Bismarck, N. D. GEO. E. POND, C. Q. M. 1420

**TRAINING WALLS.**

[At St. Augustine, Fla.] U. S. Engineer Office, St. Augustine, Fla. Sealed proposals for constructing training walls in St. Johns River, Fla., will be received here until March 10, 1903, and then publicly opened. Information furnished on application. FRANCIS R. SHUNK, capt., engr. 1418

**HIGH SCHOOL.**

[At Audubon, Ia.] Sealed bids will be received by the undersigned for the erection and completion of a high-school building at Audubon, Ia., according to plans and specifications prepared for same by Liebbe, Nourse & Rasmussen, architects, Des Moines, Ia. Plans will be on file at the office of secretary of board or architect's office. Bids will be received until March 7th. G. W. COSSON, Sec'y B. O. E., Audubon, Ia. 1418

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 16, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 23d day of March, 1903, and then opened, for the completion of the U. S. Post-office at Richmond, Kentucky, in accordance with drawings and specifications, copies of which may be had at this office, or at the office of the Custodian, Richmond, Kentucky, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1418

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 14th, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 19th day of March, 1903, and then opened, for the enlargement including plumbing, heating apparatus and electric conduits and wiring of the U. S. Post-office, etc., at Minneapolis, Minnesota, in strict accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian at Minneapolis, Minnesota, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1418

Treasury Department, Office Supervising Architect, Washington, D. C., February 14th, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 18th day of March, 1903, and then opened or repairs, painting, etc., at the U. S. P. O., Buffalo, N. Y. Copies of the specification may be had at this office or at the office of the Custodian of the building, Buffalo, N. Y., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1418

**CONCRETE PIER.**

[At Duluth, Minn.] Capt. D. D. Gaillard, Duluth, will receive bids until March 9 for the construction of the concrete south pier of the Superior entry. The contract will involve the expenditure of \$200,000. When finished, the pier will be about 3,300 feet long. 1418

**ELECTRIC LIGHT PLANT.**

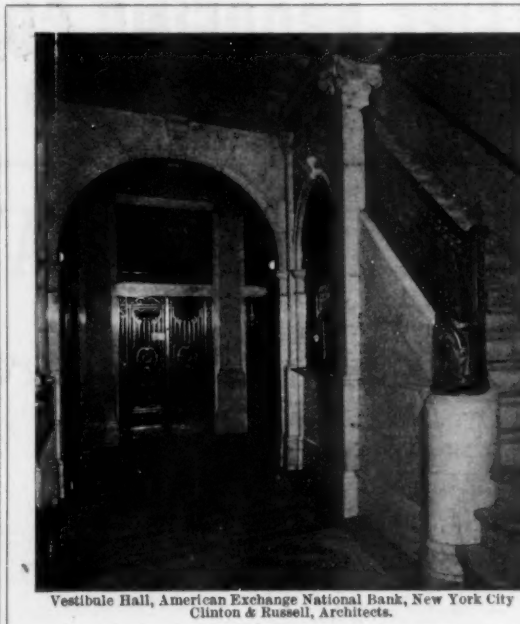
[At Fort Stevens, Ore.] Office of C. Q. M., Vancouver Barracks, Washington. Sealed proposals will be received here until March 6, 1903, for furnishing and delivery of all material required by the plans and specifications for the construction of electric light plant at Fort Stevens, Ore. Information furnished on application. F. H. HATHAWAY, C. Q. M. 1418

**SCHOOL.**

[At Williston, N. D.] Josephine G. Littlefield, clerk Grinnell District No. 4, will receive bids until March 10 for the erection of a school-building, 18' x 24'. 1418

**BUILDINGS.**

[At Athens, Ore.] Proposals for the erection of a two-story business block to cost about \$45,000 will be received by N. A. Miller until March 20. Buildings to be erected according to plans and specifications prepared by C. E. Troutman, architect, Pendleton. 1418



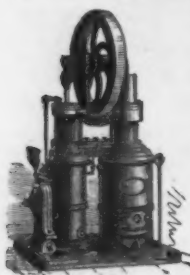
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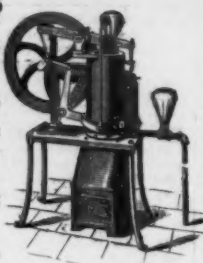
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**CODE OF PRACTICE  
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Adopted by the Master Builders' Association of the City of  
Boston, Aug. 2, 1894.

**ARTICLE I.****Obligation of Principal Contractor to Sub-  
Contractor.**

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

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

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

**ARTICLE II.****Award of Sub-Contracts.**

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

**ARTICLE III.****Penalty for not Awarding Contract to Lowest  
Sub-Bidder.**

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

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

**ARTICLE V.****Payments to Sub-Contractors.**

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

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

**ARTICLE VII.****Obligation of Sub-Contractor to Principal  
Contractor.**

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

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

**ARTICLE X.****Bids to Architects or Owners.**

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

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

**SUGGESTIONS.**

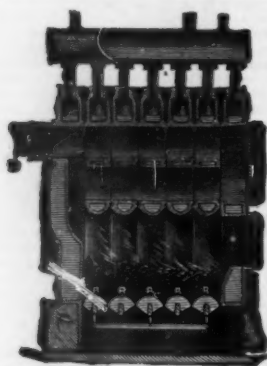
Members of this Association having sub-contracts to let, or material to buy, should, as far as may be consistent with business principles, deal only with members of the Association, or at all events give their fellow-members an opportunity to compete, and then give them the preference, other things being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

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

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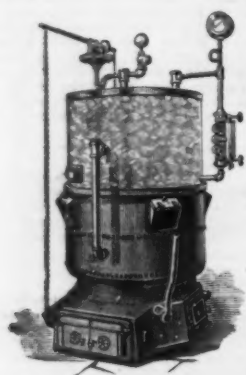
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ADOPTED BY THE SOCIETY, FEBRUARY 1  
. . . 1895. . .

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.

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