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FEBRUARY 17, 1900.



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The Threatened Building Strike in Chicago.—New Haven, Conn., receives Proposals "for Architect's Services."—Tales showing how certain Architects can compete in such Proposals.—Devices by which an Architect can Stand-in with the Contractors and Material-men.—The Course in Landscape Architecture at Harvard.—The Imaginative Faculty necessary to a good Landscape Architect.—A Canadian Niagara Falls Electric Power Company.	49
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THE Building Trades' Council of Chicago has given notice that all members of the unions connected with the Council will be ordered to strike on Saturday, unless the contractors in the meantime accede to certain demands. As the latter show no disposition to yield to these demands, it seems quite probable that sixty thousand men will be out of work next week. It is generally understood, whether correctly or not, that the question at issue is that of arbitration, the unions having changed their minds about the Board of Arbitration which was agreed upon not long ago between them and the contractors, while the latter insist upon this as the only way to avoid ruinous disputes. As very little building is now being done in Chicago, on account of the high prices of materials, a better time could hardly be chosen for a strike, so far as the contractors are concerned; and it may be observed that the officers of the Building Trades Council may not be unaware of the fact that a time when there is not much work to be done is usually found to be appropriate to grand labor demonstrations. When there is plenty of employment for every one, it is difficult to get men to give up a good job at the order of a walking-delegate; but when work is falling off, and the contractors are discharging their inferior men, and keeping the better ones at a loss to themselves, it is easy to get men to drop their tools who know that they will soon be discharged in any case, and those who have already been discharged are sure to encourage any movement which will bring their more favored comrades into the same condition with themselves.

THE Board of Education of New Haven announces that it will receive, until * P. M. of February *, sealed proposals "for architects' services in preparing designs, plans, specifications, estimates and for full professional services for a school-building to be erected on the lot corner of Canner and Livingston Streets. . . . The right to reject any and all bids is reserved." It is quite probable that the Board of Education of New Haven knows the kind of professional assistance that this invitation will attract, but is compelled by some city ordinance to advertise for bids for this as well as all other kinds of service to the city; so that we will not address our observations to it; but the citizens and taxpayers who will have to pay for the building should be warned that prudent men do not generally find it a profitable operation to entrust large sums of money to the persons who will undertake the charge at the lowest price. We will not say that the architects who will respond to this invitation, particularly those who make the

lowest bid, may not be the most honorable and skilful in the profession; but it can at least be pointed out that an architect without the first of these qualifications could take the commission for nothing, and yet secure for himself without difficulty, and without detection, a remuneration at least two or three times as great as would be charged by the best men in the profession.

EVERY experienced architect can tell many stories in illustration of this position, but two will be enough for the present. An architect who found very little employment of any other kind was once employed, very probably on account of his "reasonable charge for his services," to build a school-house. The commission was not a large one, but the work dragged a little, the architect, meanwhile, giving evidence of great prosperity. One of his friends congratulated him on his improved circumstances, asking what other work he had in hand besides the school-house. "Nothing," replied the architect; "but a man must be a fool who cannot make a good living out of one public building." The second story will, perhaps, cast a little light on the first. A very distinguished and experienced architect was once asked by a client if he would not, as a favor, do his work for less than the regular five per cent. "Give me a little discount," said the client, "and you may get all you can out of the contractors." The architect laughed. "If you will put that in writing," he said to his client, "I will give you five per cent." It ought to be evident enough that an architect who takes perhaps two or three per cent commission from his client, and ten from the contractors, is a more expensive professional adviser than one who charges his client five per cent, and neither takes any money from the contractors nor allows them to steal any from his client, but it seems to be difficult to persuade inexperienced people of this. In point of fact, where there is collusion between a dishonest architect and the contractor, a great deal more than ten per cent on the amount of the contracts is often paid to the former. We have repeatedly known twenty per cent on the amount of large contracts to be offered the architect for his influence in "throwing them in the way" of certain bidders; and, while such an offer to an architect of reputation would simply insure the award of the contract to some one else, it is easy to see that a dishonest one can without difficulty bargain for a much larger share of the plunder.

THE average committee-man may, perhaps, say that, as the bids for a building, or for work in it, are based on definite plans and specifications, it would be impossible for any bidder to add any considerable sum, destined for the architect, to his bid without making it so high as to exclude him from all chance of receiving the award. Unfortunately, however, theory and practice do not agree in such matters. In the first place, it is a simple matter for the architect to drop a hint to the bidders, all of whom come repeatedly to his office, that a certain percentage is to be added to each bid for his benefit, and those valuable members of the profession who can derive a good living from a single public building often adopt this plan. We have seen bidders add up their figures, with the usual provision for contingencies, and, before making out the total, draw the architect aside, and ask, "And how much is to come to you, sir?" It is plain that an addition of thirty, or even fifty per cent for this purpose, if made by all the bidders, would not affect the award, and it could not possibly be detected by any member of a school board who was not himself an expert architect or builder. But this is by no means the only way in which an unscrupulous architect can rob his employer. Instead of the bids for a building, and particularly for a public building, being all based on the same plans and specifications, it is almost always the case that there are considerable variations between them. One bidder will estimate for "everything in the specifications except the brickwork;" another will put a codicil to his bid, to say that "this does not include the heating and ventilation," while we have known a bidder for public work to interline the printed specification which he handed in, signed, as a part of his tender, so as to provide for a much cheaper job than that on which the other bidders had estimated. It was the architect, in this case, who called the attention of the committee to this interlineation, and the architect is

generally obliged, after the formal bids are in, to examine and compare them, before it can be determined which bidder really offers to do the work wanted for the lowest price. It is hardly necessary to say that a dishonest architect, by intentional vagueness in the plans or specifications, or by calling for materials controlled by certain persons, or by suitable representations in regard to the result of his comparison of the bids, can easily influence the award in the direction most profitable for him. How profitable a judicious use of one or both these devices may be can be judged from the fact, shown by printed reports some years ago, that, at that time, a school-house in Boston cost twice as much as those of similar character and size in Chicago. We do not wish to suggest that the incumbent of the city architect's office at that time was in fault; in fact, the system then in use was shown to be chiefly responsible for the trouble; but as, in general, building-operations are, at least, as dear in Chicago as in Boston, the lesson conveyed by this circumstance is that school boards, auditors and mayors will, without suspicion, approve contracts and bills for public buildings to an amount twice as great as their proper cost, even when millions of dollars are involved in the expenditure. If, therefore, school boards and auditors will pay without hesitation, on an architect's certificate, two hundred thousand dollars for a building that really costs only one hundred thousand, there is, evidently, a fine margin of profit for somebody; and we hope that our readers begin to understand how "a good living" can be derived, without detection, and without risk, by an unscrupulous architect out of a single public commission. But this is not all. After the specifications have been signed, the contracts made, and the work begun, it is the architect who decides whether it is carried on in accordance with the contract, and he may, in collusion with the contractor, accept work grossly inferior to that contracted for, and certify it for payment at the contract price. In engineering work, under the supervision of rascals, this is the favorite method of cheating one's employers, but it is also practised on a large scale in public buildings, the most expensive portions of the contract work being often replaced by something very inferior. In most cases, the substitution is covered up by subsequent work, so that no one ever knows anything about it except the architect and the contractor with whom he is in collusion; but it is often made in fittings exposed to view, the guilty parties knowing that there is little chance that any one will take the trouble to compare the printed specification with the executed work, and that, if any one should do so, some plausible explanation can probably be given. In either of these three ways, therefore, or by all of them together, by adding a percentage to all the bids; by influencing the award of the contract to a certain bidder who has special views in regard to contract and extra work, or by certifying inferior work at the contract price, the architect of a public building can without difficulty profit enormously, without fear of detection, and without risk of punishment if he should be detected. It is the law that if a man or corporation, municipal or otherwise, chooses to entrust a person with important duties, that person cannot be held responsible for the consequences of errors of judgment, or want of proper knowledge, no matter how gross they may be, or how ruinous to the interests of his employer. So long as direct fraud cannot be proved, which would rarely be the case in such operations under our laws, the only answer that a court would make to the complaints of the employer would be that he should have selected a better man. Just as, in the case of the trustee of an estate, the only way to avoid the plundering and waste of the estate is to select an honest trustee, so in building-operations, the only possible way to prevent the waste and misappropriation of the large sums so employed is to entrust the control of them to an architect known as thoroughly competent and honest; and we hope that the people of New Haven will ponder well the question whether the best way to secure such an adviser is to advertise for the cheapest man that can be found.

THE detailed announcement just issued by Harvard University as to the new course in Landscape Architecture contains some interesting particulars. The general direction of the course will be in the hands of Mr. Frederick Law Olmsted, Jr., who will be assisted by Mr. Arthur A. Shurtleff. It is a satisfaction to learn that the students of landscape architecture will be required to take the second year work in design of the regular architectural course, somewhat modified to suit their

special needs. This will give them, what landscape gardeners generally lack, a conception of the value of symmetry and axial arrangement in building, and, we may hope, of the importance, in dealing with a symmetrical building, of a certain formality in the plantation immediately around it. In addition to this study of architectural design, those who devote themselves to landscape architecture must take a part of the fine-arts course, in order to familiarize themselves with the history and development of fine-art in general. Mr. Olmsted says, very truly, that the professional success of a landscape architect depends very much on his ability to understand the various tastes and ideals of his clients, and, while a college education naturally tends to enlarge the views and broaden the sympathies, it is desirable to give particular attention to increasing the resources of men who must try to please a great variety of tastes. It is hardly necessary to say that, with the course in the hands of one brought up in the traditions of the Olmsted office, the materials of landscape gardening, such as flowers, trees and shrubs, are to be thoroughly studied, with a view not only to their habits, but to their value and expression in landscape work; and a summer course in surveying completes what seems to be a very well-considered scheme. As we have before said, there is room for doubt whether the profession of landscape gardening will, for a time, furnish employment for all the graduates of the schools which have determined to teach it; but the Doctors of Landscape Architecture, or whatever else they be called, if they find their services for a time not in great demand, will, at least, be of use in guiding the taste of the community in which they live, and the development of the public taste for beautiful adjuncts to houses and other buildings is sure, in the end, to bring employment to those qualified to produce them.

IT is rather a pity that amongst the tests for admission to this course there could not be inserted one that should exclude all applicants who could not prove that they possessed the imaginative faculty, growing and healthy. Landscape architecture should be more of an art than a science, but it can become such only in the hands of men whose imaginative faculty is highly developed by training and observation, men who can correctly picture to themselves the ever-changing effects their work must pass through from year to year under the compulsion of their all-powerful partner, Nature, whose influence may be benign or malign according as she is checked or guided at precisely the right time and in exactly the right way, and these times and ways we fancy must be foreseen and provided for at the outset. We hope that it is the intention to make the engineering training altogether subordinate to the artistic and horticultural. There are in practice to-day too many "surveyors and landscape gardeners," men who have really only an engineering training and think more of grades and levels than they do about form, color, reliefs, vistas and shades; men whose work is stiff and cold; to whom a concrete bridge over a brook or ravine is the one thing needed to give their scheme the *cachet* of the most perfect art; men who would blast away a jutting boulder and would never think of patiently enlarging its natural hollows so as to give place for enough loam to support the climbing vines and flowering shrubs that would transform its ugliness into loveliness; men, in short, in whom the imaginative faculty is non-existent or benumbed by the burden of engineering formulas. We hope that the day of these despoilers of our surroundings is nearly over and that the graduates of Harvard and the Institute of Technology will give us better things.

A CANADIAN company has been formed to utilize the Falls of Niagara in the production of power. More than ten years ago the Company was organized, but, prudently, as it seems, waited until the American company had completed its operations, and had ascertained, at a considerable cost, the expense of transmitting force by electric currents. Now, the Canadian company can work with an adequate knowledge of what is required, and what apparatus is available to fulfil the requirements, and operations are to begin at once. Under the present scheme, a canal will be dug from the confluence of the Welland and Niagara Rivers to the edge of the precipice below the Falls. Turbines will be placed at two different points, and it is estimated that nearly two hundred thousand horse-power will be available.

THE ITALIAN GARDEN.¹—II.

WHEN either the fine view or the abundance of water was wanting, the greater burden came upon the other, and no Italian garden was really perfect without both.

Sometimes, perhaps more commonly about Genoa, the house is at or near the foot of the slope (see Illustrations for plan of the Villa Scassi), from which the terraces rise at the back to higher and higher levels, terminating with the bosket and the reservoir, a feature to the beauty of which special attention was generally given. The higher terraces in this case afford more extended views than the house itself. How this reversal may have come about sometimes, at least in the Genoese gardens, will appear farther on.

The shape of the Italian garden seems to have been usually rectangular, as has since been the case with the French and English gardens, though of course there were instances where the slope of the grounds at the disposal of the architect did not permit this exceeding formality; and still other instances where such a shape seemed not to consist with economy, or best fit the villa scheme of design as a whole.

Regarded broadly, the garden nominally consisted of three parts, which, passing from the point of highest elevation to that of the lowest, were respectively the bosket or grove, the terraces, and the parterre proper. Through these three in succession the water was led in various basins of architectural design.²

The main axis of the garden, about which were grouped symmetrically the different architectural and horticultural features, was usually (and typically, I should say) perpendicular to the garden façade of the house; or, in other words, it was but the main axis of the house produced exteriorly out to the limits of the enclosure. Sometimes, however, the longer axis of the garden had to be parallel to the façade, or, rarely, even oblique. This difficulty was effectively overcome by continuing the axis of the house, as before, as far as practicable, and then turning it sharply to the necessary angle. In such a case both vistas, that from the house and that from the garden, terminated at this turn, and were there closed either by the same architectural features or by separate ones. An example of such an oblique axis is that of the garden of the Palazzo Nicolini, Via de Serni, Florence, where the outer end of the garden axis is closed by the building called the orangery. Besides the main or longitudinal axis, there was always a transverse axis perpendicular to it and crossing it generally at the great central feature; and parallel to these two axes were a greater or less number of minor axes, intersecting at right angles and forming rectangles whose longitudinal axes might be either parallel or perpendicular to the main axis of the garden. Sometimes there were diagonal axes, the principal ones meeting or intersecting the principal rectangular ones at their intersection of one another. The whole garden-design, the water-

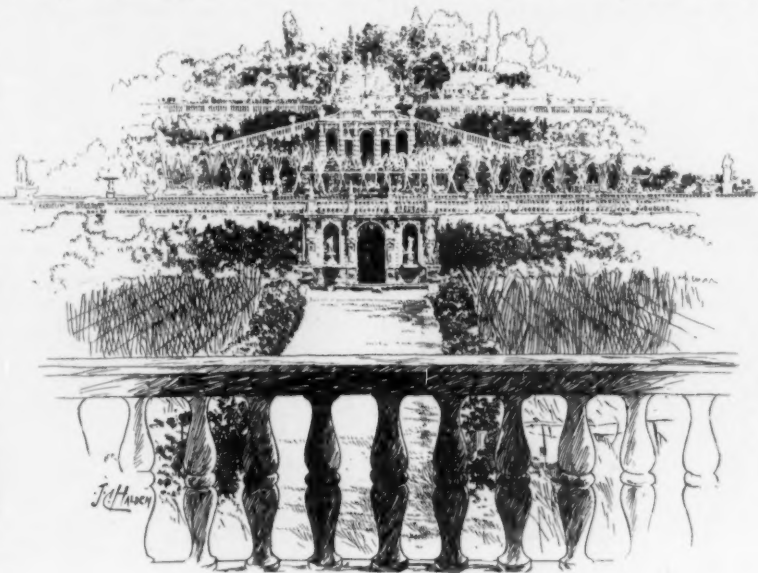
system and system of connecting paths, the placing of all the individual features, whether architectural, engineering or horticultural, and their tying together, was in carefully studied and scrupulous relation to these various axes, so that the whole scheme had compactness and entire unity. Moreover, since the architectural lines of the plan were all straight or segmental (usually quarter, half or whole circumferences), the scheme was absolutely geometric, as it was also symmetric and formal.

As it was the water-system which afforded the motive for the principal features of the garden, the most important fountains and water-basins, etc., were generally along this main axis. Around these the lesser water-features were subordinatedly grouped in relation to this and the other axes. The flow of water from one basin to another and another by tying them all together was perhaps the chief factor in giving to the Italian garden its characteristic organic unity. The starting-point of the water-supply, at least so far as the garden was concerned, was the great reservoir, already referred to, in the bosket. This reservoir,

like most of the features of the Italian garden, varied very much in design. It was either circular, rectangular or otherwise polygonal, or outlined by a symmetrical combination of straight and segmental lines. One such form afforded right-angled re-entrants, which served as pleasant standpoints for enjoying both the beauties of the water and the movements of the fish with which the basins were commonly stocked. This reservoir was surrounded usually by a balustrade, but sometimes merely by a wall with a more or less moulded coping. Along the top of this balustrade or wall, placed at regular intervals, might be a series of statues, urns, obeliskoid monoliths, or almost any other form of sculptural ornament³ which took the fancy of the designer or the owner, as, for instance, a series of great pine-cones. Sometimes, instead of such purely architectural features, a series of decorative pots with ornamental plants was employed. In the centre of the basin was a fountain, to the beautiful designing of which especial attention was given. Paths led to and from this basin and sometimes radiated from it in half a dozen or more directions through the bosket.

While this bosket would never have been taken for a wild, unordered forest, it was, nevertheless, made perhaps the most naturalistic feature of the whole grounds. It was often left dense, particularly immediately about the basin, and its formalism was no more than was needed to consist with the more or less conscious simulation of the classic grove. In the most beautiful examples the trees were allowed to grow close to the water-basin, so that much of their beauty of form and color

might be reproduced in reflection from the mirror-like surface of this miniature woodland-lake,⁴ thus more closely relating, and blending with admirable effectiveness, the beauties of Nature with those of Art, while at the same time the simple, placid surface of the water itself rested the eye from the confusion of



Garden of the Villa Scassi, Sampierdarena, near Genoa, Italy.



Lower Part of the Garden, Royal Villa, at Castello, near Florence, Italy.

¹ Continued from No. 1259, page 45.

² For an interesting and charming poetic description of an Italian garden, see Leigh Hunt's "The Story of Rimini," Canto III.

³ See the Garden of the Caryatides in the *American Architect* for April 8, 1899.

⁴ See the *American Architect* for August 12, 1897.

the surrounding vegetation. Immediately outside the balustrade was generally a paved walk, or even a continuous stone platform, beyond which again was the path, and often on the farther side of this, stone seats of architectural design known as "exedra." This grove and its little lake must, it would seem,



Villa Lante, Detail of Stairs: Swan Fountain.

have been in every way the most restful in its effect of all the different parts of the garden.

From this reservoir the water was led—in places below ground by aqueducts, but for the most of its course above ground, in full view—down over the successive terraces and out over the parterre. In its passage over the terraces it appeared as cascades or waterfalls, according to the steepness of the slope, or was conducted through caves or grottos, or rockeries sunk in the bank-walls of the terraces, whence, after collecting from innumerable small jets, and being gathered again into larger and larger pools, it was led on till it reached the parterre, or great level expanse which spread out at the foot of the terraces. There, at different points, as at various parts of its upper course, the charming channels in which it was confined expanded into basins, with central fountains and enclosing balustrades, repeating the general character of the first basin in the bosket, but without its thick, embracing woods, and always ringing changes on the old theme. Where the basins were ex-



Villa Torlonia, Frascati: Upper Basin.

posed to the direct rays of the noonday sun, little caves and grottos were provided under the parapet of the fountain into which the fish could dart for refuge in the heat of the day. Sometimes, as in the Boboli, swans floated proudly over the water-surface. Occasionally, when the basin was of consid-

erable size, it was given an island, connected with the bank by bridges. Such is the Isola Bella, in the Boboli.¹ Bridges were also elsewhere used to span the water-channel, and, wherever placed, were utilized as opportunities for artistic treatment. The exceeding variety of the fountains included in some cases old sarcophagi, the remains of ancient times, dug up and altered over for their new purpose!

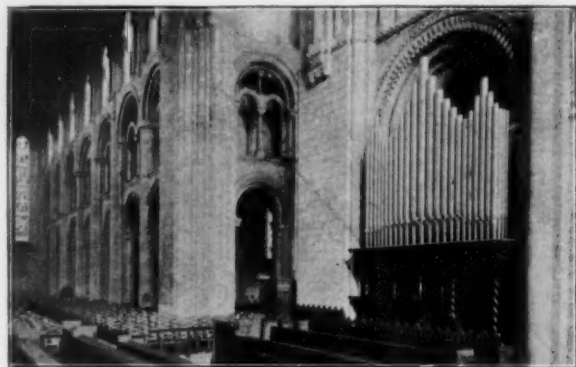
J. S. PRAY.

[To be continued.]

ROMSEY ABBEY.

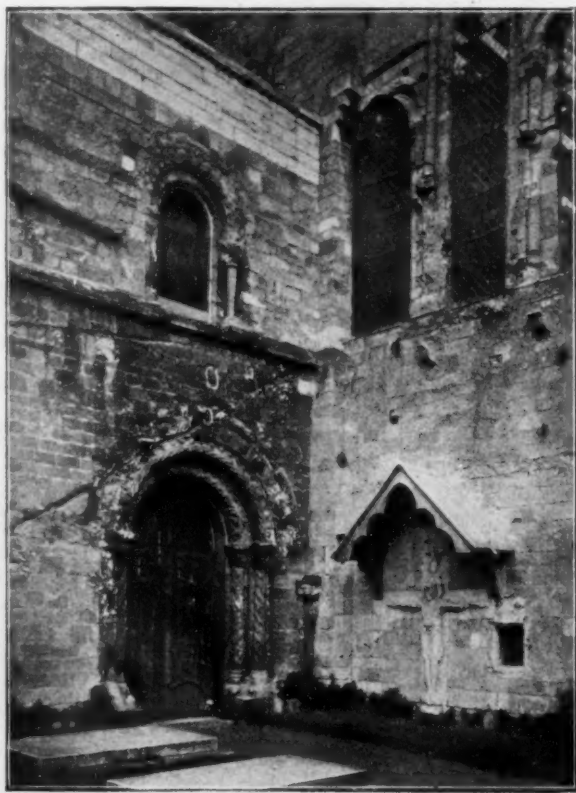
THE beautiful abbey church of Saint Mary and Saint Æthelfræda was commenced by Abbess Hadewis about 1120, some years subsequently to Durham Cathedral (1093), and Christchurch Priory, both of which are severer in style in some parts, as for instance, the triforium arches, which at Romsey are light, open and interlaced.

The abbey was founded by King Alfred's son, Edward the Elder (who began to reign about 900), when he began to restore the



Choir from the East: Romsey Abbey.

churches and monasteries destroyed by the Danes. "All the monasteries," said the king, "to the outward sight are nothing but worm-eaten and rotten lumber and boards; and that worse is, they are almost empty and devoid of divine service." Romesyg is mentioned



Nuns' Door and Crucifix: Romsey Abbey.

in Doomsday Book, and Roman coins have been found there; but whether it derives its name from *Romana Insula* or *Rumesige* (Anglo-Saxon)—the Broad Island: hence the late Lord Palmerston's estate of Broadlands—is a matter for antiquarians and archaeologists.

¹See the *American Architect* for April 28, 1897.

It is still all but surrounded by the River Test and its tributaries, which wander through delightful meadows, green and full of wild-flowers, the happy hunting-grounds of numerous herds of cattle.

Some five miles from Romsey was another famous monastery, Nutcel (now Nursling), a school and training-college for missionaries, from whence Saint Boniface was sent as apostle to the Germans in 710.

In the early days the abbey was a school for the daughters of the wealthy and a retreat for the unhappy. Such was Christina, cousin of Edward the Confessor, who took the veil in 1086. As Robert of Gloucester puts it: "Edgar Athel-lyng, that rygt eyr" (right heir) "made his yonge sister nunne of Romseye." After all, what better career for a good or a strong-minded and intellectual woman could be found in those semi-barbarous times? The conventual life was vastly superior and freer than that of the wives who were locked

up in towers during their lord's absence or pleasure. Nor was the monastery a bad school; for we know that "Molde, the gode quene," was brought up there and educated by Abbess Christina. Maud was the daughter of Malcolm and of Margaret of Scotland, and was wooed by Henry I; but she seems to have liked conventual life, free of vows, better than the idea of a throne, for she retired to the Abbey of Saint Mary Winchester after leaving school at Romsey. Maud was married at Westminster and buried at Winchester. May it have been as a thank-offering that the abbey was rebuilt in 1120 to commemorate the marriage of Henry and Maud?

Two remarkable very early crucifixes are still intact. The one in the south chancel aisle had been built into the wall, face inwards, until quite recently; the other stands on the wall which formerly bounded the cloister to the east, and covered the nun's beautiful porch. On the wall above the figure may be seen corbels from which the roof of the cloister started. The figure is unlike later crucifixes, being erect and clothed,—not the dead but the living Christ. The eyes are open, and above is the hand of the Eternal Father issuing from a cloud and giving the blessing. A drawing of a similar design may be seen in the homilies of Archbishop Ælfric in the British Museum manuscript, so that we may consider the Romsey carving to be, most probably, of the date of the earlier church, which was destroyed in 994 by the Danes, when the abbess, having heard what was coming from Saint Æthelfreda in a vision, gathered together her nuns and valuables and fled to Winchester. This event is the subject of a fragment of wall-painting of very early character, which is almost obliterated. The square space in the wall by the crucifix is conjectured to have been a receptacle for a light, as the holes above suggest apertures for the smoke to pass away.

The dimensions of the church are: 275 feet long, 131 feet wide at the transepts, and 74 across the nave. It is larger than Oxford, Carlisle, Rochester, Chester or any of the Welsh cathedrals except Saint David's. The east windows, though beautiful in themselves, and filled with most exquisite modern glass by Messrs. Powell & Co., were unfortunately substituted for the older Norman arcading in the thirteenth century. The massiveness of the walls (4 to 6 feet thick) and the solidity of the piers have strength enough without the help of buttresses to support a tower of double the height, and yet, in

spite of this strength, there is nothing of the clumsiness of the Norman work at Gloucester and, in a lesser degree, in parts of Norwich and Durham Cathedrals. The height of the triforium, with its beautiful, slender shafts and interlaced arches, is a special and unique feature. These were at one time plastered up, either to save

expense or as a preservative from draughts.

The clerestory is interesting as showing the gradual transition during probably one hundred years or more from pure Norman to Early English. The mouldings of the arches are mostly carved with the chevron, billet, dog-tooth or egg-and-dart ornament, and here and there, notably upon the outside of the abbess's door, are some unusual specimens of ornament. In the ambulatory some of the capitals are Romanesque in character. In one of the chantries, both now unfortunately turned into vestries, there are two piscinas upon different elevations,

showing that, whereas in Norman times the altar was level with the ground, in the Early English period it became raised. Like many of the smaller churches in the neighborhood, the abbey possesses its original stone altar-slab, but it probably stood where the choir-screen is now placed, the rood-screen most likely having been originally across the nave. The greater part of the present screen is modern, but the old parts date back to the fourteenth century, having been constructed to cut off the north transept for use as a parish church—a church within a church. Later on, the screen was used to support the organ, and was then covered with a coat of paint. This gallery was taken down some fifty years ago, the base was destroyed, and the rest thrust away into the triforium gallery. It originally had triangular openings in the lower part, to act as confessionals.

The chancel aisles are peculiar in having square terminations on the exterior, while the interior is apsidal.

The nun's porch mentioned above is formed of a series of rich mouldings supported upon twisted columns with grotesque capitals. The soffit of the arch is also covered with four-leaved roses in a lozenge form. It has all the rich character of the porch at Iffley, Oxford.

Passing into the church by this porch, an interesting canopied tomb may be seen in the south transept.

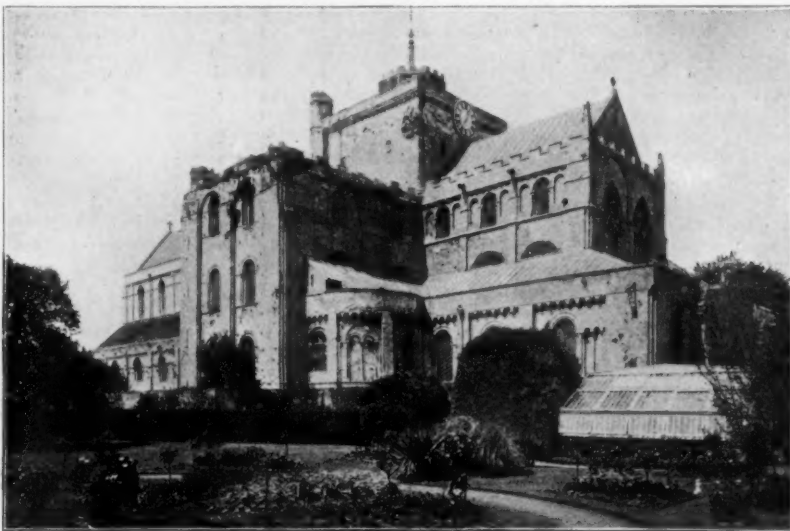
Angels, much mutilated, support the canopy, and in the arched recess at each end is a female figure. It has been attributed to the Abbess Mary, but the date is too late, and the figure possesses no attributes, regal or abbatial.

The use of the north transept as the parish church of Saint Laurence seems to have been anterior to the year 1333, as we find the abbess in that year endowing a vicarage for the people of Romsey. The town had increased, and the congregation had grown so large that upon high festivals the people overflowed into the church; hence disputes and troubles, and William of Wykeham, Bishop

of Winchester, was called in to settle the squabbles. He lent the abbess monies (as may be seen by his will, 1404), and he advised the building of an outside aisle to the north transept, to be called the Chantry of Saint George. In order to do this, a large porch had to be destroyed and some arches pierced in the west wall of the transept. Thus the parish church, consisting of a chancel and two aisles, was formed, only to be demolished at the Reformation, when the



The Chancel: Romsey Abbey.



Romsey Abbey.

windows of the exterior aisle were brought in to fill up the arches which had been pierced; and, latterly, these same Perpendicular windows have given place to modern Norman ones, and have been deposited in the vicarage garden! This desire to restore the church to its original style has also led to the banishment of several sixteenth and seventeenth century monuments and slabs from their original places in the nave to the improvised vestry. The ancient font has quite disappeared, but some curious relics of the past remain. In a glass case is an embroidered cope which had been used as an altar-cloth until rescued from decay by the daughter of the late vicar. Near by is a panel which probably formed part of the roof of Saint George's Chantry, painted. There are several altar-slabs and stone coffins, probably those of the abbesses, and a very curious pair of ancient cressets, or lamps. But a head of auburn hair under glass excites the most attention in the ordinary visitor. This was found during some excavating near the abbess's door, in a very much corroded leaden coffin which projected from beneath the foundations of one of the great piers. Its position was unusual, being north and south, and its length only five feet. The hair was gathered in a plait eighteen inches long, and rested upon a block of wood, forming a pillow. Could it have been the remains of a young girl who died at the abbey during her schooling? Or was it a subsequent burial after the suppression of the convent?

The painted panels, which probably formed part of the original reredos of the high-altar, were found at the back of the altar at the beginning of this century, with the Lord's Prayer and Ten Commandments panelling nailed in front of it. It has been roughly repainted and is partly gilt. The subject is the Resurrection, with the abbess-donor in the left-hand corner. Above this are a bishop, Saint Anthony, with the Devil at his feet, Saint Roch, Saint Benedict, Saint Scholastica, another bishop, Saint Sebastian, Saint Francis of Assisi and Saint Clara, and a cardinal, St. Jerome possibly. Most of these saints were either Benedictines or were in some way connected with the introduction of the order into England, and therefore selected by the Abbey of Romsey, which was under that rule.

The only remains of the nunnery is the refectory on the south side of the church, and now converted into two dwelling-houses.

One of the most beautiful features of the exterior is the corbel-table, which runs all round the church above the windows. The corbels represent the projecting ends of roof-beams, and are carved into heads of every kind of animal, natural and fantastic. On the north side are the remains of holes made by cannon-balls during a skirmish between the Royalists and Parliamentarians in 1642, concerning which there are several entries in the parish registers. Some of the Saxon kings are said to have been buried at Romsey, but with no memorials remaining; but in 1845 the skeleton of a priest with some remains of vestments, and bearing a pewter chalice and paten in his hands, was found in a stone coffin.

S. BEALE.

TRADE-UNION CONDITIONS IN CHICAGO.

W. F. BEHEL, Chairman of the Executive Committee of the Building Contractors' Council, has issued the following statement to the public in regard to his organization's differences with the Building Trades' Council:—

Comprehension of the present critical situation in the building industry of Chicago lies in the definition of the "union conditions" referred to in the communication of the Building Trades' Council to the public, printed in the newspapers recently.

This communication says: "We, the Building Trades' Council, are willing to furnish our services to whomsoever needs them in the erection and construction of buildings, irrespective of whether they are members of contractors' associations or not, the only stipulation being that union conditions shall prevail on the building."

The public who are so largely concerned in this matter has the right to know what is meant by the phrase "union conditions," so that it may intelligently judge of the issues at stake. One of these "union conditions" refers to the limitation of the work a man is permitted to perform in a day. The lathers, steam-fitters and plumbers place these limitations upon members of their unions. In the plumbers' trade, for example, a man may do only one-half and in some instances one-third of what he is capable of performing. He is only allowed to set one fixture a day, of a sort where three is within the capacity of an ordinary workman.

Another "union condition" is the delay caused by the quarrels between unions as to which shall perform a specified piece of work. In the process of erecting the new Marshall Field Building it was found that one inch had to be cut off the granite of the north pier. The Chicago Soft-stone Cutters insisted that the work of doing this belonged to them. The Granite Union, on the other hand, claimed it was theirs, and threatened that if any but one of their union cut the granite they would call a strike at the quarries from whence the granite was shipped. The soft-stone cutters stated that if any but their members performed the work they would call off every man on the building. The completion of this work was delayed three weeks and was finally settled by each of the contending unions cutting half an inch! In the same building a number of iron window-mullions were set in place by the Ornamental Iron-workers, but the members of the Structural Iron-workers said that this work was their rightful prerogative. After a delay of a week, during which all work on the mullions was stopped, it was finally decided that the work should be done by the Structural Iron-workers. All the mullions which were already placed were then taken down by the Orna-

mental Iron-workers, laid on the floor and the ropes with which they had been handled removed. The mullions were then set in place the second time by the Structural Iron-workers. Who paid for these delays? The owner. Who paid for the double work? The contractor. For what did the two unions who caused the trouble pay? Nothing.

Another of the "union conditions" referred to in this communication is that the union shall dictate to the contractor how many men he shall employ on a specified building, and that he shall not discharge a man to whom they wish to give work, even if he is lazy or an incompetent workman. In the Chicago Telephone Company's new building the contractor for the plastering was forced by the business-agent of the Plasterers' Union, under threat of having his men ordered out, to put on six more men than he needed. One man whom he discharged for incompetency he was forced under the same threat to reinstate. Who paid these seven parasites?

A fourth of these "union conditions" is that the union shall dictate to the investor where he shall buy his building materials and by whom they shall be finished. In the Montgomery-Ward Building the exterior marble-work was cut out of the city by union men, working union hours, and for union wages. Yet the Soft-stone Cutters attempted to prevent the work from being set. It was permitted to proceed only after a compromise had been effected between the general contractors and the Soft-stone Cutters, requiring that a portion of the cutting be done in Chicago. Who paid the tariff in this case?

The overcrowding of our public schools has brought a great pressure for the completion of new school-buildings, yet three of these school-buildings have been incomplete for four months and still are at a standstill. Why? Because in one the boiler was made by men who did not care to belong to a union. In another a concrete floor was laid by non-union men, and in a third a compression-tank was made by men outside of a union. With the exception of these small particulars the work on these three buildings was done by union labor. Before the first step can be taken toward their completion the tank and boiler mentioned will have to be removed and the concrete floor torn up. In the meantime the children who would attend these schools are forced into damp and unsanitary quarters. Who pays for this loss of time and material, and also let us ask who is to blame for the injury to those boys and girls?

It is a "union condition" that industry is to be blocked by the prohibition of machinery, as in the case of the stone-cutters who have shut down all the planers in Chicago, and the carpenters, who will not allow a patent miter-box to be used.

It is a "union condition" that in many unions the growing youth is not permitted to learn a trade. In the plumbers' and tile-setters', for example, by the prohibition of apprentices, a father is not allowed to teach his trade to his own son. The unparalleled power of the walking-delegate armed with the sympathetic strike constitutes another "union condition." This irresponsible individual, because of some fancied grievance, may step in at any time and stop the activity on a whole building, the non-completion of which costs thousands of dollars. During process of construction the Edison Building has had twenty strikes. These are some of the "union conditions" under which the Building Trades' Council so magnanimously offers the services of its members.

The communication further states that it is the aim of the contractors that the unions shall only work for the members of the employers' association. This is not a fact. A proposition was made by the committee representing the Building Trades' Council to the committee representing the Building Contractors' Council in the conferences held during December last that the unions should only work for employers belonging to the Contractors' Association. The proposition was rejected by the Building Contractors' Committee.

The Building Contractors' Council stands for free trade in all manufactured material, except prison-made. The restrictions placed on certain building-materials, mentioned in Section 6 of the agreement entered into between the committees of the two Councils, were insisted upon by the committee representing the Building Trades' Council, and were only agreed to by the Building Contractors' Council committee when the latter saw that unless they were granted it would be impossible to arrive at any agreement.

Mr. Grant and his committee state that they mean to carry out the agreements entered into by their unions in good faith. Does he refer to the two-year agreement made by the plumbers last spring with the employers' association, limiting the wages to be paid to \$4 per day, and which was later evaded by cutting a man's daily limit of production 50 per cent, thus making his wages \$8 per day instead of \$4?

The contractors have taken their present stand because no other course was open to them. They have no alternative but to hold solidly together until the good sense and the good citizenship of the rank and file of organized labor rises above the standards and methods of the Building Trades' Council. In this their effort, made for the welfare of the city, as well as in self-defense, they ask the moral support of the people and press of Chicago. — *Times-Herald*, Chicago, February 11.

PERHAPS AN EARLY FEMALE ARCHITECT.—While women are only now being admitted to German universities, the doctor's degree was conferred on a young woman named Dorothea von Schlözer as early as 1787, at Göttingen, after an examination in Latin, architecture, mining and algebra. — *N. Y. Evening Post*.

RUSKIN AND VENICE.



THE Municipal Council of Venice, besides voting a message of condolence to the late Mr. Ruskin's family, have resolved to place a memorial tablet upon the house which he occupied in the "silent city in the sea," while preparing himself to write "The Stones of Venice." If ever a community had reason to be grateful to a benefactor it is surely that which dwells beneath the pearly skies of the Venetian lagoons. The splendid harvest which it reaps every year from thousands of English and American tourists is traceable directly to the vogue established by the great English critic. It is true that not all the Anglo-Saxon visitors are familiar or even acquainted with the swinging march of the easy prose in which he glorifies the great act of faith that made St. Mark's, and shows how every inch of it—stone and fresco and mosaic—illustrates "the scrolls which teach men to live and die"; yet Ruskin is the original cause of their presence beneath the shadow of its white dome. Venice, no doubt, had her prophets before him—Byron and Rogers, Canaletto and Turner. Ruskin has himself told us that his Venice had been in great part created for him by Turner, who had received its traditions from the author of "The Bridge of Sighs." But even in those days the city was comparatively inaccessible. The diligence of the first half of the century was an even sorer trial to the flesh than the travelling-carriage or the post-chaise was to the pocket, and it was left to the railway to accomplish what neither the tints of Turner nor the verses of Byron had been able to effect. Since it has become possible to travel to Venice and back for a few pounds it has been overrun with tourists, who have done much to make it busy and prosperous—something also to spoil and vulgarize it. Great ocean-liners call there; fussy little steamers pant up and down the broader waterways, further blackening the dingy marble palaces, and the traffic on the Malamocco is such that its waters are often as turbid as those of the Thames.

Cheap modern shops and howling newsboys go some way toward the disillusionment of the visitor who arrives with his head full of poetry and the Council of Ten, dreaming of Marino Faliero and the escape of Casanova. Yet it would be unwise to laud too highly the silence and repose, the dignified consciousness of history, which sat upon Venice when Ruskin first saw it—which, indeed, it retained until well into the sixties. The grand city which had been a motherland of the empire wore mourning because she was under the heel of the conqueror, and from lack of political hope came commercial decay. A great town must either live or die, and Venice, with her glorious past, her far-stretching memories of dominion beyond the sea, her wonderful sense of art, her architectural triumphs coming down from Byzantine times through Gothic to the Renaissance, was dying. She was becoming a mere museum, like Bruges, once her rival, a fallen power, with grass-grown streets, and canals upon which an oar rarely splashed. It is unluckily true that the commercial and manufacturing Venice of to-day has sometimes been a trifle too much inclined to value the things of the market-place to the despite of those matters upon which her fame still rests. One man has, before now, created a Sheffield; but we shall never again see that peculiar combination of political insight, maritime power, geographical situation and love of art that created Venice, and enabled her to despoil the decaying Byzantine world of treasures which are still the delight of all who can appreciate gorgeous color.

It would be idle, of course, to deny that even when she had about her many of her now legendary glories Venice did not appeal to every mind or impress every eye. She failed to move Sir Philip Sidney to enthusiasm; John Evelyn went into no Ruskinian raptures. Other travellers, new and old, have found the Grand Canal muddy, and the black gondolas funereal. The truth is that Venice is one of those places that need to be lived in to be loved and understood. Utterly unlike every other European city (for Amsterdam, after all, resembles it only in the number of its canals), it has charms impossible for the hasty visitor to seize—skies of pearl and opal, gray waters touched sometimes with a rosy flush, marbles varying from dazzling white to dull opaque hues that might not be out of place in London. In rain, in storm, in sunshine there is always something new in the aspect of Venice, some variation of the point-of-view, some mysterious link between the sympathetic observer and the dazzling, elusive, tantalizing city which holds him in a spell realized and enjoyed but never successfully analyzed.

SOCIETIES.

WASHINGTON ARCHITECTURAL CLUB.

THE Washington Architectural Club's programme for its regular meeting of February 3d consisted of a visit to the "Halls of the Ancients." An address was made by Franklin W. Smith, Esq., the Curator, who is putting unflagging enthusiasm into the great undertaking of establishing "National Galleries of History and Art." The added interest in and better appreciation of architecture which would be awakened in the public mind by such an institution as Mr. Smith contemplates, and of which the present "Halls of the Ancients" is but a forerunner, leads him to seek the support of the architectural fraternity.

After the meeting, the club adjourned to an informal dinner.

LOUIS A. SIMON, Secretary.

ILLUSTRATIONS

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

NEW BUILDING FOR THE GOVERNMENT PRINTING-OFFICE, WASHINGTON, D. C. MR. JAMES G. HILL, ARCHITECT, WASHINGTON, D. C.

THE erection of the building is by Act of Congress in the hands of the Chief of Engineers, United States Army, and the Public Printer, and the general plans and construction-drawings are being prepared by Lieut. John Stephen Sewell, of the Engineer's Corps, who has been placed in charge of the work.

The work of designing and preparation of all drawings for the exterior and all portions of the interior calling for architectural treatment, such as entrance-halls, staircases and finished offices, has been placed in the hands of Mr. James G. Hill, ex-Supervising Architect.

The problem presented was a repeated unit of horizontal spacing approximating 12 feet, and a repeated vertical division of 16 feet (floor to floor).

Building is 175 feet on North Capitol Street, 408 feet on G Street. Appropriation, \$2,000,000.

A DESIGN FOR THE NORMAL TRAINING-SCHOOL, BOSTON, MASS. MR. O. A. THAYER, ARCHITECT, BOSTON, MASS.

As stated on the drawing this design was not accepted for execution.

PLAN AND SECTION OF THE VILLA SCASSI, SAMPIERDARENA, NEAR FLORENCE, ITALY.

SEE article on "Italian Gardens," elsewhere in this issue for reference to this plate, which is copied from Reinhardt's "Palast Architektur von Ober-Italien und Toscana."

TOMB OF JACOPO SURIANO, IN SAN STEFANO, VENICE, ITALY.

MONUMENT OF MELCHIORRE TREVISAN, IN STA. MARIA GLORIOSA DEI FRARI, VENICE, ITALY.

THIS plate is copied from Cicognara's "Le Fabbriche e i Monumenti conspici di Venezia."

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

THE NEW YORK "BOX-STOOP,"—VIII: NO. 933 FIFTH AVE., NEW YORK, N. Y.

[Additional Illustrations in the International Edition.]

HOUSE OF LOUIS STERN, ESQ., 993 FIFTH AVE., NEW YORK, N. Y. MESSRS. SCHICKEL & DITMARS, ARCHITECTS, NEW YORK, N. Y. [Gelatine Print.]

ENTRANCE TO THE SAME. [Gelatine Print.]

INTERIOR OF ST. MICHAEL'S CHURCH, MUNICH, BAVARIA. [Gelatine Print.]

ADDITIONS TO WAREHOUSEMEN AND DRAPERS' SCHOOLS, PURLEY, ENG. MR. J. KINGWELL COLE, ARCHITECT.

STAIRCASE OF THE SAME.

THE CLOISTER OF THE SAME.

THE CLOISTER GATEWAY OF THE SAME.

NOTES & CLIPPINGS

NEW YORK TUNNEL AND BRIDGE PLANS.—The New York Evening Post gives the following useful tabular view of the numerous transit schemes, in the shape of bridge and tunnel plans, with which the city is now lavishly supplied. For the sake of completeness the list contains some schemes at present very quiet, and possibly moribund. The actual present state of each plan is given as definitely as possible.

BRIDGES.

Peck Slip Bridge.—To Brooklyn, near Broadway. Authorized by Municipal Assembly; \$1,000,000 appropriated for beginning work.

Delancey Street Bridge.—From Grant Street, Manhattan, to Broadway, Williamsburg. Building by the city. Piers about two-thirds completed.

Blackwell's Island Bridge.—From Manhattan, across Blackwell's Island, to Long Island City; \$1,000,000 appropriated by Municipal Assembly. No general authority to build.

Rainey Bridge.—Franchise from State. To connect Manhattan, over Blackwell's Island, to Long Island City. Private. Piers partly built. Franchise expires in March, 1900.

Lauterbach Bridge.—Franchise from State for bridge from foot of Grand Street, Manhattan, to Hudson Avenue, Brooklyn. Waiting for a purchaser.

North River Bridge.—From Fifty-ninth Street, Manhattan, to the Jersey Shore. Company formed and capitalized at \$80,000,000. Contracts mostly made and Jersey approaches building. Manhattan approaches now under consideration.

North River Bridge.—From near Twenty-third Street. In embryo. A company under the temporary presidency of Gustav Lindenthal is trying to push the scheme. Exact status unknown.

TUNNELS.

Rapid-transit Tunnel.—To run from Post-office Square to Ninety-sixth Street; then two branch tunnels to north of the Harlem River. To be built by the city. Contract given to John B. McDonald for \$35,000,000. Work to begin within a few weeks. Time of building, three to four years.

South Brooklyn Tunnel.—Plan for a tunnel connecting the Battery with Brooklyn near Hamilton Avenue, to be built by the city as a connection with the rapid-transit tunnel. Resolution giving \$50,000 for borings has passed Municipal Assembly; now before Board of Estimate and Apportionment.

New York and Long Island Railroad Terminal.—Application for a tunnel franchise connecting Cortlandt Street, Manhattan, with Flatbush Avenue Station of Long Island Railroad in Brooklyn. Now before the Municipal Assembly. To be built by New York and Long Island Railroad Terminal Company.

North River Tunnel.—From Lackawanna coal piers in Hoboken to a point opposite in Manhattan. This plan has failed several times, and is now apparently abandoned.

DURABILITY OF PAINT ON THE FORTH BRIDGE.—In a most interesting paper upon "Protective Paints for Iron," read last month before the Newcastle section of the Society of Chemical Industry, Mr. Harry Smith referred to a report which he had received from Mr. A. Hunter, Resident Engineer of the Forth Bridge, upon the behavior of the paint upon that structure. All the iron employed in the superstructure of this bridge was scraped clean and given a coat of linseed-oil, applied as hot as possible, after leaving the shops or yards. The iron then received a coat of red-lead paint, either before or immediately after its erection. Then a second coat of red lead, followed by two coats of oxide-of-iron paint, were applied. Mr. Hunter finds the life on the upper portions exposed to the weather to be about three years, but the paint inside the tubes of the bridge is as perfect as when first applied more than twelve years ago. Where signs of rust appear, the iron is scaled, scrubbed with wire brushes, coated with boiled linseed-oil, then with a mixture of red-lead paint and iron-oxide paint, and finally with brown oxide-of-iron paint. The lower parts of the bridge near the water have to be cleaned and re-painted once every year, for here the salt spray soon causes rust to appear around the rivet heads and the edges of the plates, and this rust has a tendency to extend in fungus-like patches until the whole plate becomes affected. Mr. Harry Smith expresses some doubt regarding the utility of the coat of boiled linseed-oil without pigment; but, with this exception, his experiments indicate that the treatment adopted for the iron of the Forth Bridge is as effective as any that can be devised.—*The Builder.*

WASTE OF AMERICAN LUMBER.—Apparently abundant testimony can be found to support either side of the controversy as to the waste of our lumber-supply; for instance, while we believe that a terrible wrong is being done, in the annual report of the Maine Bureau of Labor statistics, just issued, Commissioner Matthews arrives at the following conclusions regarding the lumber industry: "The outlook for the Maine lumber industry is bright. There has been comment on the danger of destruction of the forests of the State. It has been stated that, if the plans of various concerns were to be fully carried out, it would be but a question of a few years before the mill-owners would have to look elsewhere for their timber. From conversations with prominent operators and owners, it is found that these are regarded as pessimistic views, and that there is cause for no immediate alarm concerning the destruction of the forests. Most of the best and most extensive timberlands are held by large owners who will cut conservatively and not make serious inroads into the forests, in order that the value of their property may be maintained and the supply kept growing for future use. An element of danger which exists is that certain lands are held by small owners, who find it difficult to make their business profitable, and are obliged to cut immature lumber, without waiting for the fuller development of the trees. Another danger is that when the stumpage is sold at a high price, the operator is bound to get his lumber out regardless of waste. In this way many small trees are destroyed. Fortunately, the men prominent in the lumber business of the State are alive to the importance of maintaining permanent water-supplies, as well as permanent lumber-supplies, and we may still safely look to this great industry as a source of widely disseminated wealth and prosperity."

SIR BENJAMIN WEST'S "RAISING OF LAZARUS."—The announcement that Sir Benjamin West's picture "The Raising of Lazarus," which has formed a conspicuous feature of the screen of Winchester Cathedral for more than a hundred years, has been sold to an American firm has caused great regret in the diocese generally. The price paid for it is stated to be £1,500. Replying to a number of criticisms which have been passed upon the Dean and Chapter for their action, Dean Stephens states that the picture was not presented to the cathedral, as is generally supposed, but was purchased in 1781. The picture, he states, is intended for the new cathedral church in New York, "a much more fitting home for it than in our own cathedral, where it was out of

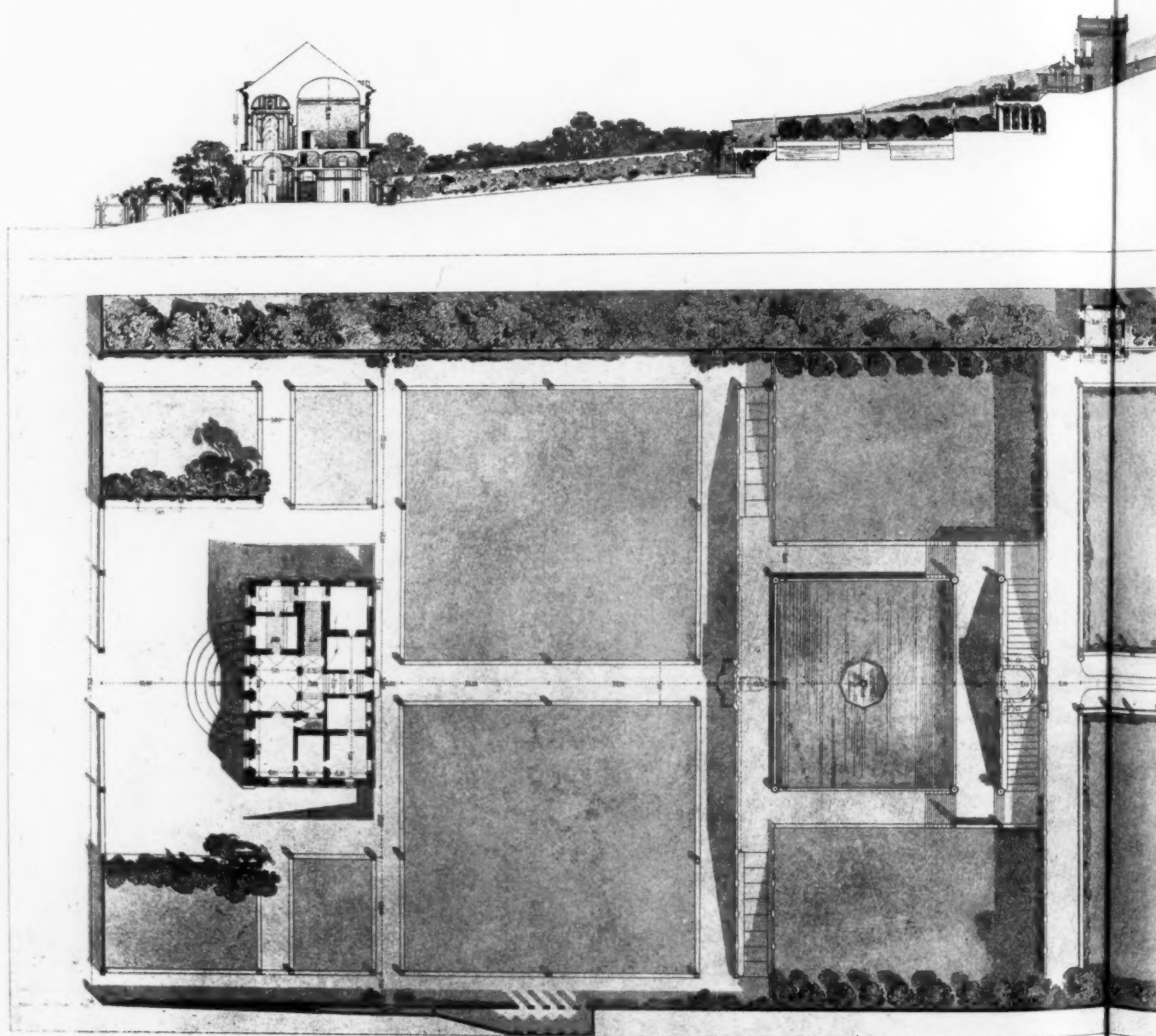
harmony with all its surroundings, and spoiled the proportions of the screen." He adds that the proceeds of the sale will be devoted to decorative work in the Lady Chapel.—*The Building News.*

THE HEALTH OF TREES IN PARIS.—From a lecture delivered a few days ago in the Sorbonne by M. Mangin, it would appear that Paris possesses about 80,000 trees in the streets and public places of the city. It is calculated there are 26,000 plane trees, 17,000 chestnuts and 15,000 elms, the remainder consisting of sycamores, maples, lindens, etc. Apparently there is only one oak and one mulberry. Although the trees add so much beauty to Paris, there is a large percentage of mortality among them. In the centre of the city they suffer from want of air. In the gardens of the Luxembourg, Tuileries, and in fact in all which are surrounded with houses, what M. Mangin calls the reverberation of the sun's rays is fatal to many trees. He maintains that the trees breathe not only by means of the leaves, but also by the roots, and consequently in streets where the ground is hard it is difficult for a tree to be in a healthy condition. Of late years the scavengers have cast salt on the pavement in order to dissolve the snow. This substance, he considers, is most prejudicial to the roots of trees. But M. Mangin believes the greatest enemy to the Paris trees is the engineer, who carries out excavations without regarding their existence.—*The Architect.*

COMBUSTION IN LIQUID-AIR.—When air is liquefied, nitrogen and oxygen condense simultaneously, so that the liquid has the composition of the gas mixture in the air. As soon, however, as evaporation recommences, the composition begins to change. At first the escaping gas is essentially nitrogen. After a while the vapors again contain the two gases in the proportions in which they are found in the atmosphere. That point occurs when about seventy per cent of the liquid has evaporated, and 81 per cent of the original nitrogen, and 35 per cent of the oxygen have escaped; the remaining liquid contains the two bodies in equal proportions, afterwards oxygen begins to predominate in the vapors. These numbers concern evaporation at atmospheric pressure. *In vacuo*, the evaporation of the two gases proceeds more rapidly; at increased pressure, more slowly. The changes may be observed with the help of a glowing chip of wood. At first the wood will be extinguished, when held over the liquid; then it will brighten up, and when dipped into the liquid burn intensely. Powdered carbon, soaked with liquid-air, puffs away like gunpowder on ignition, and explodes when a detonator cap is employed. This seems very strange when we think of the exceedingly low temperature of the liquid—180 degrees Cent.; and in a paper brought before the Bavarian Academy of Science, Carl Linde expresses the opinion that we may have to modify our views on the nature of explosions. Petroleum, absorbed by kieselguhr or powdered cork coal, can be saturated with liquid oxygen. Such a mixture explodes even when not confined. Cartridges filled with it cause others, placed at a distance of 25 centimetres (10 inches) from them to explode, while with the highest explosive so far known, blasting gelatine, cartridges 15 centimetres away from the detonating cartridge remain inactive. Linde has tested this preparation at Schleibach. Within a steel bomb of 20 litres capacity blasting agents are exploded by means of fulminate of mercury. The gas pressure is registered by a piston on a drum which has a circumferential velocity of 330 centimetres (10 feet) per second. The petroleum liquid-air preparation gives a curve which demonstrates that the maximum pressure surpasses that obtained with blasting gelatine, and is reached in a shorter period of time. The preparation was simply wrapped in paper. It is singular that such a mixture should burn more rapidly, in spite of its low temperature, than any solid or liquid compound we know at ordinary temperatures.—*Engineering.*

A CURIOUS LANDSLIDE.—A mile south of Atchison, Kan., the entire side of a bluff is sliding into the Missouri River. The avalanche is a quarter of a mile long, and at its base is the most expensive piece of railroad-track on the Missouri-Pacific system. There is probably not another quarter of a mile of track in the United States which it costs more to maintain. The odd thing about this monster landslide is that it has been slipping down for twenty years, and unless it takes an unexpected plunge will probably be slipping for the next twenty years, and possibly fifty or a hundred. The avalanche is moving more or less at all times, but not enough to require watching by the Missouri Pacific except about two months in the spring. During the winter the moisture is held in the ground, and when the frost thaws and the spring rains come the great mass of earth begins slipping. Sometimes it comes down a foot in twenty-four hours, and once in a while it slides 6 feet. The Missouri Pacific then puts a force of from twenty to fifty men at work pulling the track back to its proper place and keeping it level. A man is employed to watch the track at night and see that it does not get so far out of line as to topple a train over into the river. Orders are issued to engineers to go slow over the bad track, for the jar of a train might cause an unprecedented move. The current of the Missouri River is always very swift in the spring, and it wears away the earth as it slides in, and it appears a few miles below in the form of an island. The bluff is one of the highest of the very high bluffs along the Kansas side of the Missouri River from Kansas City to the Nebraska line. Lying under about fifteen feet of earth there are one or more strata of rock aggregating from twenty to forty feet in thickness. There seems to have been a perpendicular split down through this rock dividing the bluff almost half in two, and extending a quarter of a mile north and south. The side which lay on the river, or east side, slid because there was nothing to hold it, while the opposite or west side was up against another bluff. Thus the east side began gradually to sink into the river, and has laid bare a wall thirty or more feet high in places. Here and there enormous boulders, which hung for a long time undecided with which side to identify themselves, finally lost their balance and crashed down, dashing themselves to pieces below. It costs the Missouri Pacific several thousand dollars and causes a great deal of anxiety every spring, but there is no way of avoiding it.—*Chicago Record.*

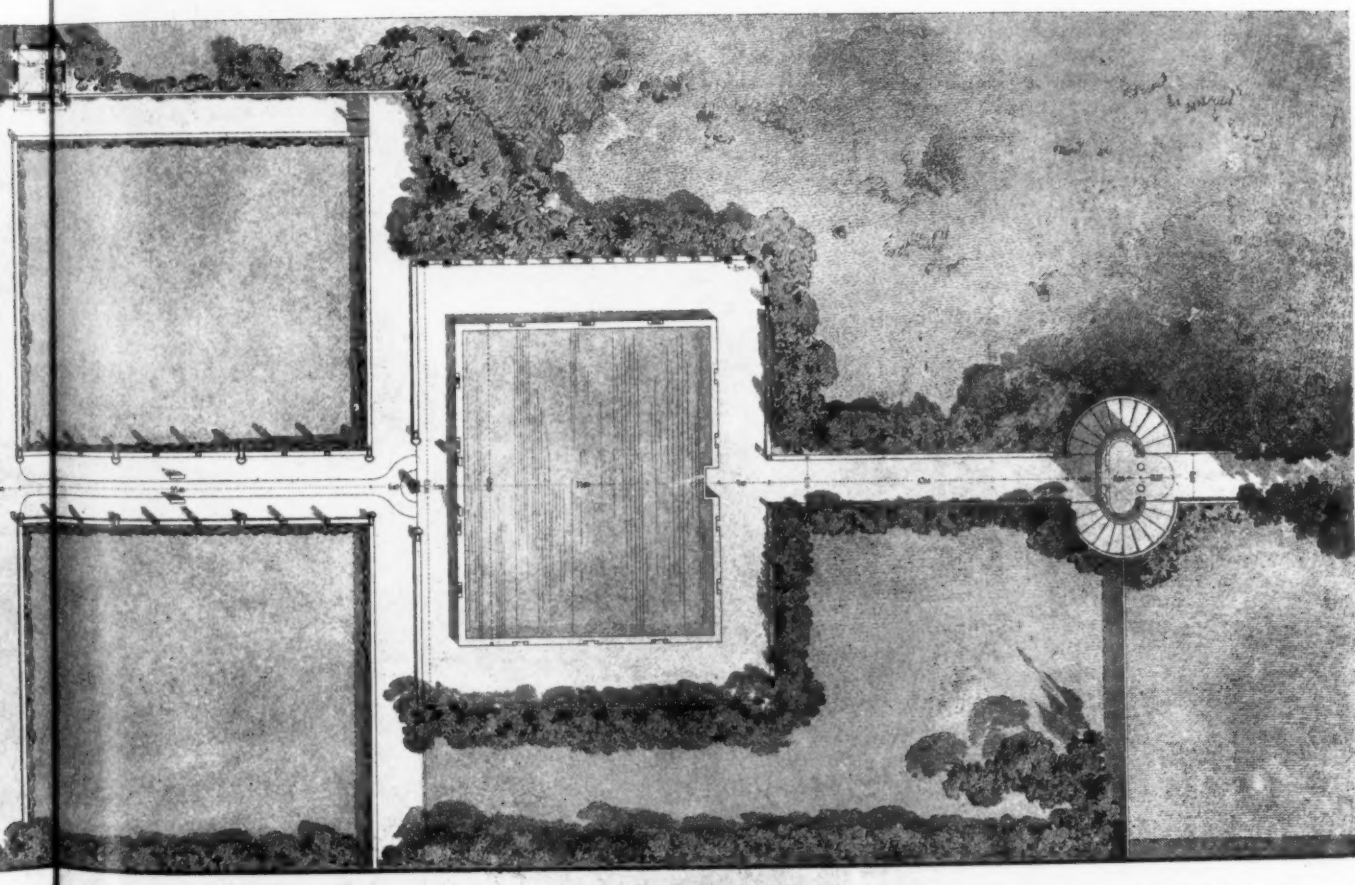
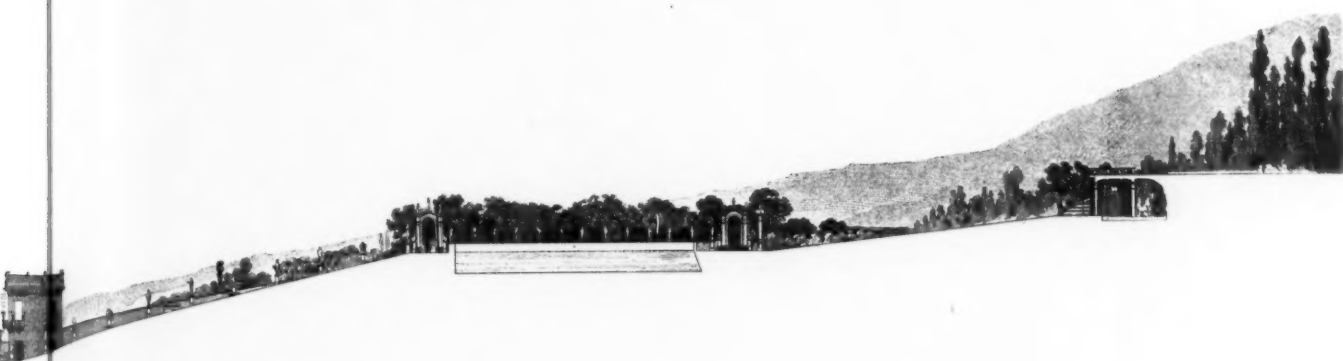
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Langenscheidt and Carter

THE VILLA SCASSI, SAMPIERDARENA



Technical Gardenplan
SAMPIONE DARENA, NEAR GENOA, ITALY.

Geity 1. Layer

EXPLANATION: SEE THE AMERICAN ARCHITECT AND BUILDING NEWS 12.



TOMB OF JACOPO SURIANO, IN S. STEFANO, VENICE.

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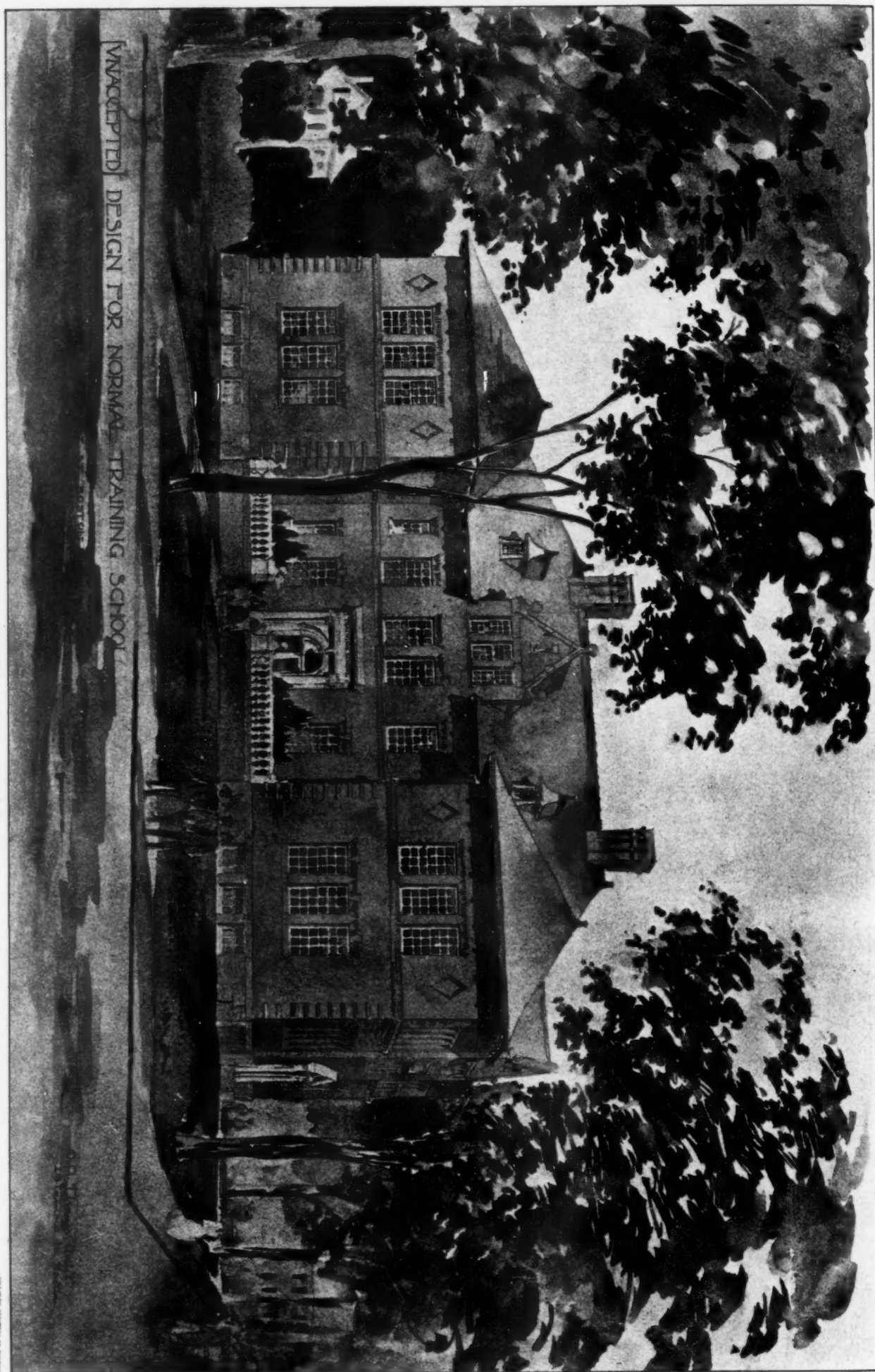
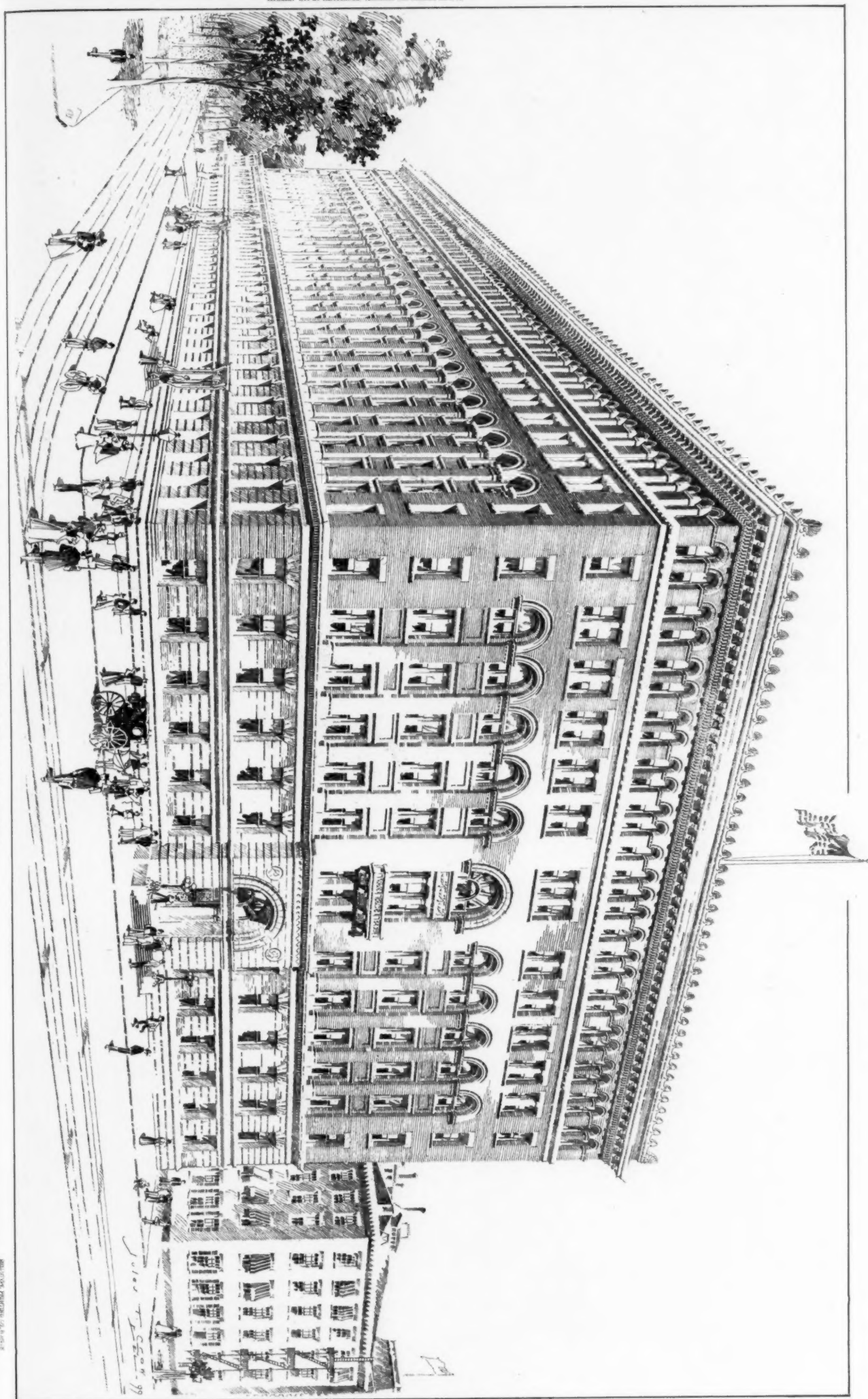


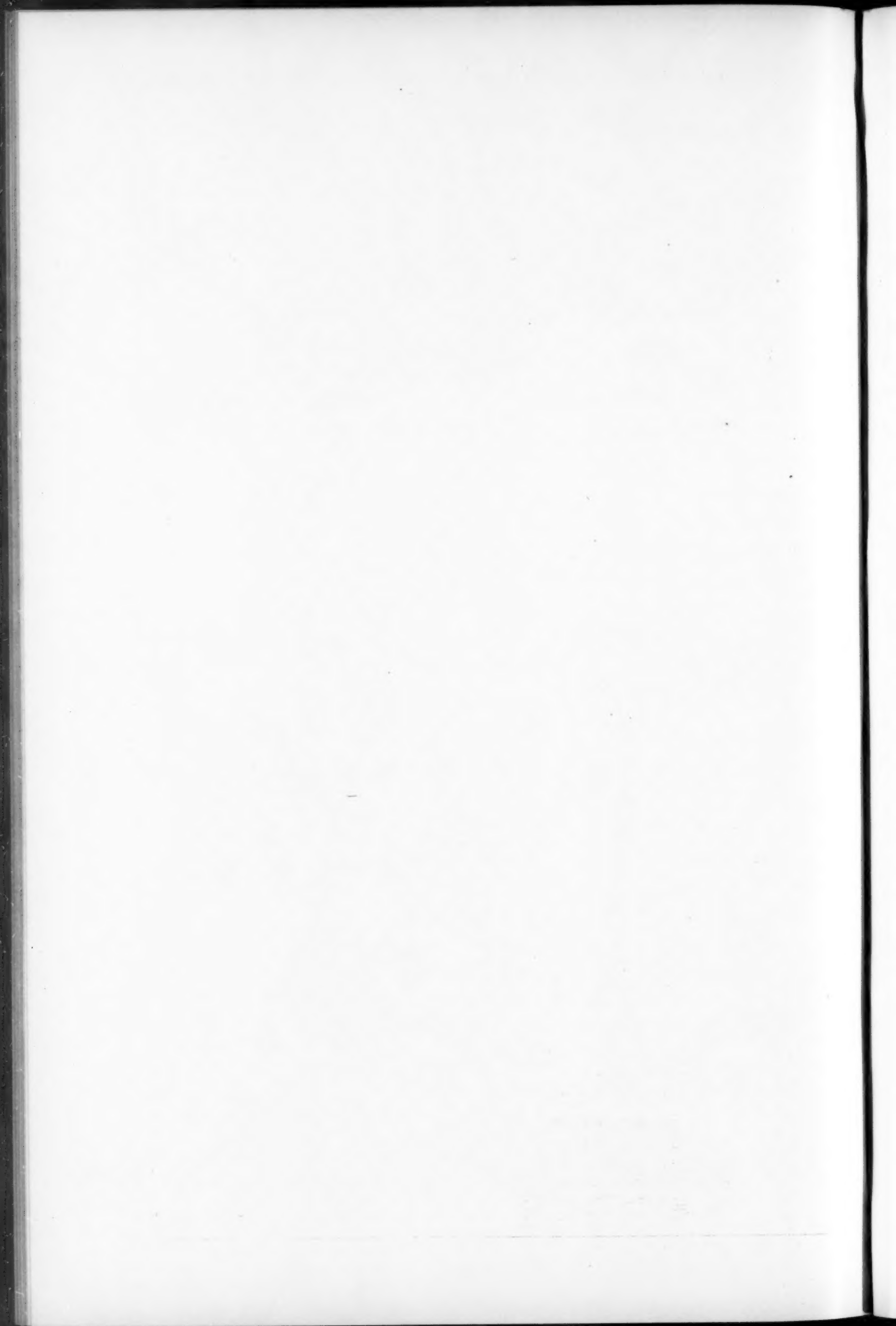
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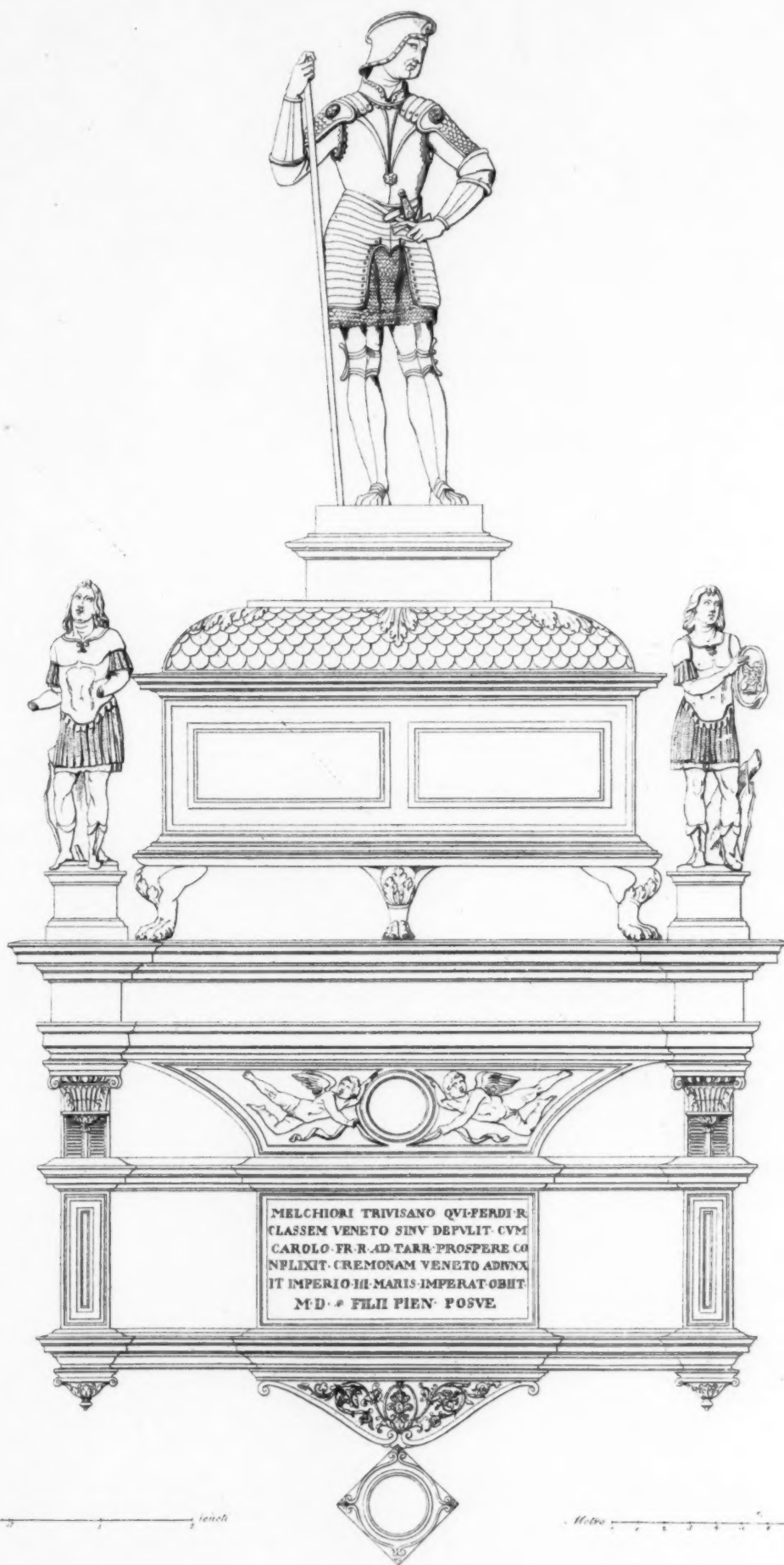


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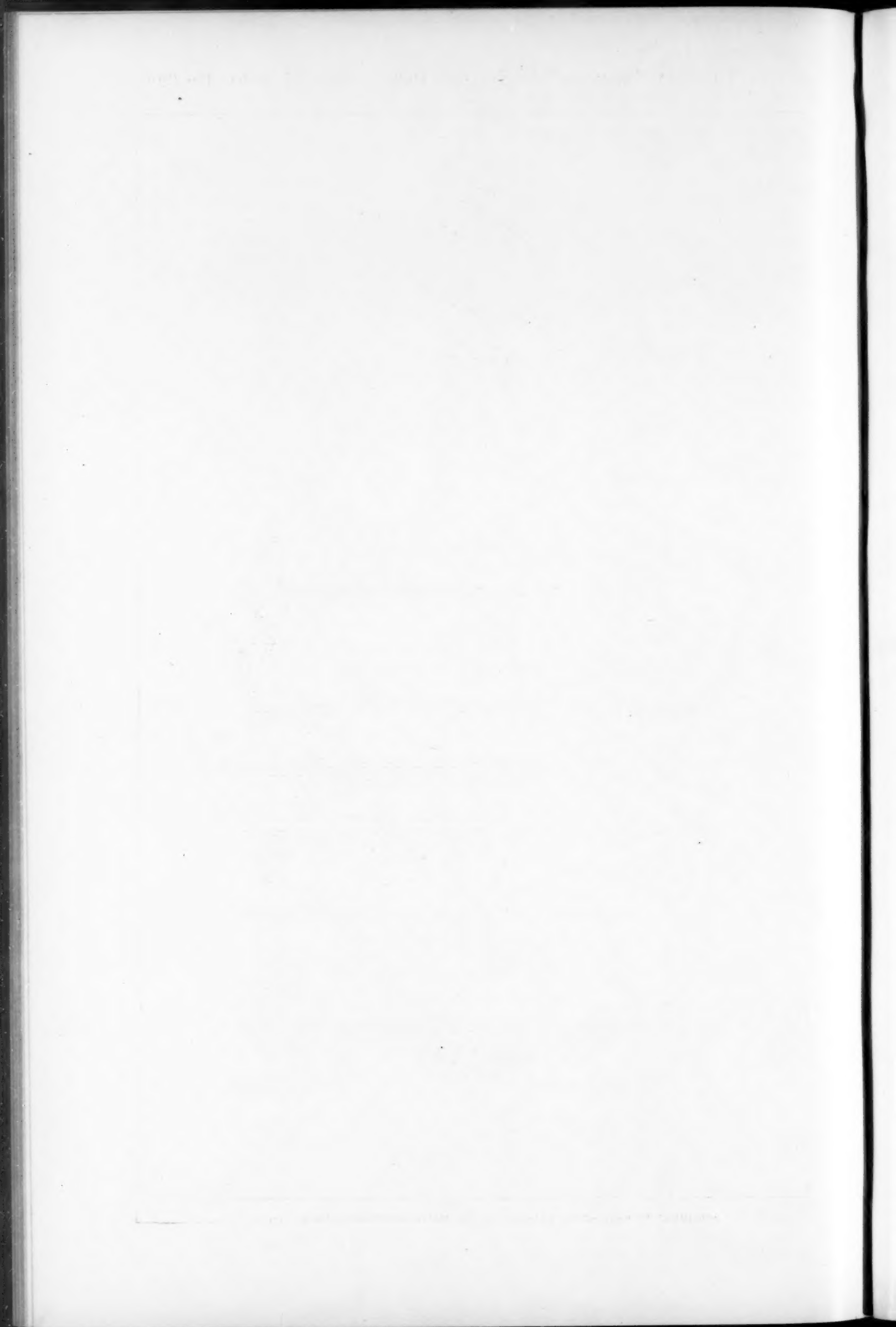
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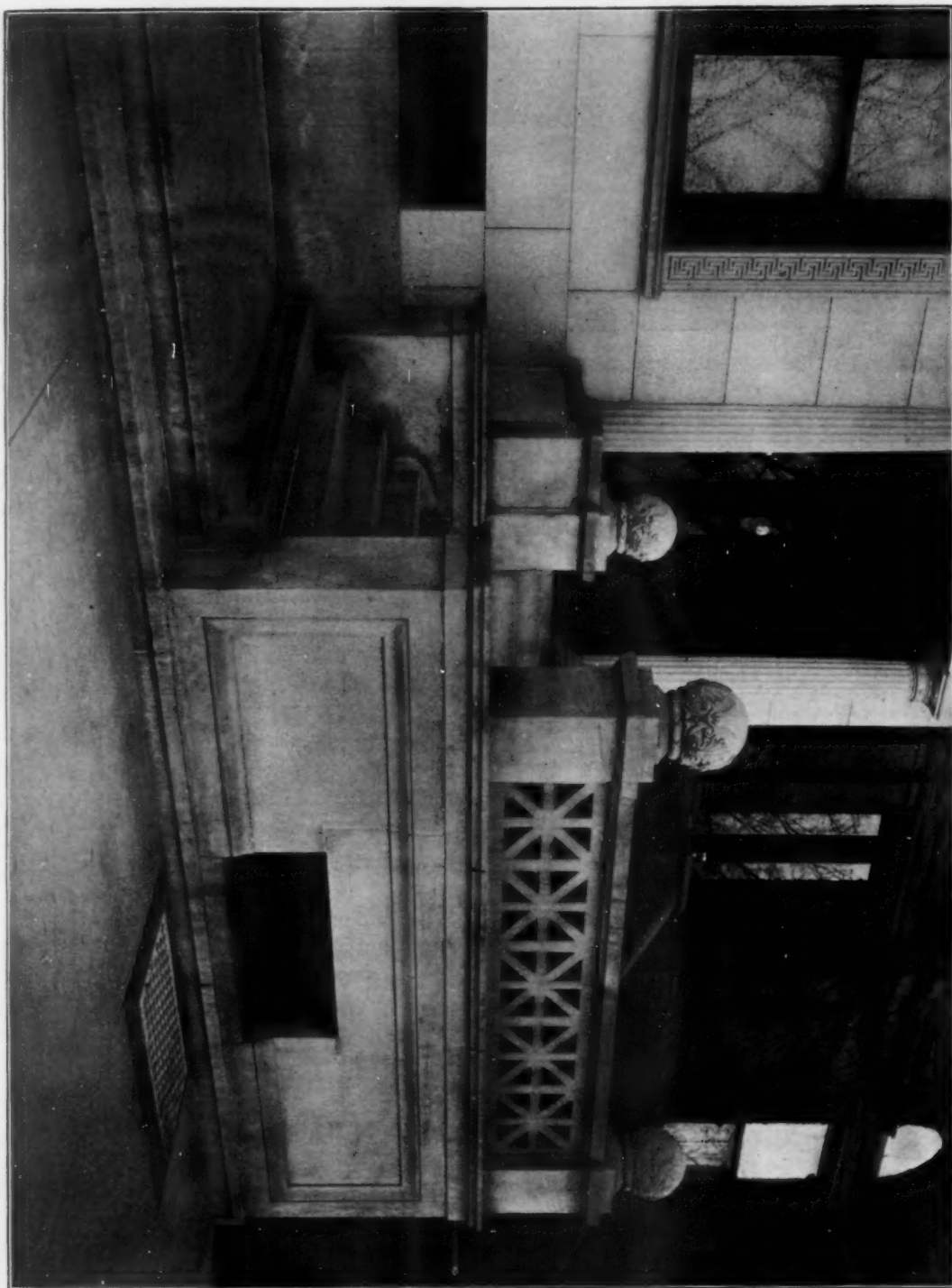
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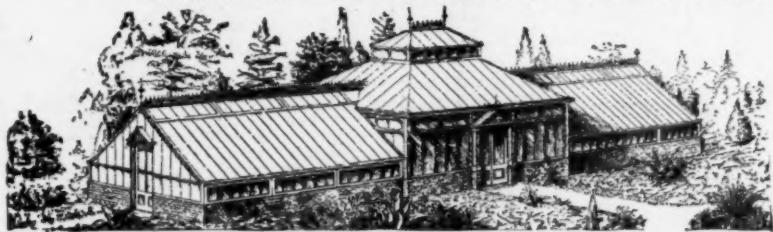
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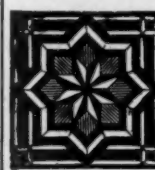
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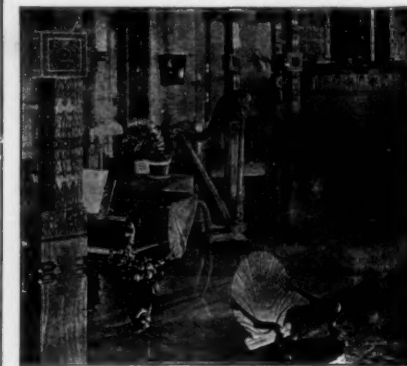


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- 642,069. ADJUSTABLE DOOR-HANGER.—Albert G. Bierbach, Milwaukee, Wis.
- 642,077. AUTOMATIC WINDOW-SCREEN.—John L. Bucher and Ferdinand C. Mueller, Milwaukee, Wis.
- 642,098. MECHANISM FOR OPERATING ELEVATOR DOORS.—Francis K. Fassett, St. Louis, Mo.
- 642,136. FIREPROOF CONSTRUCTION.—John H. Laing, Pittsburgh, Pa.
- 642,147. BURGLAR-ALARM APPARATUS.—Sumner L. Morse, Athol, Mass.
- 642,165. FLUSH-TANK VALVE MECHANISM.—Wm. H. Schulte, Trenton, N. J.
- 642,175. EXCAVATING APPARATUS.—John Titus, Oyster Bay, and William Titus, North Hempstead, N. Y.
- 642,188. SPRINKLER.—George W. Weston and Wm. H. Weston, Philadelphia, and Mitchell Ancker, Bristol, Pa.
- 642,197. HEATING APPARATUS.—Conrad Bender, Indianapolis, Ind.
- 642,198-199. VALVE FOR HOT-WATER RADIATORS.—Willard E. Blake and Randall B. Andros, Boston, Mass.
- 642,208. FIREPROOF CONSTRUCTION.—Howard Constable, New York, N. Y.
- 642,230. PLUMB-LEVEL.—Francis X. Hurtubis, Oswego, N. Y.
- 642,239. SASH-BALANCE.—John Marx, New York, N. Y.
- 642,240. ROOF.—George M. Marshall, Edinburgh, Scotland.
- 642,261. DOOR-HOLDER.—Frank W. Ruppman, Philadelphia, Pa.
- 642,279. WINDOW.—Sarah F. Albright, Sidney, O.
- 642,316. PIPE CONNECTION FOR TUBS.—Dennis J. Galbraith, Plainfield, N. J.
- 642,332. SAFETY DEVICE FOR ELEVATORS.—Murray M. Hunter, Milwaukee, Wis.
- 642,369. WINDOW FRAME AND SASH.—James S. Reynolds, Minneapolis, Minn.
- 642,413. DOOR-LOCK.—Alexander Armstrong and Archibald F. Patterson, Moundsville, W. Va.
- 642,443. WATER-HEATING APPARATUS.—Amesno Griffith, Springfield, Mass.
- 642,445. SAFETY DEVICE FOR ELEVATORS.—Jos. W. Holmes, Joplin, Mo.
- 642,514. DOOR-CHECK.—Nathan O. Bond, Hyannis, Mass.
- 642,566. COMBINED SET-SQUARE AND BEVEL.—Andrew C. Smith, Los Angeles, Cal.
- 642,572. PRISM-PLATE.—Henry F. Belcher, Chicago, Ill.
- 642,586. MAIL-CHUTE.—Joseph W. Cutler, Rochester, N. Y.
- 642,588. TOWER.—Francis H. Davis, New York, N. Y.
- 642,591. DOOR-CHECK AND CLOSER.—Frédéric Desogne, Antwerp, Belgium.
- 642,614. FIREPROOF FLOOR.—Gottfried Knoche, New York, N. Y.
- 642,633. MEANS FOR GENERATING GAS AND WATER VAPOR FOR HEATING, ETC.—John P. B. Sadtler, Baltimore, Md.
- 642,651. SHUTTER-FASTENER.—Frank E. Walters, Waterbury, Conn.
- 642,655. SHUTTER WORKER AND FASTENER.—Alvin Welling, Covington, Ky.

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

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

ADVANCE RUMORS.

- Allegheny, Pa.**—It is stated that N. J. Osterling, *Times* Building, Pittsburgh, will prepare plans for improving the jail, at a cost of about \$22,000. Edwin Carrell, Hamilton Building, Pittsburgh, has prepared plans for a three-story frame addition, costing \$8,000, to be built to hotel on Spruce St.
- Architect F. C. Sauer, Hamilton Building, Pittsburgh,** is preparing plans for a two-story brick store and flat building to be erected at McClure Ave. and Shady St., for R. S. Matthews; cost, \$15,000.
- Bon Aqua Springs, Tenn.**—Dean & Walker are about to build a \$15,000 hotel, after plans by Architects Thompson, Gibel & Amus, of Nashville.
- Chattanooga, Tenn.**—Secretary of War Root, to whom the House Military Committee had referred a bill providing for the erection of a National memorial arch here, has returned that measure with a favorable report on it from the Chickamauga and Chattanooga National Military Park Commission.
- Chicago, Ill.**—A. G. Lund, 602 W. 3rd St., has prepared plans for a \$6,000 two-story stone front flat building, 34' x 86', to be erected on Morgan St., near 59th St., for Johnson & Peterson.
- Theodore Lewandowski, 828 Schiller Building,** has planned a \$12,000 brick boiler-house, 30' x 50', to be built at Clybourn Ave., near Fullerton Ave., for the Northwestern Brewery.
- Cincinnati, O.**—Architects Elzner & Anderson, 18 E. 4th St., is drawing plans for a three-story stone residence, 30' x 60', for Dr. F. W. Langdon; cost, \$12,000.
- Clarion, Ia.**—Architects Omeyer & Thorl, 409 Chamber of Commerce, St. Paul, Minn., are preparing plans for a two-story and basement pressed brick and stone business building, 88' x 90'; cost, \$15,000.
- Cleveland, O.**—The Wheeling & Lake Erie will build a new freight depot in this city at once; cost, about \$170,000.
- Colorado Springs, Col.**—Plans are being prepared by T. P. Barber for the \$50,000 Y. M. C. A. Building, to be built here.
- The First Congregational Society is interested in the erection of a \$12,000 chapel.
- Crawfordsville, Ind.**—A Masonic Temple will be built on Washington St., to cost about \$25,000.
- Evanson, Ill.**—Reports state that Chas. F. Grey has offered \$100,000 to the directors of the Evanson Public Library for a building. J. W. Thompson, Pres. Bd. Dir.
- Fort Dodge, Ia.**—H. C. Koch & Co., architects, of Milwaukee, Wis., have had their plans accepted for the \$100,000 court-house to be erected here.
- Houston, Tex.**—Gustave A. Jahn & Co., Brooklyn, N. Y., are to build a \$50,000 rice-mill here after plans by Ole J. Lorehn, architect.
- Isleboro, Me.**—James Lawrence, of Boston, Mass., will erect a summer residence here, to cost about \$15,000.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Kansas City, Mo.—Root & Siemens, American Bank Building, are preparing plans for alterations to the Centropolis Hotel, to cost \$50,000.

Louisville, Ky.—Edgar E. Albus, 4th and Main Sts., is about to prepare plans for a \$24,000 flat to be built by Hieatt & Hieatt, real estate agents.

Monroe, La.—It is stated that Ernest Fudickar will erect a \$25,000 hotel on S. Grand St.

New Canaan, Conn.—Kathrine Bliss will have a residence erected on Oenaka Ave., to cost about \$25,000.

New Haven, Conn.—L. W. Robinson, 465 Chapel St., has prepared plans for a \$10,000 brick dwelling to be built by John E. McPartland, at Park and Oak Sts.

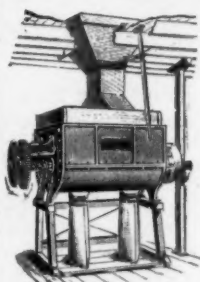
New York, N. Y.—The Committee on Buildings and Grounds of Columbia University has been authorized to have prepared detailed plans for the completion of University Hall; estimated cost, \$125,000.

Architect M. J. Garvin has prepared plans for a new parish house for Rev. W. H. Murphy, pastor of St. Peter and St. Paul Church in Cauldwell Ave., near 161st St. It will be a two-story & basement brick structure, costing about \$15,000.

North Adams, Mass.—C. L. Richmond is having plans drawn for a \$50,000 opera-house to be erected here.

Perth Amboy, N. J.—Reports state that the grain elevator of the Lehigh Valley R. R. Co., recently burned, will be rebuilt at a cost of \$20,000. W. G. Berg, Engr. Main & Way, Jersey City.

Philadelphia, Pa.—It is stated that Jas. H. Windrim, 1107 Walnut St., has prepared preliminary



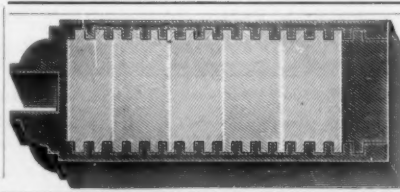
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

plans for a new hospital for the Jefferson Medical College to be erected on Sansom and Moravian Sts.

Richmond, Va.—Noland & Baskerville, Chamber of Commerce Building, have prepared plans for a \$40,000 church to be built at Adams and Franklin Sts. W. J. Whitehurst, Chm. Bldg. Com., Second Baptist Church.

Chas. E. Hunter will build a \$20,000 warehouse at 1436 E. Main St. Albert F. Hunt, 1301 E. Main St., is the architect.

San Francisco, Cal.—It is stated that Edw. B. Hinder will erect a hotel on California and Jones Sts., to cost about \$100,000.

Toledo, O.—The State Commission of the Ohio Centennial Exhibition to be held here during the summer of 1902 recommends the erection of the following buildings: A manufacturers' and liberal arts building, \$200,000; machinery and mechanical arts and power building, \$120,000; agriculture, horticulture and floriculture building, \$110,000; transportation building, \$95,000; educational and school building, \$85,000; fine arts and sciences building, \$75,000; fish, fisheries and game building, \$72,000; an administration building which shall form the entrance to the grounds, \$65,000; a building devoted to archaeological and ethnological displays, \$45,000; hygiene and sanitation building, \$42,000; mines and mining building, \$28,000; building for department of electricity, \$25,000; an auditorium building for public entertainment and assemblies, \$22,000; forestry building, \$20,000; a building or buildings for the department of

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

public comfort, safety and service, \$12,500; a building dedicated to the uses of the people of the State of Ohio, \$300,000.

Waupaca, Wis.—The Supervisors have decided to erect a county asylum for insane, at a cost of about \$40,000.

ALTERATIONS AND ADDITIONS.

Bridgesburg, Pa.—Brill and Franklin Sts., second story & other additions & alterations, 93' x 203'; \$20,000; o., Robert H. Foerderer; b., Geo. Kessler.

Brooklyn, N. Y.—Dean St., s s, 175' e Court St., three-st'y bk. extension, 26' x 100', & interior alterations, stable; \$12,000; o., Westcott Express, 338 Fulton St.; a., C. Werner, 26 Court St.

Third Ave., w s, 150' s Lateral Canal, interior alterations; \$9,000; o., Brooklyn Rapid Transit Co., Montague & Clinton Sts.; a. & b., J. N. Brewster & Co., W. 1st St. & Neptune Ave.

Union St., Nos. 331-335, four-st'y bk. extension, 21' x 29'; \$9,000; o., Harry Gladwith; a., J. G. Glover, 186 Remsen St.

Chicago, Ill.—Van Buren and State Sts., additional bk. story, 50' x 64'; \$15,000; o., Siegel Cooper & Co.; a., Hill & Waltersdorf.

Springfield Ave., nr. Polk St., additional story & mansard to school-building, 60' x 70', tile roof, steam; \$6,000; o., Church of the Presentation; a., Martin Carr.

Jamaica, L. I., N. Y.—Fulton St., alteration of three-st'y bk. school to opera-house; \$10,000; o., Wm. Cass Baker.

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BUILDING INTELLIGENCE.

(Alterations and Additions Continued.)

Louisville, Ky.—Bk. & st. additions to court-house, 95' x 109'; o., Jefferson County; a., Kenneth McDonald.

Milwaukee, Wis.—Knapp St., three-sty' bk. addition, 40' x 70', comp. roof, steam; \$5,000; o., Val Blatz Brewing Co.; a., Carl Trotsche.

New York, N. Y.—Broadway, Nos. 557-559, and Mercer St., Nos. 128-130 interior alterations; \$25,000; o., John S. Hawley, 326 Warburton Ave., Yonkers; a., John R. Thomas, 169 Broadway.

First Ave., n w cor. 70th St., remodel building for school; \$10,000; o., City of New York.

Fourteenth St., nr. Avenue C, two-sty' addition to factory, 25' x 65'; \$7,000; o., Eagle Pencil Co.; a., P. W. Berger, Bible House.

Fourteenth St., nr. Avenue C, four-sty' extension, 18' 4" x 39' 10"; \$7,000; o., Eagle Pencil Co., 710 E. 14th St.; a., B. W. Berger, 121 Bible House.

W. Thirty-sixth St., No. 13, two-sty' extension, 24' x 26' 10"; \$10,000; The Whist Club of New York, 11 W. 36th St.

Wooster St., s e cor. Spring St., partition rearranged; \$10,000; o., N. Y. Telephone Co., 15 Dey St.; a., C. L. W. Elditz.

Madison Ave., n e cor. 73d St., building raised; \$75,000; o., Madison Ave. Presbyterian Church, 962 Lexington Ave.

E. One Hundred and Twenty-fifth St., Nos. 151-153, raise building; \$9,000; o., Chas. Weisbecker, 131 W. 126th St.; a., Geo. H. Badlong, 132 Park Ave.

Henry St., No. 148, four-sty' extension, 14' 10" x 24' 2"; \$5,000; o., Elias Sobel, 148 Henry St.; a., M. Bernstein, 245 Broadway.

Madison Ave., s e cor. 63d St., raise building; \$30,000; o., H. C. Miner, 8 Grand Circle; a., M. Bernstein, 245 Broadway.

Montgomery and High Sts., three-sty' bk. extension to hospital private ward pavilion; \$12,000 to \$14,000; o., St. Barnabas Hospital; a., Mr. Darrach, care of Bruce Price, 1133 Broadway, New York City.

Eighth Ave., s w cor. 19th St., new partitions; \$8,000; o., Board of Education; a., Ward & Davis, 203 Broadway, New York, N. Y.

Camden St., addition to bk. & st. public school; \$30,000; o., Board of Education; a., Edw. A. Wurth.

Pelham, N. Y.—Alteration of three-sty' fr. hotel to two fr. dwells, 40' x 50'; \$6,000; o., Wm. Van Der Oest; a., W. H. A. Horstall.

BUILDING INTELLIGENCE.

(Alterations and Additions Continued.)

Philadelphia, Pa.—Arch St., Nos. 1411-13, four-sty' bk., st. & iron addition & interior alterations; \$25,000; o., Catholic Philopatrian Literary Institute; a., Henry D. Dagit.

Wishart and Amber Sts., four-sty' bk. & iron factory extension, 70' x 174'; \$40,000; o., Fern Rock Woollen Co.; b., William R. Dougherty; a., Hales & Ballinger.

Trenton and Erie Aves., second & third sty' bk. & fr. factory additions each 57' x 125'; \$25,000; o., Schlichter Jute Cordage Co.; b., John J. Ploncher, Jr.

APARTMENT-HOUSES.

Brooklyn, N. Y.—Clifton Pl., w s, nr. Marcy Ave., 2 four-sty' bk. & st. flats, 25' x 78'; \$24,000; o., Geo. Dietrich, 1184 Gates Ave.; a., F. Holmberg, 1137 Myrtle Ave.

Quincy St., s s, nr. Sumner Ave., 2 four-sty' bk. & st. flats, 30' x 61'; \$28,000; o., Geo. Dietrich, 1184 Gates Ave.

Nostrand Ave., w s, nr. Sterling Pl., 6 three-sty' brownst. double flats, 26' 8" x 70', with extension, 11' x 17'; \$50,000; o., Otto Singer, 671 Macdon St.

Macon St., nr. Reid Ave., 2 three-sty' bk. double flats, 25' x 62', with extension, 17' x 18'; \$17,000; o., Adam Metz, 1403 Green Ave.

Union St., nr. Smith St., four-sty' bk. flat, 21' x 66' 6"; \$9,000; o., Harry Gladwith, 335 Union St.; a., J. G. Glover, 186 Reimsen St.

Davenport, Ia.—Three-sty' bk. & fr. aparts., 73' x 122', gravel roof, steam; o., W. E. Snider; a., Clausen & Burrows.

Des Moines, Ia.—Sixteenth St. and Woodland Ave., three-sty' bk. & st. aparts., 54' x 64', comp. roof, steam; o., Mrs. L. C. Tinsley; a., Hallett & Rawson.

New York, N. Y.—First Ave., s w cor. 101st St., 4 six-sty' bk. flats & stores, 25' x 25' 5" x 95' x 80' 6"; \$106,000; o., Janpole & Werner, 206 Broadway.

E. Houston St., No. 180, six-sty' bk. flat, 24' 10" x 98' 3"; \$40,000; o., Elias Sobel, 148 Henry St.; a., M. Bernstein, 245 Broadway.

Boston Ave., cor. Prospect Ave., 2 four-sty' bk. flats & stores, 25' x 27'; \$40,000; o., M. F. Riley, 1062 E. 169th St.; a., Moore & Landsiedel, 148th St.

Franklin Ave., nr. Crotona Park, four-sty' bk. flat, 27' x 90'; \$20,000; o., Harry White, 1046 E. 169th St.; a., Hunter & Murgatroyd.

E. Fifteenth St., Nos. 338-340, seven-sty' & base. bk. flat, 42' x 87' 9"; \$35,000; o., Shaff & Silberman, 83 Canal St.; a., M. Bernstein, 245 Broadway.

E. Twenty-fourth St., Nos. 231-235, 2 six-sty' & base. bk. & st. flats & stores, 29' 4" x 88' 6"; \$60,000; o., B. A. Klein, 125 E. 120th St.; a., G. F. Pelham, 503 Fifth Ave.

Grand St., Nos. 458-460, six-sty' bk. flat & store,

PASSAIC ROLLING MILL CO.,
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BUILDING INTELLIGENCE.

(Apartment-Houses Continued.)

43' 10" x 88' 1"; \$45,000; o., Rosenberg & Feinberg, 129 Vernon Ave., Brooklyn; a., Sass & Smallheiser, 23 Park Row.

Madison St., n e cor. Scammel St., six-sty' bk. flat & stores, 41' 3" x 90' 6"; \$40,000; o., Lowenfeld & Prager, 115 Broadway.

Riverside Drive, cor. 115th St., seven-sty' bk. flat, 81' 6" x 103' x 105'; \$225,000; o., H. J. Beaudet, 132 Nassau St.

Riverside Drive, No. 126, seven-sty' bk. flat, 25' x 31' x 67'; \$50,000; o., John L. Miller, 128 Riverside Drive; a., Julius Munkwitz, 247 W. 125th St.

Amsterdam Ave., s e cor. 118th St., seven-sty' bk. flat, 94' 8" x 100' 11"; \$250,000; o., Hugo Hoefler, 164th St. & St. Nicholas Ave.; a., Neville & Bagge, 217 W. 125th St.

Bank St., nr. Bleecker St., 2 six-sty' & base. bk. flats & stores, 35' x 86' 10"; \$50,000; o., Elias Kempner, 55 E. 61st St.; a., G. F. Pelham, 503 Fifth Ave.

Chrystie St., No. 143, six-sty' bk. flat & store, 25' x 93' 11"; \$20,000; o., Adolph Schlessinger, 60 Livingston St.; a., Horenburger & Straub, 122 Bowery.

Grand St., Nos. 287-289, 2 six-sty' bk. flats, 25' x 86' 6"; \$50,000; o., B. A. Klein, 35 Nassau St.; a., Schneider & Herter, 46 Bible House.

Seventy-first St., nr. West End Ave., seven-sty' bk. flat, 52' x 115'; \$165,000; o., Kate C. Brown, 60 Liberty St.

One Hundred and Eleventh St., nr. Manhattan Ave., seven-sty' bk. flat, 40' x 90'; \$45,000; o., Le Grand K. Pettit, 556 Halsey St., Brooklyn.

Oak Terrace, nr. Crimmins Ave., five-sty' bk. & st. flat; \$22,000; o., Charles H. Sprössig, 1395 Bristol St.; a., Arthur Boehmer, 751 Tremont Ave.

One Hundred and Forty-third St., s s, nr. Hamilton Pl., 2 six-sty' bk. flats, 50' x 89' 11"; \$200,000; o., Chas. F. Rogers, 1063 Amsterdam Ave.

Broadway, w s, 60' x 101st St., seven-sty' bk. & st. flat & stores, 60' x 90'; \$120,000; o., Thos. J. McLaughlin, 418 W. 145th St.; a., Neville & Bagge, 217 W. 125th St.

W. Twenty-first St., Nos. 218-220, seven-sty' bk. & st. flat, 46' 10" x 88' 8"; \$75,000; o., I. & S. Boehm, 35 Nassau St.

Riverside Drive, n e cor. 115th St., seven-sty' bk. & st. flat, 103' x 110' 6" x 105'; \$225,000; o., H. J. Beaudet, 132 Nassau St.

West End Ave., s w cor. 80th St., seven-sty' bk. flat, 95' x 102' 2"; \$225,000; o., Arthur D. Hyde, 208 W. 51st St.

W. Forty-seventh St., Nos. 542-548, 4 five-sty' bk. flats, 25' x 86' 5"; \$80,000; o., J. D. Karst, Jr., 2051 Eighth Ave.

One Hundred and Fiftieth St., nr. St. Nicholas Pl., five-sty' bk. flat, 25' x 84' 6"; \$28,000; o., Oliver C. Moore, 443 W. 147th St.; a., Moore & Landsiedel, 148th St. & 3d Ave.

One Hundred and Thirty-fourth St., nr. Lenox Ave., 2 five-sty' bk. flats, 25' x 84' 9"; \$40,000; o., T. S. Quinn, 2740 Broadway; a., W. O. Tait, 1238 Madison Ave.

Third Ave., No. 2031, six-sty' bk. flat with stores, 25' 2" x 86' 8"; \$25,000; o., R. Allen; a., Geo. F. Pelham, 503 Fifth Ave.

One Hundred and Seventeenth St., n s, and One Hundred and Eighteenth St., s s, nr. 5th Ave., 4 five-sty' bk. & st. flats, 25' x 90'; \$120,000; o., & b., Mrs. C. M. Silverman, 1210 Fifth Ave.; a., Neville & Bagge, 217 W. 125th St.

W. Nineteenth St., Nos. 417-419, six-sty' & base. bk. flat, 42' 10" x 68'; \$40,000; o., Lowenfeld & Prager, 124 E. 64th St.; a., G. F. Pelham, 503 Fifth Ave.

Broadway, Nos. 2528-2530, seven-sty' bk. & st. flat, 50' 4" x 106' 10"; \$100,000; o., Herman Fuerst, Jersey City, N. J.

Eighty-sixth St., nr. Park Ave., seven-sty' bk. & st. flat, 90' 4" x 102' 2"; \$150,000; o., Mary E. Dempsey, 347 Jamaica Ave., Astoria, L. I.; a., Neville & Bagge, 217 W. 125th St.

W. Twenty-sixth St., No. 28, seven-sty' bk. bachelor apart., 25' x 81' 4"; \$50,000; o., Hew Miller, 100 Broadway; a., Neville & Bagge, 217 W. 125th St.

Chatham Sq., Nos. 7-8, seven-sty' bk. lodging house, 50' 8" x 122' 116"; \$150,000; o., P. Herter, 1032 Lexington Ave.

Madison Ave., cor. 89th St., seven-sty' bk. & st. flat, 85' x 95' 8"; \$200,000; o., Oppenheimer & Hirsch, 206 Broadway; a., Neville & Bagge.

E. Thirty-ninth St., Nos. 223-225, six-sty' & base. bk. & st. flat, 38' x 88' 9"; \$40,000; o., Lowenfeld & Prager, 124 E. 64th St.; a., G. F. Pelham, 503 Fifth Ave.

CHURCHES.

Brooklyn, N. Y.—E. Eighteenth St., e s, 95' x Avenue D, fr. chapel & Sunday school, 71' x 72', shingle roof, hot air & steam; \$8,000; o., Flatbush Congregational Church; a., B. S. King, 3 W. 29th St., New York; b., J. J. Beatty, 1187 Sterling Pl.

Irrington, N. J.—Park Ave. and Union, one-sty' fr. church; \$10,000; o., M. E. Society, Rev. M. Gibbs, pastor; a., Geo. W. Kramer, 1 Madison Ave., New York, N. Y.

New York, N. Y.—Seventh St., nr. 1st Ave., one-sty' bk. & st. church, 32' 8" x 97'; \$70,000; o., Church St. Stanislaus, 43 Stanton St.; a., A. Arcander, 360 Alexander Ave.

EDUCATIONAL.

Brooklyn, N. Y.—Second Ave., s e cor. 71st St., three-sty' & base. bk. school, 60' 6" x 172'; slate roof, steam; \$110,000; o., City of New York; a., C. B. J. Snyder, 59th St. & Park Ave., New York.

Mobile, Ala.—Two-sty' bk. industrial school, 71' x

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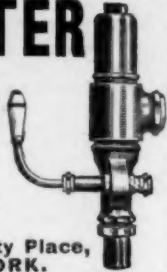
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NOTICE! We believe all forms of water heaters now manufactured, in which the flow of gas to the burner is controlled by variations of water pressure in the heater, are infringements on one or more of the following patents, which are owned by this company:

No. 594,326, Jun. 15, 1897
No. 563,275, May 25, 1897
No. 563,276, May 25, 1897
No. 591,588, Oct. 12, 1897

No. 620,888, Mar. 14, 1899
No. 601,426, Mar. 29, 1899
No. 606,540, Aug. 2, 1898
No. 608,972, Aug. 9, 1898

All manufacturers, sellers or users of such heaters are doing so contrary to law, and it is our intention to protect our rights under the patents by all legal means.

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"Monarch" Automatic, Instantaneous Water Heater,

306 WOOD ST., PITTSBURGH, PA.



BUILDING INTELLIGENCE.

(Educational Continued.)

144', slate & gravel roof, steam; \$25,000; o., Boys' Catholic Orphan Asylum; a., W. H. Hammond.

New York, N. Y.—Broadway, nr. 120th St., five-sty bk. & st. college building, 100' x 200', slate & metal roof, steam; \$350,000; o., Teachers College; b., Norcross Bros.; a., E. A. Josselyn and Howells & Stokes.
Park Ave., n w cor. 63d St., five-sty bk. college, 35' x 94'; \$80,000; o., Church St. Ignatius Loyola, 980 Park Ave.; a., Schickel & Ditmars, 111 Fifth Ave.

FACTORIES.

New York, N. Y.—Water St., Nos. 673-679, three-sty bk. factory, 71' 7" x 67'; \$17,000; o., J. Kramer, 274 Henry St.; a., Chas. Rentz, 153 Fourth Ave.

HOUSES.

Boston, Mass.—Vancouver St., No. 9, three-sty bk. dwell., 25' x 50', flat roof, steam; \$7,500; o., Joseph Green; b., J. J. Galvin; a., J. H. Parker.
Smith St., 2½-sty bk. dwell., 32' x 40', stoves; \$6,000; o. & b., David Johnson; a., S. Rantin & Son.

Greenwich, Conn.—Two-sty & base. dwell., 40' x 50'; \$12,000; o. & a., H. C. Pelton, 1133 Broadway.

Mt. Vernon, N. Y.—Terrace Ave., 2½-sty fr. dwell., 35' x 40'; \$5,000; o., T. Z. Rone; a., W. A. Horsfall.

New York, N. Y.—Crotina Park, nr. Franklin Ave., three-sty bk. dwell., 26' x 41'; \$6,000; a., Hunter & Murgatroyd, 1046 E. 169th St.

Hunts Point Road, n e cor. Lafayette Ave., 2½-sty fr. dwell., 37' x 37'; \$6,000; o., J. A. Dunn, 206 Broadway; a., W. J. King.

Trinity Ave., w s, 85' s 154th St., 4 two-sty fr. dwells., 20' x 56'; \$20,000; o., Thos. H. Baskerville, 31 Nassau St.; a., Thomas Graham, 1238 Madison Ave.

Trinity Ave., s w cor. 154th St., 3 three-sty fr. dwells., corner, 20' x 77' 6", two 15' x 56'; \$15,000; o., Thomas H. Baskerville, 31 Nassau St.; a., Thos. Graham, 1238 Madison Ave.

Faye St., w s, 200' s Jennings St., 3 two-sty fr. dwells., 21' x 54'; \$12,000; o., Helena B. Acker, 117 W. 75th St.

OFFICE-BUILDINGS.

New York, N. Y.—Madison Ave., No. 645, six-sty bk. & st. office building, 25' x 90'; \$30,000; o., J. J. Buckley, 99 Nassau St.; a., D. N. B. Sturges, 220 Fourth Ave.

Broadway, Nos. 599-601, twelve-sty & base. st. loft & office building, 50' x 200'; \$500,000; o., Fred'k Ayer, 232 Beacon St., Boston, Mass.; a., A. J. Manning, 160 Fifth Ave.

William St., s e cor. Liberty St., twelve-sty bk. & st. office building, 60' x 121' 7"; \$300,000; o., David W. Bishop, 11 Madison Ave.; a., Clinton & Russell, 32 Nassau St.

Broadway, Nos. 395-399, fifteen-sty bk. & st. office & stores, 51' x 127'; \$550,000; o., P. J. Merriek, 111 Broadway.

Exchange Pl., Nos. 42-58, twenty-sty bk. office building, 100' 8" x 236', 102' 4"; \$4,000,000; o., P. J. Merriek, 111 Broadway.

Broadway, Nos. 524-526, twelve-sty & base. bk. office & loft building, 51' x 200'; \$350,000; o., Fred'k Ayer, Boston, Mass.; a., A. J. Manning, 160 Fifth Ave.

PUBLIC BUILDINGS.

Blue Ridge, Ga.—Two-sty bk. & terra-cotta court-house, 50' x 80', slate roof, hot air; \$30,000; o., Fannin County; a., Golucke & Stewart.

Hudson, Wis.—Two-sty bk. & iron jail, 40' x 80', slate roof, steam; \$10,000; o., St. Croix County; a., W. T. Towner, St. Paul, Minn.

Port Washington, Wis.—Two-sty bk. & st. court-house, 72' x 94', comp. roof, steam; \$35,000; o., Ozaukee County; a., Fred Graf, Matthews Building, Milwaukee.

BUILDING INTELLIGENCE.

WAREHOUSES.

Malden, Mass.—Eastern Ave., 1½-sty storage house, 36' x 150'; \$6,000; o., Geo. P. Cox Last Co.; b., L. B. Jordan; a., Tristram Griffin.

COMPETITIONS.

LIBRARY.

[At San Diego, Cal.] Competitive plans will be received by the Board of Public Library Trustees for a library, at a cost not to exceed \$50,000. LYDIA M. HORTON, Secy. 1260

PROPOSALS.

NEW CAPITOL FOR THE STATE OF MINNESOTA.

[At St. Paul, Minn.]

NOTICE TO CONTRACTORS.

Sealed proposals in duplicate will be received at the office of the Board of State Capitol Commissioners, No. 512 Endicott Building, St. Paul, Minn., until 11 o'clock A. M. on the 6th day of March, 1900, for all labor and material required for the general construction of the dome for the new State Capitol Building at St. Paul, in accordance with the drawings and specifications, which may be seen at the office of the Board and at the architect's offices on and after February 13th, 1900. Copies of said drawings and specifications may be obtained from Cass Gilbert, architect, No. 524 Endicott Building, St. Paul, Minn., or Room 704 Constable Building, 111 Fifth Ave., New York City, upon payment of the cost of such reproductions, and a deposit of \$100, such deposit to be returned to the bidder upon return of the drawings and specifications.

Each bid must be accompanied by a certified check for a sum not less than \$5,000, payable to the order of said Board, as a guarantee of good faith. The right is reserved to reject any and all bids and to waive any defect or informality in any bid, if it be deemed in the interest of the State to do so. Proposals received after the time stated will be returned to the bidders. Proposals must be made on printed forms which will be furnished by the Board, and must be enclosed in envelopes, sealed and marked "Proposals for Dome for new Minnesota State Capitol at St. Paul," and addressed to the Board of State Capitol Commissioners.

For the Board of State Capitol Commissioners, CHANNING SEABURY, Vice-president. St. Paul, February 9th, 1900. 1260

SCHOOL-HOUSE.

[At Gatesville, Tex.]

Sealed proposals will be received until February 20, for the erection and completion of a two-story ten-room stone school-building. J. E. WALKER, mayor. 1260

SCHOOL-HOUSE.

[At New York, N. Y.]

Sealed proposals will be received by the Committee on Buildings of the Board of Education at the hall of the Board of Education, southwest corner of Park Ave. and 59th St., borough of Manhattan, until February 19, for erecting new public school 127 on 7th Ave., between 78th and 79th Sts., borough of Brooklyn. RICHARD W. ADAMS, et al., Committee on Buildings. 1260

JAIL.

[At Aberdeen, S. D.]

Bids are wanted March 9, for the county jail and sheriff's residence for Brown County; separate bids will be received for cells and iron work. CHAS. EFGABROAD, Co. Aud. 1262

CHURCH.

[At Wawaka, Ind.]

Sealed bids will be received until April 2, for an edifice for the Baptist Church. SIDNEY J. OSGOOD, Grand Rapids, Mich. 1262

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88 Beckman St., NEW YORK, N. Y.

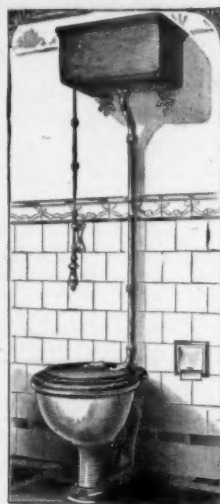
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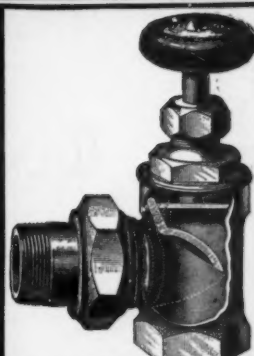
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PROPOSALS.

STEEL FIXTURES.

[At Salem, N. J.]

The Committee on Public Buildings of Salem County requests bids for furnishing steel fixtures for County Clerk's and Surrogate's offices. Bids will be opened at 1 o'clock, Friday, February 23, 1900, at Salem, N. J. JOHN S. REDSTRAKE, WM. J. FREAS, JOEL J. BORTON, Building Committee. 1260

SCHOOL-HOUSE.

[At Susanville, Cal.]

The Board of Trustees of Susanville School District, Lassen County, will receive bids until February 24, for the erection of a six-room brick and stone school. W. N. GOODWIN et al., trustees. 1261

COURT-HOUSE.

[At Park Rapids, Minn.]

Plans and specifications will be received by the County Commissioners until February 20, for a court-house; cost, \$15,000. FRANK HEISEL, Co. Aud. 1260

COURT-HOUSE.

[At Port Washington, Wis.]

Bids will be received by the County Commissioners until February 25, for the construction of a \$40,000 court-house. COUNTY COMMISSIONERS. 1260

COURT-HOUSE.

[At Blue Ridge, Ga.]

Sealed proposals will be received until March 1st for the erection of a court-house building. T. G. WILSON. 1260

SCHOOL.

[At North Platte, Neb.]

Bids are wanted by the Board of Education until February 17, for a 13-room brick school. L. B. ISENHART, Secy. 1260

Treasury Department, Office Supervising Architect, Washington, D. C., February 3d, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 5th day of March, 1900, and then opened, for the installation of a wiring system for the U. S. Custom-house and Post-office Building at Bristol, Tenn., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Bristol, Tenn., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1261

MEMORIAL ANNEX.

[At Lincoln, Neb.]

Sealed proposals will be received until February 14, for the construction of the Nebraska Soldiers' Memorial annex to Grant Memorial Hall, upon the university grounds in Lincoln. J. S. DALES, Secretary Board of Regents, University of Nebraska. 1261



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Professional Ethics.

The following . . .

. . . CODE OF ETHICS . . .

Prepared in Conformity with the Best Standards of Practice, and Recommended to its Members by the Boston Society of Architects, was

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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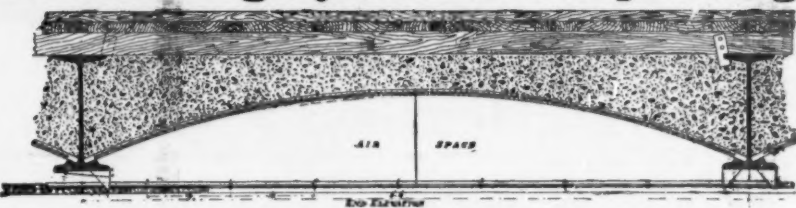
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