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THE Chicago ordinance limiting the height of buildings in that city to a maximum of one hundred and thirty feet is to be cancelled, leaving owners free to carry fireproof buildings to any height that they like. The old ordinance could be waived, by special vote of the Board of Aldermen, and the applications for such vote were so numerous that the Aldermen, very sensibly, decided that every one should have the same privileges. The streets of Chicago are so wide that there is much less objection to high buildings there than in the lower part of New York; and, as experience has shown that there is a limit of height, varying with circumstances, to which office-buildings can profitably be carried, it is probable that the matter will adjust itself satisfactorily in course of time. Meanwhile, it seems to us that it is very necessary, before hundreds of millions more are invested in steel-frame buildings, to come to some definite conclusion as to the durability of the metal structure in its envelope of masonry. If paint on the steel favors its destruction, as seems now not improbable, it is time to know it; and if steel vertical members, in the lower stories of a building, endure only a few years, as was believed not long ago, it is time to know that also. There would be no difficulty in whitewashing steel structural members, instead of painting them, as was formerly often done in New York, or in using cast-iron verticals in place of steel, as was common a few years ago, but architects, in order to know what methods to specify, need more accurate information than is at present available. Such information could, perhaps, be best obtained by the Building Departments of cities. Naturally, an architect has very few opportunities of inspecting the skeleton of a building after it has been some years in use, and he certainly cannot pull other people's buildings to pieces for the sake of gaining information for himself; but a Building Department often has occasion to investigate old buildings, for various reasons, and can, if necessary, dissect private property for the public good. The examination needed for this purpose would not be difficult or costly, and its results would be of immense importance.

A CURIOUS case, which dealers in grates and mantels should remember, has been decided by the New York Supreme Court. A Mrs. Archibald hired a house of one Powers, with an agreement that if she continued for a certain time to make regular payments, fixed by the agreement, she should receive a deed of the house. During her occupancy of the house, and without the knowledge of Powers, she contracted with Andrews & Newell, dealers in mantels and gas-grates, to put some of their goods in the house, agreeing to pay for them in monthly instalments. She failed to pay these instalments, and also failed to make her payments to Powers, who, in consequence, took possession of the house. Andrews

& Newell then claimed their grates and mantels, under the agreement with Mrs. Archibald. Powers resisted the claim, on the ground that they had been attached to the house, and therefore had become a part of his real-estate. Two courts gave judgment in favor of Andrews & Newell; but the Supreme Court reversed the judgment, holding that if Powers had known of the agreement between Andrews & Newell and Mrs. Archibald, and had assented to it, either explicitly or by implication, he could not retain possession of the grates and mantels; but, as they were put into his house without his knowledge, and were so attached to it, with screws and cement, that they could not be removed without injury to the building, he was entitled to hold them as attached to the realty.

THE Custom-house officials of the United States are gaining a reputation for nice distinctions which a corporation lawyer might envy. A few days ago, Senator Foraker, of Ohio, was prudent enough to inquire their opinion in regard to a beautiful altar, of sculptured marble, which is being made in Rome for the convent of the Sisters of Charity at Hamilton, Ohio. Under the law, works of art intended for presentation to an "educational or charitable institution" are admitted free of duty, but Senator Foraker evidently understood the uncertainty whether the Board of Appraisers would consider a convent of Sisters of Charity a charitable institution, or whether they would rate a sculptured angel as a work of art or as a "manufacture not otherwise provided for," and made his investigation in time to prevent, if necessary, the shipment of the altar from Italy. Even his experience was, probably, a little disconcerted at the information that the Custom-house authorities thought it likely that the good sisters would make use of the altar, and that the effect of putting a chalice and a candlestick on it would be to constitute it an object of utility, and not an ornament; and that nothing could be considered, for Custom-house purposes, a work of art, unless intended solely for ornament; and that, therefore, the altar could not, under any circumstances, be admitted without payment of duty. It might be suggested that if the nuns would make oath, supported by a bond filed with the collector of the port, that they would not put any candlesticks or sacramental vessels on their altar, but would use it simply to look at, this ought to bring it back into the category of works of art; but Senator Foraker does not appear to have thought of that, and perhaps the appraisers would be unwilling to trust the good sisters to look at their sculptured marble, for fear that they might, inadvertently, or, perhaps, surreptitiously, put something on it which would instantaneously convert it into a menace to American industry.

THE New York Fine-Arts Federation has been encouraged by the comprehensive scheme prepared by the new Commission for the improvement of Washington to urge upon Mayor Low the propriety of appointing a Commission to draw up a similar scheme for New York, under which improvements, as they are made, shall contribute toward a definite scheme, instead of being taken up separately, and at random. When one thinks of what might have been made of New York, if its unrivalled situation had been taken advantage of at the outset in planning its streets, the immense importance of some such definite scheme in municipal improvement is manifest; and, although what is done cannot easily be changed, it is not too late to plan for the future. Both shores of the Harlem River and Spuyten Duyvil Creek still admit of magnificent terracing, which might make them more attractive as sites for the palaces of the future than even the Riverside Drive; and the great, though unavoidable, defect of the Riverside Drive, that it has no particularly interesting beginning or end, could be provided against on the shores of the Harlem, by making the terraced streets connect esplanades at the terminals of the bridges. These esplanades would be very suitable sites for public buildings, and, with reasonable restrictions as to the architecture of structures fronting on them, nothing in New York would offer a greater artistic opportunity. It is for the purpose of pointing out such opportunities, before they are irretrievably lost, that Commissions, such as the Fine-Arts Federation proposes, are useful; and it is much to be hoped that the municipal authorities will accede to the suggestion.

A REMARKABLE illustration of the way in which great economic ideas, evolved originally by the "kings of finance," or whatever else we may choose to call them, "filter down," as the books say, into the humbler classes of the community, is to be observed just now at the University of the South, somewhere in Tennessee, we believe. At this renowned institution of learning preparations have been made for establishing a laundry, in which the linen of its members may be cleansed. It appears, however, that before the laundry was thought of, the academic linen was washed by the wives and daughters of the mountaineers in the neighborhood, and these hardy citizens, who, as we are told, derive their support from the labor of the female portion of their households, are so far advanced in the knowledge of the new principles of business that they at once proceeded to apply the Standard Oil method to their customers, and notified the authorities of the University that unless the use of the new laundry was immediately discontinued, the University buildings would be burned or torn down over the heads of the inmates, and personal violence would be done to the latter. We are told that two of the most distinguished officers of the University have already "fled," and the application of the new method seems likely to meet with complete success. Now that the ingenious mountaineers have set the example of high finance on a small scale, we may expect to see it widely followed. The occasional lynching of a college professor by his washerwoman, as a penalty for transferring his patronage elsewhere, would have an excellent effect in checking the discontent which people so often feel, not only with their laundresses, but with their butchers and bakers; and as soon as it is generally understood that housekeepers can complain of mouldy beef and last year's eggs only at the risk of their lives, the millennium which the Standard Oil Company, and the coal combination, and the window-glass and tin-plate trusts have so long had all to themselves will begin to "filter down" to the lower strata of the business world.

SOME of the Paris newspapers have been making an outcry about certain cracked stones which appear in the front of the new Opéra Comique. M. Planat, in *La Construction Moderne*, comes to the defence of the architect, and gives, on the authority of an experienced mechanic, an explanation of the trouble. The mechanic, M. Galineau, after observing that the cracks in the stones have existed, in the same condition, for more than a year, says that such fissures, which frequently occur in heavy buildings in Paris, are due to the defective manner of setting stone which is universal in that city. Instead of laying each stone, as is usual in this country, in a bed of mortar prepared to receive it, the Parisian practice is to set the stones on wooden wedges, two to each stone. By driving in the wedges, or drawing them out, the face of the stone is inclined forward or backward, until it is plumb. After several stones have been set in this way, thin cement is poured in at the top of the vertical joints, and makes its way, as best it can, into those and the horizontal joints beneath them, around the wedges. It was formerly usual in Paris to assist in filling the horizontal joints by tucking in additional cement from the front, between the wedges, by means of a long trowel, with serrated edges; but, according to M. Galineau, this process is no longer used. It may be imagined that, on the removal of the wedges, the stones find themselves resting on a very uncertain substratum of cement. Even where the horizontal joints are filled by tucking in mortar from the front, there is no way of compressing it properly, and it forms, in drying, a weak, spongy mass. Where the joint is simply grouted from above, it is a matter of pure chance whether any mortar reaches the horizontal joints, or, if it does, how far it fills them; so that, in this case, the removal of the wedges leaves the blocks supported only at intervals by the irregular course of the grouting under them. Viollet-le-Duc speaks in the strongest terms of reprobation of this method of setting stone, which, as he says, frequently causes the fracture of the blocks through the inequality of the supporting stratum of mortar under them, and M. Galineau makes precisely the same observation.

THE editor of the *Builder* has just made a visit to Baalbek, and gives an extremely interesting description of the work which is being accomplished there by the German Government. Every one knows from photographs the six beautiful Corinthian columns of the Temple of the Sun, which, with their entablature, are all that remain above ground of

what was one of the largest temples in the world, and has probably observed, in the same photographs, the enormous stones, some sixty feet in actual length, which form the face of the retaining-wall of the platform on which the temple stands. Since the Germans have taken the ruins in hand, however, a great deal of additional work has been uncovered, and a systematic plan made of the sacred enclosure of Baalbek, and of the buildings surrounding it. From these investigations it appears that the central point of the enclosure was a rock, with a flat top, cut at one side into rude steps. Such rocks are found in various other places in Syria and Palestine, one existing in Jerusalem, and are supposed to have been prehistoric altars, or, at least, altar platforms, while the steps at the side are assumed, without much apparent evidence, to have been made to facilitate the ascent of human victims to the sacrifice. However it may have been with human victims at Baalbek, the flat altar-rock seems to have enjoyed the reputation of great sanctity, for not only was it made, many centuries after the passing away of the prehistoric religion to which it was dedicated, the central point of a group of buildings of a magnificence very disproportionate to the importance of the insignificant town in which it stood, but in later times, when Christianity had become the State religion of the Roman Empire, and the pagan temples were closed by imperial decree, a Christian church was built in the area in front of the Temple of the Sun, in such a position as to bring the ancient altar-rock in the middle of it.

THE discovery of this prehistoric altar is due to the Germans, who, excavating around it, have found, at some distance outside the foundations of the Christian basilica, the remains of a magnificent colonnaded portico, or atrium, some two hundred feet square, entered from a vast hexagonal vestibule, more than a hundred feet in diameter, whose plan suggests a domed covering, which is itself preceded by a portico, or propylea, about one hundred and fifty feet long, with twelve columns, flanked on each side by solid walls. The hexagonal vestibule has an interior colonnade, interrupted by deep niches; and distributed around the great atrium are six exedrae, as if the local philosophers, like those of Athens, discoursed to their disciples in this public place. The altar-stone did not stand in the centre of the atrium, but near the side opposite the entrance, and directly behind it rose the splendid front of the Temple of the Sun. It is evident that the position of the temple was determined by that of the altar-rock, for, in order to place the temple at a suitable distance behind the rock, and with its entrance-door toward the east, which was the rule everywhere with Temples of the Sun, it was necessary to fill the sloping natural surface to a depth, at the western end of the temple, of fifty feet. The huge sixty-foot blocks of stone belong, therefore, to the retaining-wall built to hold the newly-filled earth in place; and, as the German excavations have shown, the same retaining-wall extended around three sides of the temple, enclosing a rectangular terrace, adjoining the atrium at one end, and enough larger than the temple to afford a promenade, some forty feet wide, all around it. The purpose of using the sixty-foot stones, which were indispensable to the construction of a retaining-wall fifty feet high on sloping ground, with such mortar as was known to the Syrians of the Roman period, is thus explained, and the precision with which the Roman engineers estimated pressure and resistance is shown by the fact that their retaining-wall stands firm to this day.

THE city of Paris, whose credit is good, proposes to borrow the sum of sixty million dollars immediately, to carry out certain public improvements "of pressing necessity." Among these improvements is included the erection or completion of three asylums for insane persons, as if insanity were increasing in the city. About fifteen millions are needed for the extension or widening of streets, and a large sum for building new bridges over the Seine, or for widening existing bridges; and it is proposed to complete the Palace of Justice, at a cost of about a million and a half. New sewers will take two millions, and the great highways extending into the country need nearly four millions spent on them within the metropolitan limits. Except a project for a new School of Arts and Manufactures, nothing in the way of interesting architectural work seems to be in contemplation, unless, indeed, the enlargement of the Palace of Justice should include some important new portion.



THE HEIGHT-LIMIT AGAIN UNDER DISCUSSION.—NEW OFFICE-BUILDING UNDERTAKINGS.—THE UNION LEAGUE CLUB-HOUSE.—PROGRESS OF THE POST-OFFICE BUILDING.—OUR LADY OF SORROWS.—THE STADIUM.

THE year of 1902 opens with very great activity in the downtown district. Buildings which, fifteen or twenty years ago, were looked upon as some of the best structures in the city may soon be torn down to make room for larger and higher buildings. Some people are still looking upon the First National Bank Building as one of the best, if not one of the highest, modern office-structures in its vicinity. It seems but a short time ago that we were inspecting its vestibules and halls, and the idea of newness is still associated with it in the minds of many. Now comes the announcement that it may be pulled down to give place to a sixteen-story skyscraper, provided the city ordinance relative to the height of buildings can be modified. This question of the height of buildings here in Chicago is once more being discussed, and at one time recently it looked as if the existing ordinance might become a dead letter. It has been a farce for some time, inasmuch as under the name of "tower" some of the recent buildings have been carried up to almost any height desired. The existing ordinance is useful as providing for the necessity for occasional special permits, always a pleasant matter to the party of the "second part," to borrow a legal expression, and is further supported by those interested in real-estate situated elsewhere than in the very centre of the city. Bringing all the office-buildings within so short a radius of each other, building them so as to hold so many hundreds of people, naturally tends to the greatest congestion of the surrounding streets, and also renders much less valuable even the districts but little removed from the actual centre.

At one time within the last few weeks, it looked as if the recommendations of the Council's Committee on Streets and Alleys would be accepted, granting special permits for building over 132 feet, thus practically annulling the ordinance. On the strength of this there were new schemes springing up on every side for the erection of high office-buildings, and at one time it looked as if the downtown districts might become impassable for the amount of building going on in them. Among others there was a sixteen-story structure to be erected on State Street for Otto Young at a cost of \$1,000,000, a fourteen-story annex to the Hartford Building on Madison Street, and still another large building on Monroe and State Streets. Largest of all the building schemes, and one which will doubtless eventually be carried out, is that of erecting an immense office-structure over the half-block bounded by Dearborn, Clark and Monroe Streets, the present site of not only the First National Bank, but the Montauk Building, which only a short time ago was esteemed one of the best and most up-to-date office-buildings in the town, though not carrying so many stories on its foundation as some others. The idea was to tear down the Montauk first and erect that portion for the housing of the tenants disturbed by the demolishing of the rest of the structures. Besides all these plans the managers of the Sherman House are trying to lease their property for ninety-nine years for the purpose of an office-structure. The old Tremont House has seen its last days as a hostelry, and plans have been made to remodel it at a cost of \$100,000. The property is owned by the Northwestern University and will be used for college purposes for those departments which are kept in Chicago, rather than at Evanston. In the changing of the building it was first contemplated to include in it an auditorium especially designed for a music-hall. This part of the plan has been abandoned, and it is much to be regretted, as the proposed hall was to have been a model in many respects, Mr. Theodore Thomas having the important matter of acoustics under his supervision as well as some of the minor details which so materially add to the success of such an auditorium.

The scheme for the erection of a new home for the Union League Club is now being actively pushed. The present club-house was built at two different times, the oldest section, however, not being erected more than fifteen years ago. It is one of those Chicago cases of premature old age in a building which in other places would only be considered in the first blush of youth. However, signs of dissolution seem to be upon it, for Chicago is a hard taskmaster when it comes to a question of the buildings which house its thousands. About two years ago a lot of land, 50' x 100', just south of the present structure, was purchased, with the thought of eventually adding it to the land now covered by the club-house when the time for a new structure should arrive. It is rumored that the new house will cost in the vicinity of \$1,000,000, if an entirely new building is constructed, though some technicality in connection with the land may retard the plan of financing this somewhat large amount. Several architects have been invited to join in the competition, though it was not opened to all architects who were members of the Club. D. H. Burnham & Company were finally accepted as the architects to do the work, though when it will be done, club-members seem to think, is altogether uncertain. The Club's neighbor over the way,

the big white Government Building, is fast putting on the substance of a building. The central walls above the corner one-story structure are now up, with pilasters and carved capitals in place. So, likewise, is the granite about the entrance-ways. The columns with carved capitals, a fine American eagle and several Classic wreaths, are now exposed to the public gaze, and are good pieces of carving. The skeleton dome is rising higher every day, and it will not be long before the exterior stands in its entirety.

A good deal of enthusiasm is evinced here lately in the building of churches. One very large Catholic church, known as Our Lady of Sorrows, has just been dedicated on the West Side. The local papers came out with prints and strong head-lines all attesting to the beauty of this church, "one of the most magnificent in the country. It is built of blue Bedford stone and the style of architecture is pure Romanesque. Almost severely plain outside, it is the beauty of the interior that is most impressive." The front façade, which indeed is built of blue Bedford, is of a rather severe Renaissance design, both as to outline and detail, and comes upon one as rather a shock and surprise after having read the description. It most certainly seems a pity that a paper of the standing of this one, in this case the *Record-Herald* (though, as a rule, its architectural descriptions are no worse than those of any other paper) should permit such accounts of recent building to be published. They are, of course, written up by men who know absolutely nothing of their subject, and it certainly seems a mistake that some man, moderately well educated in this branch of art, could not be hired to write such descriptions from time to time as the need for them occurs. If some new stock-yard plant is to be written up, a man knowing something of the business is sent to inspect it, but let some new building be completed, one either deserving high praise or severe censure, and they send out "any old" reporter. He will do to throw together some hackneyed phrases used in art-nomenclature, and the public, having been chiefly fed on such stuff, will never know the difference. But to return to the exterior of Our Lady of Sorrows. As soon as one allows one's eyes to wander from the front to the side façade one sees that brick has become the material used. What is the propriety on a corner lot, where as much, if not more, of the side is seen, of using two different materials is more than the mind of mortal man can perceive, especially in a church, where everything is supposed to stand for truth. Economy is the solving word for such difficult questions, and, no doubt, this would give the correct answer here, but why use stone anywhere, then? Why not brick all around the building? The towers are stone up to a certain point, beyond which, where the eye of man is not supposed to penetrate, they become wood or painted metal. The supporting columns of the entrance are not monolithic, and where they have been cemented are badly discolored and cracked. A very broad band of honeysuckle design finishes the column below the capitals, and gives the somewhat barbaric effect of an armlet, not quite in keeping with the Classic design. The interior of the church has finer points than the exterior, and, if a satisfactory color-scheme is carried out, will present many pleasing features. The ceiling of the nave is one continuous barrel-vault faced with plaster ornamentation very strictly Classic in design. White marble faces the walls for several feet in height, above which everything is plaster. The organ is on each side of the chancel, and when completed may be a feature. The high-altar, the papers tell us, is one of the most beautiful features of the interior, costing \$12,000. This may be the ultimate result, but at present only the lower part is marble, while the upper shelves are of wood covered with cambric, and not even an apology for the still higher parts are there, as the monotony of the bare white wall at the back is only broken by a small square window. Owing to the lack of depth of the apse, the vaulting of it is not entirely satisfactory, having the appearance of being unnecessarily compressed. The details are all Classic in character, but are often civic rather than ecclesiastical, as evinced by the fascies over some of the doors. This is unexpected in a Catholic church, where symbolism is apt to be rampant.

Turning from the sacred to the profane, Chicago while building churches is not forgetting her duty as entertainer of the athletes who will be her guests in 1904. The Stadium, where the international Olympic games will be held, is now under discussion, and plans for a huge structure are being talked and thought over. The modern Athenian Stadium had a seating-capacity of between 40,000 and 50,000, and, as Chicago has so much larger country to draw on for an audience, a seating-capacity of 75,000 would be none too large to plan for. This seems a goodly number, but when we think that the Colosseum at Rome seated 87,000 and the Circus Maximus over 300,000, an audience of only 75,000 seems quite a little "pinney, pinney poppy show," as we used to say as children. The seats themselves will be covered, and there is some talk of protecting the arena against possible showers by a series of curtains worked by electricity.

PROPOSED NATIONAL ART-GALLERY.—Senator Penrose of Pennsylvania has introduced a bill appropriating \$500,000 for a building in Washington to be used as a national art-gallery, "for developing, protecting and perpetuating American art." It is provided that the Secretary of the Interior, the Architect of the Capitol Extension and the Librarian of Congress are to be a committee for the selection of a site for the building, and to have charge of its erection. It is provided that the gallery shall be devoted to works of American artists, and that a commission of "twenty competent connoisseurs" shall be appointed by the President to have charge of the project.—*Exchange*.

commerce; there were merchants amassing princely wealth and consequence. They, too, built themselves dwellings, and their sons were educated to peaceful pursuits, and when we find 12,000 students on the registers of the great school of law at Bologna, similar numbers at Salerno and Paris studying medicine and theology, and many others, we see that the learned professions had made considerable progress at this period of architectural history.

Having, thus, before us the political and social aspect of the country during the Edwardian period, we are better able to understand the people's habits of living, as evidenced in their buildings, and, by noticing the salient features in the architecture of the day, we can picture to ourselves and understand the times during which these buildings were erected.

As wealth accumulated, its possessors naturally sought the comforts, advantages and magnificence that wealth alone could provide. We see this at once in the improvement of their dwellings, their amplification to meet the demands of increased retinues and servants, increased facilities for hospitalities, entertainments and festivities; the separation of the family from their servants; the further retirement and seclusion of the ladies of the household. It is in this direction we find the most marked progress by comparing plans of different dates, as, for instance, Castleton (page 76, vol. LXXII) with Kenilworth. The Saxon thane and early Norman were content with the primitive hall, or common house-place, the one apartment they possessed for cooking, eating, sleeping and dressing indiscriminately, the chamber (or presence-chamber) being first added for the owner's business use during the day, and for the retirement of his family and friends at night. Then came the separate kitchen and its offices amplified around it. During this progressive period we find the first approach made in the refinement and privacy of the family and friends. First, we find its evidence in the Royal lodges where special chambers are set apart for the Queen and her retinue; a little later this is met with in the dwellings of the wealthier nobles, their manor-houses, the granges, and so on downwards.

The hall, or "great houseplace," became a truly magnificent feature in the dwellings of the wealthy. The merchant-princes emulated the older and noble families in the splendor and extent of their surroundings. The halls of the period were the grandest dwelling-rooms of which we have any record; their magnificent proportions, expansive windows and highly-decorated roofs place them on a par with the monumental works of the Church. Crosby Hall, Eltham Palace and Westminster Hall are familiar examples to every student, and remain almost perfect at the present date.

At one end we find the raised dais, a platform raised two or three steps, on which was placed the high table of state. At the opposite end we find a new feature in a decorative partition of panelled wood-work, usually open, forming a screen to the entrance and to the kitchens and offices. Above this screen was the minstrels' loft, approached by a stairway, usually in the thickness of the wall. The great log fire was still found in the centre of the hall and a louvered turret in the centre of the roof provided the only egress for the smoke. Long tables were ranged at the sides of the hall for retainers and less dignified guests. These were days of wild revelry after the chase, the tournament, or the fray, and after the feast the bulk of the company, both sexes alike, passed the night on the rush-covered floor.

Contiguous to the hall, at the dais end, were the lord's chamber and the lady's chamber, or bower. Gradually, in the manor-houses and the dwellings of the wealthier class, these family chambers amplified in number, forming combined sitting and bed chambers, and the great hall was used more for banquets and great festivities. Private stairs came into use, mostly circular, leading from one floor to another, evolving suites of chambers and also leading to private entrances. The castle-yards became enclosed and were planted with shrubs, forming secluded retreats. Penthurst Place in some measure illustrates this advance.

A chapel, too, is a frequent feature, and a priest's room. The Church kept an ever-watchful eye on the temporal as well as the spiritual welfare of landed proprietors, and the estates of the abbeyes and monasteries were frequently increased by bequests and legacies.

The architecture of the period is the Gothic of the previous century, improved, amplified and enriched. The elements of defensive architecture were still demanded by the state of the times, but these essential features were refined in treatment, and decorated, not abandoned, but made less obviously aggressive, or made attractive by their intrinsic beauty and elegance of treatment. Thus, we find the gateway not less massive, but beautified by deeply-recessed mouldings decorated by carvings, the parapets moulded on the embrasures and often panelled on the face.

The keep, or donjon, disappeared entirely; the castle has become the secure and peaceful dwelling, of extent suitable to the rank and affluence of the owner, with its spacious courtyards and expansive lawns, surrounded still with walls of defence, with towers and gateways, within which are sheltered vast barns, granaries and store-houses, with stables and all the necessary out-buildings.

The buttresses, which play such a conspicuous part in the exterior of all mediæval buildings, had during this period more numerous offsets, the weatherings frequently moulded and decorated at the base by panelling and finished at the top by gables.

The columns of the period were more deeply moulded at the base, and the shafts became clustered, with deep hollows between them. The richly-carved capitals with moulded abaci were very distinctive. The conventional carving of the earlier period had given way

to beautiful representations of natural foliage; the leaves and berries of the ivy, maple and oak were the most common, among which birds were frequently introduced. These were deeply undercut in full relief and wonderfully sharp and crisp.

The mouldings, that during the thirteenth century, or Early English period, had become very conspicuously elaborated, now became somewhat simplified; not less beautiful, but more delicate and refined; the dog-tooth decoration, a characteristic of the former period, disappeared entirely, and was replaced by the ball-flower and running sprays of foliage in the hollows.

The work of the sculptor had become more ambitious and as the period progressed we find figures of saints, kings and warriors as isolated works in niches under decorated canopies. They are frequently met with in the more important entrances to churches and monastic buildings and on the walls of castles, manor-houses and granges. The quality of the work is very uniform throughout the buildings of any period.

The windows ceased to be mere loopholes, and gradually widened out and became divided up into numerous lights by moulded mullions, which, as the period advanced, became richly moulded. The heads of the windows, which before had been pierced out of a single slab of stone, were now replaced by geometric figures built up of small stones of the same section as the mullions and known as "bar-tracery," in contradistinction to the plate-tracery of the former period. This treatment of the window-heads as elaborated in the large halls and in ecclesiastical buildings is the most distinctive feature of the period, which, while set out with geometric accuracy, display the utmost grace and beauty in design. There was a marked advance in scientific construction. The walls were better built, the stones were squared and carefully bedded, showing that the forced labor of the unskilled serf, the stability of whose work depended solely upon the ponderous mass of material heaped together, had been replaced by mechanics skilled in the art of construction, who secured better results from the use of less material scientifically disposed.

It is worthy of note, in passing, that the great calamity that swept over Europe about the middle of this period, known as the Plague, or Black Death, had a pronounced influence in the elevation of the laboring-class. This plague is said to have destroyed nearly half the population of England, and, by the consequent scarcity of labor thus created, raised its value and importance, leading up to the ultimate abolition of serfdom and villeinage in England.

In proportion to her population, England is rich in castles, manor-houses and monastic buildings beyond any country in Europe. The Welsh examples of this period form an unrivalled group of themselves, and are infinitely superior in extent and magnificence to any on the Continent of Europe; while such castles as Raglan, Chepstow, Kenilworth, Warwick and Windsor are, for picturesque beauty and elegance of detail, quite unrivalled.

The most celebrated architect of the day was William of Wykeham, who was principal adviser to King Edward III, and who became Chancellor of England. He built the quadrangle east of the keep, and the Round Tower at Windsor; Queensboro' Castle, Kent; established Winchester College and New College, Oxford, later became Bishop of Winchester and rebuilt the nave in its present unrivalled magnificence.

The object of these pages is, if possible, to associate the buildings as we now see them with the times in which they were built, that we may see in them something more than picturesque ruins, and people them with a panorama of the past. The great artist J. W. M. Turner was once painting on the banks of the Thames; a lady approached him and looking over his canvas said, "But do I not see before me the beauties you are painting." He replied, "Don't you wish you could!"

THOMAS C. SORBY.

[To be continued.]

ROME TO-DAY.

FOR the benefit of those who do not have the pleasure of seeing the *Boston Transcript* we make bold to convey bodily from its columns the following account that the Rev. Wolcott Calkins, D. D., gives of the Rome of to-day:—

"Exactly one year after the Kingdom of Italy was constituted by law and proclamation, I entered Rome for the first time. All the way from Milan and Genoa and along the coast to Florence the walls were covered with placards and the people were shouting and getting ready for the anniversary. Possibly this was one reason why I had a bad quarter of an hour in Civita Vecchia. Every article was scrutinized, and at last my Bible was seized, for confiscation if not for the flames. It was only the New Testament, and, fortunately, the Greek text was on every page parallel with the English. I pointed it out to the examiner and assured him that to my certain knowledge the Pope himself cherished an original of that in his Vatican Library as his most valued treasure. With many misgivings he finally permitted me to take the dangerous book into the Sacred City. A dog-cart full of Bibles was the first thing, I believe, that entered the city through the breach at Porta Pia in 1870.

"So I made my exit, March 17, 1862, out of the Kingdom of Italy into the dominion of Pio. Nono, escorted from the steamer to train, and received again from train to the city, by French soldiers. In a stay of two months I never lost sight of the blue jacket and red trousers of this contingent of the imperial army. Was this the rude

awakening from Caesar's dream of Italian unity? Their allies at Magenta and Solferino were now standing with fixed bayonets to stop their approach to the historic capital of the nation. But Bismarck changed all that. In 1866 he admitted the Italians to Venice, and in 1870 to Rome. And now, after nearly forty years from my visit to Papal Rome, and after more than thirty years of its occupation by the kings and by the Parliament of United Italy, I am once more in the Eternal City.

"Italy then meant not much more than a natural paradise, a museum of history, a geographical designation. What is Italy now, and what is it rapidly becoming?"

"Rome is not Italy as Paris is France. And yet there is no better way to get started in what I have to tell than to draw a little sketch of what Rome was in 1862, and of what Rome is now. Beyond all question it has lost many of its most lovely and characteristic features. With a pang you search in vain for the magnificent shade-trees of the Villa Ludovisi, and for the Gardens of Sallust. The impressive area of the Colosseum, which you remember as an even ground marked only by the cross in commemoration of the martyrs who suffered there, is half shut off from your approach by vast excavations. You are stopped, as you approach from that side of the Arch of Titus, by a pick-axe brigade, who are tearing up what you used to think was the pavement of the Via Sacra and trying to find another, 10 feet deeper. The smooth level of the Forum, which left only a few exquisite columns and the Arch of Septimius Severus in view, has been succeeded by a vast cavity which needs a lecturer to explain it. As you walk from Saint John Lateran to Santa Croce, you see on your left a long row of uniform and ugly buildings, either vacant or else occupied by Jewish families of average squalor. Then you race across the old city, missing many landmarks and passing thoroughfares that look more like Paris than Rome, and expect to find, at least, the old bridge of St. Angelo intact. No. A new arch on each side has lengthened it out of proportion, and close by it is a horrible bridge of iron. They tell you that they only put it up to serve while the old bridge was impassable, and that they mean to take it down, but you don't half believe that they ever will.

"And where is the glorious view, from the Trastevere, of the grassy banks of the Tiber, and of the old buildings which used to stand thick upon the eastern side, all overgrown with ivy, and all rich in histories of conflict, or intrigue, or adventure? Up and down, the river-banks, as far as you can see, are lined with sloping masonry of uniform stonework; old buildings have been destroyed to make room for the widened river; new bridges, above and below, of French pattern, span the river, and your picturesque old Tiber has become the Seine on a small scale!

"I pity the artists and architects who first encounter these marks of vandalism. But as a man and a brother, I am bound to tell you of some other things, too well remembered, which I see no more. The persistent old beggar, who despite his monstrous deformities used to hobble around the Spanish stairs until you had to give him something, or else step on him, has left no successor. I heard of his retiring from business some years later on an ample fortune. The beggars have nearly all retired from business. I found one cripple on approaching the Vatican, but they tell me that the Vatican is not in the Kingdom of Italy. Of course, the beggars chase you in Naples and all over South Italy, but Rome is almost as free from this pest as Boston.

"There was something immeasurably worse here, in 1862, which has disappeared, or at least has not thrust itself on my observation. In the good order and safety of the streets, Rome is far in advance of Paris and of London. An American lady who has lived here for twenty-five years does not hesitate to go everywhere in the evening without escort, and is never molested. The awful 'Roman fever' is also a thing of the past. Recent statistics prove Rome to be the healthiest great city in Europe; the Ghetto, that pestilence-breeding quarter where for centuries, in the ruins of old theatres and porches, the Children of Israel used to drive their plundering trade in old clothes, sham jewels and usury, has been levelled to the ground. An unsightly place with a splashing fountain, quite open to light and air, but destitute of grass and flowers, is left to mark the spot. It is capable of being made a very attractive piazza, of which the adjacent Theatre of Marcellus might be made a grand feature. To the honor of Pio Nono be it said that in 1848, or soon after, the barbarous customs were abolished of locking the Jews in at night and of compelling them to attend a Catholic mass every Sunday and to listen to curses pronounced upon their hated race. But the present Government must have the credit for the final removal of the Ghetto.

"Of course such rapid modern progress as we find in Rome is sure to destroy much that is picturesque, and to substitute more that is commonplace, if not repulsive. The new buildings, public and private, on the Quirinal are wearisome in their sameness of stucco walls. In the entirely new quarter of the city beyond, a worse blunder has been made than on our Back Bay. It was almost a crime to make a rectangular chess-board arrangement of streets in such a city as Boston. Curves and variations in the width of streets ought to have retained in the new the fascinating features of an old city. But we have some relief in the variation in architectural styles. The newest part of Rome has none at all. Sameness and dullness disappoint you everywhere. The effect is even worse across the Tiber, where streets straight as an arrow and too wide for this climate are laid out from the Vatican heights, and lined by uniform barracks.

"But again, as a man and brother, I can see much to admire in all this modern progress. In December, 1870, a few months after Rome

had been occupied as the national capital, old Tiber served notice upon its new occupants that they had something else to do than sing paeans of victory. The greatest flood that has been recorded for centuries suddenly inundated the city. The water, which flows normally at a depth of 6½ metres, was swelled by rains in the north, and soon reached a depth of 13½ metres, which always puts the lowest streets under water. This time there was no pause. Higher and higher the floods rose until they reached the unprecedented level of 17½ metres. The Corso and Ripetta were roaring torrents. The pavement and all the altars of the Pantheon were covered. The whole old city was a lake. The Cloaca Maxima backed up, and drainage was poured back into streets and houses. The millions of damage and the fever-breeding effects of this flood are remembered with a shudder to this day.

"The new Government needed no second warning. The commission summoned Jan. 1, 1871, to take action, made choice of Raffaele Canevari as their engineer. He has made thorough work and has been loyally sustained in his far-reaching plans. The bridge of Saint Angelo at the narrowest place in the river was a dam. To preserve the venerable monument he widened the river, adding the two arches in the old style. To make a smooth, swift current of the enlarged river he lined the banks with masonry. He insisted that all new bridges should make as slight obstructions as possible. Finally, he projected the greatest improvement of all, which has not yet been finished: new main-sewers are to be carried parallel to the river, one on each side, far enough below the city to preclude the reflux current. The mouth of the Cloaca Maxima will soon be closed, and if left at all will only be an unused monument of the republic.

"This colossal work is far from complete. Last winter there was another serious flood, which was much less disastrous and proved that no mistakes have been made in engineering thus far. The new sewers and the elevation of the banks will in time form a perfect protection of the city against this danger, which has been incessant for more than two thousand years.

"There was another immediate necessity confronting the new Government in 1870. It found here a population of 217,000 persons crowded into buildings with only 162,000 habitable rooms. The working people, numbering 57,000, lived in 13,274 rooms, an average of over four persons in a room, and there were slums in which men, women and children, to the number of ten or twelve, spent the night in a single room. The streets were left in a filthy condition, there were nooks and corners, designated by the suggestive name *immondezze*, where all sorts of garbage might be thrown. The police took little notice of the thriftless Southern habits of the people. There was no board of health worth the name. The malaria of the Campagna shut the city into this narrow compass, which was malarial enough in itself, and Shakespeare's pen could no longer apply to the Rome I saw in 1862 and Cavour saw in 1870:—

"Now it is Rome, indeed, and room enough."

"The new Government made an immediate and immense addition to the crowded population. To get room enough was the very first necessity. What wonder that the work was pushed with little regard to landscape or architecture? The vacant heights of the Quirinal were instantly occupied. Former buildings were taken by the right of eminent domain. New structures were hastily erected. The boom resembled what we have seen in Kansas City and other Western cities, and even in Hartford and, still nearer, Boston. New streets were opened and speedily occupied beyond the Quirinal to the Viminal and to the Esquinal. And of course the work was badly done and overdone. New Rome is not artistic, but it is wholesome and roomy.

"There is an amusing confusion in the distribution of public buildings. If you want to 'go to the University' you must be quite sure of what you want and whom you want to see. The University is in the Piazza Sant Eustachio, but when you arrive there with your letter to Professor de Gubernatis, the distinguished author and teacher of Italian literature, you can't get in. You must circumnavigate the building and find the door in the Via Sapienza. You will find Professor Sergi, the anthropologist, in the National Library near the Corso, and Professor Dr. Sante de Sanctis, Professor of Pathology, at his residence, Bocca di Leone, No. 85. When you go to see Michael Angelo's 'Moses' in St. Peter in Vincoli, you will notice on an adjacent hill the ancient monastery of the Canonical Regolari; it is there that the faculties of the physical sciences and of mathematics have found roomy quarters. The University is everywhere and so is 'the Government.' You think at first that the Quirinal is the new Capitoline Hill. Is not the royal residence there, and next to that the office of the foreign ministry in the former palace of the papal consular? And farther up the Via Venti Settembre you come to the new building of the War Department, and still farther on to the immense Palace of Finance. But 'the Government' is not all up there. You must go down into the old city to the Palazzo Braschi in the Piazza Navona to find the Ministry of the Interior; across the Corso to the Palazzo Poli, near the Trevi Fountain, to find the Ministry of Agriculture; back again for the temporary quarters of the Ministry of Justice in the Palazzo Firenze; and for the office of the Marine Ministry you turn aside into the old cloister of St. Augustine's Church. The rich cluster of cloister buildings between the Via del Seminario and S. Maria sopra Minerva is occupied by the two Ministries of Education and of the Post and Telegraph, and, finally, the General Post-office shares with the Ministry of Public Works the cloister buildings in the Piazza S. Silvestro

in Capite. None of these buildings afford residences for the ministers. They are scattered all over the city, most of them living frugally in some fourth-story apartments. As for the House of Representatives, it has moved often, and is now in a very unsightly building in the Piazza di Monte Citorio. And the Senate in the same building? By no means. You must turn down from the Pantheon towards the river to the Piazza Madama, where a palace of the same name, once the home of Margaret of Parma, and, later, of the Medicis, furnishes a more ornate and more historic place for the Upper House.

"Street changes have been still more extensive and beneficial. We used to start with good courage down from the vicinity of the Piazza di Spagna for the region of the Pantheon; we would soon get bewildered and finally lose ourselves in a labyrinth leading nowhere. Now, the Via Tritone, spacious and on a slight curve, empties the whole of this part of the city into the capacious Piazza Colonna, which opens easily in every direction. The engineers are not satisfied with this. A tunnel is in process of construction which will divert electric, trams and heavy traffic from this crowded thoroughfare, under the Quirinal and out upon the Via Nazionale. This new boulevard is a splendid avenue from the Piazza di Venezia to the new part of the city, while the grand Corso Vittorio Emanuele opens a wide and entirely new road from near the Capitol through the old city to all the new bridges below the old Ponte Sisto; the heights on the other side of the river have been splendidly improved and crowned with a park, rivaling the old Pincio. Here the equestrian statue of Garibaldi stands, and from this point you have the grandest panorama of the whole city.

"Through these new thoroughfares trolley-cars and trams are running incessantly. For two cents you are swiftly taken from anywhere near the Spanish stairs to the very colonnades to St. Peter's, and for five cents to St. Paul's outside the walls. The system of hacks, strictly regulated by Government, is the best in the world. A clean and roomy carriage with one horse will take you anywhere within the walls for sixteen cents. And if there are four of you it will hardly pay to wait for trolley or omnibus; you will find a cab nearby that will take you by a short cut through the confusing streets to your destination, and the extra four-cent tip, making one lira, will be accepted with thanks.

"There is certainly something twisted in the brain of a writer who grumbles, as Marion Crawford does in his '*Ave Roma*,' about the impiety and the *lese majesté* of destroying the old city by these improvements. Almost everything that has been destroyed ought to have been destroyed long ago. Light, air, comfort, wealth and immense progress in social and in moral conditions have followed the work of the new Government at every step. There has been sedulous care to guard, or to mark by inscriptions, where removal was unavoidable, historic monuments. The excavations in the Colosseum, Forum and Palatine have made archaeological schools, like ours under Professor Norton, and, like the much older and larger German and French schools, a necessity in liberal education. I have not looked in vain for a single book I have needed, in Italian, in French, in German and in English, in the catalogue of the splendid National Library. Rome never had so much to offer the student before."

EXCAVATIONS IN TURKESTAN.



IN an interview with Reuter's representative, Dr. M. A. Stein, who is returning to India after making a preliminary arrangement of the remarkable finds brought to light during his recent expedition in Chinese Turkestan, said that the cursory examination that has so far been possible within the short time available reveals in a striking manner and for the first time many points bearing on the culture and daily life of localities which for many centuries — some for nearly 2,000 years — have been buried under a sea of sand, and whose history has hitherto been practically a blank. Speaking on this point, Dr. Stein said:—

"A full investigation of the sculpture, fresco-painting, objects of industrial art and seals, etc., which were dug out of the temples and dwelling-houses of sand-buried sites will help us to resuscitate the civilization of a region which has played an important part in history as the link between ancient China, India and the Classical West. Now for the first time have been brought to light some aspects of the every-day life, the home industries and arts of the inhabitants of the villages and settlements of Chinese Turkestan which were abandoned in the early centuries after the beginning of the Christian era, and have since been buried under moving sand-dunes. As showing the extent to which the desert has advanced, I may say that some of the settlements excavated are situated fully a hundred miles beyond the edge of the present cultivated area. The great lifeless desert is naturally regarded with much superstition by the people who live in the scanty settlements along the desert edge and the difficulty of carrying sufficient supplies and water has luckily kept the native 'treasure seekers' from visiting and exploiting the more distant and also more ancient ruined sites which have now been systematically explored for the first time under the auspices of the Indian Government. No doubt can be entertained," continued the Doctor, "that the inhabitants of these places were in possession of a culture mainly derived from India, and that they were Buddhists. My excavations go to prove that their culture was highly advanced, and that the art-influences of Greece and Rome were felt even at that great distance from the centres of Classical culture. Khotan is, I should say, about half way between Peking and Western Europe. Possibly the most

striking excavations I made were at a site in the heart of the desert north of Niya, where one settlement was exposed, covering with its scattered dwelling-houses and shrine an area of about six miles by four. Until digging began all that was visible were weird-looking rows of bleached timber pieces projecting in various places like the framework of a wrecked ship from between the sand-dunes. Even with all the interesting work on hand the utter desolation of the place made itself felt most keenly during a prolonged stay, and the uncanny surroundings specially affected my people.

"Of special interest were the refuse-heaps which we unearthed near some ruined houses, once apparently tenanted by village officials — kinds of 'waste-paper' baskets, containing hundreds of documents, beautifully written on wooden tablets, and carefully tied and sealed. Owing to the preservative nature of the sand, many of these were in splendid condition — the ink as black and the seals and string as perfect as if they were only a few weeks old. As these documents are in a known Indian script, their deciphering can be expected to reveal in a fascinating manner many of the details of the ancient village life. But it will be a task requiring years of close study, as in India itself the materials available of this early script have so far been very scanty. At sites less ancient we also found paper documents in Sanskrit, Chinese and also Tibetan manuscripts. In none of the excavations did I find any unknown characters. Round most of the sand-buried houses were brought to light carefully-planned little gardens, with avenues of trees, fenced lanes, orchards, and so forth. It was truly astonishing, on clearing away the sand, to find under the shrivelled hedges heaps of dried leaves, just as they had fallen in ages gone by. The gardens were much the same in character as those still to be found in Turkestan to-day. The trees were mostly poplars and peach, mulberry and apricot trees. There is no evidence that these places were abandoned owing to any sudden catastrophe, but their gradual desertion was evidently due to the impossibility of continued irrigation, causing an advance of the sand.

"While articles of real value were therefore removed by their possessors, we found in the dwelling-places many household implements of small value, such as pitchforks, mouse-traps, boots, chairs, shoemakers' lasts, etc. In the ruined temples we found a sort of unintentional exhibition of the fabrics of these remote ages — for in front of some of the idols were heaps of torn shreds of elaborately-worked silks and other fabrics, which had been deposited as votive offerings. In one temple it was curious to note an instance of where a pilgrim, anxious apparently to propitiate as many deities as possible, had torn into portions a Tibetan manuscript, which he had divided among the various idols. These fragments are now once more united under glass panes. Many colossal statues in stucco were unearthed from the monasteries and temples. One of the latter contained in its cloisters over one hundred statues, all over life size. While as many as possible of these were cleared for the purpose of taking photographs, only a few could be rescued, as when the protecting sand was removed the great stuccos threatened to collapse, owing to their inner wooden work having rotted away. However, interesting portions of them were successfully brought away. As showing how the customs of to-day were in vogue in the past, it may be noted that my laborers at once recognized an ice-pit, which was dug out, by dry leaves, which were apparently used then, as now, to protect the ice from the terrible summer heat."—*London Daily News*.



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

UNITED STATES POST-OFFICE, KANSAS CITY, MO. MR. JAMES KNOX TAYLOR, SUPERVISING ARCHITECT, WASHINGTON, D. C.

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WINDSOR CASTLE: TWO VIEWS.

THESE and the following plates illustrate the chapter on the "Domestic Architecture of England" elsewhere in this issue.

WARWICK CASTLE.

RUINS OF RIVAUDX ABBEY;—THE NAVE OF WINCHESTER CATHEDRAL.

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

LA PORTE GUILLAUME AND THE CATHEDRAL, CHARTRES, FRANCE.

[Additional illustrations in the International Edition.]

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HOUSE AT ABOYNE, ON THE RIVER DEE, ENGLAND. MR. JAMES M. PIRIE, ARCHITECT.

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PRIZE DESIGN FOR BRIDGE OVER THE RHINE, BASEL, SWITZERLAND.

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ROPE BRIDGE OVER THE KISHANGANGA AT SHARDI, INDIA.

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DESIGN FOR THE PONT DE LA MONNAIE, PARIS, FRANCE. M. ED. BÉRARD, ARCHITECT.

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STONE AND WOOD PAVING IN EDINBURGH. — Rufus Fleming, United States Consul at Edinburgh, Scotland, in a report to the State Department, says: There is a growing demand in this city for the substitution of wood pavements for granite, especially in the principal streets, where the traffic is heavy and noisy. But the municipal authorities, giving attention solely to the question of economy involved, are not disposed to extend the use of wood. Mr. David C. Proudfoot, City Road-surveyor, who has had long experience in the making and repairing of streets, informs me that the life of wood-pavement on a main thoroughfare is ten years, while granite of the best quality will last thirty years if relaid once or twice; and as the cost of wood-paving exceeds that of granite, the reason for the municipal preference for stone in street-making is obvious. The wood blocks formerly used for the few streets having this kind of pavement were infused with a creosote preservative — the common, heavy oil from iron-smelting works. A soft-wood block, 7" x 9" and 3 inches thick, would take in about two pounds of the oil under a pressure of 120 pounds per square inch. The present wood-pavements are constructed of Australian "jarrah" hardwood, requiring no creosote, as it contains a natural oil. Blocks 5" x 9" and 3 inches thick are laid on a 6-inch concrete bottom with smooth surface, and joined with cement grout or asphalt. This paving costs about \$4.10 per square yard. Nine by 4" x 7" granite blocks laid on a 6-inch concrete bed and jointed with gravel cost \$3.60 per square yard. — *Exchange*.

THE EXODUS OF PAINTINGS TO AMERICA. — A writer for *The London Daily Telegraph* is so alarmed by the number and quality of the paintings by old masters which have gone to the United States or are about to leave Europe, that he urges the formation of a society like the Société des Amis du Louvre to keep in England the fine pictures still in private hands, notably the Bridgewater Gallery, which contains five Titians, among them the "Three Ages of Man," the "Diana and Actæon," and the "Diana and Callisto." The trusts which have prevented the collection at Bridgewater House from dispersal will soon expire. It contains Rembrandt's "Hannah and the Infant Samuel" and Raphael's "Virgin with the Palm-Branch" and "Bridgewater Madonna." Can we tolerate for a moment, he asks, even the remote possibility that the great Titians and Raphaels might leave England and find a home on the Continent, or, worse still, on the other side of the Atlantic? "If it came to the worst, ought we to suffer this without some serious effort to prevent what should surely be looked upon as a national disaster?" — *N. Y. Times*.

JERRYBUILT. — In a list of words formed out of proper names a correspondent of *Notes and Queries* gives "jerry-build," to which he assigns the familiar derivation from the Brothers Jerry, a Liverpool firm who in the early part of the nineteenth century put up many showy ill-constructed houses in the northern suburbs of that city. But this etymology has been disputed, and now the *Builder* tries to knock it finally on the head. In this it has the negative support of the "*New English Dictionary*." Dr. Murray says that the origin of the term has not been ascertained. His earliest quotation for it dates only from 1869, and he states that the Liverpool story has been inquired into, but has not been confirmed. A correspondent points out that the term is probably no more than a late manifestation of the old contempt thrown into "Jerry," as an abbreviation of Jeremiah at the time when the Puritans were giving Old Testament names to their children. "Gerry-mander" has quite another origin, being taken from the name of Elbridge Gerry, a wire-pulling American politician; but it may be noted that the alleged operations of the Brothers Jerry at Liverpool are assigned to the "early part of the nineteenth century." It was about 1810 that "jerry-mander" became current, and it may well be that this new phrase, acting in conjunction with the Jeremiah tradition, sug-

gested "jerrybuilt." From several correspondents we receive evidence of quite another derivation of the "jerry-builder." Among bricklayers, it is said, the walls which were not firm until they were papered were formerly called "Jericho walls," in obvious allusion to the walls which fell down flat when the priests blew with the trumpets. — *London Chronicle*.

THE CHICAGO-RIVER TUNNELS. — Shall Chicago abandon its position as a lake port and become commercially an inland city? This is the question which Secretary Root, in his answer to the request that the Federal Government aid the city in widening and improving the Chicago River, has practically put to the citizens of Chicago. The tunnels now used by the traction-companies are the key to the problem. Until they are removed or lowered vessels drawing over 16 feet of water will be unable to enter this port, which means practically that all important lake navigation will in the future be barred from the Chicago River. In approving the plans of the Drainage Board for widening the river to 200 feet Secretary Root has emphasized the inability of the Federal Government to enter upon any comprehensive plans of river improvement until the tunnels are lowered and the centre-pier bridges removed. The Drainage Board is ready to spend \$11,000,000 for the widening of the river and the acquisition of condemned property along the lake-front. The deepening of the river, however, is in the interest of lake commerce, and the city is again assured that not a dollar can be expended for this purpose until the obstructions for which the city is responsible are removed. Even the appropriation of \$500,000 included in the River and Harbor Bill for the building of two turning-basins in the Chicago River will not be available until the city has lowered the tunnels. Thus far no definite steps toward compelling the traction-companies to remove or lower the tunnels have been taken, and unless something is done speedily it is reasonable to predict that Chicago's prestige as a lake port will ere long become a matter of history. — *N. Y. Tribune*.

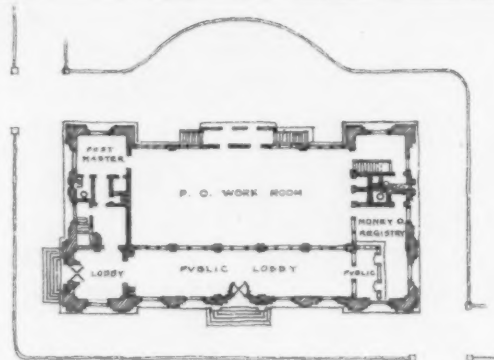
TELEPHONE-POLES FOR EGYPT. — The Telephone Company of Egypt, Limited, operating a large telephone system in Egypt, has experienced great difficulty in securing a suitable pole. The climate of the country is so hot and dry that good timber to use for a pole line for the transmission of an electric current does not grow, and timber imported from other countries dry-rots and becomes useless in a very short time. A certain pole imported from Sweden proved to be the most valuable so far, but its greatest life was not over four years. The Company began negotiations, therefore, with cedar-pole firms in the United States, with the result that arrangements have just been completed with W. C. Sterling & Son, of Monroe, Mich., wholesale producers of cedar poles, ties and posts, for the shipment of 1,600 poles of the white-cedar variety, Michigan-grown, to Alexandria and Cairo, Egypt. Correspondence opened between the two firms last June, but owing to the great distance and slow transportation of mail-matter, arrangements were not completed until last week, and the shipment of the material will begin at once. — *Electrical World and Engineer*.

DUST AND CONSUMPTION. — That dust is a cause of consumption is clearly shown in the statistics of the patients treated at the sixty institutions of the German Empire for the cure of tuberculosis. In 1,095 cases, or more than one-half of the 2,161 persons under consideration, the origin of the disease was alleged to be due to the continuous inhalation of dust involved by their employment, as follows: 431 cases from the effect of "dust" without more exact designation; 182 cases from the effect of metal-dust; 129 cases from the effect of stone, coal or glass dust; 116 cases from the effect of wood-dust; 111 cases from the effect of wool-dust, and 126 cases from the effect of various kinds of dust. These facts suggest to hygienists and inventors the necessity of devising dust-consumers and dust-preventers for factories, workshops, etc. This is a fact that legislators should bear in mind. — *American Medicine*.

NATURE OF LIGHTNING. — In an article recently printed in the *Physikalische Zeitschrift*, K. R. Koch says that he has found that lightning-conductors whose connections have become imperfect through rusting or otherwise act, nevertheless, in an efficient manner in case of a thunder-storm. This is, in his opinion, due to the oscillating character of lightning-discharges. Electro-magnetic waves are produced, which act upon the imperfect connections as upon a coherer, restoring their conductivity for a more or less long period. Lightning has hitherto been considered a continuous discharge, which often becomes apparently oscillatory by quick repetition. The author employs a rapidly revolving camera in order to test this question, but does not arrive at any definite conclusion, as the flashes photographed were all too distant. — *Exchange*.

TENANT'S RIGHT TO REMOVE FIXTURES. — In the submission to the Second Appellate Division of a controversy between Frederick B. Van Vleck, as trustee of Joseph L. Queensbury, a bankrupt, and Alexander M. White, the question was as to the ownership of a boiler and engine situated on premises owned by the defendant. Queensbury had been a tenant of Mr. White, having placed the boiler and engine on the premises when he first took possession. Justice Sewell, for the Court, holds that the right of a tenant to remove trade fixtures, placed by him upon the leased premises, must be exercised before the expiration of the term, or before he gives up possession. Assuming, says Justice Sewell, that an unexercised right to remove trade fixtures passes to a trustee of the estate of the tenant appointed in bankruptcy proceedings the day after the issuing of a warrant for the removal of the tenant for non-payment of rent, the trustee loses such right by accepting from the landlord a new lease of the property, "together with the buildings thereon and the appurtenances," not containing any reservation of the right to remove the fixtures. — *N. Y. Times*.

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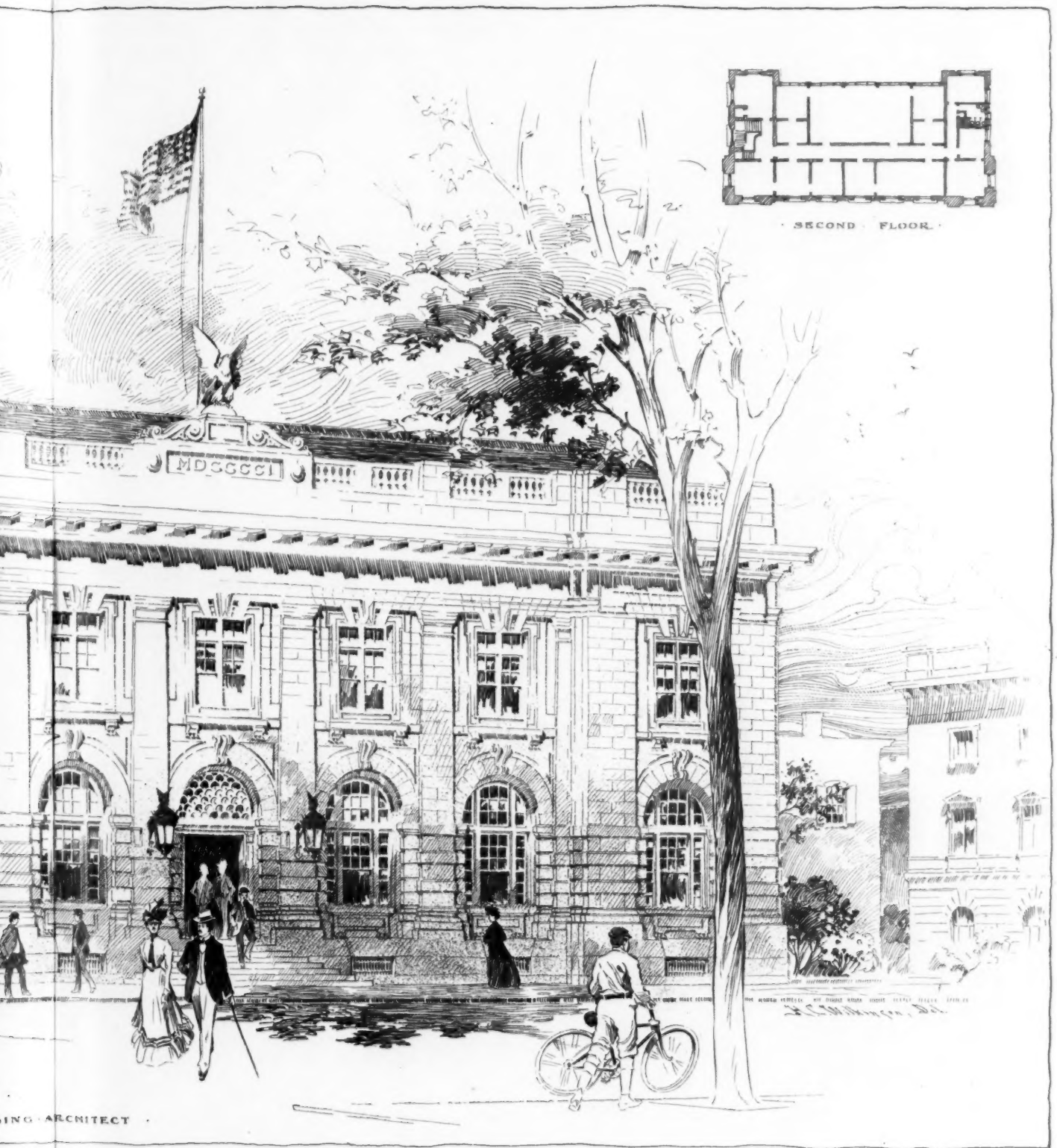
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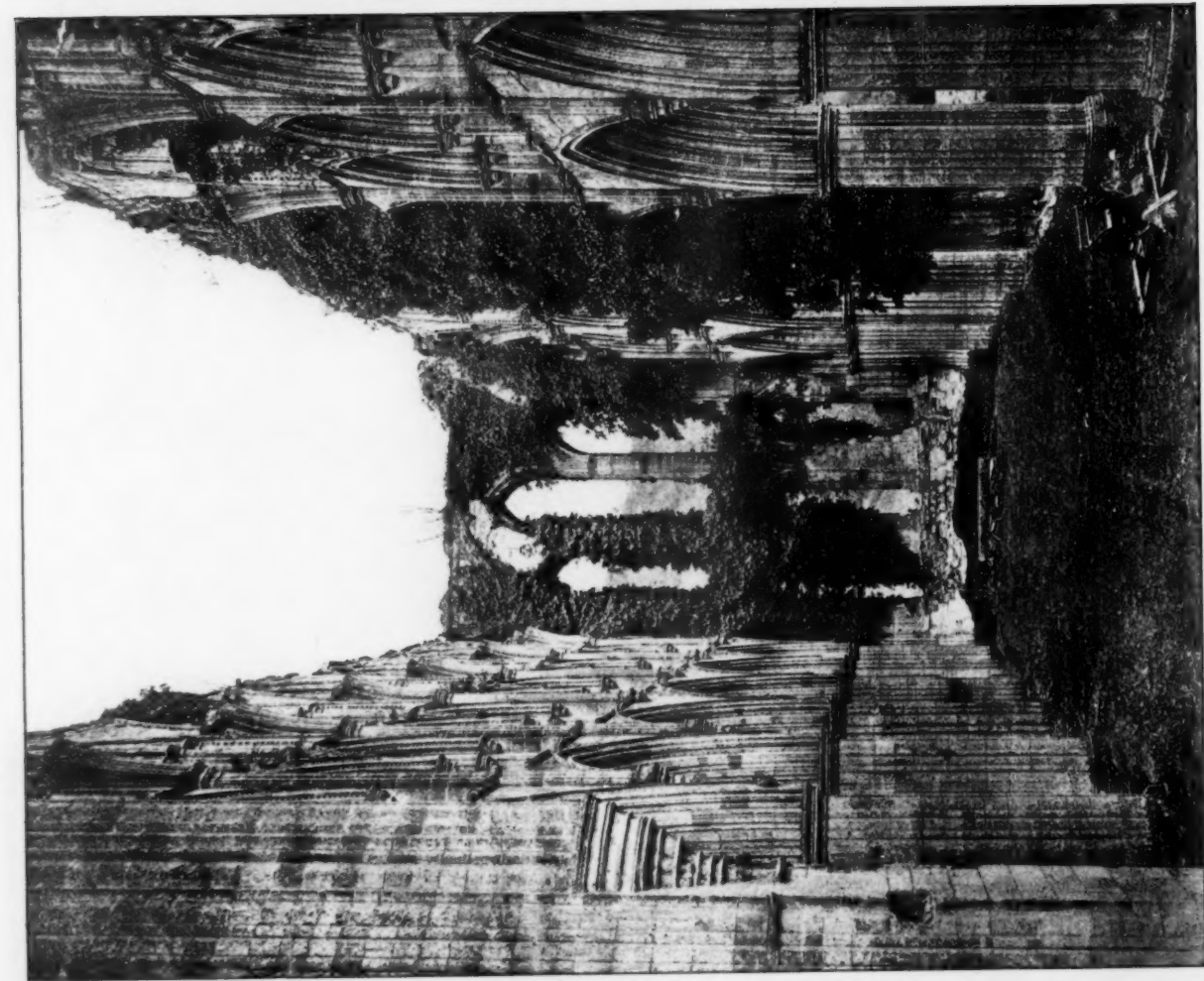
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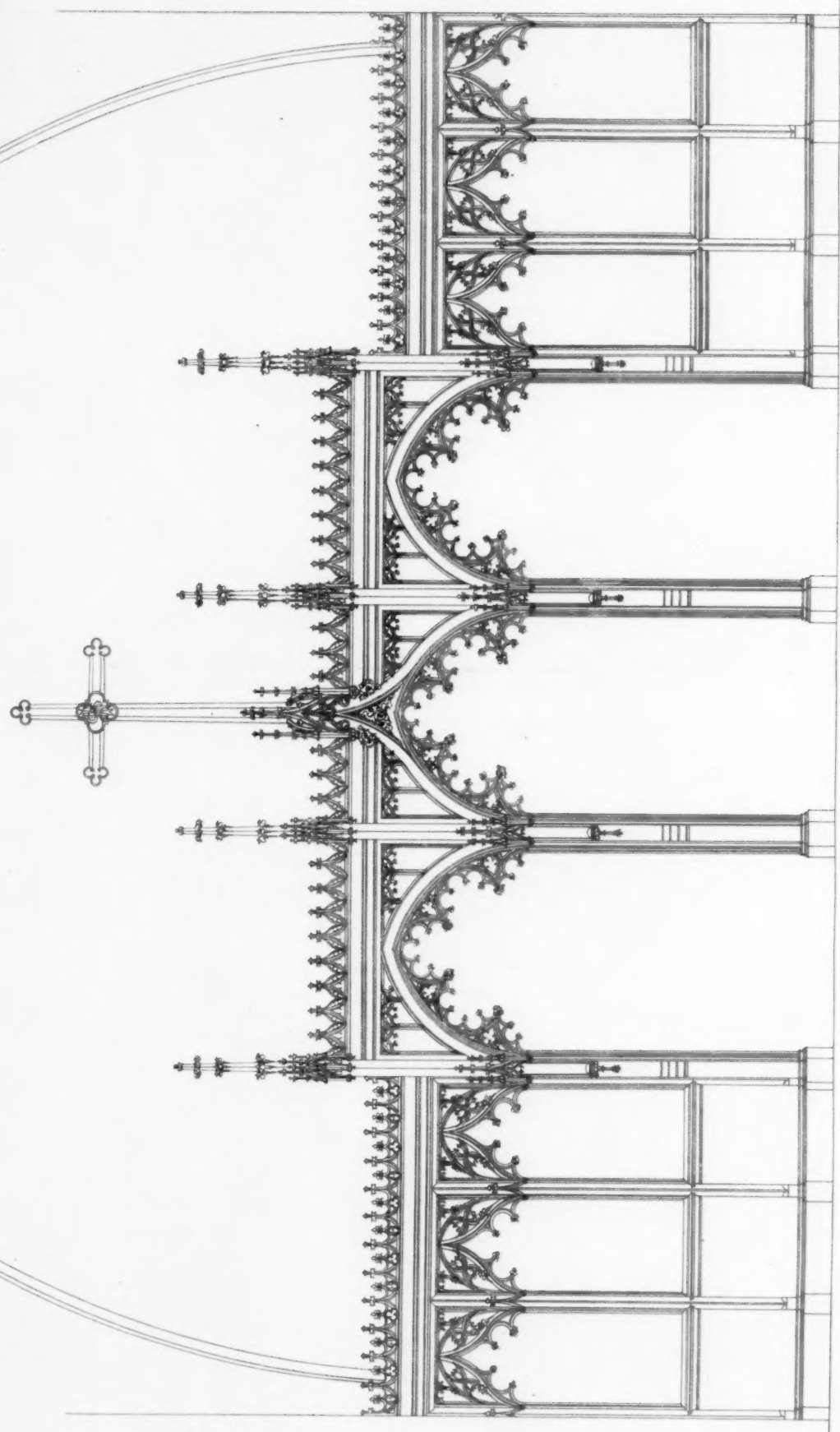
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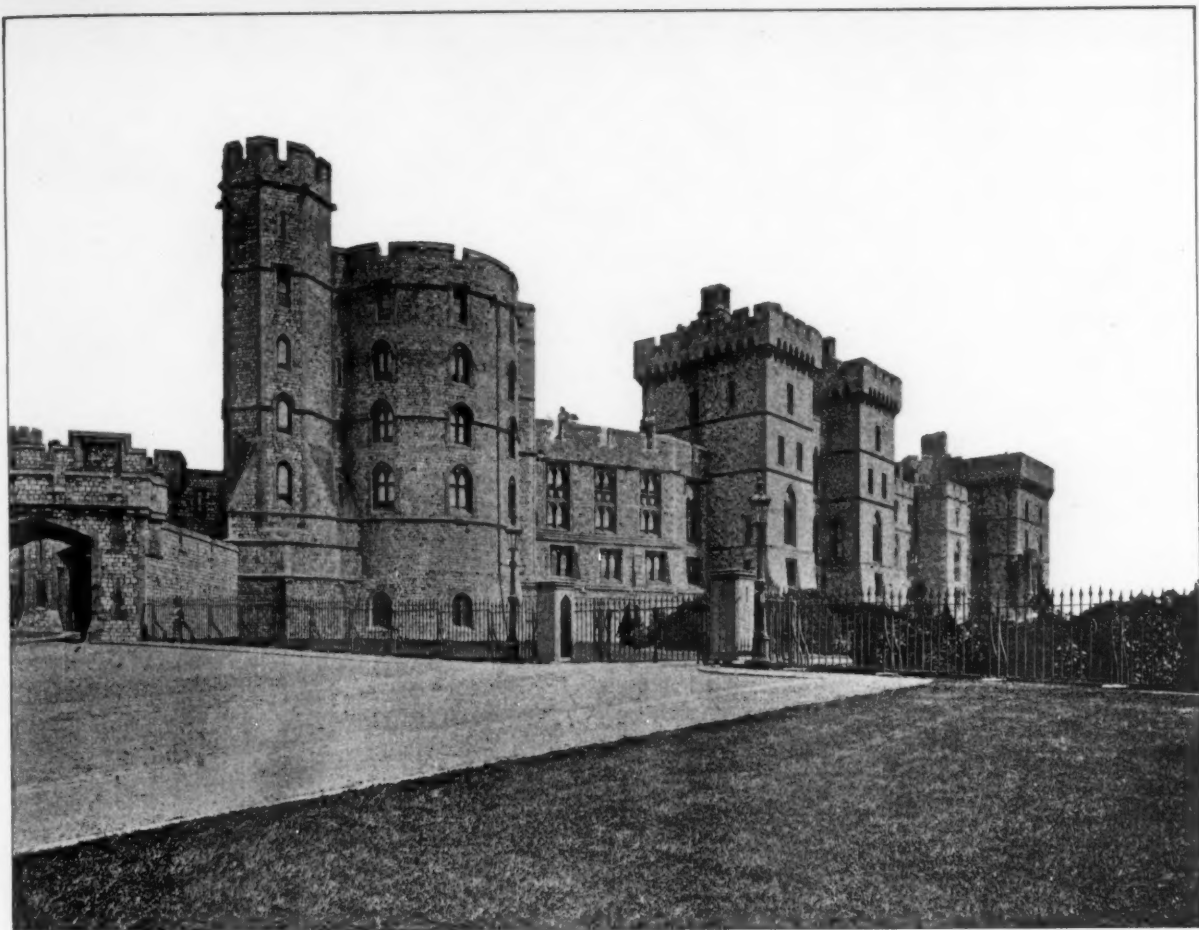
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and others.	

CHURCHES

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

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Royall Mansion, Dedham, Mass.	" 1737
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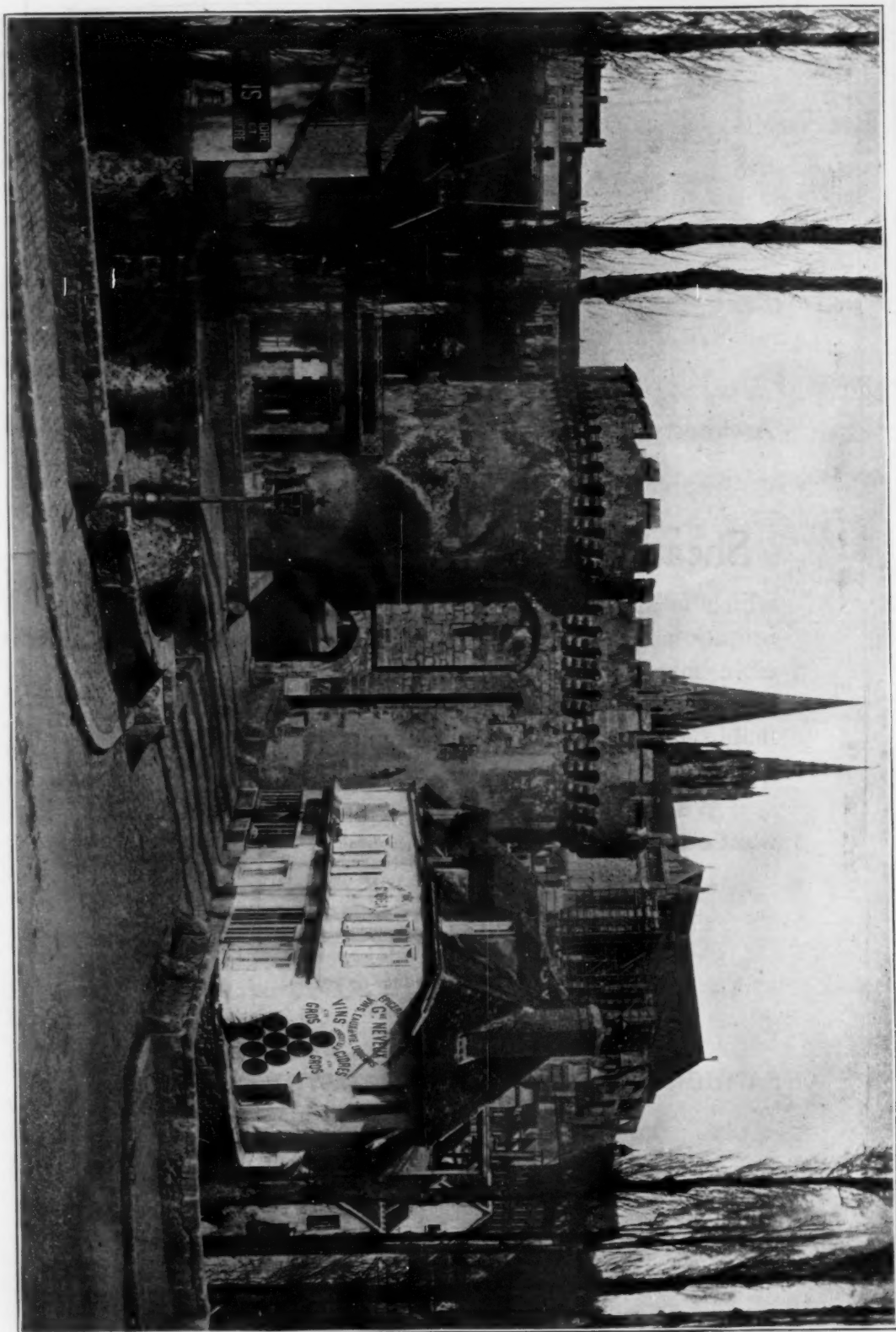
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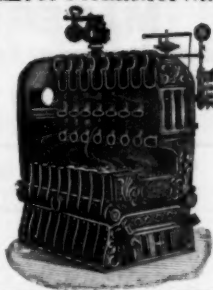
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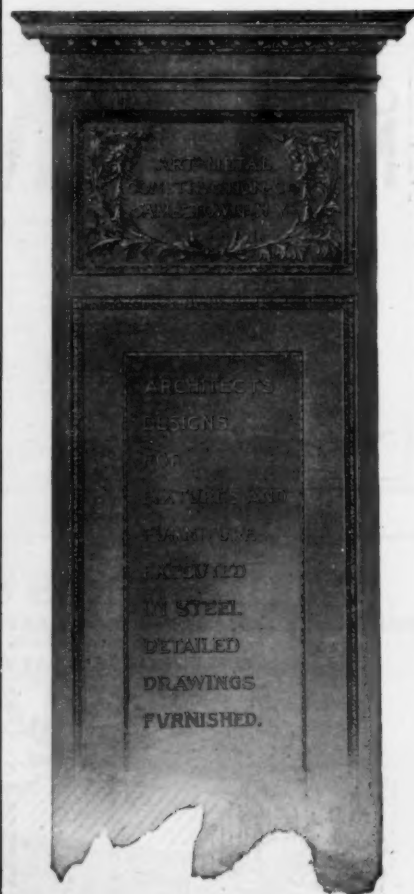
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P OSITION.—Wanted, position as draughtsman in architect's office in New York City; have had six years' experience in office and outside work. "T. S.," care H. M. Carleton, Temple Court, N. Y. 1364

WANTED.

D RAUGHTSMEN.—Wanted, structural steel work and architectural draughtsmen. A competitive examination will be held at the Navy Yard, League Island, Pa., February 18, 1902, for two first-class architectural draughtsmen and one first-class structural steel-work draughtsman at \$5.01 per diem, each. For application and further information apply to Commandant, Navy Yard, League Island, Pa. 1365

WANTED.

D RAUGHTSMAN.—Wanted, first-class architectural draughtsman and specification writer. Call, if possible, at office of Ernest Flagg, architect, 35 Wall St., N. Y. City. L.F.

WANTED.

D RAUGHTSMAN.—Wanted, one first-class architectural draughtsman, one well up in design, and able to render in perspective. None but a first-class man having had experience with first-class architects in this country need answer this advertisement. Fremont D. Orff, Minneapolis, Minn. 1365

CATALOGUES WANTED.

JOHN KEVAN PEEBLES, architect, Lowenberg Building, Norfolk, Va., desires all trade catalogues to replace those lost by fire recently. 1366

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.

Anaconda, Mont.—A modern high school is projected; cost, about \$50,000.



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PHILADELPHIA, 26 and 28 N. Fourth St.
SAN FRANCISCO, 12 Front St.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Ann Arbor, Mich.—A school, to cost \$40,000, will be constructed for the use of the 1st and 7th Wards.

Boston, Mass.—The heirs of Andrew Carney have purchased the property at 39-43 Tremont St. and the two estates in the rear fronting on Pemberton Sq., and have had sketches prepared by Architects Hartwell, Richardson & Driver for an eleven-story office-building.

Brookline, Mass.—Plans have been drawn by C. H. Blackall, 1 Somerset St., Boston, for a ten-story steel fireproof hotel on Mason Terrace and Beacon St. for the Beacon Boulevard Hotel Trust, of which Charles R. Batt and Wm. H. Allen are trustees; cost, \$650,000.

Buffalo, N. Y.—The House Committee on Commerce has ordered a favorable report on the bill establishing a marine hospital here, appropriating \$125,000 for the purpose.

Cambridge, Mass.—J. D. Rockefeller has offered to give \$1,000,000 for the advancement of Medicine and Allied Sciences at Harvard College provided that other friends of the university will raise a sum of money in the neighborhood of \$500,000 to be used by the Harvard Medical School for land, buildings or endowment. There can be little doubt that this condition will be speedily complied with.

Chicago, Ill.—A permit has been issued for the terminal station of the Lake Shore and Rock Island railroads in this city, and the estimated cost given is \$2,000,000. The entire improvement consists of the depot and office-building, the train shed and a power-house.

A press report states that 24 rich men, including Jews as well as Christians, of the more liberal sort, have subscribed \$93,000 out of \$100,000 for a new home for All Soul's Church, the liberal institution presided over by Jenkin Lloyd Jones. A six-story auditorium, workshop, school and club-house will be erected. The association will be known as "Lincoln Centre."

One of the largest private building projects in the history of Chicago, involving an expenditure of \$2,250,000, has been provided for by the purchase from C. W. Marks by Montgomery Ward of the property at the southwest corner of Michigan Ave. and Washington St., for \$600,000. The building planned for this ground will cost \$1,000,000, the authority for erecting sixteen stories having been granted by special city ordinance. The section to replace the eight-story structure between this and the new Ward Building will cost \$1,250,000, and will conform to the new building.

Denver, Col.—The Western Packing Co. has been incorporated with \$500,000 paid up capital, for the purpose of building and operating a packing plant in this city. J. J. Cahill, formerly with the Armour Packing Co., at Kansas City, is to be general manager of the new company, and a \$300,000 plant will be constructed at once.

Des Moines, Ia.—A number of improvements are projected at the State fair ground. There will be a coliseum, and the legislature will be asked to pro-

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

vide for a \$40,000 brick building. Permanent dining halls will be erected, new barns, etc., and other changes are projected.

Detroit, Mich.—The Newberry estate will erect an eight-story brick and stone building southeast corner Larned and Shelby Sts.; cost, about \$50,000. A. C. Varney & Co. are the architects.

The Lloyd Construction Co. will build the necessary building corner Greenwood and Piquette Aves. for the manufacture and construction of gas plants.

Durand, Mich.—A press report states that the Grand Trunk R. R. (F. W. Egan, Div. Supt., Detroit) and the Ann Arbor R. R. (W. F. Bradley, Supt., Durand) will erect a union depot here to cost \$36,000.

Durham, N. H.—The Legislature has appropriated \$25,000 for the new Agricultural Building.

Florence, Mass.—The Florence Mfg. Co. has awarded a contract for the construction of two brick buildings for the enlargement of its plant. The buildings will be 31' x 60' and 60' x 50', and two stories in height.

Gambier, O.—It is expected that work will begin shortly on the new dormitory at Kenyon College for which Senator Hanna gave \$50,000 last commencement. The architect's plans made by C. F. Schweinfurth, of Cleveland, show a stone building 128 feet long and two stories and a half high, of collegiate Tudor architecture, containing rooms for nearly fifty students, and club-room and assembly hall.

Goshen, Mass.—Further steps are being taken toward the establishment of a missionary medical school at this place. It will be for the training of medical missionaries, for general missionary training, and for the education of the children of missionaries. The amount of capital will probably be \$25,000. It is proposed to build a four-story building, with basement, 115 feet long and 30 feet wide, containing 80 rooms. The site selected is in that part of Goshen known as Lithia, and is owned by Alvan Barrus.

Lansdale, Pa.—Plans have been drawn by Frank Watson, 1208 Chestnut St., Philadelphia, for a convent to be erected here for the R. C. Church; cost, \$20,000.

Leavenworth, Kan.—Wm. P. Feth is drawing plans for a \$40,000 office-building to be erected in this city for Chas. Espenschied.

Lynn, Mass.—The plans for a bath-house at Lynn Beach contemplate a building on the same general lines of construction, and of somewhat the same appearance as the bath-house at Revere Beach. Red tile roofs will gleam above the head house in the Moorish tile, with walls of gray, accented here and there by red brick trimmings, and having ornamental iron railings at stairways and balconies. It will be two stories in height, with hip roofs, and will consist of a main building with a transverse wing at each end. Stickney & Austin, 50 Bromfield St., Boston, architects.

Minneapolis, Minn.—It is stated that plans are being prepared for a \$150,000 warehouse, to be erected here by Foley Bros. & Kelley.

Montclair, N. J.—The police of this town are hard at work trying to solve the mystery of the fire

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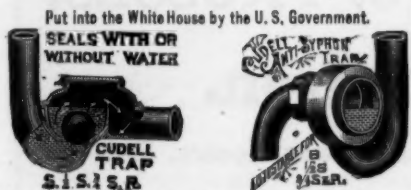
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

which almost destroyed the entire business portion of the town on January 26th. I. Seymour Crane, the owner of the burned block, has announced his intention to rebuild at once, and all the merchants whose stores were destroyed will resume business at an early date.

Nashville, Tenn.—Messrs. Brown & Brown have been commissioned as architects for the alterations at the State Capitol here, to cost \$25,000. Plans in preparation. They also have plans ready for figures for *Daily News* Building, five stories high, to cost \$15,000.

New Haven, Conn.—It is reported that Andrew Carnegie will donate \$1,000,000 to Yale University for the building endowment fund. It is also rumored that he will give Columbia University, of New York, a magnificent gift.

New York, N. Y.—It is stated that George G. Heyl has recently purchased the property at 136 to 144 W. 45th St. The old buildings on the site will be torn down at once to make room for a handsome fireproof theatre building.

Messrs. Neiberg Bros., 232 E. 10th St., who recently purchased the property at 226 to 240 E. 14th St., will improve by the erection of a six-story light brick and limestone front flat-houses to cost \$100,000. Saxe & Smallholder, 23 Park Row, are the architects, and plans call for the usual construction and equipment. Owners will build. Contracts not let.

A press report states that an eleven-story brick, stone and iron business building will be erected on the north side of 41st St., west of 6th Ave., for Mr. C. C. Shayne, 124 W. 42d St., at an estimated cost of \$60,000.

Plans have been filed for an eight-story brick office-building, to be built at 892 Broadway, by A. G. Gailatin, the cost of which is estimated at \$300,000. The building will have a frontage of 48 feet in Broadway and a depth of 189 feet. John B. Snook & Sons are the architects.

Joseph Jacobs, who owns 254 and 256 W. 42d St., has bought from Mary Rickaby, 258 W. 42d St., a four-story brownstone front building. H. D. Phillips was the broker. The property adjoins the 42d St. entrance to the American Theatre. It is thought that a large hotel will be built on the premises.

Eugene S. Reynal has awarded a contract to build a new country house for himself, to cost \$250,000, to Fountain & Choate. The house will be near the one being built for Paul Gilbert Theband, near Mamaronock Boulevard.

The Progress Club has chosen plans for its new club house to be erected on the northwest corner of 88th St. and Central Park West. The building will cost \$250,000, will be 75' x 100' in size, and six stories high.

Norristown, Pa.—Plans for Norristown's new court-house contemplate the entire rearrangement of the present structure and a large addition to it. The contractors, Miller & Son, of Pittsburgh, whose bid of \$153,354 was accepted by the County Commissioners, will soon begin work upon the structure. The court-house will contain in its two floors all the necessary business offices, three court-rooms, law library, judges' and jury's rooms, and the basement will be fitted up for transcribers.

Oneeyville, R. I.—Architects Sawtelle, Robertson & Shurrocks have drawn plans for the business block to be erected at the corner of Broadway and Valley St. for the Waterman estate. It will be triangular in shape, fronting 70 feet on Broadway and 30 on Valley St., covering about 35,000 square feet. The building will be two stories, brick, with limestone trimmings and gravel roof.

Passaic, N. J.—The Board of Education is to erect a \$40,000 school on Harrison St.

Philadelphia, Pa.—It is stated that the East Coast Milling Co. will shortly erect one of the largest flour mill and warehouse plants in the city, at Beach and Green Sts. and Delaware Ave. Two lots were recently bought for this purpose, for \$300,000. One is located at the southeast corner of Beach and Green Sts., while the other is immediately opposite with a frontage on Delaware Ave. and extending to the Port Warden's line. The structures will be fireproof, built of brick, with steel construction, from eight to ten stories high, and the contract for the work has been awarded to the George A. Fuller Co., of New York. The total cost of the plant, including the ground, will be \$1,000,000.

Pittsburgh, Pa.—J. Lewis Beatty, 146 Sixth St., has completed plans for a \$40,000 residence for J. C. Grier, to be erected in Shady Ave., near Woodland Road.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Press reports state that plans have been prepared by D. H. Barnham & Co., Rookery Building, Chicago, Ill., for a \$5,000,000 hotel to be erected at 6th Ave. and Grant St. for C. H. Frick.

Providence, R. I.—A concerted effort is being made to obtain a new armory for this city.

San Francisco, Cal.—Draughtsmen for Armour & Co., Chicago, are preparing plans for an immense warehouse and cold-storage plant, which that firm will erect here at a cost, it is said, of \$450,000. Plans provide for a plant which will have every modern equipment for the storage of food products.

Sault Ste. Marie, Mich.—C. S. Beadle will erect a three-story block to cost \$45,000. Martin & Stuart will erect a four-story block to cost \$40,000.

St. Louis, Mo.—The most important recent transaction in the development of New St. Louis was the award of the contract for the foundation of the new power-plant building of the Citizen's Electric Lighting and Power Co., to be built at the foot of Biddle St., at a cost of about two millions of dollars. It will be one of the largest plants of the kind in the world, and the contractors are under orders to rush the work with all possible speed, in order to complete it before the time for opening the World's Fair.

The old Round Top market building, at Broadway and Biddle St., owned by persons connected with the Merchants Bridge Terminal Railroad Co., will probably be torn away to give place to a new passenger station for the World's Fair.

The Memorial Hall Committee held a meeting at the Mercantile Club recently to take action toward establishing a permanent museum for the collection of war relics, trophies, etc. Addresses were made setting forth the needs of such a building and advocating that immediate steps be taken to secure same. The consensus of opinion was that a large fireproof building should be erected for a permanent museum, in which the relics owned by the different organizations could be placed on exhibition. Among the organizations represented at the meeting were the Blue and the Gray, Volunteer Firemen's Association, Missouri Historical Society and the World's Fair Fraternity Building Association.

St. Paul, Minn.—Dr. Rudolph Schiffman has purchased the Raudenbush Building at 6th and St. Peter Sts. and will remodel it into an office building at a cost of about \$25,000.

Toledo, O.—The Masonic Building Association will erect a new temple on Adams and Michigan Sts., to cost about \$100,000.

Walpole, Mass.—Francis R. Allen and J. Lawrence Berry, associate architects, 230 Devonshire St., Boston, have been selected to draw plans for the \$20,000 library to be erected here.

Washington, D. C.—Plans have been drawn by Marsh & Peter, 1503 Pennsylvania Ave., for a club-house, to be erected on Vermont Ave. and K St., to cost about \$135,000.

Williamsburg, N. Y.—A new church is to be erected by the parish of St. Barbara's Church, at Bleecker St. and Central Ave., at a cost of \$100,000. The new edifice will replace the present frame structure. Joseph Eppig, a brewer, has given a plot of ground, while other wealthy members of the parish have contributed much money. It is stated that the building fund has already reached \$20,000.

Winona, Ind.—Plans were completed recently at a conference between directors of the Winona assembly and summer school and business men of the City of Warsaw for the establishment of a large industrial school for boys at Winona Lake. Rev. Sol C. Dickey, secretary and general manager of the Winona Assembly, announced at the close of the meeting that an endowment fund of at least \$60,000 was assured, and that the school would be opened next September.

Worcester, Mass.—The Rev. James B. Brady is about to purchase some property on the "West Side" where, as soon as money enough can be raised, the Grace Church on Walnut St. will erect a large chapel.

The Worcester Polytechnic Institute is to spend about \$15,000 in erecting a new building for a forge shop and foundry. The new foundry will be erected on West St. and be of brick with composition roof.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Architects Frost, Briggs & Chamberlain have been engaged by the city to prepare plans for a new passenger station to take the place of the present union station.

The plans of Fuller & Delano, 425 Main St., are stated to have been accepted for an addition to the Central Exchange Building, to cost about \$75,000.

APARTMENT-HOUSES.

Boston, Mass.—Hemenway St., seven-sty bk. & st. apart., 50' x 100'; \$75,000; o., Francis Peabody, Jr., et al., Devonshire St.; a., E. T. Baker, 15 Exchange St.

Brookline, Mass.—Park St., 2 three-sty bk. aparts., 35' x 40' and 40' x 70'; comp. roofs; \$45,000; o., Lincoln Terrace Trust; a., Benj. Fox, Devonshire Building, Boston.

Cambridge, Mass.—Cambridge St., nr. Columbia St., Ward 2, three-sty bk. apart with stores; \$20,000; o., Josiah Grossman; a., E. E. Jordan; b., F. Rula.

Evanston, Ill.—Hinman Ave., cor. Lee St., three-sty bk. & st. apart.-house, 140' x 180'; \$80,000; o., Dr. P. L. McKinnle, S. Evanston; a., J. D. Atchison, 90 Washington St., Chicago.

Pawtucket, R. I.—N. Main St., four-sty bk. apart., gravel roof, steam; \$40,000; o., J. A. Angiers & Bro.; a., G. P. B. Alderman.

CHURCHES.

New York, N. Y.—Eighty-fifth St., nr. Park Ave., one-sty & gallery stone-front synagogue, 71' x 93'; \$60,000; o., Congregation Khevlath Jeshurun, 178 E. 79th St.; a., Geo. F. Pelham, 503 Fifth Ave.

One Hundred and Sixty-fifth St., nr. Amsterdam Ave., two-sty bk. & st. church, 70' x 105'; \$70,000; o., R. C. Church of St. Rose of Lima, care Most Rev. Mich'l A. Corrigan, 452 Madison Ave.; a., Joseph H. McGuire, 45 E. 42d St.

CLUB-HOUSES.

New York, N. Y.—W. Twenty-third St., Nos. 213-219, W. Twenty-fourth St., Nos. 206-212, eight & nine-sty & base, bk. & st. club-house, 75' x 197½', tile & copper roof; \$5,000; o., Y. M. C. A., 156 Fifth Ave.; a., Parish & Schroeder, 3 W. 29th St.; b., A. R. Whitney, Jr., & Co., 135 Broadway.

FACTORIES.

Ansonia, Conn.—Three one-sty bk. buildings, 75' x 325', 75' x 100', 75' x 75'; \$250,000; o., Farrell Foundry & Machine Co.; a., J. E. Brook, 45 Broadway, New York City.

Berlin, Wis.—One-sty bk. factory, 200' x 200'; \$50,000; o., Berlin Machine Co.; a., Nimmons & Fellows, Marquette Building, Chicago.

HOUSES.

Barrington, R. I.—2½-sty st. & fr. dwell., 63' x 68'; \$50,000; o., Leroy Fales, Pawtucket; a., Wright & Isham, Bangian Building, Providence.

Brooklyn, N. Y.—Fulton St., nr. Utica Ave., three-sty bk. store & dwell., 25' x 53'; \$5,500; o., M. Deining, 1774 Fulton St.; a., W. B. Wills, 17 Troutman St.

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(Houses continued.)

Avenue E, cor. E. 2d St., two-st'y & attic fr. dwell., 23' x 44'; \$5,000; o., C. A. Denison, 1124 Prospect Pl.; a., O. F. Anderson, 1231 Seventy-third St.

E. Eighteenth St., nr. Albemarle Road, two-st'y & attic fr. dwell., 31' x 40', shingle roof; \$5,000; o., A. K. Robbins, 173 E. 12th St.; a., B. Driesler, 1432 Flatbush Ave.

E. Seventeenth St., nr. Beverly Road, two-st'y & attic fr. dwell., 35' x 33', shingle roof, steam; \$5,000; o., G. W. Blanchard, 222 E. 17th St.; a., G. F. Roonen.

Bay Tenth St., nr. Bath Ave., 2 two-st'y & attic fr. dwells, 31' x 37', shingle roof; \$10,000; o., F. Slocum, 86th St. & 22d Ave.; a., B. Driesler, 1432 Flatbush Ave.

Bay Twenty-eighth St., nr. Benson Ave., two-st'y fr. dwell., 31' x 37', shingle roof; \$5,000; o., F. Slocum, 86th St. & 22d Ave.; a., B. Driesler, 1432 Flatbush Ave.

Bath Ave., cor. Bay 28th St., two-st'y & attic fr. dwell., 35' x 40', shingle roof; \$4,500; o., F. Slocum, 86th St. & 22d Ave.; a., B. Driesler, 1432 Flatbush Ave.

Bay Twenty-eighth St., nr. Bath Ave., two-st'y & attic fr. dwell., 20' x 39' 10", shingle roof; \$5,000; o., F. Slocum, 86th St. & 22d Ave.; a., B. Driesler, 1432 Flatbush Ave.

Bay Twenty-eighth St., nr. Bath Ave., two-st'y & attic fr. dwell., 30' x 39', shingle roof; \$5,000; o., F. Slocum, 86th St. & 22d Ave.; a., B. Driesler, 1432 Flatbush Ave.

Patchen Ave., cor. Putnam Ave., three-st'y bk. stores & dwell., 20' x 55'; \$6,000; o., H. Grassman, 1725 Broadway.

Jefferson St., nr. Myrtle Ave., three-st'y & attic bk dwell., 37' x 40', steam heat; \$8,000; o., H. J. Gans, 517 Bushwick Ave.; a., B. Finkensieper, 134 Broadway.

E. Twenty-third St., nr. Avenue F, two-st'y & attic fr. dwell., 32' x 35', shingle roof; \$4,500; o., D. Sauer, 1626 New York Ave.; a., B. Driesler, 1432 Flatbush Ave.

E. Twenty-second St., nr. Foster Ave., two-st'y & attic fr. dwell., 28' x 41', shingle roof; \$6,500; o., Margaret Morin, 141 Lot St.; a., B. Driesler, 1432 Flatbush Ave.

Eighteenth Ave., nr. 85th St., three-st'y fr. store & dwell., 20' x 50'; \$4,500; o., H. Grovers, 18th Ave., nr. 85th St.; a., J. W. Waudell, 74th St., nr. 11th Ave.

Nineteenth Ave., nr. 86th St., two-st'y & attic fr. dwell., 25' x 49', shingle roof; \$5,500; o., U. A. Kiser, 19th & Benson Aves.; a., C. Schubert, 1632 Bath Ave.

Park Pl., nr. Albany Ave., 4 three-st'y bk. dwells., 20' x 49', gravel roof; \$20,000; o., a. & b., Henry B. Hill, 438 Bainbridge St.

Prospect Pl., nr. Albany Ave., 4 three-st'y bk. dwells., 20' x 48'; \$20,000; o., a. & b., H. B. Hill, 438 Bainbridge St.

Greenwich, Conn.—Field Point Park, 3½-st'y bk. dwell., 34' x 60'; \$30,000; o., F. L. Fremont, 126 Banks St.; a., F. G. C. Smith.

Little Bear's Head, N. H.—Two-st'y fr. dwell., 35' x 44'; \$6,000; o., Miss M. I. Bachelder; a., Perkins & Bancroft, Haverhill.

Lowell, Mass.—NeSmith St., 2½-st'y fr. dwell., pitch roof, steam; \$5,000; o., T. Costello; a., H. P. Graves.

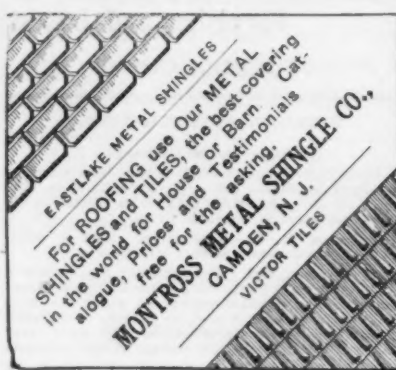
New York, N. Y.—Seventy-seventh St., nr. Central Park West, 3 five-st'y bk. & st. dwells.; \$375,000; o., James Carlew, 17 W. 123d St.

Fifty-second St., nr. Park Ave., four-st'y bk. & st. dwell., 25' x 93'; \$35,000; o., Moses Newberg, 44 Broadway; a., J. H. Friedlander, 244 Fifth Ave.

W. Fifty-third St., Nos. 23-25, four-st'y st. front dwell., 50' x 73', tile, copper & slate roof; \$75,000; o., Geo. Blumenthal, Hotel Savoy; a., Richard H. Hunt, 28 E. 21st St.

Fifth Ave., cor. 87th St., four-st'y st. front dwell., 54' x 122', terra-cotta roof; \$250,000; o., Henry Phelps, 3 E. 56th St.; a., Trowbridge & Livingston, 424 Fifth Ave.; b., Marc Edlitz, 480 Fifth Ave.

E. Ninety-sixth St., No. 8, five-st'y & base. st. front dwell., 30' x 76', plaster slate roof; \$40,000; o.,



BUILDING INTELLIGENCE.

(Houses continued.)

Morris J. Leonhardt, 114 E. 90th St.; a., Small & Schumann, 265 Broadway.

Cromwell Ave., nr. 169th St., two-st'y bk. dwell., 20' x 50'; \$6,000; o., August Kampner, 33 Inwood Ave.; a., Rudolf Werner, 1579 Bathgate Ave.

One Hundred and Eighty-eighth St., cor. Park Ave., East, two-st'y fr. dwell., 21' x 50'; \$5,000; o., Harriet E. Lockwood, 1718 E. 188th St.; a., J. J. Vreeland, 1965 Webster Ave.; b., Frank Lockwood, 718 E. 188th St.

Fifty-first St., nr. Madison Ave., 3 six-st'y st. front dwells., 22' x 74', copper, felt & tin roof; \$225,000; o., Jennie S. Parker (John H. Parker Co.), 125 Fourth Ave.; a., York & Sawyer, 155 Fifth Ave.; b., John H. Parker Co., 225 Fourth Ave.

One Hundred and Sixty-fourth St., nr. Stebbins Ave., 4 three-st'y bk. & st. dwells., 19' x 50'; \$26,000; o., Walter N. Knorr, Walden, Orange Co.; a., W. C. Dickerson, 149th St. & 3d Ave.

Ninety-first St., nr. 5th Ave., five-st'y bk. & st. dwell., 55' x 100', tile roof; \$300,000; o., Mrs. John H. Hammond, 14 E. 72d St.; a., Carrère & Hastings, 28 E. 41st St.

E. Eighty-seventh St., No. 6, six-st'y & base. bk. dwell., 38' x 77'; \$75,000; o., Henry Phipps, 3 E. 56th St.; a., Grosvenor Atterbury, 23 E. 63d St.

Graham St., nr. Morris Park Ave., 4 two-st'y fr. dwells., 20' x 40'; \$12,000; o., John Selfridge, Briggs Ave. & 201st St.; a., F. D. Miller, 3852 Southern Boulevard.

Jackson Ave., nr. 166th St., 2 two-st'y bk. dwells., 20' x 55'; \$14,000; o., a. & b., J. H. Lavelle, 1118 Jackson Ave.

Fulton Ave., cor. 174th St., 7 two-st'y bk. dwells., 18' x 18' x 60'; \$46,500; o., R. Salla C. Guidera, 734 Cauldwell Ave.; a., W. C. Dickerson, 149th St. & 3d Ave.

Teasdale Pl., nr. Cauldwell Ave., three-st'y bk. dwell., 22' x 25' x 65'; \$7,000; o., Pat'k J. Owens, 887 Trinity Ave.; a., Bronx Architectural Co., 3307 Third Ave.

Fifty-first St., nr. Madison Ave., 2 five-st'y bk. & st. dwells., 18' x 20' x 65'; \$100,000; o., Mrs. J. S. Parker, 823 West End Ave.; a., Chas. I. Berg, 571 Fifth Ave.; m'n, J. H. Parker Co., 225 Fourth Ave.

Noroton, Conn.—Three two-st'y fr. dwells., shingle roof, steam; \$15,000; o., Tokonoko Co.; a., A. M. Paddock, Springfield, Mass.

Olneyville, R. I.—Three-st'y bk. & terra-cotta parish-house, shingle roof, hot water; \$30,000; o., Church of the Messiah; a., B. S. D. Martin.

Omaha, Neb.—Sixteenth and Canton Sts., two-st'y bk. dwell., 25' x 52'; \$5,000; o., Fritz Miller; a., J. P. Guth.

Waterbury, Conn.—Hillside Ave., fr. dwell., shingle roof, hot water; \$15,000; o., C. P. Goss; a., E. H. Randall, New York City.

Worcester, Mass.—Montague and Baker Sts., 2½-st'y dwell.; \$5,000; o., J. G. Murdoch; a., A. J. Harrington.

Sniffeld St., fr. house, 27' x 56'; \$5,000; o., Clarence E. Anderson; a., Erik Eriksen.

OFFICE BUILDINGS.

New York, N. Y.—Pine St., Nos. 24-26, three-st'y st. front office-building, 56' x 57' 9", tile & asphalt roof; \$200,000; o., Speyer & Co., 30 Broad St.; a., De Lemos & Cordes, 130 Fulton St.

Tremont Ave., nr. Monterey Ave., five-st'y bk. office-building, 26' 9" x 95' 2"; \$35,000; o., Rowland W. Thomas, 4221 Third Ave.; a., Bronx Architectural Co., 3307 Third Ave.



BUILDING INTELLIGENCE.

STABLES.

Boston, Mass.—Rutherford Ave., nr. Baldwin St., Ward 4, 3 three-st'y bk. stables, 40' x 64', flat roof, steam; \$24,000; o., George S. Hall estate; a., T. M. Sargent.

Brooklyn, N. Y.—Metropolitan Ave., nr. Vanderpoort Ave., two-st'y fr. stable, 60' x 70'; \$2,000; o., T. B. Chapman, 1105 Metropolitan Ave.; a., D. H. Vail, 51 N. 1st St., Jamaica.

Church Ave., nr. Buckingham Road, fr. stable, 35' x 65', shingle roof; \$3,500; o., W. A. Engeman, 215 Montague St.; a., F. H. Quimby, 99 Nassau St., N. Y.

New York, N. Y.—Exterior St., nr. 149th St., two-st'y bk. stable, 31' x 55', cement & gravel roof; \$4,000; o., Willson, Adams & Co., 149th St. & Harlem River; a., H. S. Baker, 494 E. 138th St.

One Hundred and Sixty-second St., nr. Jerome Ave., three-st'y fr. stable, 66½' x 150', tar & gravel roof; \$7,000; o., Geo. H. Huber, Jerome Ave. & 162d St.; a., John E. Kerby, 722 Tremont Ave.

Forty-eighth St., Nos. 318-320, five-st'y bk. & st. stable & carriage-house, 50' x 90'; \$35,000; o., Marie & William Brewster, 264 W. 57th St.; a., C. H. Caldwell, 160 Fifth Ave.

STORES.

Brooklyn, N. Y.—Broadway, cor. Saratoga & Jefferson Aves., three-st'y bk. stores & lofts, 39' 10" x 34'; \$24,000; o., C. Miller, 685 Willoughby Ave.; a., C. Brandner, 686 Bushwick Ave.

Third Ave., 3 one-st'y bk. stores, 25' x 65'; \$9,000; o., P. Wich, 217 Lee Ave. and H. Maher, 417 Grand St.; a., H. Pohlman, 198 Fifty-third St.

New York, N. Y.—Broadway, No. 892, E. Nineteenth St., No. 27, eight-st'y bk. & st. lofts & stores, 48' x 180', asphalt roof; \$300,000; o., Almy G. Gallatin, 670 Fifth Ave.; a., Jno. B. Snook & Sons, 261 Broadway.

Jerome Ave., nr. Highbridge Road, one-st'y fr. stores, 30' x 32' x 100'; \$5,000; o., William L. Hardy, 176th St. & Grand Boulevard & Concourse; a., Frederick C. Browne, 143 W. 125th St.

THEATRES AND HALLS.

Brooklyn, N. Y.—Willoughby St., cor. Pearl St., bk. theatre, 45' x 100', gravel roof, steam; \$60,000; o., Henrietta Levey, 61 Debevoise St.; a., J. B. McEatriek, 1402 Broadway, N. Y.

COMPETITIONS.

LIBRARY BUILDING.

[At Boston, Mass.]

Competition for a new Library Building for the Boston Athenaeum. Architects may obtain the programme of competition by applying to the Secretary of their local Chapter of the A. I. A., or to J. K. COOLIDGE, JR., Secretary of the Building Committee, Boston Athenaeum. 1366

MONUMENT.

[At Philadelphia, Pa.]

Competitive designs for the erection of a monument in honor of the soldiers, sailors and marines who served in the war for the suppression of the rebellion are invited to be submitted on or before March 3, 1902. Competition open to any architect who is a citizen of the United States. Copy of a printed programme will be furnished on application to Gavin Neilson, clerk of committee on soldiers' monument. 1364

[*"A Hit, a Palpable Hit!"*—HAMLET.]

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PROPOSALS.

SEWERS.

[At Salt Lake City, Utah.]

Office of the Board of Public Works, Salt Lake City, Utah. Sealed proposals will be received at this office until February 28th, 1902, for constructing all pipe sewers that may be ordered by the City Council during the year 1902. Instructions to bidders, together with the specifications and forms for contract and bond, can be obtained upon application at the office of the Board of Public Works or the City Engineer, JOHN E. DOOLY, chairman. Louis C. Kelsey, city engineer. 1364

BUILDING.

[At Devil's Lake, N. D.]

Bids will be received by M. H. Brennan, until February 24 for erecting a brick block at Devil's Lake. 1364

BRIDGES.

[At Chicago, Ill.]

U. S. Engineer Office, 1637 Indiana Ave., Chicago, Ill. Sealed proposals for manufacture and erection of twenty-one riveted steel highway bridges over Illinois and Mississippi Canal will be received here until March 6, 1902. Information furnished on application here, or to Assistant Engineer Jas. C. Long, Princeton, Ill., and Assistant Engineer L. L. Wheeler, Sterling, Ill. J. H. WILLARD, Maj. Engrs. 1365

PROPOSALS.

OPERA HOUSE.

[At Bluefield, W. Va.]

Bids are wanted March 1 for erecting a three-story brick opera house and lodge room, 60' x 160'. A. H. LAND, Sec'y, Bluefield. 1365

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 10, 1902. Sealed proposals will be received at this office until 2 o'clock P. M., on the 18th day of March, 1902, and then opened, for the construction, including plumbing, heating and ventilating apparatus, electric wiring and conduits of the U. S. Post-office at New Iberia, La., in accordance with drawings and specifications, copies of which may be had at this office or the office of the Postmaster at New Iberia, La., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1365

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 4, 1902. Sealed proposals will be received at this office until 2 o'clock P. M., on the 17th day of March, 1902, and then opened, for the general construction (except heating apparatus and electric wiring and conduits) of the U. S. Court-house and Post-office building, Indianapolis, Indiana, in accordance with the drawings and specifications, copies of which may be had at the discretion of the Supervising Architect on application at this office or the office of the architects, Rankin & Kellogg, 1012 Walnut St., Philadelphia, Pa. Applications

PROPOSALS.

must be accompanied by a certified cheque for \$250 which will be held at this office until the return of the drawings and specifications. JAMES KNOX TAYLOR, Supervising Architect. 1365

DORMITORY.

[At Fulton, Mo.]

Bids are wanted March 6 for erecting a three-story pressed brick dormitory for the Missouri School for the Deaf, at Fulton. N. B. McKEE, Supt. of School. 1365

JAIL AND SHERIFF'S RESIDENCE.

[At Vincennes, Ind.]

Bids are wanted until March 5 for erecting a jail and sheriff's residence. J. D. WILLIAMS, Co. Aud. J. W. Gaddis, archt. 1365

SCHOOL.

[At Scottsville, Ky.]

Bids are wanted March 1 for erecting a school in Clinton District. R. E. STOVALL, chmn. 1365

HALL.

[At Rockford, Ill.]

Bids are wanted until March 1 for erecting a memorial hall building; cost about \$30,000. J. B. WHITEHEAD, Sec'y Bldg. Com., 408 Brown Bldg. Bradley & Carpenter, archts., 226 S. Main St. 1365

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PROPOSALS.	PROPOSALS.	PROPOSALS.
Treasury Department, Office of the Supervising Architect, Washington, D. C., February 1, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 15th day of March, 1902, and then opened, for the construction (except heating apparatus, electric wiring and conduits) of the U. S. Court-house and Post office at Cumberland, Md., in accordance with drawings and specification, copies of which may be had at this office or the office of the Postmaster at Cumberland, Md., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1364 COURT-HOUSE AND JAIL. [At Grand Island, Neb.] Bids will be received by J. L. Schaupp, county clerk, at his office, Grand Island, Hall County, Nebraska, until February 27, 1902, for the construction of a court-house and jail building. Plans and specifications are on file at the county clerk's office, Grand Island, Neb., at the office of Thos. R. Kimball, architect, 603 McCague Building, Omaha, Neb., and at the office of Dwight Heald Perkins, Steinway Hall, Chicago, Ill. J. L. SCHAUPP, county clerk. 1364 SCHOOL. [At Monmouth, Ill.] Sealed bids for the construction of an eight-room	school-building will be received by the Board of Education, Monmouth, Ill., up to February 25, 1902. For plans and specifications apply to O. S. French, secretary, or Reeves & Ballie, architects, Peoria, Ill. O. S. FRENCH, Secretary Board of Education. 1364 FREIGHT-HOUSE, BRIDGES, ETC. [At Matanzas, Cuba.] Office of District Engineer, Matanzas, Cuba. Sealed proposals for the erection of a freight-house, pier, railroad and bridges at Matanzas, will be received at this office until March 6, 1902. Information furnished on application. JNO. S. WINN, Captain 2d Cavalry, District Engineer. 1364 STORE AND OFFICE BUILDING. [At Glenwood, Minn.] The undersigned hereby gives notice that sealed proposals for the erection of a two-story pressed-brick store and office building at Glenwood, Minn., including all labor and material, will be received by E. M. Webster until the 24th day of February, 1902. All bids must be in strict accordance with plans and specifications prepared by Charles S. Sedgewick, architect, 1027 Lumber Exchange, Minneapolis, which may be seen at the office of the architect, on and after February 8, 1902, and also at office of E. M. Webster,	Glenwood, Minn. (Signed) E. M. WEBSTER, Glenwood, Minn. 1364 BUILDING. [At Bremerton, Wash.] Sealed proposals will be received at the bureau of yards and docks, Navy Department, Washington, until March 8, 1902, for constructing a brick building at the navy yard, Bremerton, Wash. Appropriation, \$67,000. Plans and specifications can be seen at the bureau or at the navy yard named, or will be furnished upon deposit of \$10 to secure their return. MORDECAI T. ENDICOTT, chief of bureau. 1364 PAVING, ETC. [At Hoboken, N. J.] Bids will be received at office of city clerk until February 26 for curbing, paving with Belgian block, etc., on 7th St. JOHN HAGGERTY, city clerk. 1364 STEEL AND IRON WORK. [At Fort Monroe, Va.] Engineer Office, U. S. Army, Custom-house, Norfolk Va. Sealed proposals for furnishing and delivering steel and iron work for six range towers at Fort Monroe, Va., will be received here until February 27, 1902. Information on application. 1364