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# *The* AMERICAN ARCHITECT AND BUILDING NEWS

Regular Edition

Vol. XCII.

JULY 27, 1907.

No. 1648

SUMMARY:

Pages 25-26

The Movement to Reform the Method of Assessing Architects' Fees—Cases where the Present System bears Inequitably on the Client—The Architect's Commission on the Mechanical Plant—A Regrading of Rate to Accord with Classification of Buildings Desirable—The Calling of the English Quantity-Surveyor "Especially Lucrative"—An Architect's Refusal to Comply with his Client's Instruction set up as an Offset to his Claim for Commission—Heirs-at-Law Reclaiming Property Once Bequeathed to the French Church.

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*Additional:*—Rear-entrance to Stable-yard of Harry Rubens, Esq., Glencoe, Ill.—Entrance Feature: House of Mr. Spencer, St. Louis, Mo.

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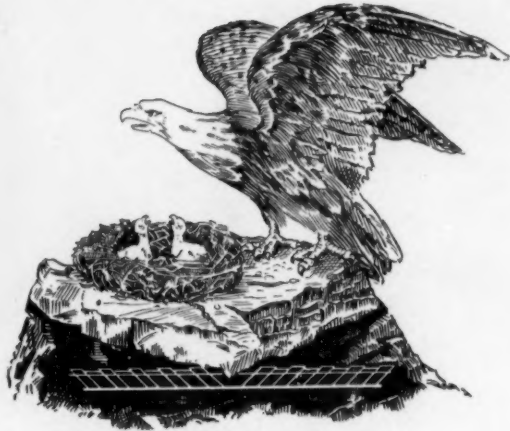
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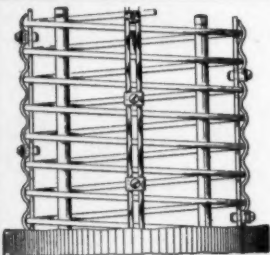
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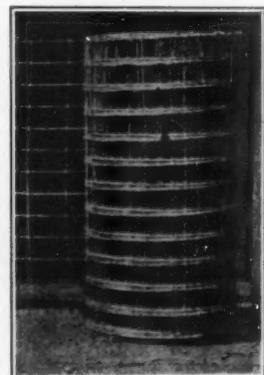
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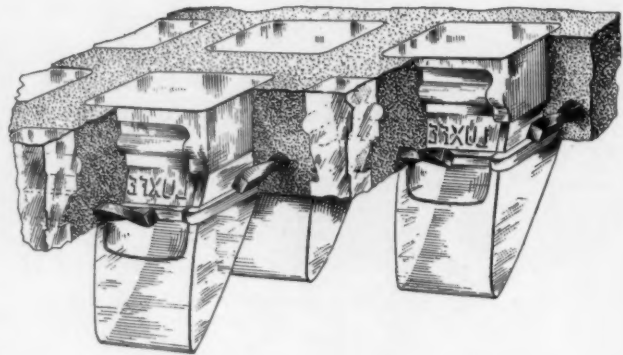
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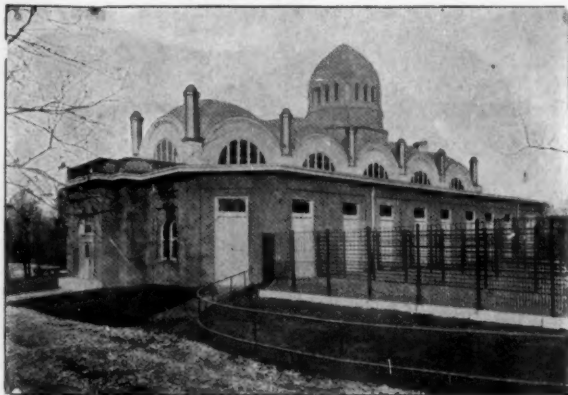
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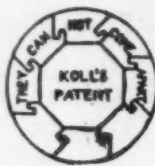
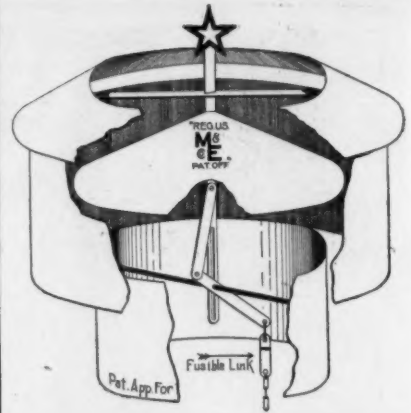
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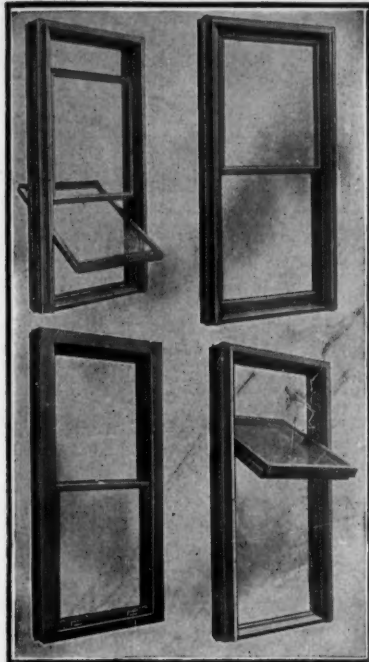
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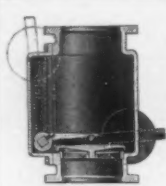
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SOCIETIES, PERSONAL MENTION, ETC.

THERE are indications declaring themselves from several directions that architects, both in this country and in England, are getting ready to debate seriously the propriety of attempting to reform the accepted method of computing the remuneration of an architect for his work. The system as it exists in this country is simple in application, and nowadays is pretty generally understood by the public and accepted without too much demur by the courts, but it is crude and inequitable, and its routine application to all sorts of differing situations and conditions has the disagreeable effect of reducing the members of a liberal profession to the grade of members in a trade union, as the public understands the matter. Theoretically, the five per cent. rate was suggested as a fair "minimum" rate, the expectation being that as a man gained name and fame he could and would charge and collect a larger fee; but practically there are very few who have attempted to charge at a higher rate, and the maximum rate is, generally speaking, five per cent. flat, and before the modern methods of building became current, when buildings were of moderate size, and before architects had organized their offices on a factory basis, the system worked fairly, except in those cases when, as now, it was wholly inequitable.

AN even rate of five, or any other, per cent. would seem to imply that the cost factors in the several problems should be essentially comparable, that the efforts for which proportional payments are demanded should be practically identical. That is, if five per cent. is a proper architect's fee on a million-dollar office-building, then an architect should be able with exactly the same expenditures of time, thought, effort, labor and skill to earn a similar fee of fifty thousand dollars by the designing and supervising the construction of five two-hundred-thousand-dollar country-houses for equally particular individual owners, or a church, a theatre and a hospital at three hundred and fifty thousand dollars each, and every architect knows this cannot be done. The inference then is, clearly, that the architect is paid too much for the office-building, or not enough for the others. But as it is the architect who has established the rule and forced it on the public, it is of no consequence to the latter, so far as equity is concerned, whether he earns less for his five houses than he does for his office-building, always assuming that in that case five per cent. is a proper charge. But, is it? Suppose a skyscraper of the commercial type has been designed—an architecturally treated stone base, a plain brick middle body punched full of window holes and an elaborately be-corniced upper section—and the working-drawings practically completed; suppose the owner discovers at this point that, to have a paying investment, he must have more room to rent, and the architect must add four more stories. The architect inserts these, of course, in the plain middle body where the arrangement of rooms is "typical," cuts his elevations apart, makes new tracings and blue-prints, changes a few figures on the framing-plans at an outside cost of five hundred dollars, and collects, with gratitude, five per cent. on the fifty thousand dollars the four new floors have cost the owner. But has not the owner been inequitably charged for the time and effort the architect spent on the alteration? To be sure, if the case had been reversed, the architect would have, as blandly, eliminated four stories from the middle of his building and been two thousand dollars the poorer. An instance of this sort suggests that the method is inequitable and unscientific.

IT is easy to show, and has been shown over and over again, that, charging at a five per cent. rate, an architect who does a fairly active business of a good type earns only a fair and modest living, no greater than thoughtful persons would be likely to concede was due to his skill. But, when such an architect's books are analyzed, it is found that on much of the work done there was little net profit, on some of it there was none at all, while on other parts the profit as compared with the cost was really handsome, and yet all the clients had been billed at the same rate. The inference is plain: the client who had paid the handsome profit had really been making a present to that other client, a stranger, whose work had yielded to the architect less or no profit. There is clearly inequity here: it is no part of an architect's duty, or right, to levy a forced contribution upon one client for the benefit of another. It is of no concern to clients that the five per

cent. rule enables an architect to make "in the long run" a reasonable living, while it is of the greatest concern that no one of them should be forced to spend his money unfairly, unwittingly and unwillingly.

THE inequitableness of the five per cent. rule shows out when we consider the matter of machinery, for the architect's income from a tax on this part of his client's outlay may wax or wane in a very curious way. As it is the architect's duty to construct a building for his client in complete working order, it is proper enough under the present system that the cost of heating and ventilating apparatus, pumps, elevators and the ordinary mechanical apparatus that are installed in modern buildings should be included in the total cost upon which his fee is computed. But, suppose, in the case of an office-building, say, the client and architect had all along meant to install an elaborate and costly steam plant, five per cent. upon the cost of which would yield the architect a very pretty sum, but that at the last moment the client decides to put in a motor and take electric current from a power company. The client makes a saving in prime cost and also another saving at the expense of the architect, who loses his expected commission on the steam plant, and yet has, in our practice, no reasonable ground for complaining. But does or does not the converse of this indicate that the architect would collect a fee to which he had no equitable claim? If the client adheres to the steam plant idea the architect gets a fat fee on the plant, or he loses it if a motor is substituted; but in neither case does he do anything at or after the time of making the decision to earn any fee at all; the building is already planned and will be built with engine-room complete, and on that building the architect can collect the standard fee; but the installation of one or another kind of machinery may be decided by the client's whim, and that whim may seriously affect the architect's pocket—and temper. Clearly such a case as this reveals an element of gambling that is undignified, and a system which admits of gambling can hardly be held to be scientific.

PROBABLY nothing can be devised that will work more satisfactorily than a system of charging a percentage on cost, but it is time that there should be a classification of buildings, to each of which classes a separate rate should be appropriate and fair, for owner and architect alike. As our municipal building-laws and the underwriters' rules recognize fresh and more classifications each year, and as architects are parties to the introduction of such classifications, often urging and insisting on their making, there seems no good reason why they should not incorporate similar classifications into their own schedule of fees. The matter seriously needs attention, and partly because, if it should be undertaken, and it ought to be, it would give a very good chance to thresh out and determine how, by whom and at what rate engineering and other experts—whose aid has become of such importance during the last score of years—shall be paid.

THE situation as to architects' fees in England is at once better defined and yet more complicated, and we must confess to not understanding the bearing

of all the conditions there; for example, we do not understand why an English architect recounting, recently, how his own son had just entered on a career, should have said that this son had taken up "that especially lucrative branch of the architectural profession, quantity-surveying." "Especially lucrative" is an enticing phrase to have properly attaching to any branch of the profession, but we had not understood before that quantity-surveying was anything more than uninteresting and laborious. Perhaps, just as the solicitors, not the barristers, are the members of the legal fraternity who are enabled to leave fortunes to their children, the quantity-surveyor is the moneyed man of the architectural profession in England. The further fact that the quantities are paid for by the contractor, not by the architect, nor yet directly by the owner, would suggest that quantity-surveyors have to be men of the utmost rectitude, not open to any form of bribery, and, generally speaking, we understand that the men who adopt this calling are of exceptionally high character.

A RATHER unusual defense is set up in the case of Messrs. Henry & Son, of Akron, O., against T. K. Albaugh, the architects having sued for their commission for designs for the Grand Opera-house at Akron, which plans were finally discarded in favor of those prepared by another architect. The defendant, in his answer, alleges that he was obliged to abandon Messrs. Henry & Son because they resolutely refused to alter their drawings to meet his requirements, and that this step was forced upon him by the evils flowing from the delay caused by a seeming deadlock, and it is easy to see that where the "opening" of a new theatre is concerned a delay is an unusually serious and costly matter. It does not appear what instructions were given by the owner that the architects refused to comply with; but unless he was trying to insist on some breach of the local building-law, or the gross violation of some principle of construction, it seems to us that his novel defense is likely to prove sufficiently valid for his purpose.

THE Separation law in France continues to afford interesting developments, and it is worth while to mention one of the latest, though it is questionable how far it may be proper to do so in an architectural journal, seeing that its connection with the preservation of church fabrics is somewhat remote. It now appears doubtful whether the State is going to be as greatly benefited as was anticipated by the confiscation of the Church funds, for already, in various parts of France, suits have been brought against the State by the heirs-at-law of individuals for the repose of whose souls, through the perennial celebration of masses, certain moneys or properties had once been turned over to the Church. As the masses can no longer be celebrated, a breach of contract has been operated, and in the cases already decided the courts have ruled that the heirs-at-law can recover from the State which forced the breach of contract, and now holds the funds. What the anguished souls in Purgatory will now do is not so easy to guess.

## Standard Fire-resisting Construction<sup>1</sup>—II

THUS far we have considered only the problem of efficiently protecting structural steelwork. Let us now consider the steelwork itself.

As we have seen, it is the steelwork which is really the source of trouble, because under high temperatures it tends to lose all or a large proportion of its strength, and finally, when the diminution of resistance to strain is sufficiently far advanced to sag and then collapse.

Metal-framed structures are being largely adopted in the present day, and it is quite common to find massive stone or brick walls wholly carried on metallic pillars and beams, so as to give large window space. In such circumstances concentration of metallic members and heavy sections is essential for constructional purposes, but such concentration accentuates the weakness of the structure as a fire-resisting building, and this even where insulation is carried out.

It will be obvious, therefore, that if the metallic members can be, so to speak, decentralized and diffused, and heavy sections avoided, it will be possible to effect better protection or insulation to each metallic structural unit. This brings me to that portion of the rules of the Fire Offices' Committee headed "Ferro-Concrete or Reinforced Concrete Construction," a form of construction which gives effect to this idea of diffusion of steelwork, reduction of steel sections and more adequate protection of the steel.

The meaning of the term "Ferro-concrete or reinforced concrete construction" is defined by the rules to be "buildings constructed with concrete reinforced in every part with embedded metal rods or bars spaced not more than 12 inches apart, securely connected or overlapping at least 6 inches at all abutments and intersections, having also bands or bars across the thickness of the concrete."

Comparing a rolled steel joist and a ferro-concrete beam, the difference in the cross-sectional area of steelwork is very marked. In the rolled steel joist there is a relatively heavy concentrated mass of metal, difficult to protect efficiently against fire and wide temperature fluctuations. In the ferro-concrete beam there are a number of steel bars of small cross-sectional area, and these bars are absolutely embedded and surrounded at every point by a monolithic mass of concrete. It should be also noted that this concrete forms an essential part of the beam; it is not merely a protective skin or coating; it is a solid jointless mass thoroughly rammed and consolidated, and in which the steel bars are completely embedded. This principle of construction can be applied throughout the building without using any combustible material.

I have stated that such a building approximates more closely than any other to fireproof construction, and my reasons for this statement are:

- (1) The non-concentration or diffusion of the structural metalwork throughout the mass.
- (2) The thorough encasement of the relatively small metal sections by the concrete.
- (3) The solid and monolithic character of the resulting structure and the absence of joints.
- (4) The absence of concealed spaces.
- (5) The complete absence of combustible structural material.

In a paper read before the International Fire Congress at Milan, by Mr. James Sheppard, Chief Surveyor of the North British and Mercantile Insurance Company, the author stated that "experts in reinforced-concrete buildings agree that to obtain the best results (considered only from a structural point of view and under normal conditions) reinforcing rods must be placed near the outer surface of the concrete, a thickness of 1 inch in front of the rods being generally adopted, but this thickness is altogether insufficient for the protection of metal rods against a serious fire." Now I may say, in a word, that in actual practice 1 inch thickness is certainly sufficient for the small sections, and a greater thickness is given for the larger sections. To illustrate what I mean, if 2 inches thickness is required for a bar 1 3/4 inches diameter, then surely 1 inch is more than ample for a bar 5/16 inch diameter. The rules of the Fire Offices' Committee seem

to meet this aspect of the matter by providing "that no rod or bar shall be nearer the face of the concrete than double its diameter, and that such thickness of concrete shall not be less than 1 inch and need not be more than 2 inches." A very interesting suggestion was also made to the effect that the outer skin of the concrete might be made with a different concrete with an aggregate of high fire-resisting qualities. To carry this out in actual practice would, I fear, involve considerable additional expense.

The Congress passed a resolution as to the nature and size of the aggregate (which should be able to pass 1-inch mesh), the nature and fineness of the cement, and as to the method of protection of angles with angle irons, with all of which I am in complete agreement.

I also understand that the British Fire Prevention Committee are about to undertake a full set of tests to determine the different values of various aggregates in concrete for fire-resistance, and this body has already made and issued the results of a large number of tests on the subject.

Such research work is very valuable, but, as regards concrete, these tests have always struck me as requiring a good deal of careful consideration. I do not suppose that any one of the various concretes subjected to these tests is older than, say, three months. Now at that age the concrete must still, in the heart, contain considerable moisture, and under the application of intense heat this imprisoned moisture will become converted into steam, and everyone knows the expanding properties of steam, which will tend to the disintegration of the practically still "green" concrete. If a porous aggregate has been used, such as the clinker of destructor refuse, the steam will probably find a ready means of escape, or the moisture will sweat out under the application of heat without becoming converted into steam. But with a dense gravel concrete the steam, by reason of the density of the mass, will not be able to find a ready means of escape, and will tend to disintegrate the concrete. I do not think this will be evidenced by actual bursting of the concrete, but rather by a large number of small fissures being opened up, separating the mass, and causing pieces to fall off on the application of a powerful jet of water.

Now, in a building which has been constructed for, say, a year this moisture would have almost entirely disappeared, and as time went on would become more and more infinitesimal, and the conclusion to be deduced from this is that the resistance of gravel concrete to the action of fire will increase with age. I venture to offer this suggestion for consideration, as it seems to me that this may have a considerable bearing on the results of tests made on what is practically "green" concrete.

I hold this view because I have had experience of the result of a fire in a building wholly constructed in ferro-concrete where river gravel was the aggregate used for the concrete. The building referred to is a very large warehouse, seven stories in height, and occupied for the storage of various grocery stocks. It was constructed in the year 1900, and during the night of January 11, 1906, a fire broke out on the third floor, amongst a large stock of bran in bags. The origin of the fire was attributed to that well-known culprit, "spontaneous combustion." The bags of bran were closely stacked over an area of 45 feet by 15 feet, and to a height of 9 feet 6 inches and within 1 foot of the ceiling. The firemen took about two hours to force their way to the seat of the fire, and when they did so they directed their hose jets on the concrete ceiling over the centre of the fire, so that the water would fall directly into the heart of the mass of glowing bran. Centered on the same spot for about one hour, they kept these jets, which were working at a pressure of about 100 pounds per square inch. Owing to the force of the water and the length of time it was directed on the intensely heated concrete, small portions became disintegrated, and ultimately some of the steelwork was exposed. The floor, however, stood, and after the fire had been extinguished was found to be but little affected. Some of the beams and pillars were in places slightly fissured. But to my mind the outstanding feature is that no structural member gave way or became distorted or warped, or was rendered unable to carry the loads on the floors

<sup>1</sup>A paper by Mr. F. Macdonald, read before The Edinburgh Insurance Institute, and here continued from page 23, No. 1647.

above through loss of strength on account of the high temperature. The structure not only stood under the most trying conditions, but also, thanks to the thorough fire-resisting construction of the whole building, this severe fire was confined to the apartment in which it broke out. I was informed that the damage to the building cost the trifling sum of £50 to repair, and the damage to stock was valued at £800. On the other hand, I roughly estimate that at the time of the fire the total value of the building and its contents would be, approximately, £50,000. Such a result demonstrates the value of this form of construction in its resistance to fire.

Another example may be cited. An ordinary brick building at Baltimore, six stories in height, had its former wood floors removed and these replaced by ferro-concrete floors within the existing brick walls. These new floors, however, were supported on independent columns of similar construction, and had practically no bonding with the brickwork. The floors were of the flat-arch type, and 4 inches thick at the crown. During the recent conflagration at Baltimore the fire passed round this building, and is said to have levelled all the buildings in the same block with it. Part of the outer brick walls of this building fell away and exposed the concrete work, and the remainder of the brickwork had all finally to be taken down. Notwithstanding the falling away of part of the brick outer walls, the concrete construction stood, and, apart from slight cracks, showed no sign of deterioration; indeed, it is stated that on actual loading tests being made the floors were found as strong and serviceable after the fire as they had been before it. Be this as it may, it is remarkable that the concrete construction should have stood as it did, in view of the ordeal to which it was subjected. The concrete for this building was made with an aggregate of broken stone.

One other reported instance may be of interest, and it is one of the most remarkable. It refers to the six-story factory of Messrs. Kleyer, at Frankfort, occupied for the manufacture of cycles. The building was brick built, with ferro-concrete floors, beams and internal pillars. A fire broke out in the fourth floor, where a large stock of celluloid was stored. An explosion took place when the fire reached the celluloid, blowing out the brick walls of the upper floor, lifting the roof off, and causing the upper floors and the whole mass of debris to fall on the third floor. The impact of this must have been terrific, and one would certainly have expected that in such circumstances the whole structure would have completely collapsed. It is stated, however, that not only did the floor of the third story support the impact, but also that it remained sufficiently solid to prevent the fire from the burning mass of debris imposed on it passing through the floors beneath. Comment on such a satisfactory result as this is needless.

Turning now to the rules of the Fire Offices' Committee which apply to this class of construction, I have one or two remarks to make. It is provided that no floor must be less than 5 inches thick. Two or three years ago the minimum thickness for floors was 6 inches. Since the issue of these rules this has been reduced to 5 inches, and I hope that the minimum thickness may ultimately be reduced to 4 inches. My reason for expressing this hope is that, in economy of design, the designer is considerably hampered by this rule, for there is in the design of such work an economical mean between the relative proportions of concrete and steel employed, and in the majority of cases 4 inches thickness of concrete with a slightly larger proportion of steel is more economical than 5 inches thickness with less steel. In both cases the insulation of the embedded steel is complete, for the floor bars are always of very small cross-sectional area, rarely exceeding 7-16 inch diameter. There is also another important point as regards economy of design in connection with this rule to which I would draw your attention, namely, the considerable difference in deadweight between a floor 5 inches thick and a floor 4 inches thick. As is well known, concrete is a very heavy, dense material, weighing approximately 1 1-4 cwt. per cubic foot. The result is that the designer, being forced to increase the thickness of the floor beyond what is necessary for actual strength, coupled with economy in design, is also, by reason of the increased deadweight involved, forced to increase the strength of all supporting beams, columns and column bases. This is a serious consideration as regards capital cost, and it, of course, becomes accentuated in proportion to the height of the building. I think the Fire Offices' Committee might take this into consideration. I am confident that in many risks a 4-inch floor will form an effective horizontal fire-break, especially in

cases where the building is well cut up by horizontal fire-breaks in the shape of floors, and vertical fire-breaks in the shape of internal party walls.

It is unfortunately the case that in almost every instance fire-resisting construction has to fight for adoption against the much cheaper ordinary non-fireproof construction of stone or brick walls with wood floors and wood and slate roof, and I think it must in the long run be greatly to the advantage of the insurance offices that fire-resisting construction be adopted, especially for the heavier risks. It would seem to me very much better that a building should be constructed with fire-resisting floors 4 inches thick rather than combustible wood floors. But the tendency of the rule as to minimum thickness is to increase initial capital outlay (so far at least as ferro-concrete floors are concerned) to such an extent that the proprietor may ultimately decide to do without fire-resisting construction altogether, so that this important aspect of the matter might well be given further consideration by the insurance offices, with a view to giving every possible encouragement to the more general adoption of better and safer methods of construction.

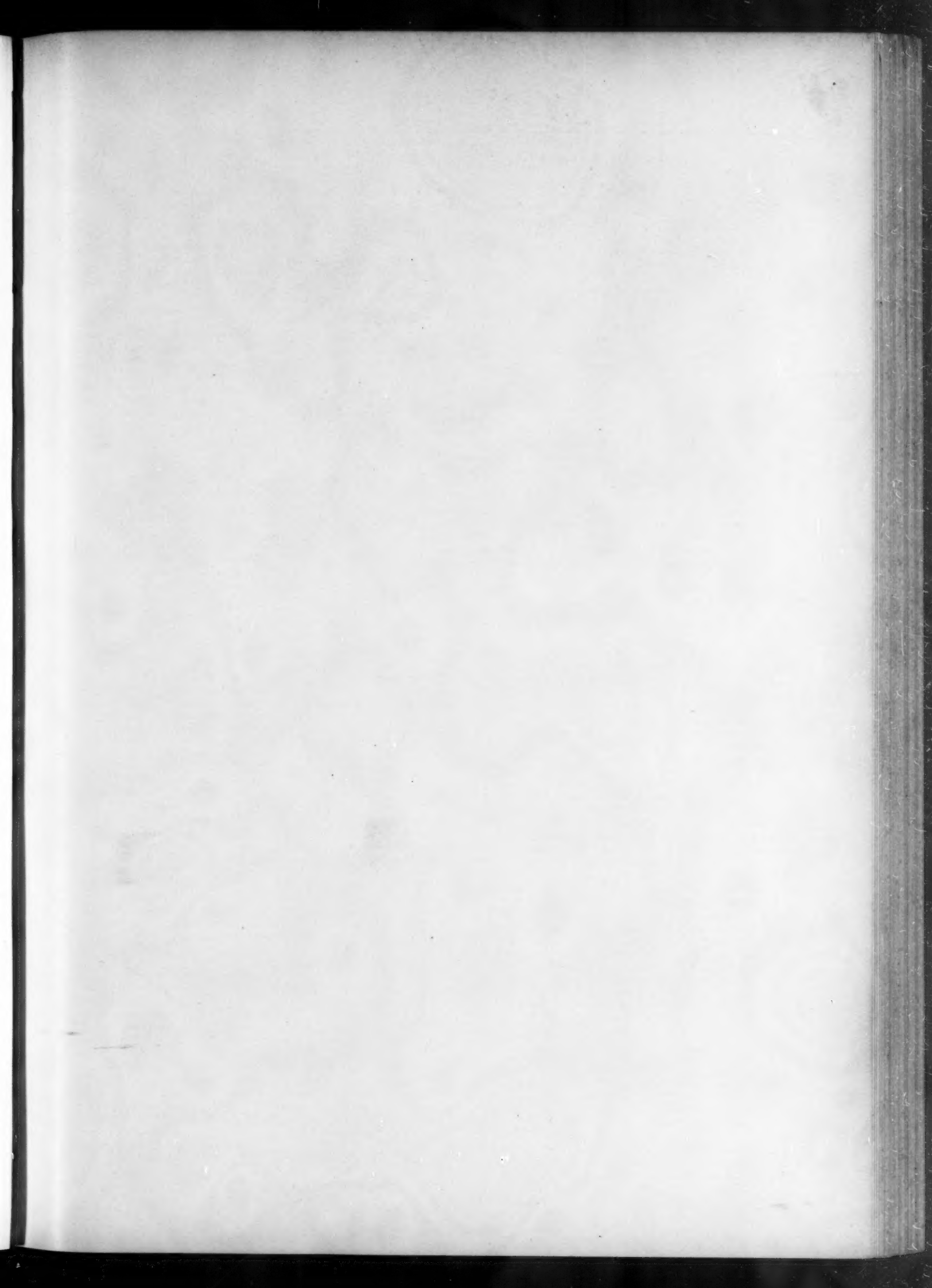
Let me state an actual instance which recently occurred in my own experience of how economy of design is affected by these rules, and the effect on the ultimate result of the competition between fire-resisting construction and ordinary construction.

A firm of printers decided to build a large five-story warehouse to be occupied wholly as store for paper in bulk, and for their own safety and for the continuity of their business they decided to adopt fire-resisting construction, provided the cost was not too excessive as compared with ordinary non-fire-resisting construction. There was no exposure hazard on three sides of the proposed building. On the fourth side there was an exposure hazard, which could have been met without difficulty in the design.

In the first design for the proposed new building (which was made solely with a view to economic design) a thickness of 4 inches in ferro-concrete was adopted for the floors, and also for the outer wall-panels on the sides where no exposure hazard existed; but subsequently, in order to conform to the rules, the thickness of the floor was increased to 5 inches, and that of the outer wall-panels to 6 inches, at an increased estimate of capital cost of approximately £1,000. But in addition to this it was intimated that party-walls must be built within the building from the ground upwards, so as to limit the cubic capacity, and this stipulation proved fatal to further consideration of fire-resisting construction, as the firm stated that these internal walls would seriously interfere with their working arrangements, and that the advantage offered them as regards rate was not important. I think that the rate quoted in case of ordinary non-fireproof construction being adopted was 7s. 6d. per cent. for building and contents, and that if fire-resisting construction in accordance with the rules were carried out a discount of 25 per cent. was, I believe, offered on this rate. The firm also stated that if they adopted ordinary construction they would not be hampered with any restrictions as to cubic capacity or constructional details, and they ultimately decided to abandon fire-resisting construction entirely and adopt brick walls and wood floors.

The estimated value of the building in question is approximately £8,000, and of the contents £30,000. The probability is that if a fire takes place in it as now constructed a total loss to the insurance offices interested will result, whereas if even a modified scheme of fire-resisting construction, coupled with intelligent design, had been encouraged and adopted, there can be but little doubt that the consequent loss in the event of fire would be much restricted; and also that the probabilities of a fire taking place would be much less.

With reference to internal party-walls intended to act as "fire-break" walls, the rules stipulate that these shall not be less than 13 inches thick. It seems strange that 15 inches thickness should be recognized as sufficient for a horizontal fire-break in the shape of a floor, and that for a vertical fire-break in the shape of an internal party-wall a thickness of 13 inches should be asked for. If 15 inches thickness will act as an effective stop in the case of a floor, it will surely do so in the case of a wall. Perhaps it may be thought that a ferro-concrete wall of this thickness would not resist a lateral thrust, such as a blast of flame, or heavy articles falling against it. Such, however, is far from being the case; on the contrary, the resistance of a ferro-concrete wall to lateral thrust and pull is very great. To illustrate this I may say that I have seen an outside iron staircase weighing ten tons bracketed onto a ferro-concrete wall-panel 4 inches thick.





FRONT VIEW.



REAR VIEW.

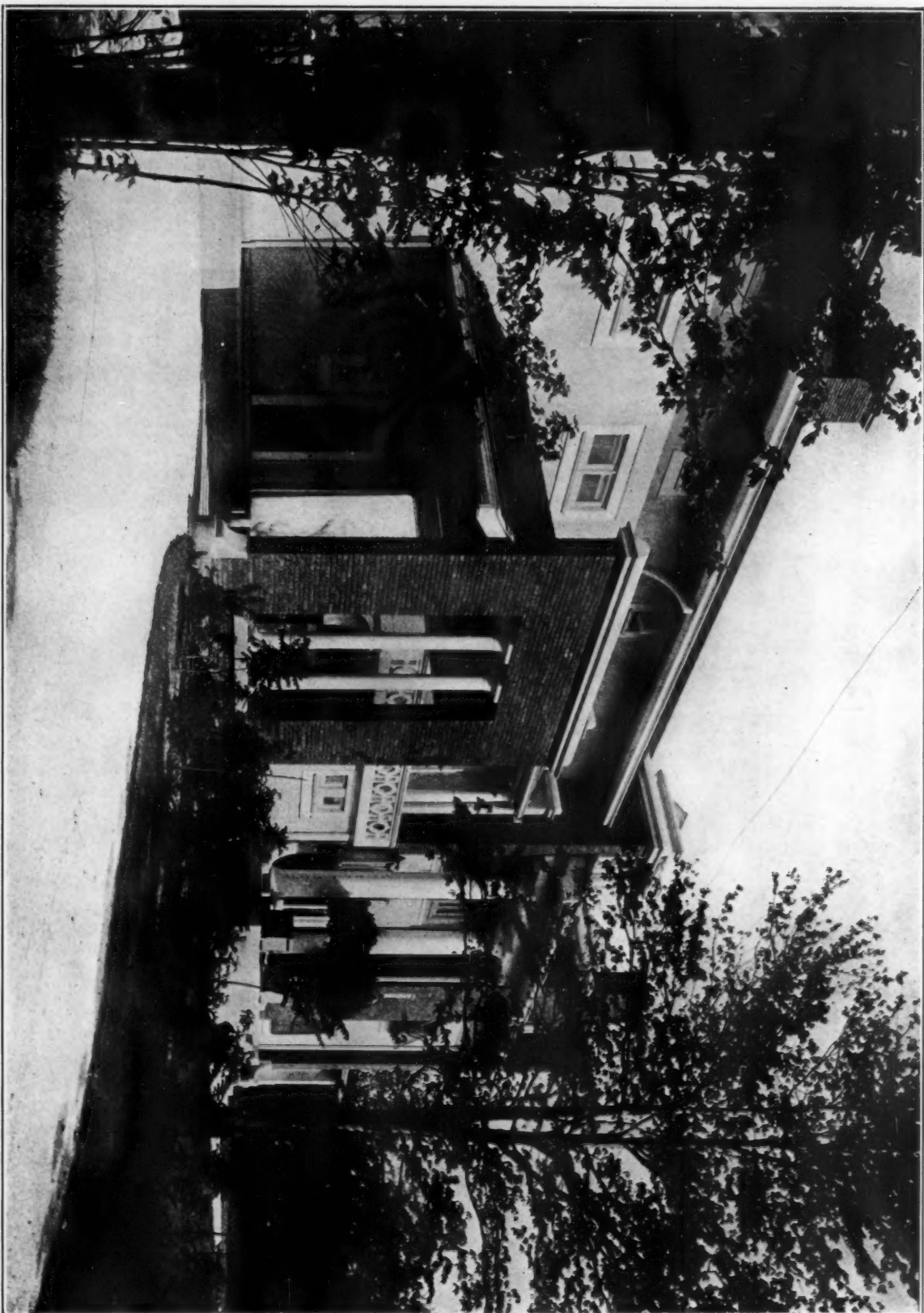
HOUSE OF HARRY RUBENS, ESQ., GLENCOE, ILL.

George W. Maher, Architect.

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George W. Maher, Architect.

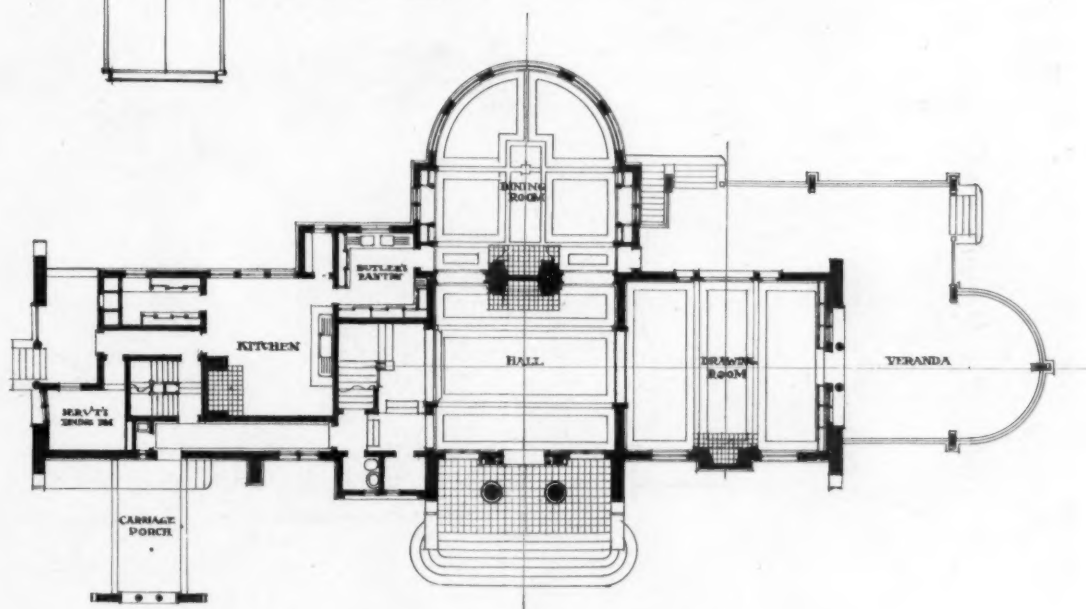
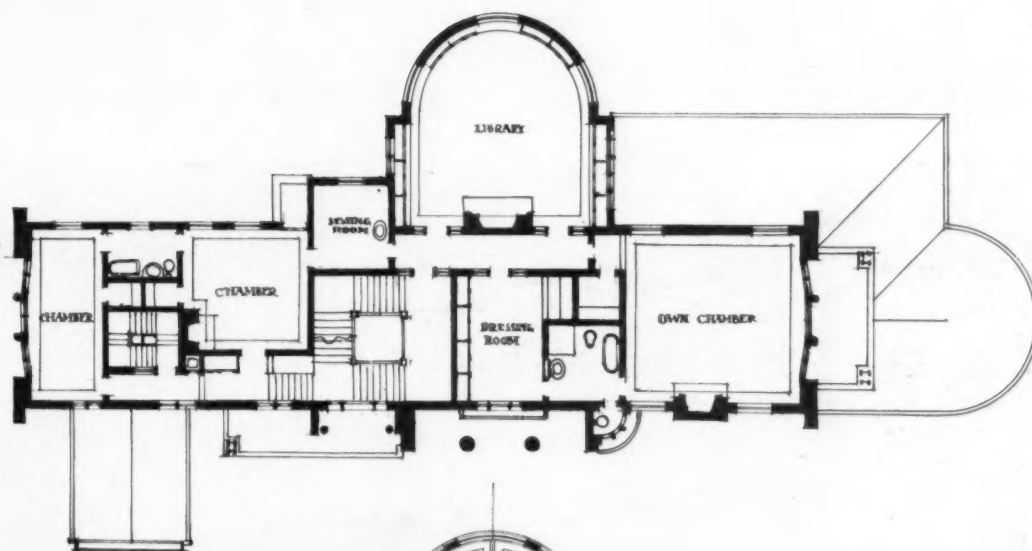
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Volume XCII, Number 1648.  
July 27, 1907.



INTERIOR VIEWS: HOUSE OF HARRY RUBENS, ESQ., GLENCOE, ILL.  
George W. Maher, Architect.



PLANS: HOUSE AND STABLE OF HARRY RUBENS, ESQ., GLENCOE, ILL.

George W. Maher, Architect.



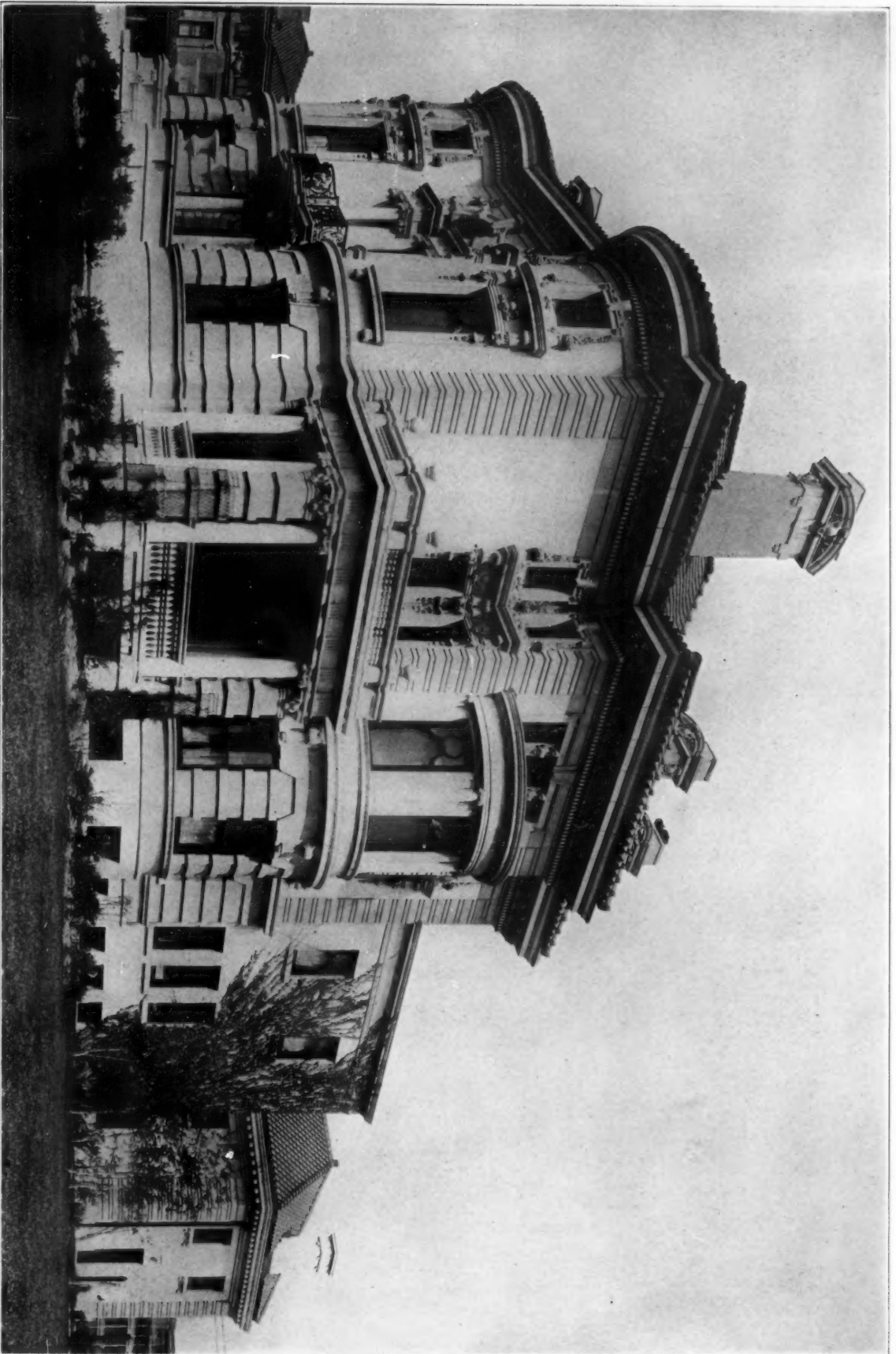
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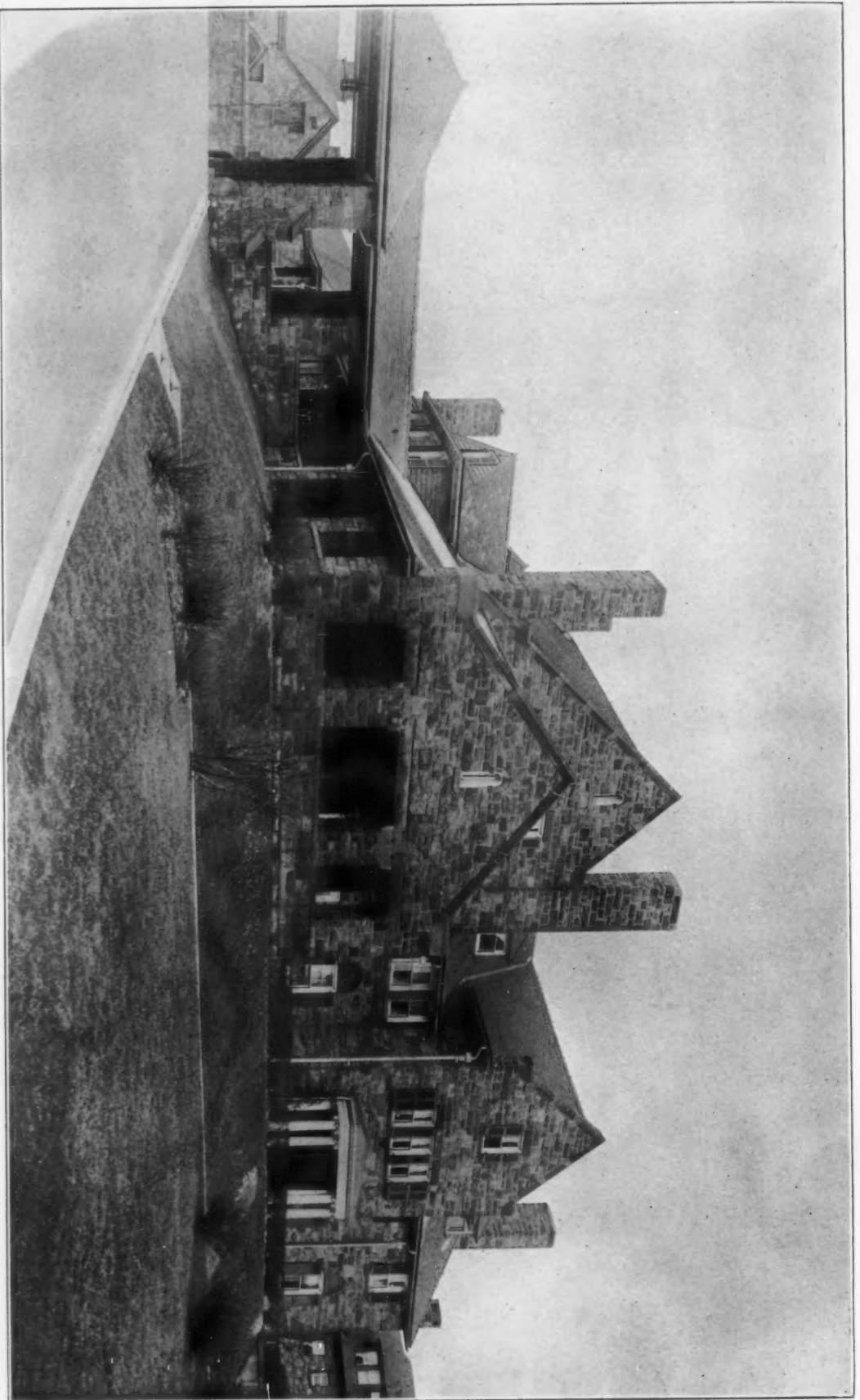
HOUSE OF MR. SPENCER, WASHINGTON TERRACE, ST. LOUIS, MO.

Barnett, Haynes & Barnett, Architects.

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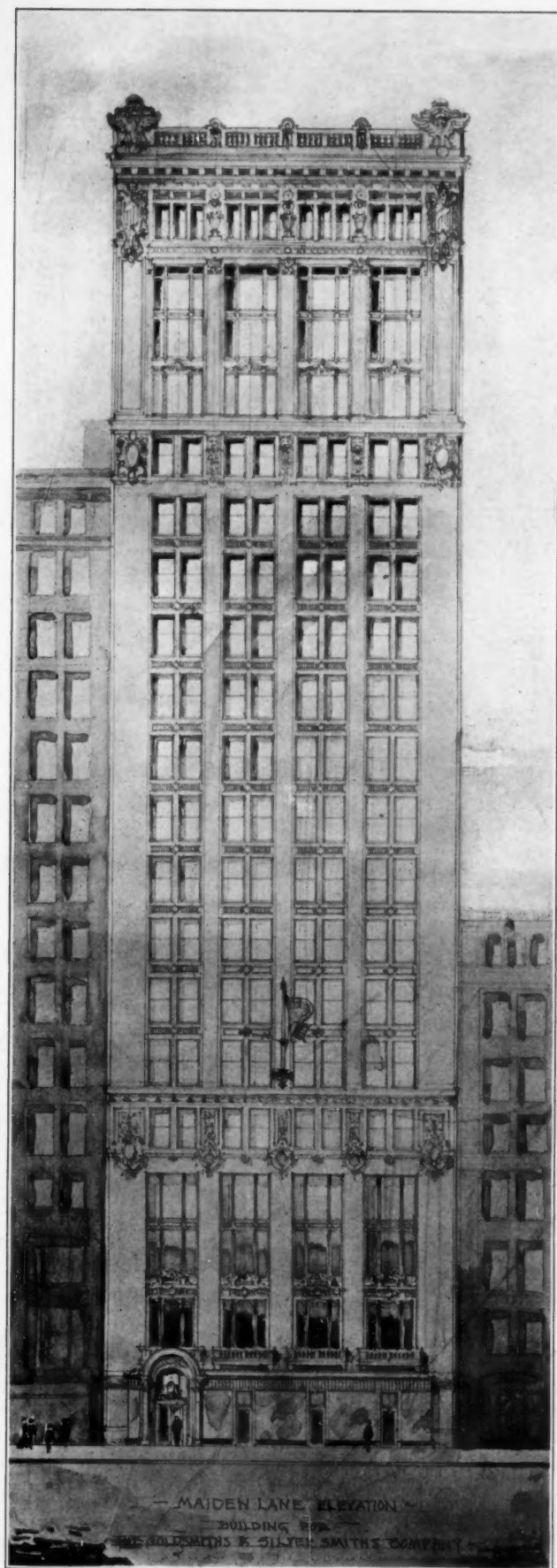
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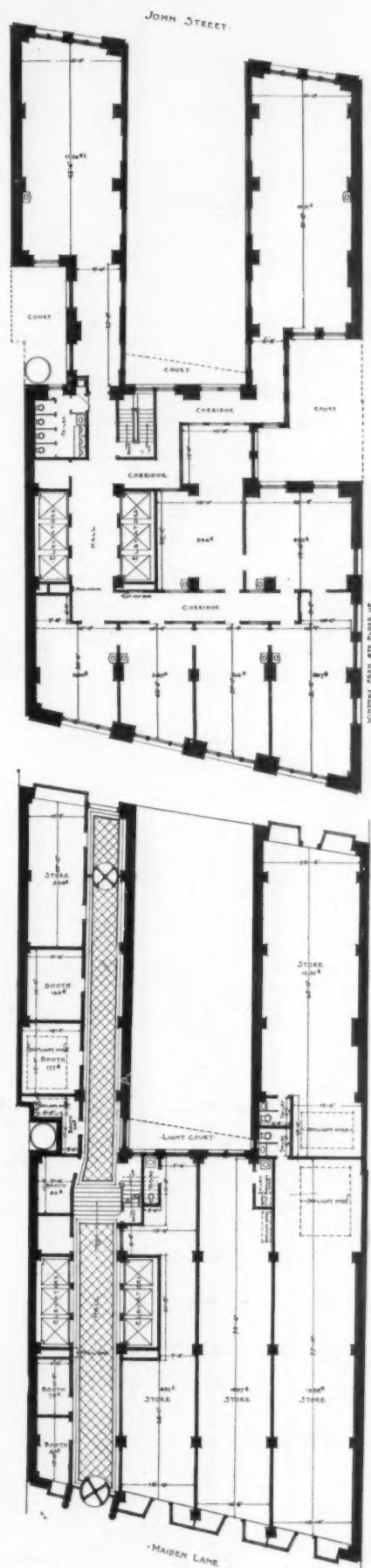


THE GOLDSMITHS' AND SILVERSMITHS' BUILDING, MAIDEN LANE, NEW YORK, N. Y.

Clinton & Russell, Architects.

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This question of thickness of party-walls is really exceedingly important.

Some years ago I was engaged on the design of a large fire-resisting building four stories in height, measuring 160 feet in length by about 35 feet in depth over all. The ground floor is occupied as a power wood-worker's and pattern-maker's workshop, and contains a large number of power-driven machines and benches. The upper three floors are occupied as stores for wood patterns, being filled from floors to ceilings with wood goods. The firm made it a condition of design that the ground floor (which was used as a work-shop) must be free of internal pillars, that is to say that the main transverse beams required to have a clear span across the internal width of the building, which, to be exact, was 33 feet 1 inch. It was manifestly most desirable to limit the large area of these upper floors stacked with wood goods by sub-dividing them up into three or four separate compartments by means of transverse "fire-break" walls, but it was also manifest that to impose the deadweight of a 13-inch wall on a beam having 33 feet clear span in addition to the floor loads would be a decidedly expensive matter. Still, to limit the area in the upper floors so as to prevent a whole story becoming involved at the one time, it was decided to construct ferro-concrete transverse walls, but only 4 inches in thickness, so as to lessen the dead load on the large-span beams. Each of these party-walls had one doorway opening therein, which was to be protected with a single metal-covered door. The intention of this, of course, was to form vertical fire-screens between the horizontal fireproof floors, so as to limit the area of a fire in its first stages. This precaution was intended to be taken not so much with a view to securing a reduction of rate of premium, but as an effort to carry out the design of a fire-resisting building so far as it was possible to comply with the structural requirements of the proprietors for their occupancy; that is to say, the internal "fire-break" walls could not be built up from the ground on account of the requirements of the proprietors for their work-shop. The transverse "fire-break" walls, 4 inches in thickness, were duly constructed on the upper floors, but before the doorway openings in them were protected by single metal-covered doors, as intended, the insurance office interested surveyed the risk and intimated that such walls, as party-walls, were useless, not being of the required thickness. In view of this the proprietors decided not to incur the expense of protecting the doorways, and, so far as I am aware, the doorways in these walls remain unprotected to the present day.

I am quite confident that such walls with protected doorways would afford very considerable opposition to the spread of fire from one section to another, and that for a sufficiently lengthened period to allow the fire-brigade to get into action and overcome without much difficulty a fire confined to one apartment, instead of having to face an entire story 160 feet in length well alight. Surely, therefore, such precautions have some value and deserve, better, recognition than condemnation as useless effort.

This I would respectfully submit is the outstanding fault of the present rules. Better building methods are coming into favor very slowly, and the reason for this is not difficult to find. Better building methods and fire-resisting construction require increased capital expenditure, and proprietors who are called on to pay this increased cost will only do so up to a certain point. If a too perfect standard is set up it generally becomes unattainable on account of cost.

There is a continual struggle for adoption between fireproof and non-fireproof construction, and there can be no doubt that the advice and the attitude of the insurance offices are considerable factors in determining the result. I am aware that many insurance officials formerly held the view that "fire prevention" was of no interest to them, and that their business was to rate risks as they found them. I do not know whether this is the view held at the present day; I hope it is not, because, as I have said, the influence of the insurance offices is so great that concurrently with regard to their own financial interests much can be done by them to diminish the annual fire-waste in the country; and surely this is the higher side of the business.

Another factor in the slow progress of fire-resisting construction in Great Britain is that perhaps but few architects have time to make a special study of this branch of work. The designing of a structure intended to be fire-resisting, and where a severe fire risk resulting from the occupancy or from exposure is generally always involved, seems to me to demand not only a

knowledge of special constructional work, but also of the fire risk arising out of the intended occupancy, and neither of these subjects is a matter of everyday experience or interest to the majority of designers. The consequence of this is that the summit of most efforts towards the design of fire-resisting building is the specification of some commercial firm's patent fireproof floor, and the type of floor selected is generally decided by which firm offers the cheapest price, and not by the merits of the floor. In such circumstances many buildings have been constructed and designated "fireproof" when, in point of fact, some of them are really as far from being "fireproof" as any ordinary building is, and this has been clearly demonstrated on many notable occasions. To such an extent has this taken place that it has been said it is impossible to construct a really "fireproof" building. But, as I have endeavored to indicate, it is quite possible to construct "fire-resisting" structures of a very high standard; it is not the specification of certain details, however, that will insure efficiency in this respect, but rather the skill and knowledge of the general designer. For this reason anyone who takes the design of such work should, I think, possess some knowledge of all the following subjects:

1. Constructional work.
2. Resistance of materials to fire.
3. Ability to estimate the fire hazard which will arise from the occupancy and exposure.

The first and second of these subjects involve a large amount of special technical training. I have endeavored to indicate in a general manner some of the technical points which are of outstanding interest to those engaged in this class of work, but there are many others which I have not mentioned, and all of them demand exhaustive consideration.

The third of the qualifications I have mentioned is one which insurance officials possess, and which can only be acquired by long training and experience. Few constructional designers possess all three of these qualifications, and even in such cases freedom of action is denied by the rules. However well-intentioned the designer may be, the task given him of serving separate masters in the shape of economy in capital expenditure, constructional requirements and insurance rules, is a difficult one, and it is not infrequently impossible to reconcile all these interests on the present basis.

It is not by the action of an isolated few that better and more intelligent methods of construction will come to be more generally adopted for the heavier fire risks, and which will tend to minimize the annual fire-waste, but by the combined action of the many. And no body of men is more competent, or has greater facilities, influence or prestige than insurance officials to establish and set in motion some system of combined action in this matter.

If, in conclusion, I may venture to make a suggestion, it would be that the Fire Offices' Committee might give consideration to the creation of a standing sub-committee to whom all questions on fire-resisting construction should be referred. Such standing sub-committee, aided by the expert advice of competent permanent officials, could largely supersede the present hard-and-fast rules, and give skilled attention to each individual case and its typical requirements and merits.

I would suggest that such a committee might, through its officials, undertake:

- (1) Examination of all architects' and proprietors' plans and specifications submitted to them for buildings proposed to be erected where fireproof construction is intended to be incorporated in the design, and report on such designs to the particular office interested.
- (2) Fix discounts for complete "fire-resisting" buildings on the report of the office interested, on the merits of the type of construction employed, details of construction, occupancy, limitations of areas, exposure, etc. Such discounts to be tariff.
- (3) General research work, and accumulation of data on fires and fire-resisting construction.

Perhaps this is too bold and progressive a suggestion to make, but I am convinced that the expense of the establishment of a central department specially devoted to this work would be repaid many times over in the first two or three years of its existence. Not only this, but it would make for the good of the general community, on account of the diminution of the annual fire-waste which would certainly ensue, and the consequent annual national saving of wealth.

## Hungarian Art<sup>1</sup>

**A** PASSIONATE love for Art, as well as for Music, is the birthright of every Hungarian. Right from the very earliest ages there were signs of great artistic taste and display among the Hungarians.

St. Stephen, the founder of the Hungarian Kingdom, and the introducer of Christianity into Hungary in the year 1000, had done a great deal during his forty years' reign to encourage the arts and sciences of the country. He founded numerous bishoprics, abbeys and churches, both at home and abroad, the walls of which were adorned by the finest frescos of the time.

Among his immediate successors, St. Ladislaus (1077-1095), the brave and chivalrous king, proved also a true patron of the arts, likewise his successor, Kolomon (1095-1114), the conqueror of Dalmatia. The last named monarch, owing to his great learning and scientific attainments, was commonly known as the "Book King."

That enlightened ruler, Andrew II. (1205-1235), who granted to Hungary in the year 1222 the "Golden Bull" or the Magna Charta of Hungary, a few years after the charter was granted to England by King John, was also a great patron of the arts. Upon his return from Jerusalem as a leader of the Crusaders, he devoted a great deal of time to the reorganization of the State, and likewise to the encouragement of arts and science.

Unfortunately, owing to various internal troubles and strifes, but principally as the result of the Mongol invasion, the art treasures of the country perished and its edifices were reduced to ruins, and the Cathedral of Pécs alone bears witness to the high development of the artistic taste and splendor of that period.

The Basilica of Esztergom, built in the twelfth century, may also be considered of great artistic value, while the renowned church of Ják, with its noble porch, and the church of Lebény, and a number of other churches, are rightly famed in the history of art.

It may be of interest to point out here that in those days the principal churches were erected right in the interior of the country, far away from any city; and these churches were so constructed as also to answer the purpose of places of refuge and defence against the repeated invasions of the Mongol hordes, and other tribes, and these circumstances no doubt accounted for the fact that most of the churches belonging to this period were destroyed during the country's struggles.

With the accession to the throne of Charles Robert, of the House of Anjou (1308), the Italian Renaissance art was introduced into Hungary, both by Charles Robert and during the long reign of his son, Louis the Great, and for the next two centuries art and science prospered throughout the land.

We have only to look at one of those volumes belonging to the famous collection of King Matthias (1458-1490) known to history as the Corvina Library, and we shall at once be convinced of the highly artistic taste which was developed in those days. The wonderful ornamentation and the marvellous miniature paintings in those volumes, which were written on parchment, furnish the best proofs of the great love for art and perfection of workmanship which prevailed during the rule of this great king. No wonder that the Turks during their occupation of Buda attached such importance to the possession of this valuable collection, which consisted of 5,000 volumes.

The Hungarians will always be grateful to the present Sultan for having recently restored to the Hungarian nation a portion of this library, which had been scattered about his dominions and sacredly guarded there for centuries. The volumes were brought back to Hungary in a special train, and the occasion was marked by the greatest national rejoicings. The thanks of Hungary in this respect is due to that eminent Hungarian scholar, Professor Vámbéry, who, with the consent of the Sultan, was entrusted with the task of searching throughout Turkey for these valuable volumes.

I understand from my friend, Mr. Joseph Offord, the well-known Egyptologist, that one of the MSS. belonging to this library is in the actual possession of Lord Leicester at Holkham Hall, and it is sincerely to be hoped that this will be restored in the near future to the Hungarian nation, the natural custodian of such a priceless document.

In a country like Hungary, where patriotism is as sacred as religion, it is quite natural that the artists of the Middle Ages should have paid equal attention to the execution of subjects

relating to national and historical life, and these are represented by the frescos at the Gisella Chapel in Veszprém and the Church of Turnicez, the latter of which shows an episode in the legend of St. Ladislaus. The fresco to be found at the Cathedral of Szepesváralja displays an ecclesiastical subject with a political background.

Of the monuments and public buildings of the fifteenth century, the Cathedral of Kassa and a few other village churches in Upper Hungary, as well as the beautiful Town Hall of Bártfa, in the same district, are the only relics of that period.

Among other architectural relics of the Middle Ages no doubt the most perfect specimen of the kind preserved is that of the Castle of Vajda-Hunyad, formerly the city and stronghold of that immortal Hungarian hero, Hunyadi-János (father of King Matthias).

A replica in plaster of this building was exhibited at the Hungarian Millennial Exhibition, and also at the Paris Exhibition, where it commanded the general admiration of all, and was considered as the finest specimen of architecture preserved from mediæval times.

The Hungarian Government have lately raised a beautiful palace for the Royal Agricultural Museum in the town park of Buda-Pesth, after the pattern of this castle.

Among the artists belonging to the Middle Ages, hardly any names of importance have been handed down to us, but Hungary is proud to be able to claim the famous Albert Dürer as one of her sons, for although Dürer was born at Nuremberg he was of Hungarian parentage. His father, whose name was Ajtós, was born in the town of Cyuia, in the county of Békés, and resided there until he migrated to Germany, where he took the name of Dürer, the German for the Hungarian name of Ajtós.

For over a century and a half, while the Turks were either knocking at the gates of Hungary or had practically become its masters, the Hungarians had no time to devote to art, for, to use the words of a famous poet, "They had to guard the country with their sword in one hand and to plough the land with the other."

With the final expulsion of the Turks (1699) the innate love of art made itself again potent, and two artists of great fame appeared on the scene in the persons of John Kupeczky (1671-1740) and Adam Mányoky (1673-1757), both of whom established a world-wide reputation, John Kupeczky having lived for many years in Rome and finally settled in Nuremberg, which at the time was the city of art and culture; whilst Adam Mányoky, who lived for many years and studied art in Hanover, Paris, and Holland, became the favorite painter of the King of Poland, Frederic Augustus II., also Elector of Saxony.

Both these artists cultivated the art of portrait painting, and followed the style and tendency of the Rembrandt and Vandeyck schools, of which they were most able exponents. It may be of interest to know that both of these painters are represented in the gallery of the Marquis of Bath, and likewise in the leading collections of Europe.

The frescos of the Buda-Pesth University Church date from the eighteenth century, and although they have been hardly dealt with by time, nevertheless they may be regarded as fine specimens of the Rococo style.

During the reign of the famous Queen Maria Theresa (1740-1780), art and science received great support and encouragement, and this was partly the case during the rule of her son, Joseph II. (1780-1790), but unfortunately the kings that followed them have shown no desire, nor did they have any inclination, to encourage Hungarian art, science and literature; besides, their time had been otherwise taken up with continual wars, which was especially the case with Francis I. (1792-1835).

Under such conditions art again lay dormant, and the few who made it their profession could barely make a living, and some of the most celebrated portrait painters had to take to painting sign-boards, or to adorn with pictures the household furniture of the peasants, while the sculptors had to work in the potteries. In the Koronaherczeg-street of Buda-Pesth there is a sign-board which was painted by one of the most famous Hungarian artists, Barabás.

Towards the middle of the last century that great Hungarian patriot, Count Stephen Széchenyi, to whom Hungary owes so much for its resuscitation in many directions, had also seriously occupied himself with the promotion of the arts, and his activity in this direction was followed up with the greatest zeal and energy by the late Minister of Education, H. Auguste Trefort. With a view of attaining his object, the late lamented Minister

<sup>1</sup>Extract from a paper by Mr. Louis Felberman, read before the Society of Arts and published in the "Journal" of the Society.

founded an Art Union, which had for its object the exhibition from time to time of pictures presented by Hungarian and foreign artists, which were disposed of by means of a lottery among its members.

The stormy period of 1848 and the sad days which followed put an end again for some time to the development of Hungary in general, and with it its arts and industries suffered; as soon, however, as peace was restored in the country and, by the Treaty of 1866, Hungary had a free hand in the management of its affairs, the people settled down to work, and art and science commenced to prosper once more.

In the year 1870 the first School of Fine Arts was opened under the direction of the famous painter, Gustavus Keleti, and later the School of Painting began its activity under that illustrious painter, Julius Benczur.

The Government took the matter seriously in hand. A Fine Art society and other institutions were formed under their auspices, scholarships were granted to deserving art students, and in many cases the entire expense of their education was defrayed both at home and abroad by the Government. The result of this was that the country became possessed of some of the foremost artists in Europe, men whose names will be handed down to posterity.

In the plastic art and sculpture, Hungary can claim to rank among the first countries in Europe; indeed, few nations can boast of so many famous sculptors as Hungary.

Hungary boasts of a great number of highly-talented architects, and it is owing to them that the public buildings of the city of Buda-Pesth are considered among the finest in Europe.

Nicholas Ybl was the first to distinguish himself with his beautiful designs of the Ropal Opera-house, the Customs-house, and the Bazaar of the fortress of Buda. Nothing can excel in style and beauty the Houses of Parliament which were recently erected along the Danube quay, at a cost of nearly £3,000,000, after the designs of the architect, Emerich Steindl. The beautiful Gothic structure is a real triumph of art and it is a worthy rival of the Palace of Westminster, which inspired the great artist.

The imposing new buildings of the Palace of Justice, close by, which were recently erected at enormous expense after the designs of Alois Hauszmann; likewise the new Palace of Buda, commenced by Ybl, and completed by Hauszmann, may be regarded as the pride of Hungarian architecture.

Altogether Buda-Pesth may be termed a city of art. There are two beautiful palaces of fine arts and a National picture-gallery filled with the most precious treasures that money could purchase at home and abroad.

In addition to this there are numerous private collections both in Buda-Pesth and in the country. There is a museum of Fine Arts which will bear comparison with any of its kind, and everything is done both by the King and the Government to encourage native artists and to induce them to live at home, for the good of the country. It is fortunate that the country possesses such a gifted and esteemed nobleman as Count Albert Apponyi as its Minister of Arts and Culture. Doubtless under his able direction the arts of the country will flourish more than ever.

## The Value of English to the Technical Man<sup>1</sup>

TECHNICAL men are peculiarly prone to offend in the use of their mother tongue, because they have not, as a rule, read deeply in classical literature or been instructed thoroughly in the construction of the language. Their higher education is generally almost entirely technical. Most of the engineering schools now require for matriculation substantially the same subjects as the colleges do, but some of the best still admit students with little more than a grammar-school education, supplemented by the rudiments of the natural sciences and elementary mathematics. Cultural subjects are never required to any great extent, and they cannot be taught in the course. The curriculum is already well filled with scientific, mathematical and technical subjects, and there is not room for a deep study of literature and the languages. The technical man who has a thorough knowledge of English has had the wisdom and patience to supplement his technical education by an arts course, has read

widely of classic literature, or possesses the rare gift of language. Long-continued and intimate association with those who employ excellent English will insure reasonably good usage, in fact such association is almost essential, no matter what the education may be; but the knowledge of the language so acquired generally breaks down when it is applied to technical matters in which extreme accuracy is a requisite and in which the terms differ much from those used in ordinary conversation. There is no royal road to a knowledge of technical English.

Some of our better universities are now offering a six years' course which combines the usual arts and technical courses, each of which ordinarily occupies four years, but which have many subjects in common. This is a decided step in the right direction, for technical men generally are coming into a more complete realization of their deficiencies and are insisting that young technists be more liberally educated. The professional man does not always remain a technist, in fact he frequently becomes a man of affairs as well, where a liberal education is even more essential than in his purely technical work.

Before passing to a consideration of the specific advantages enjoyed by the technical man who uses good English, let us glance at some of the grosser faults of which so many are guilty, for there is no better way to attain a comprehension of the good than by contrasting it with the bad. It has been well said that it is no virtue to speak good English, but that it is a disgrace to use bad English. The upright man does not feel the burden of the law, but to the criminal it is oppressive.

You will say that it is absurd to state that men who have graduated from any college cannot spell correctly, but many of them cannot. S-e-d, said, p-e-a-r, pier are extreme but true examples. It is very common to find misspelled words in letters written by young engineers. They consider such errors of no material consequence, because they are not technical errors. The mind has been so fixed upon the scientific work during the course of study, and while the early experience is being acquired, that such matters as language and culture seem to be of little importance. But the recipient of the letter generally takes a different view of the matter, for he justly considers the writer something of an ignoramus.

Errors of orthography and orthoepy are both due to unpardonable carelessness and ignorance, for any one can learn to spell and to pronounce correctly, and no man should be given a degree or a diploma by any institution of learning unless he does so habitually.

Grossly bad grammar is also very common. It generally arises from carelessness in ordering the thought and speech rather than from lack of knowledge of correct usage, but it is frequently attributed to ignorance, and certainly the penalty is not too severe. In many instances, however, ignorance is the true cause of the error. The study of grammar commonly ceases when the student leaves the graded schools. Thereafter, he assumes that his knowledge of the subject is full and complete and that he need give it no further attention, notwithstanding the fact that his capacity for thought and the need of means for its expression continue to increase. His vocabulary grows; but his knowledge of the fundamental principles which govern its use not only does not expand as his needs require, but it is allowed to become uncertain and to diminish through lack of exercise. When the matter is thought of at all, it is assumed that in some vague, uncertain way habit will serve, instead of knowledge and understanding. The grammar is put away, like other childish things.

Some prominent writers state that the English language is without grammar because inflection is absent and the position of the words in respect to each other is depended upon to make their meaning clear, but this is an extreme view. It is true that most of our grammars only catalogue the rules without explaining their origin and history, but the rules are none the less existent and binding upon us. They were developed by the English people in the course of the evolution of the language, not by the grammarians who formulated them; and sentences which are not constructed in accord with them will fail in their purpose. The lack of inflection, however, affords a degree of flexibility not attained in any other language. Because the laws of English are less rigid than those of other tongues we are not only none the less obliged to observe them, but we are also obliged to supplement them by a careful observance of precedent and reason and to study the usage of those who serve as examples.

<sup>1</sup>Extract from an address by Mr. John Lyle Harrington to the Technological Society of Kansas City.

## COMMUNICATION

## "Origination of the Steel Skeleton"

Washington, D. C.,  
July 22, 1907.

TO THE EDITORS OF THE AMERICAN ARCHITECT:

Dear Sirs:—Judging by the number of letters of inquiry and of criticism received anent my communication of June 27, appearing in your issue of July 13, concerning the "beginnings" of steel frame construction, I should imagine that something was lacking in that letter to make it quite clear, or that the title you gave it misled some of the hypercritically inclined. I did not, and do not, claim the invention of the steel frame. That letter was written to show the folly of any such claim by any one individual for himself, or some one he admired and desired should be honored.

My belief is that no one man originated—"invented"—that construction, as the term invention is generally understood. It was rather a most natural step in the regular and ordinary evolution of construction, and that was suggested by the conditions and demands of the time. Probably a hundred men thought of the same way of meeting those conditions. To engineers and architects of extensive experience it must have been a logical and simple development—a solution of the problem that seemed quite natural. It never occurred to me, a lad just out of his 'teens at the time, that there was anything marvelous or original about the idea, and my intention or purpose in writing that much-criticised letter was merely to discredit, to contradict and to stamp as ridiculous and an impertinent assumption the claims of at least one alleged inventor to having given birth to this most wondrous scheme.

Very truly yours,

F. W. FITZPATRICK.

[We ourselves understood Mr. Fitzpatrick's former letter just as he now explains it, except that we supposed he meant in part to suggest that something in the way of credit was due to Mr. Strom.—EDS. AM. ARCH.]

## ILLUSTRATIONS

HOUSE AND STABLE OF HARRY RUBENS, ESQ., GLENCOE, ILL. MR. GEORGE W. MAHER, ARCHITECT, CHICAGO, ILL.: FIVE PLATES.

HOUSE OF MR. SPENCER, WASHINGTON TERRACE, ST. LOUIS, MO. MESSRS. BARNETT, HAYNES & BARNETT, ARCHITECTS, ST. LOUIS, MO.

GOLDSMITHS' AND SILVERSMITHS' BUILDING, MAIDEN LANE, NEW YORK, N. Y. MESSRS. CLINTON & RUSSELL, ARCHITECTS, NEW YORK, N. Y.

HOUSE OF JULIAN KENNEDY, ESQ., PITTSBURGH, PA. MESSRS. GEORGE S. ORTH & BROTHERS, ARCHITECTS, PITTSBURGH, PA.

## Additional Illustrations in the International Edition.

REAR ENTRANCE TO STABLE-YARD OF HARRY RUBENS, ESQ., GLENCOE, ILL.

ENTRANCE FEATURE: HOUSE OF MR. SPENCER, ST. LOUIS, MO.

## NOTES AND CLIPPINGS

ONE OF DISRAELI'S GIBES.—Disraeli said that our fine London squares resembled "a large family of dull children, with Portman Square and Portland Place for their respectable parents." Surely this is very unjust; it may be doubted if any city can show such a succession of stately gardens and noble trees.—*Builders' Journal*.

THE PATRIZENHAUS ZUM RITTER AT HEIDELBERG.—From Heidelberg comes information that the first stage in the restoration of the "Patrizienhaus zum Ritter" has been completed in a manner to evoke most favorable commendation. State, city and owner share in the cost of restoration of this remarkable example of German Renaissance architecture. The actual work was intrusted to Herr Linde, a royal architect, who also, as a State charge, has made all investigations and arranged for the general reconstruction. The erection plans are carried out in natural size, thus rendering easily possible any subsequent renewals of the façade. It may be recalled that some three years ago an Ameri-

can had the intention of purchasing from its private owner the original building as one of the most beautiful architectural examples of the German Renaissance, and, after carefully taking it down, re-erecting it in some American city as an art memorial. No doubt it was this project that stimulated the State and city to undertake, with the owner, its restoration. Every one familiar with Heidelberg, and especially every Heidelberg University man, will be interested in learning of the outcome.—*New York Herald*.

EXPANSION AND CONTRACTION IN CONCRETE STRUCTURES.—A paper by Mr. A. C. Lewerenz, M. Am. Soc. C.E., containing some notes on concrete and reinforced-concrete retaining-walls at the United States Navy Yard, Puget Sound, is deserving of study, as the subject of expansion joints in structures of the kind has never been exhaustively investigated, and many practical engineers are not entirely convinced as to the efficacy of such joints. In the case of a solid concrete wall built some four years ago, Mr. Lewerenz states that the expansion joints provided all appear to be active, opening as much as 3-16 inch. Across the top of the wall many fine cracks, sufficiently wide to admit the blade of a pocket-knife, and 2 inches to 3 inches deep, have appeared at intervals of about 6 feet apart. It is interesting to compare these results with the record concerning a reinforced-concrete wall with a thin face slab, and buttresses at intervals. This wall, over 1,200 feet long, was built last summer without expansion joints, as it was considered that the reinforcement would prevent serious cracking of the concrete. The anticipation has been fulfilled, for careful examination shows that the only effect of exposure to the sun at low tide during the day, and to the cold water at high tide during the night, has been the formation of very fine surface cracks across the top and down the face of the wall at intervals of about 75 feet apart. From the foregoing and other examples, Mr. Lewerenz concludes that the use of properly-designed expansion joints, or of sufficient reinforcement, will prevent the development of cracks through concrete structures, but that neither method of treatment will obviate fine surface cracks in situations where sudden and extreme changes of temperature are experienced.—*The Builder*.

YSLETA CHURCH BURNS.—The oldest church edifice in the United States was destroyed by fire the other day. The ruins of adobe and stone are to be removed, under the direction of the Catholic Church authorities, and a thorough search made for hidden treasure, which, according to legends that have been handed down for generations, lies buried beneath the floor of the building. The records go to prove that Ysleta, Tex., is older than St. Augustine, Fla. In the records of the great cathedral of Madrid, Spain, is found the report of Marcus de Niza, a French monk, who says that he left the City of Mexico and made his way north, finally crossing the stream that is now known as the Rio Grande. He says that he followed the road that he left for his mule to take. Part of this manuscript is written with the blood of a deer for ink, and his own forefinger nail for a pen. He says that in 1537, across the Rio Grande, he found the village known as Ysleta, occupied by the Pueblo Indians, whose traditions all point to their having been of the ancient Aztec race, or to a people of even more remote origin. Franciscan missionaries arrived at Ysleta four or five years later, and the mission church which was destroyed by fire a few days ago was erected. It was completed about 1550. In many respects it was the most unique mission building in the Southwest. Owing to the fact that it was remotely situated it was seldom visited by tourists, and little has ever been written about it. It was a very large structure, and was built with the idea of serving as a fortress in case of attack by Indians, as well as for worshipping purposes. The walls were 4 feet and 6 inches thick. It was the boast of the worshippers that the candles which burned at its altar had shed their light continuously for more than 350 years. It was one of these candles that caused the destruction of the church. A piece of tapestry was wafted against the blaze by the wind and in an instant the inflammable material of the altar was afire. It was as dry as tinder and the flames quickly spread to the other woodwork of the edifice. The interior was soon a roaring furnace. The town has no means of fighting fires and the people were forced to stand idly by and watch the building go to its doom. There is great sorrow among the people on account of the destruction of the historic edifice.—*Boston Transcript*.

## CURRENT NEWS SECTION

## SOCIETIES.

## SOUTHERN CALIFORNIA CHAPTER A. I. A.

Nearly thirty members of the Southern California Chapter, American Institute of Architects, dined, July 9, on the Bristol pier near Ocean Park, Los Angeles, and afterwards held their monthly meeting. There was considerable discussion of building ordinances and some suggestions of amendments, but no definite action will be taken until the next session.

The architects in attendance were President A. F. Rosenheim, Secretary Fernand Parmentier, Harrison Allbright, R. F. Train, Theo Eisen, Joseph J. Blick, of Pasadena; Thomas Preston, Timothy Walsh, J. E. Preston, R. B. Young, Julius Krause, S. Tilden Norton, Charles F. Whittlesey, Wesley Eager, Octavius Morgan, John P. Krempel, J. Lee Burton, P. W. Ehlers, Charles A. Greene, Henry M. Greene, Frederick L. Roehrig, Carl Brown, Norman St. Clair, R. E. Williams, E. C. Kent and August Wackerbarth.

## BUILDING NEWS.

*(The editors greatly desire to receive information from the smaller and outlying towns as well as from the larger cities.)*

AGRICULTURAL COLLEGE, MISS.—It is reported that the Mississippi Agricultural and Mechanical College is having plans and specifications prepared for mess hall to cost from \$30,000 to \$35,000; plans to be ready by July 15; within three weeks thereafter building committee will receive bids and award contract. A \$1,000 certified check must accompany bids, and successful bidders must furnish bond. A. J. Moore is secretary.

ALTON, IOWA.—Plans have been prepared, it is stated, for a church for the Catholic society by Architect Martin Heer, Thirteenth and Clay Streets, Dubuque, Iowa. Cost, \$40,000.

BAKERSVILLE, N. C.—Joseph Bowditch will receive sealed bids until August 15 for building court-house at Bakersville, according to plans and specifications adopted and on file at office of J. D. Braswell, clerk. Certified check of 10 per cent. of total amount of bid, payable to Joseph Bowditch, must accompany each bid. Bond for double contract price required. Contract shall be let only as a whole. Each bidder must furnish with bid a letter from surety company stating that it will make for the bidder requisite bond guaranteeing completion of contract; usual rights reserved. Plans are also on file in office of architect, H. L. Lewman, 1008 Lincoln Bank Building.

BALTIMORE, MD.—The city has had plans and specifications prepared by Edward H. Glidden, architect, Glenn Building, 16 St. Paul Street, for one-story brick public-comfort station, 24x53 feet, on Market Place. Estimates on construction will be asked by Edward D. Preston, Building Inspector, City Hall.

BIRMINGHAM, ALA.—J. J. Mayberry will erect five-story building, costing \$65,000, to replace the Mayberry Building, recently reported burned.

It is stated that the Roden Coal Company, recently incorporated, propose to erect a plant to cost about \$225,000. They will expend about \$400,000 in the erection of a plant later. B. F. Roden, Jr., mining engineer.

CHARLOTTE, N. C.—It is reported that N. J. Sherrill, proprietor of the Mineral Springs Water Company, will erect forty-room hotel at the springs, about twenty miles from Charlotte. Building will be covered with gravel stucco and equipped with complete waterworks and sewerage system. In addition to the hotel it is proposed to erect building suitable for high-school, the hotel to be used in winter as dormitory.

CHATTANOOGA, TENN.—W. D. Roberts proposes to erect market building; three stories; 60x120 feet; tiled floors; enameled ceilings and floors; cost, \$40,000.

CHICAGO, ILL.—Werner Brothers Express & Storage Company, 18 Evanston Avenue, will erect a storage warehouse on Evanston Avenue, near Argyle Avenue. It will be four-story, 50x150 feet, of fireproof reinforced-concrete construction, have pressed brick and stone front, composition roof, concrete foundation and floors, steam heat, structural iron, wiring for electric light, and cost about \$43,000. George Kingsley, 34 La Salle Street, is the architect.

William H. Pruyn & Company will build a three-story apartment-house at the northeast corner of Grand Boulevard and Forty-fourth Street. It will be 100x155, and will contain twenty-one apartments of five to nine rooms each, and will cost \$100,000.

Architects Shepley, Rutan & Coolidge, 82 Van Buren Street, it is stated, will let contracts shortly for a mercantile building to be built at 315 and 317 Fifth Avenue for Mrs. Harriet B. Borland, represented by Chauncey B. Borland, 1508 Borland Building, 181 La Salle Street. It will be eight-story, 46x94 feet, of mill construction, have pressed brick, iron and plate glass front, composition roof, steam heat, wiring for electric light, and cost \$75,000.

Architects Huehl & Schmid, Metropolitan Block, 163 Randolph Street, have prepared plans for a store and loft building to be built at Randolph and Jefferson Streets for Ruprecht & Company. It is to be seven-story, 100x100 feet, of reinforced-concrete construction, have pressed brick, terra-cotta, iron and plate glass front, composition roof, and is estimated to cost \$175,000. Previously reported.

Architect John D. Chubb, Chicago Opera House Block, 112 Clark Street, has completed plans for a high-school building to be built at Negaunee, Mich., for the Board of Education, J. W. Elliott, secretary, who, as well as the architect, is taking figures. It will be three-story, 110x190 feet, of fireproof construction, with reinforced-concrete floors, pressed brick and Bedford stone exterior,

terior, gravel roof, birch or oak finish, steam heat, marble and tile work, wiring for electric light, contain a gymnasium and an assembly hall, seating 500 scholars, be provided with the latest improvements, and cost \$90,000.

Architects Jenney, Mundie & Jensen, New York Life Building, 171 La Salle Street, are receiving bids on a manufacturing building to be built on Ohio Street, between Franklin and Orleans Streets, for the Adams & Westlake Company, 110 Ontario Street. It will be seven-story, 100x100 feet, of mill and fireproof steel construction, have gravel roof, maple floors, steam heat, structural iron, metal skylights, wiring for electric light, and cost \$125,000.

Architects Huehl & Schmid, Metropolitan Block, 163 Randolph Street, are taking figures and will let contracts shortly for a Masonic Temple to be built on the west side of Oakley Avenue, 125 feet south of Madison Street, for the West Side Masonic Temple Association. It will be four-story, 141x170 feet, of fireproof construction, and cost, including \$12,000 worth of furniture, \$150,000.

The R. B. Watson Company, 305 Dearborn Street, was awarded the contract for a warehouse to be built on West Monroe Street for the American Chic Company. It will be four-story, partly of fireproof construction, and cost \$75,000. George F. Hammond, Cleveland, Ohio, is the architect.

The Chicago Eye, Ear, Nose and Throat College and Hospital contemplates the erection, within a year, of a new college and hospital building on the site of the present one, southeast corner of Washington and Franklin Streets. It will be eight-story, 40.5x80.5 feet, of fireproof construction, and is estimated to cost \$125,000. The details are yet to be determined.

Architect Niels Buck, 210 and 212 Roanoke Building, 145 La Salle Street, is completing plans and will take figures next week on an apartment-building to be built at the southeast corner of Winthrop and Argyle Streets for himself. It will be three-story, 58x150 feet, have pressed brick and stone fronts, composition roof, oak and birch mahogany finish, oak floors, steam heat, marble, tile and mosaic work, mantels, wiring for electric light, contain eighteen apartments of four to six rooms each, with the latest improvements, and cost \$50,000.

Architects William H. Pruyn, Jr., & Co., 4217 Berkeley Avenue, have prepared plans for an apartment building to be built at Spokane, Wash., for the Wellington Investment Company of that town. The architects and owners are taking figures. It will be three-story, 100x130 feet, with an open court, have 400 feet of frontage of pressed brick, with stone trimmings, gravel roof, oak, birch and mahogany finish, steam heat, marble, mosaic and tile work, tile mantels of special design, steam heat, wiring for electric light, contain twenty-four apartments of five, six and seven rooms, and cost about \$100,000.

Health Commissioner Evans, City Hall, has decided to make arrangements at once for the construction of an isolation hospital for the treatment of patients afflicted with scarlet fever or diphtheria, for which the finance committee of the City Council has made an appropriation of \$100,000.

The Wells Brothers Company, Monadnock Block, has the general contract for the construction of a repository and office building in the square bounded by Lafayette, Bronson and Main Streets and Lake Shore railway tracks, South Bend, Ind., for the Studebaker Brothers Manufacturing Company of that town. It will be four-story, 321.6x120 and 89.6 feet, fireproof, of reinforced-concrete construction, with columns and roof of same materials, have also brick columns, pressed brick exterior, steam heat, electric light, tile and mosaic work, large platform elevator, large iron skylight, also showrooms for automobiles and carriages, library and smoking room for the employees, and cost about \$700,000. S. S. Bemar, 168 Michigan Avenue, is the architect.

CLEVELAND, O.—A permit was issued by the City Building Inspector for the erection of the new Pope Building, between Euclid Avenue and Huron Road, near the Union Club. Cost, \$1,000,000.

Plans have been prepared by Architect F. S. Barnum, Rose Building, for the erection of a \$300,000 high school building.

COLUMBUS, O.—Bids will be received until August 6 for the erection of a woman's dormitory at the Ohio State University. Wilbur T. Mills, 40 North High Street, and F. Kenyon Hayden, associate architects. Carl E. Steeb, Secretary Board of Trustees.

COLLEGE STATION, TEX.—Architects are invited to submit plans and specifications for any or all of following buildings: At College Station, dormitory, \$45,000; bath house, \$9,000; veterinary hospital, \$4,500; Prairie View, Texas, dormitory, \$15,500. Bids will be opened by Board of Directors of Agricultural and Mechanical College, August 3, Oriental Hotel, Dallas, Texas. Usual rights reserved. For further information address Charles Puryear, Dean, College Station, Texas.

Plans have been prepared by Architects Richards, McCarty & Bulford, The Ruggery, for a six-story department store building, 101x187 feet, at Town and High Streets, for F. & R. Lazarus Company. Cost, \$100,000.

Plans have been prepared by Architects Mills & Pruitt for an eight-story bank and office building, 120x30 feet, at Marietta, O., for the German National Bank. Cost, \$70,000.

CONCORDIA, KAN.—Plans have been prepared for a new chapel at the Convent of the Sisters of St. Joseph. Cost, \$75,000.

COVINGTON, KY.—Bids have been received for a seven-story store and office building to be erected on Madison Avenue, Covington, Ky., for John R. Copplin, 538 Madison Avenue. Cost, \$125,000. James Gilmore, Fourth National Bank Building, Cincinnati, O., architect.

CORDELE, GA.—Masonic Lodge of Cordele will erect a temple; four stories, brick and stone. Cost, \$25,000.

DALLAS, TEX.—School building, contract for which was recently noted awarded to H. J. Emmins, will be eight-room building, 55x90 feet; two stories and basement;

brick and cement; stone trimmings. Cost of completed building, \$25,000.

FRANKLIN, N. H.—Hon. Frank N. Parsons was elected a member of the Permanent Building Committee to take charge of the matter of a new building in Concord for the New Hampshire Historical Society at a meeting held in that city Saturday. The proposed building will cost more than \$100,000.

FORT WORTH, TEX.—Knight, Kenyon & Stephenson, Dallas, Texas, are lowest bidders at \$135,700 for erection of extension, remodeling, etc., of United States Post-office and Court House; James Knox Taylor, Washington, D. C., supervising architect.

GALESVILLE, WIS.—It has been voted by the city to erect a \$25,000 school building. The Clerk of the Board of Education may be addressed.

GRAND COTEAU, LA.—St. Charles College, Rev. Emile Mattern, S. J., rector, will rebuild college recently burned at a loss of \$25,000.

HARTFORD CITY, IND.—The American Window Glass Company has ordered plans for the erection of a large addition to the company's present plant, sufficient to double present capacity. Estimated cost, \$40,000. When completed will be the largest glass factory in the world.

HOUSTON, TEX.—The contract for the eleven-story Scanlon Building, to be erected on the corner of Main Street and Preston Avenue, will be awarded during August. This will be a fireproof, steel frame building, faced with granite on three lower floors, with terra-cotta on remaining stories. D. H. Burnham & Co. of Chicago are the architects.

JEANNETTE, PA.—The plant of J. J. Lowe & Co. of Minerva, O., will be removed to Jeannette, Pa., and new buildings will be erected to cost \$75,000.

KANSAS CITY, MO.—Plans have been prepared by Associate Architects John B. Wagner, New Nelson Building, and Charles A. Smith and Walter Lovitt, Dwight Building, for a fifteen-story office building at Ninth Street and Grand Avenue, for the Grand Avenue M. E. congregation.

Plans have been prepared for the South Side College for Girls to be erected by the Sisters of St. Joseph. Cost, \$200,000.

Herman Streicher will erect two apartment houses, each six stories, twelve apartments; Carthage stone and ivory buff brick; freight and passenger elevators. Cost, \$136,000. Plans are being prepared by Matt O'Connell.

Plans are being prepared for a six-story office building and studio on the east side of Grand Avenue, near Eighth Street. Cost, \$82,000. C. Harrison Shields, Eighth and Grand, owner.

MARIETTA, O.—Plans are ready for bids by Architects Mills & Pruitt, McCune Building, Columbus, O., for a three-story addition to bank building at Marietta, O., for the German National Bank. Cost, \$25,000.

MEMPHIS, TENN.—Belvedere Improvement Company and Housekeepers' Club plans to erect apartment house; seven stories. Cost, 250,000. H. W. Brennan, principal promoter.

MILWAUKEE, WIS.—Architects H. Messmer & Son, Oneida and East Water Streets, are making plans for a five-story addition to the Randolph Hotel, 134 Third Street,

fireproof, of brick and steel, to cost about \$80,000.

Architects Ferry & Clas are preparing contracts for a warehouse to be erected by Otto L. Kuehn at Detroit and Michigan streets. It will be five stories in height and of brick construction with reinforced-concrete columns and floors.

Sisters of St. Francis contemplate a \$150,000 additional building at St. Joseph's Convent, Twenty-second Street and Greenfield Avenue. Special attention will be given to sanitarium project.

The Waltham Piano Company, William Kootz, president, will erect a \$50,000 piano factory in the Webster Avenue addition, located on Vienna Avenue and Holland Avenue and the Milwaukee road tracks.

MINNEAPOLIS, MINN.—Plans have been prepared by Architects Downs & Eads, New York Life Building, for a one-story \$50,000 factory and boiler house for the Coffin Box & Lumber Company.

MOBILE, ALA.—Mobile Council No. 666, Knights of Columbus, has had plans prepared for erection of building; three stories; brick, semi-fireproof; mill construction; cost \$30,000. Dupre & Co. are contractors and will soon begin construction work.

MONTGOMERY, ALA.—The Alabama Conference Female College will erect a dormitory and main buildings to cost about \$100,000. Architect has not yet been selected. J. M. Dannelly, agent. J. M. Mason, chairman building commission, Eufaula, Ala.

MOOREFIELD, W. VA.—City has had plans prepared by John S. Siebert, Cumberland, Md., for erection of City Hall; colonial style; red brick; to contain basement, library, auditorium with seating capacity of 500, etc.

NASHVILLE, TENN.—Sharpe & Co. have contract to build foundation of proposed annex to the Central Hospital for the Insane. Annex will cost \$60,000. Contract for remaining work will not be awarded until completion of foundation.

NEWARK, N. J.—Plans have been prepared by Architects Cramp & Co., Commonwealth Building, Philadelphia, Pa., for a large \$500,000 school building, 100x200 feet, to be erected in Newark, N. J.

NEW YORK CITY.—The Alumni of Amherst, Brown, Dartmouth, Mass. Institute of Technology, Wesleyan and Williams Colleges are to unite in building a club-house in this city. A site on Forty-fourth Street is proposed.

Bids will be received by Architects John B. Snook's Sons, 73 Nassau Street, for mercantile building to be erected at 8-10-12 West Fourteenth Street, for George A. Hearn. To be six stories. Cost, \$150,000.

Plans are being prepared by Architect Charles H. Schuman, 280 Broadway, and will receive bids for a six-story bank building, 57x100 feet, at northwest corner Tremont and Park Avenues, for the Bronx Safe Deposit Company. Cost, \$100,000.

Architects Clinton & Russell filed plans for the sixteen-story offices and stores to be built at 160 Broadway for the Lawyers' Title Insurance and Trust Co. It will have a frontage of 59.1 feet and a depth of 115.8, with facade in modified classic design, of pink Milford granite at the lower stories and limestone with terra-cotta decorations above. There will be engaged Doric columns above the entrance and Corinthian pilasters at the two top stories, supporting cornice and orna-

mental balustrade. A large decorated clock will be set above the Doric colonnade at the fourth story. The building will cost \$700,000.

Chas. Weinstein, 17 West 120th Street, is still open for estimates on the various lines of work, material and equipment for the two flat houses which he will build at the southeast corner of Seventh Avenue and 143d Street, from plans by Architect George F. Pelham, 503 Fifth Avenue. The buildings will be six stories high, measuring 50x88 feet, of brick and stone, with composition roof, hardwood finish, steam heat, dumbwaiters, etc. Cost, \$140,000.

Plans have been approved by the Building Department and work will start soon on the large new business building which Mr. A. M. Powell, 326 West Seventy-second Street, will build at the northeast corner of Canal and Sullivan Streets. Henri Fauchaux, 105 Hudson Street, is the architect. It will be a ten-story building, measuring 58x94 feet, of brick, stone, and iron, fireproof, with composition roof, steam heat, electric light, elevators, and cost about \$250,000.

The Lafayette Building Co., 149 Church Street, will soon begin operation on the large new business building about to be erected at the northeast corner of Lafayette and Walker Streets, as previously mentioned. Schwartz & Gross and B. N. Marcus, 35 West Twenty-first Street, are the architects, and plans provide for an eight-story building, measuring 60x80 feet, to contain store and lofts. It will be built of brick, stone and iron, with composition roof, steam heat, electric light, elevators, and cost about \$300,000.

The Forty-sixth Street and Broadway Realty Co., 500 Fifth Avenue, will soon start the new theater building which they will erect at 200-204 West Forty-sixth Street, as reported in previous issues. Herts & Tallant, 113 East Nineteenth Street, are the architects, and plans provide for a three-story building, measuring 75x100 feet. It will be built of brick, stone and iron, fireproof, with composition roof, steam heat, electric light, tile and mosaic work, elevators, and cost about \$150,000.

NORFOLK, VA.—Trustees International Committee, Young Men's Christian Association, has awarded contract to E. Tatterson, Norfolk, Va., for construction of proposed naval Y. M. C. A. building, to be erected at cost of \$210,000; plans by L. E. Jallade, 96 Fifth Avenue, New York, N. Y.; building to be six stories; 120x104 feet; fireproof; electric lighting.

OMAHA, NEB.—Plans have been prepared by Misner and Baker, architects, 539 Ramage Block, for a three-story addition to the Ramage Block for G. E. Shukert. Cost, \$35,000.

PEORIA, ILL.—Arrangements are being made to enlarge the plant of the Keystone Fence Company, South Bartonville, station of Peoria, Ill. Cost, about \$100,000.

An immense six and one-half-story structure, 120x240 feet, will be erected here by the Glucose Company. Cost, \$1,000,000.

PITTSBURG, PA.—Contracts have not yet been awarded for the three new buildings for the Carnegie Technical Schools, which are expected to cost at least one million dollars.

PHILADELPHIA, PA.—William Steel & Sons Company, 1600 Arch Street, Phila-

delphia, are preparing plans for a six-story slow-burning factory, 50x110, to be erected at Noble and Darien Streets for S. Rose-nau & Co. Cost, \$100,000.

Plans have been prepared and are ready for bids for a four-story bakery and restaurant, at 202 and 204 South Tenth Street, by Architect F. R. Stuckert, 1421 Chestnut Street, for the Horn & Hardart Baking Company. Cost, \$100,000.

Architect George T. Lovatt is designing a group of buildings to be erected by St. Aloysius Catholic congregation at Twenty-sixth and Tasker Streets. The church proper will measure 120x145 feet, and be of the Gothic style, while the other buildings will be a three-story rectory, 36x50 feet, and a three-story parochial school 50x120 feet, containing a large assembly room.

PRAIRIE VIEW, TEX.—State Normal and Industrial College (branch of Agricultural and Mechanical College) will erect larger chapel or assembly hall and dormitory, to cost \$17,500, addition to present laundry steam plant, new agricultural building, two-story brick building for mechanical department, enlarge present building used by female industrial department in sewing, etc.; sewer system to cost \$5,000; \$1,000 to be expended for dairy herd; E. L. Blackshear, principal.

ST. LOUIS, MO.—Building Commissioner Smith has issued a permit to the Washington University Corporation for the construction of a new seven-story slow combustion building at the corner of Eleventh and Spruce Streets. The building will cost \$289,000. The plans have been prepared by Architects Eames & Young. The lot has a frontage of 154 feet on Spruce Street by a depth of 185 feet on Eleventh Street.

Southern Real Estate & Financial Co. will erect thirteen-story hotel and theater, 128x123 feet, at a cost of \$500,000. Fred C. Bonsack, 604 Columbia Building, has prepared plans.

Friedens German Evangelical Church is completing arrangements for erection of edifice; 90x90 feet; bell tower 90 feet high; English Gothic architecture; vitrified brick, terra-cotta trimmings; auditorium seating 750; cost, \$60,000. Plans have been prepared by J. Otto Boehmer.

Board of Education has secured permit to erect the new Gardenville school building, costing \$84,665, after plans by Wm. B. Ittner.

McNair & Harris Realty Co. is having plans prepared by W. A. Swasey, Missouri Trust Building, for erection of theater; four stories; 100x150 feet; brick and stone; gas and electricity; cost, \$200,000. Bids will be received in about two weeks.

Police Department is having plans prepared by James A. Smith, City Hall, for erection of police patrol house; two stories; 50x125 feet; brick and stone; gas and electricity; cost, \$50,000.

William B. Ittner is preparing plans for school building at Walnut Park; three stories; 20 rooms; brick and stone; gas and electricity; plumbing; cost, \$100,000.

Condie-Niele Glass Co. is having plans prepared by Mauran, Russel & Garden for erection of mercantile building; six stories; 80x150 feet; brick and stone; cost, \$150,000. Bids are being received.

SEATTLE, WASH.—Architect W. P. White is drawing plans for a five-story family-

hotel building to be erected on the southeast corner of Olive Street and Seventh Avenue by Forester & Co. The building is to be a modern brick, and will have a basement and subbasement. It will occupy a lot 60x80. On each floor there will be eight three-room suites, each having a bath. In the basement there will be dining and grill rooms finished in old Dutch style. The apartments will all be finished in native fir. An elevator will connect the five stories. The hotel will be called the Heidelberg, and is expected to be ready for occupancy this fall. The estimated cost is \$80,000. Architect W. P. White is also drawing plans for a three-story and basement apartment house to be erected on the north side of Denny Way, between Harvard Avenue and Broadway, for G. N. Miller. It will occupy a ground space of 48x95, and will cost about \$20,000.

SHELBY, N. C.—Cleveland County has adopted plans for the erection of court house to cost approximately \$65,000; bids are asked; contract will be let August 6; after July 23 plans will be on file and open to inspection at office of J. F. Roberts, chairman Board of Commissioners, or at office of H. L. Lewman, architect, 1008 Lincoln Bank Building, Louisville, Ky.; all bids are to be delivered, sealed, to Board of Commissioners; usual rights reserved.

SHERMAN, TEX.—Machine and blacksmith shops will be erected here by the St. Louis & San Francisco Railway Company, Frisco Building, St. Louis, Mo. Cost, about \$60,000.

STOCKTON, CAL.—The Stockton Savings and Loan Society Bank Building, the first of the so-called "skyscrapers" to be built in this city, will soon be commenced. Contract for this building has not been let. Building is to be 75x70 feet, steel frame construction, faced with brick and terra-cotta, and is expected to cost at least \$300,000.

TULSA, I. T.—Tulsa National Bank, J. G. Gannon, president, has awarded contract to the Urban Construction Co., Kansas City, Mo., for erection of five-story reinforced concrete office building costing \$100,000, after plans by James Oliver Hogg, 946 New York Life Building, Kansas City, Mo.

UTICA, N. Y.—Plans are being prepared by Architects Barnett, Haynes & Barnett, Frisco Building, St. Louis, Mo., for a three-story, \$300,000 convent at Utica.

WASHINGTON, D. C.—Gen. John Watts Kearney, 1529 Eighteenth Street N. W., will erect two dwellings at corner of Twenty-second and R Streets N. W.; one three stories and basement, 36x86 feet, and other four stories, 20x65 feet; brick with limestone trimmings; electric wiring and fixtures; sanitary plumbing; heating systems; Wyeth & Cresson, architects, 1517 H Street N. W.

Bates Warren, Columbian Building, 416 Fifth Street N. W., represents builders who have purchased fifty-five acres of land at Florida Avenue and Fifteenth Street N. E., and will erect 200 dwellings on the site at cost of \$600,000.

WAUSAU, WIS.—Plans have been prepared by Architects Van Ryan & De Gel-leke, Milwaukee, for a two-story office building at Wausau for Kreutzer, Bird & Ros-senberry. Cost, \$30,000.

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Auckland, New Zealand.

### POSITIONS OPEN.

**WANTED**—A competent architectural draughtsman for all around office work; one with experience in good offices preferred, or graduate from technical school. Address A. A. Ritcher, Architect, Lebanon, Pa. (1648-1650)

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**STRUCTURAL STEEL** and reinforced-concrete engineer, at present chief engineer for prominent engineering firm, desires position in charge of engineering department of architectural firm, or would form partnership with architect. Address 3-B, care American Architect. (1647-1650)

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**STRUCTURAL ENGINEER** graduate having had 15 years' experience in designing steel work for tall, fireproof buildings, desires position as designing engineer in office of first-class architect in New York or vicinity; first-class reference. Address A-50, care American Architect. (1648)

**EXPERIENCED** reinforced-concrete and structural engineer would like position with architect or contractor, New York City preferred. Address 00-A, care American Architect. (1648)

### PARTNERSHIP WANTED.

**ARCHITECT** of experience, architectural graduate, capable in design, water color and ink rendering and all kinds of office work, for family reasons wishes to change location; would form partnership with established architect, good business man and capable superintendent, where by joint effort along above lines practice could be increased and its character improved. Address "Office Work," care American Architect. (1646-1648)

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### PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 22, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 4th day of September, 1907, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. Post Office and Custom House at Quincy, Mass., in accordance with drawings and specifications, copies of which may be had at the office of the custodian of the site, or at this office, at the discretion of the Supervising Architect—James Knox Taylor, Supervising Architect. (1648-1649)

(Proposals continued on p. xv.)

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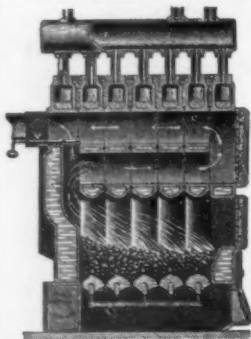
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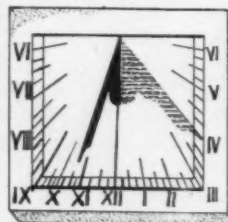
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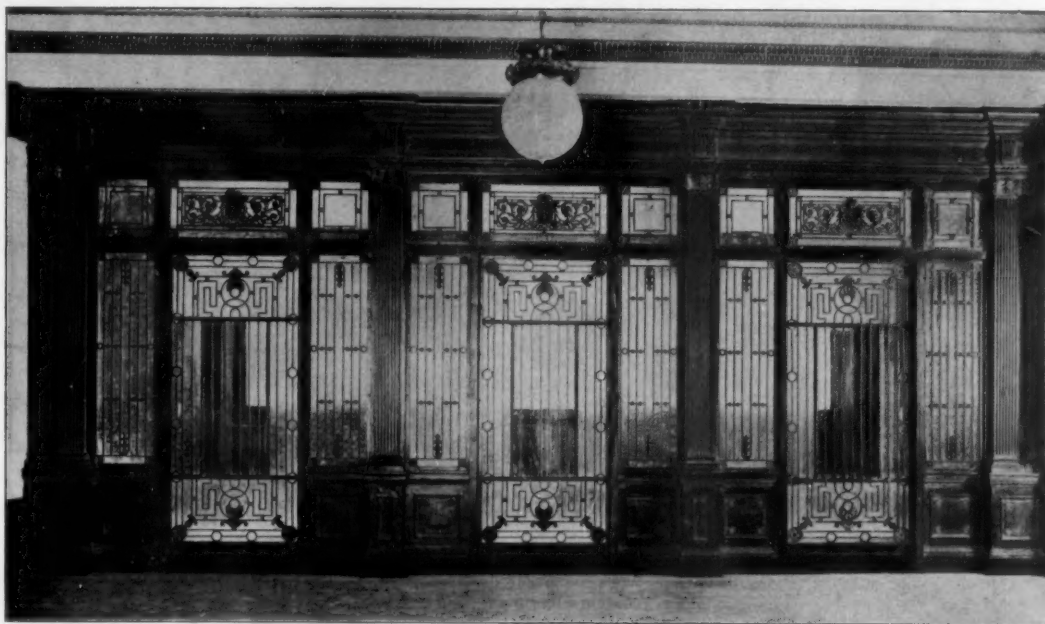
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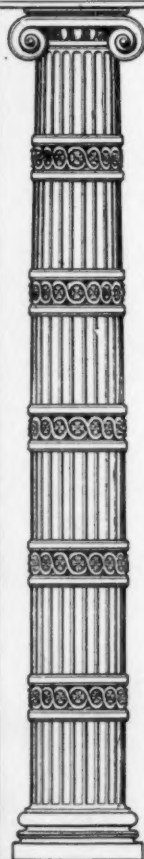
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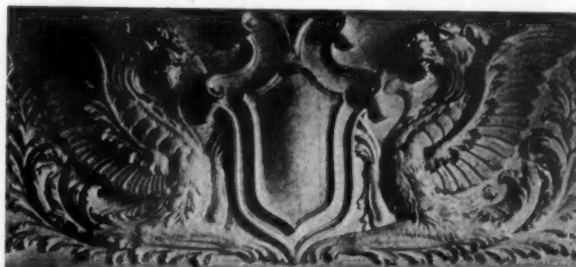
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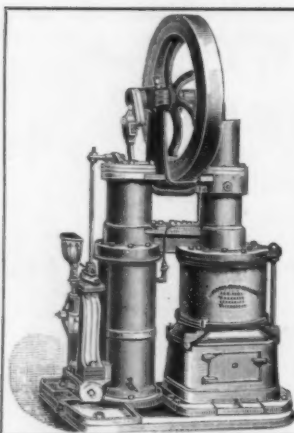


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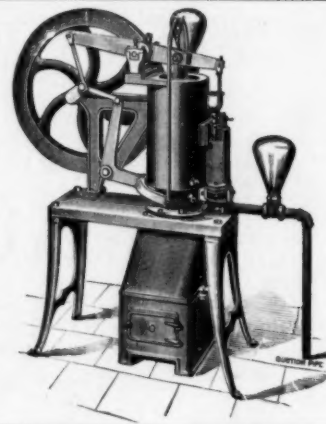
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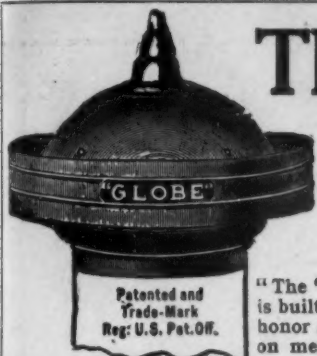
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Treasury Department, Office of the Supervising Architect, Washington, D. C., July 18, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 27th day of August, 1907, and then opened, for the construction (including heating apparatus, electric wiring and conduits) of the extension to the U. S. Post Office and Court House at Trenton, N. J., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at Trenton, N. J., at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1648-1649)

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 22, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 3d day of September, 1907, and then opened, for the construction (complete) of the U. S. Post Office at Watertown, N. Y., in accordance with the drawings and specification, copies of which may be had at this office, or at the office of the Custodian at Watertown, N. Y., at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1648-1649)



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