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ENGINEERING

DECORATION

TICKNOR & COMPANY

CONSTRUCTION

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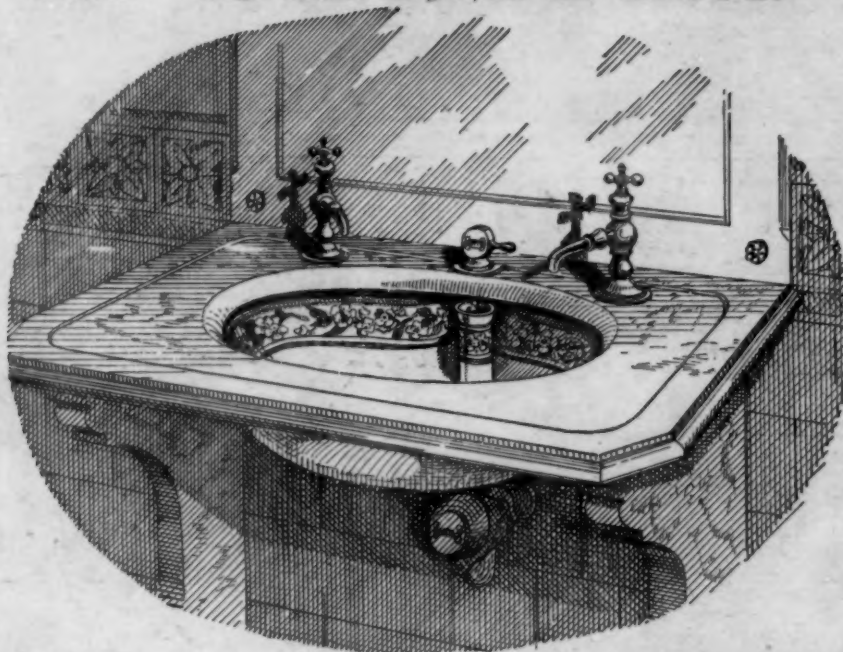
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JUNE 21, 1890.



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WE imagine that some of our readers will be surprised to hear that architects in Canada are "protected" by a tariff, which places an *ad valorem* duty on all plans of buildings imported into the Dominion, calculated upon the proposed cost of the buildings represented by the plans. What the rate is, we do not know, but the tax is conscientiously collected. The duty is avowedly imposed for the protection of Canadian architects, and those of our own people who are called upon to practise in Canada will do well to look out for it. It is obvious that a duty amounting to a very small percentage on the cost of a building would be a very large percentage on the architect's fees, and architects should be particular to have it clearly understood with clients in the Dominion, that all duties and expenses of importation of drawings are to be at the cost of the latter.

A CHIMNEY is being built at Freiberg, which will give a draught depending upon a column of heated vapor seven hundred and ten feet high. The chimney itself is only four hundred and fifty feet high above its foundation, but it stands on a rock two hundred and sixty feet above the smelting works which will use it, so that the total height of the flue above the fire will include the pipe leading to the chimney proper. The interior diameter of the chimney is fifteen feet, the exterior diameter, at the base, being forty feet. It is a disputed point among engineers whether very high chimneys are worth their cost, by reason of the advantages which they offer in strengthening the draught through them, and the opinion is very general that the limit of usefulness in this respect is reached at about three hundred feet, any height beyond this being, perhaps, valuable for carrying noxious fumes so much further from the ground, but not for any other purpose. In the Freiberg chimney, there seems to be no special necessity for getting rid of noxious fumes, and the question of the advantage gained in draught will come up in a way which should admit of its decisive settlement.

ACCORDING to *La Semaine des Constructeurs*, Brussels is to be made a seaport. It is already connected with the sea by means of a canal, which enters the Schelde above Antwerp; but it seems to be ambitious to share in the great commercial prosperity of Antwerp, and the canal is to be deepened and widened, so that vessels of a thousand tons can

come directly to the city. The work is to be done, under the direction of an English engineer, by an English syndicate, at the head of which are Lord Brassey and Lord Sheffield.

IN speaking of the criminal action just concluded against the managers of the great copper speculation of two years ago, the *Revue Industrielle* recalls the circumstances of the conspiracy by which hundreds of innocent people were ruined. As most people know, the speculation was carried on by the Société des Métaux. This was originally a comparatively harmless affair, formed by uniting the two great metal-manufacturing establishments of MM. Secretan and Laveissière & Son. Only two hundred thousand dollars was ever actually paid in on the subscriptions to the stock, the remainder of the shares, to the value of five million dollars, being divided between the owners of the two establishments taken in charge by the Société. This was in 1881. More capital being required to carry on operations, bonds were issued to the amount of four million dollars; and early in 1888, when the great speculation was already begun, the capital was increased to ten millions. Meanwhile, M. Denfert-Rochereau, the president of the great banking-house of the Comptoir d'Escompte, was made a director in the new society. In October, 1887, the price of copper had fallen about to its lowest point, and M. Secretan conceived the idea of forcing it up by monopolizing the production, which was soon put into execution. In June, 1888, M. Siegfried, manager of the Comptoir d'Escompte, resigned, because he disapproved of the loans made to the Société des Métaux. Every one knows the result of the transactions of the next few weeks, which ended in the bankruptcy of the Société des Métaux, the Comptoir d'Escompte, and M. Secretan, the suicide of M. Denfert-Rochereau, and the arrest, trial and punishment of all the principal actors in the affair.

WE like to chronicle all the improvements in school-houses as soon as possible after they are given to the world. The latest appears to be one adopted in Mannheim, where a school-house has just been completed, which, in addition to all the other recent German devices, such as gymnasium, floors of hard wood laid on asphalt, and swimming-baths for boys and girls, contains four prison-cells for refractory pupils. This appears to be a complete novelty. The building contains what has, we believe, been hitherto unknown in German school-houses, but is quite common in modern French buildings of the kind, a lunch-room, where the young children will, in winter, be fed with bread and milk, to save them the exposure and fatigue of going home at noon; but prison-cells are appliances of instruction of which Mannheim seems to be, so far, the sole possessor.

THE largest sailing-ship in the world is soon to be launched in Glasgow. It is to have five masts, and is built for a firm of merchants in Bordeaux, who have not only larger sailing-ships, but more of them, than any other mercantile firm or association in existence. The hull of the new vessel is of steel, three hundred and seventy-two feet long, with a double skin, so arranged that water can be admitted into the space between the inner and outer skin, as well as into a large watertight compartment in the centre of the hold. This enables the ships of this firm to take in water-ballast to any required extent, and secures for them great advantages in lessening the duration and expense of their trading voyages, in which it is often necessary for them to discharge cargo at one port, and go thence in ballast to another, perhaps thousands of miles away, to take in a return cargo. The five masts of the new ship are of steel, all square-rigged except the mizzen-mast, and spreading three-quarters of an acre of canvas. Power for the steam windlasses is furnished by two boilers, but there is no auxiliary steam-propelling apparatus, and even the steering-wheel is operated by hand. The measured gauge of the vessel is thirty-six hundred tons, and the guaranteed capacity sixty-one hundred tons. The compartment for water-ballast, independent of the space between the two skins, has a capacity of twelve hundred tons; and the space between the skins will hold about seven hundred and fifty tons more.

THE cable railway has made its way more rapidly abroad than the electric road, which has nearly supplanted it here.

In Paris, a cable line, exactly like ours, is now nearly ready for operation between the Place de la Republique and the most distant part of Belleville; and two more are to be immediately constructed, one at Montmartre, and the other at Menilmontant. All these places are hills, approached by streets of too steep a grade for rapid travelling in omnibuses or horse-cars, and the cable railway gives a very suitable means for improving the means of communication. In the Belleville line, which is about a mile and a half long, power is supplied by a fifty-horse-power engine, which seems small for the work required of it. The cables run over pulleys, as with us, situated midway between the rails, and the cars are furnished with the familiar steel "grips." Trains of two cars are to be run, each car having seats for twelve passengers, and standing-room for ten more, and a train will start each way every five minutes. The fare is moderate—one cent mornings and evenings, and two cents in the middle of the day.

IN these days, when a little sentiment about dwelling-houses is getting to be very popular in this country, some one could do a service to the cause of domestic contentment, and probably consult his own interest, by making a collection of names and inscriptions on houses in various parts of the world. Nearly every country has its own way of expressing the affection of citizens for their homes, but all the modes have their advantages. In England, it has long been the fashion to give names, even to very modest dwellings; and, although the taste displayed in the selection of a name is not always remarkable, and one is occasionally disgusted by the burlesque of the custom which enables a speculating builder, as he thinks, to sell a row of miserable apologies for houses to better advantage by christening them "Woodbine Villas" or "Claribel Crescent," the traveller is often pleased, and sometimes touched, at the modest refinement which knows how to make of "Daisybank" or "The Ferns" a habitation as attractive as any palace could be. In Italy, although inscriptions are rare, and people live in flats instead of detached houses, one sometimes sees the door of the tenement guarded by the Madonna, or some saint or angel, painted on the wall beside it, in a sufficiently rude style, but with an intention which merits respect and interest. In Germany and Switzerland, the place of names and holy effigies is taken by inscriptions, of which thousands are still to be seen, dating in some cases from the thirteenth or fourteenth century. In the more modern Swiss houses, it seems to be the rule to commemorate the names of the owners of the structure, and of the master-builder, following this either by an invocation of divine protection upon the house and its occupants, or by a sentence expressive of domestic comfort and peace.

THE *Bautechnische Zeitschrift* has collected many inscriptions of the kind, some of which are worth quoting in the original, for it is not easy to translate them without losing the rhyme and force of the German. Among the best is the brief one, "Eigner Heerd—ist Goldes werth"; a similar one, from Styria, can be exactly translated: "My nest—is the best." One which is repeated so often as to be rather tiresome is "Klein—aber mein"; and another good one takes the form, "Willst haben Gemach—bleib unter Deinem Dach." A Latin inscription, which has a strong flavor of convent composition, comes from Homburg: "Beatus ille homo—qui est in sua domo—et sedet post fornacem—et habet bonam pacem." From the Rhine comes a pious wish: "Des Herrn Segen sei im Haus—Unfried und Unglück bleib daraus"; and a pretty one from Switzerland: "Wo Fried und Einigkeit regiert—da wird das ganze Haus geziert." In the Altenburg district is another: "Des Hauses Schmuck ist Reinlichkeit—des Hauses Glück Zufriedenheit—des Hauses Segen Frömmigkeit"; and, from an undescribed source: "Herr, segne diese Friedenstatt—bis, wer drin wohnt, lebensatt—zu seiner letzten Ruhestatt—nur ein paar Bretter nöthig hat." It is curious that the gentle and pious inscriptions date mostly from within the last hundred years. Those remaining from an earlier period, of which there are many, reflect the coarse and rough manners of the age in which they

were composed. In those days, apparently, the art of architectural criticism was extensively practised, for many of the inscriptions are addressed to the persons who are presumed to be making unfavorable observations on the building. One from Colmar, dating from 1830, says: "Ich bauen vir mich—sih du fir dich." Another, from Eckwersheim, near Strassburg, is even less polite: "Esel was guckst—guck vor dich." A third, also, from Colmar, but dating only from 1626, probably expresses the experience of the architect: "Eh veracht—als gemacht"; and the Town-hall at Wernigerode, built in 1492, still bears the words: "Einer achts—der andere verlachts—der dritte betrachts—was machts?" Later, it was not unusual to find the financial reflections of the proprietor, after the completion of the work, immortalized upon its walls in such sentences as this: "Wer will bauen—muss in den Beutel schauen," from the Rhine; or another, which is good enough to close with: "Willst du den Bau nicht weinen—bau nur mit eignen Steinen."

IT is a matter of some curiosity to see what are the requirements to be fulfilled in the erection of one of the club-houses which the student "corps" in the German universities, like our college societies, are beginning to erect for their own use. One of the first of these is the house of the corps "Teutonia," at Jena, which is described in the *Deutsche Bauzeitung* by its architect, Herr Hirsch. According to our ideas of German student societies, the most important room in the building would be the one devoted to duelling, but we discover none expressly designated in that way, so perhaps the sword-fights take place in some other building. If there is no duelling-room, however, there is a fine beer-room, or "kneipe," in the first story, with a "buffet" attached, and a game and reading room opening out of it. Beside the beer-room is a wardrobe for society costumes and insignia, and in the rear are the kitchen and janitor's room. The second story contains a large "fest-saal," or entertainment room, in front, with an ante-room and a ladies' dressing-room—a novelty in students' club-houses, we should imagine. The rear portion has a third story, which is devoted to bedrooms for members of the "corps" who wish to use them. The cellar is used for storage. The building was erected at the expense of former members of the corps.

THE *Chicago Evening Post* is responsible for the following story, of which our readers may believe as much as they please. According to this lively journal, Mr. Allen Greenough, a former resident in China, when in Chicago, on his way home to New York, mentioned a visit which he had paid to a "famous mandarin" at his summer residence on the banks of the Tsang River. One very hot day, the mandarin found his guest vainly trying to keep cool under the shade of a tree in the garden. He expressed his sympathy with his discomfort, and then told him that he would find a cooler place for him. Mr. Greenough followed him, somewhat unbelieving, to a little mound, in which was a door. The door opened into a tunnel, leading downward by an easy incline, and ending in a large and very cool room. "Through the top" of this apartment came "a flood of soft, golden light," which showed to advantage the furniture, "of delicately-woven bamboo-work." Wondering where the light came from, Mr. Greenough inspected the place more closely, and discovered that the walls and ceilings of the room were entirely of glass, and that outside the glass was the water of a little lake, which communicated with the river. It is not surprising that the guest expressed astonishment and pleasure at this novel apartment, and his host, smiling, "touched a button," whereupon "a hundred incandescent lamps, suspended outside the room at different altitudes in the water," came into action, and revealed "the beauties of subterranean life." "Fish of all kinds," by which, we suppose, is meant the subterranean kinds, "swam leisurely about, and beautiful sea-plants were growing luxuriantly." It may be imagined that an apartment at the bottom of a lake, from which "beautiful sea-plants" and subterranean fishes could be seen by merely touching a button, proved a most attractive resort for the American visitor, who, as he says, "spent more than half his time" there, and believes, with reason, that the most exquisite of the country-houses of his native land contains nothing so interesting.

RELIGIOUS ARCHITECTURE.¹—XI.

V. CHRISTIAN ARCHITECTURE.—THE BYZANTINE PERIOD.

SOMEWHAT later, toward the end of the fifth century, another modification was introduced at Constantinople and in Syria, and in the churches of the Orient, and it seems also certain that it found its way into the basilicas of Gaul. The transept was divided into three parts by two partition

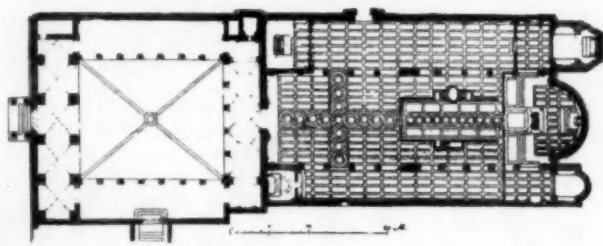
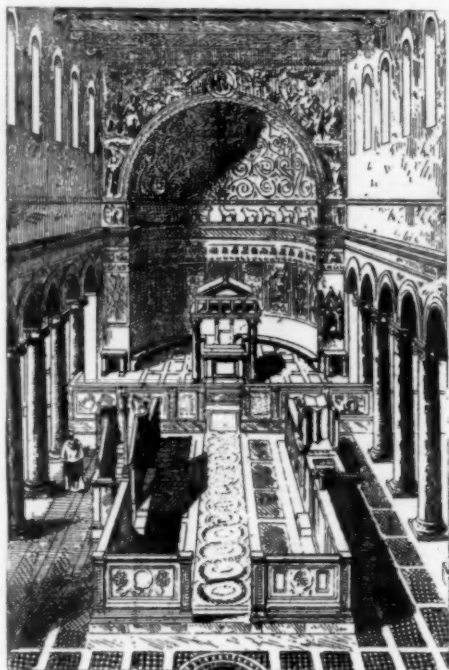


Fig. 9. Interior View and Plan of the Basilica of S. Clemente, at Rome (9th Century).

walls, prolonging the colonnades of the principal nave, and provided with broad, arched openings. The *altarium* thus became a square, isolated space, surrounded by four walls with arched openings. It was then possible to raise a roof above it, and, by making bays in the upper part, the light could be thrown full into the interior, on the holy place, whose position was indicated without, by a lofty tower rising directly over the altar. This tower, *turris*, or, as it was more generally termed, *domus ara*, *domus altaris* (house of the altar), from which the word dome was afterward derived, was, in fact, a campanile; it was roofed with gilded wood, and comprised three stories of open arches.²

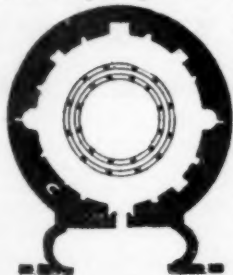


Fig. 10. Plan of S. Costanza, at Rome (4th Century).

With this modification in the form of the *altarium*, a change was effected in the destination of the apse; it soon became customary to erect a small monument in it, back of the altar, designed to receive the relics of a martyr: hence the name *martyrium*, which was applied later to the old *altarium*. Bays were then pierced in the circular wall of the apse to let a little light into this part of the structure, which had hitherto been

lighted solely through the naves. It seems to be clearly established³ that, from the sixth century, this new disposition led to the complete opening of the apse, which now merely rested on columns; the real enclosing wall was carried farther back, forming an apsidal gallery, such as is to be seen in the greater part of later churches. All these changes tended to the formation in front of the apse, which was itself gradually set farther and farther back, of a quadrangular space for the accommodation of the singers and inferior clergy, who had previously been relegated to the central nave; it was in this way that the choir originated.

From the sixth century, likewise, advantage was taken of the three-aisled arrangement in order to place the church under the protection of three different patrons. For this purpose it was necessary only to add a semicircular recess at the head of each lateral nave. The aisles became thus a repetition, on a reduced scale, of the central nave, and fulfilled the same functions.

A considerable number of subsidiary constructions were grouped around the main edifice. The *secretarium*, *vestiarium*, or *thesaurus*, for example, which became the sacristy, abutted against the rear wall or the apse itself. Often there were square cells, as at S. Clemente (Figure 9), at the head of the side aisles, where the supplementary apses were built later; sometimes there were genuine diminutive apses engrafted on the main apse, as at St. Felix of Nola.

From very early times, the outer sides of the aisles were flanked with chambers, *exedrae*, or oratories with small apses where the faithful could meditate in seclusion; these rooms communicated with the aisles through broad doors, and were the origin of our side chapels. They were often used for burials.

There were three or five doors in the principal façade, according to the number of naves, and each corresponded in importance to the interior division to which it gave access. In front there was a *narthex*, or porch, which was sometimes reduced to a mere awning, and sometimes formed an extensive portico closed at both extremities. The *narthex* was reserved for those persons who were not permitted to witness all the rites; it took the place, in this respect, of the space formerly devoted to them at the bottom of the main aisle.

These subsidiary dispositions were all subject to modifications, as, for example, in churches built after the plan of the Basilica Ulpia, in which there was a tribune at each extremity. In such cases the entrances were all on the sides. St. Vitalis and St. Agricola in Auvergne are constructed in this way. Other examples will be found in the Holy Sepulchre, at Aix la Chapelle, at Germigny les Prés, and so forth.

The *pronaos* was usually formed by the first bay of the naves, but it was sometimes a distinct transverse gallery, with colonnades. This disposition was oftenest adopted, when the aisles were of two stories, and it was necessary to establish communication between the upper galleries through a tribune above the *pronaos*.

There was a vast court or *atrium* in front of the church, which was frequently surrounded by triple or quadruple porticos; it became in time nothing more than a walled yard where the multitude of catechumens and penitents could remain, outside of the sacred edifice. In the centre stood the *cantharus* or bowl where the faithful performed their ablutions, symbolizing inner purification; a survival of this tradition is to be found to-day in the dispensing of holy water at the entrance to the churches.

After the sixth century, as most of the basilicas had come under various monastic communities, it became necessary to erect near them special buildings for the use of the brothers. These were built on one side; a court surrounded by cells was the disposition most naturally suggested to answer the new needs. As the *atrium* was daily declining in importance, owing to the great decrease of the number of catechumens in an almost wholly Christianized society, as well as to the adoption of less rigorous measures regarding the exclusion of penitents, the porticos of the *atrium* were converted into the courts or cloisters of the monastery.

Such was the usual type of the early churches, appropriated from existing antique models. But, as we have said, it was not the only type. The Romans frequently made use of the circular form for their great public halls, and we find imitations of these constructions among the earliest specimens of

¹ From the French of P. Planat, in Planat's "Encyclopédie de l'Architecture et de la Construction." Continued from page 160, No. 755.

² J. Quicherat. "Restitution de la Basilique de Saint-Martin de Tours."

³ Examples: S. Severinus of Naples, S. Cosmas and S. Damian, in 528, and S. Maria Maggiore, from 440, according to Rossi.

Christian architecture. The rotunda is sometimes simple, as in S. Pietro-e-Marcellino, at Rome, attributed to Constantine; and as in St. George at Salonica, which is probably of the same period; sometimes the rotunda is entirely surrounded by

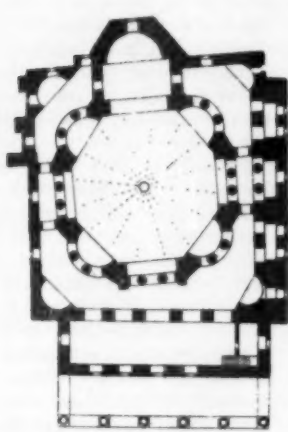


Fig. 11. Plan of the Church of SS. Sergius and Bacchus, at Constantinople (6th Century).

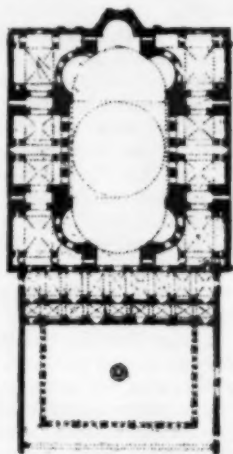


Fig. 12. Plan of St. Sophia, at Constantinople (6th Century).

a circular passage, as in S. Costanza (Figure 10) at Rome, and the Anastasis at Jerusalem, built by Constantine. The Roman prototype of this sort of structure may be seen in the rotunda of Nocera and in that on the Caelian Hill at Rome — now S. Stefano Rotonda, but doubtless a market originally — and, in



Fig. 13. Section of St. Sophia, at Constantinople.

general, in the great halls of the Thermae. All these edifices were vaulted; in the annular rotundas, the circular passages were surmounted by one and sometimes two stories, above which were the openings lighting the lofty central nave.

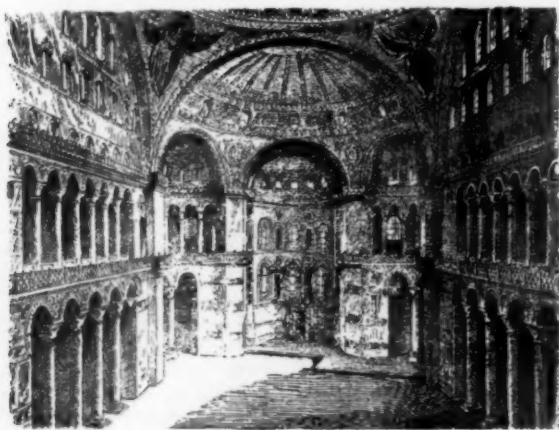


Fig. 14. Interior of St. Sophia (6th Century).

The baptistries were frequently constructed on the same plan, as the baptistry of St. John at Ravenna and that of S. Lorenzo at Milan show.

Among Byzantine churches, with a rotunda, we notice first the church of SS. Sergius and Bacchus (Figure 11), built at Constantinople, during the reign of Justinian; it has an

octagonal cupola flanked by four niches, the axes of which are at an angle of 45° with the axes of the cupola itself. This disposition, completed by niches at the outer angles, establishes the transition between the central octagon and the square of the outer wall. In the later churches of St. Elias of Salonica (eleventh century) and St. Elias of Brusa (thirteenth century), the form of the cross is more sharply defined, but they nevertheless have all their parts symmetrically disposed around a central cupola, and may be referred to the circular type of churches.

The church of St. Sophia (Figures 12, 13, 14) was the first great religious edifice of the Eastern Empire; this original and peerless model of Byzantine architecture was begun in the

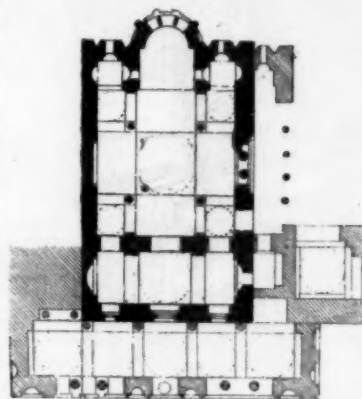


Fig. 15. Plan of the Theotokos, at Constantinople (9th Century).

year 532; it was dedicated a first time in 537, and again in 559. The architects were Anthemius of Tralles and Isidorus of Miletus. The basilical form was preserved, but a system of vaulting was introduced which presents new and most striking peculiarities. Over the centre of the principal nave rises a flat dome resting on pendentives; east and west of the dome-covered space about semicircles with semidomes, acting as supports to the main dome, the other sides of which

are buttressed. With the exception of the foundation course of masonry and the course on which the principal dome rests, the whole structure seems to be of brick.

Among edifices built in imitation of St. Sophia, we must rank St. Sophia of Salonica, in which the lateral half-domes are omitted and the central dome is boldly raised on arches. The same general structure is also found at St. Nicholas in Myra, built in the sixth century. Smaller domes crown the four angles; and the *narthex* and *esonarthex* here assume considerable importance. The same type is perpetuated in the

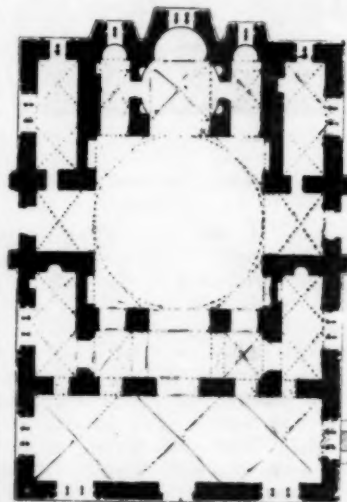


Fig. 16. Plan of the Church of the Monastery of Daphni, near Athens (9th Century).

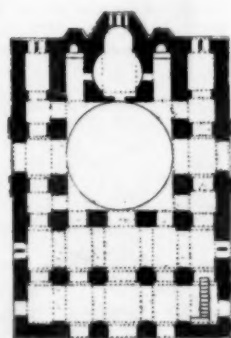


Fig. 17. Plan of St. Nicodemus, at Athens (9th Century).

churches of the Holy Apostles at Salonica (seventh century), and of the Mother of God, or the Theotokos (Figure 15), at Constantinople (ninth century), and of St. Bardias at Salonica; and also, notwithstanding secondary modifications, in the Byzantine churches of Greece; for example, the ancient Metropolitan church of Athens, the churches of St. Theodorus, Kapni Rarea and St. Taxiarchus at Athens, of Misitra and Samari in the Peloponnesus, of St. Nicodemus at Athens and of the monastery of Daphni (Figures 16, 17). The apses and aisles perhaps vary in form, but the characteristic principle of construction, to wit, a dome borne on pendentives recurs in all these examples.

In connection with this characteristic feature of Byzantine architecture, especial study should be given to the method employed in the construction of the vault. It was usually built of small material, and in such fashion that centring could be nearly or quite dispensed with.

If we seek for the origin of the essential features of the Byzantine style, namely, domes borne on pendentives or squinches, and oblique joints making it possible to construct these vaults without centring, we shall evidently have to go back of the sixth century. Our researches will very probably lead into remote antiquity.

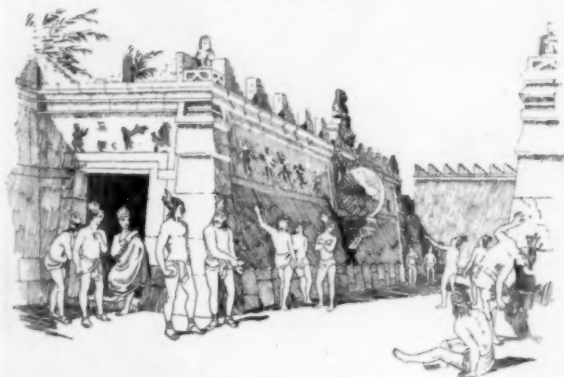
In the tomb of Placidia, of the fifth century, there is a cupola on pendentives.¹ In the cistern of the Thousand and one Columns at Constantinople, which is the reservoir built under Constantine, pendentives have also been discovered. The *Basilica* cistern of the fourth century, now Yéré Batan Seraî, the arch of Salonica, and the cupola of Diocletian's palace at Spalatro, exhibit the various forms of groined vaulting, spherical domes, and cupolas made wholly of small superincumbent squinches; we find in these early structures, then, the main features common in Byzantine architecture.

Going back to a far more remote period, it will be remembered that most of these constructional combinations were employed under the most varied forms by the Persians, and earlier still by the Assyrians. It may then naturally be assumed that the traditions which took birth on Asiatic soil were perpetuated from century to century, and generation to generation, until the day when, after the establishment of the Eastern Empire, the Romans permitted their own traditions to be influenced by those of Asia. It was the alliance of these types that produced the Byzantine style of architecture.

As for the mode of constructing vaults without centring, by means of inclined joints, it may have originated in Egypt, where it may have been learned by the Assyrians, as the two countries were in intimate intercourse with each other. It is an unquestioned fact that the vaults of the Ramesseum, built thus of crude brick, date from the nineteenth dynasty.

[To be continued.]

ART IN MEXICO.



The Game of Pelota among the Ancient Mexicans. By Ibarra.

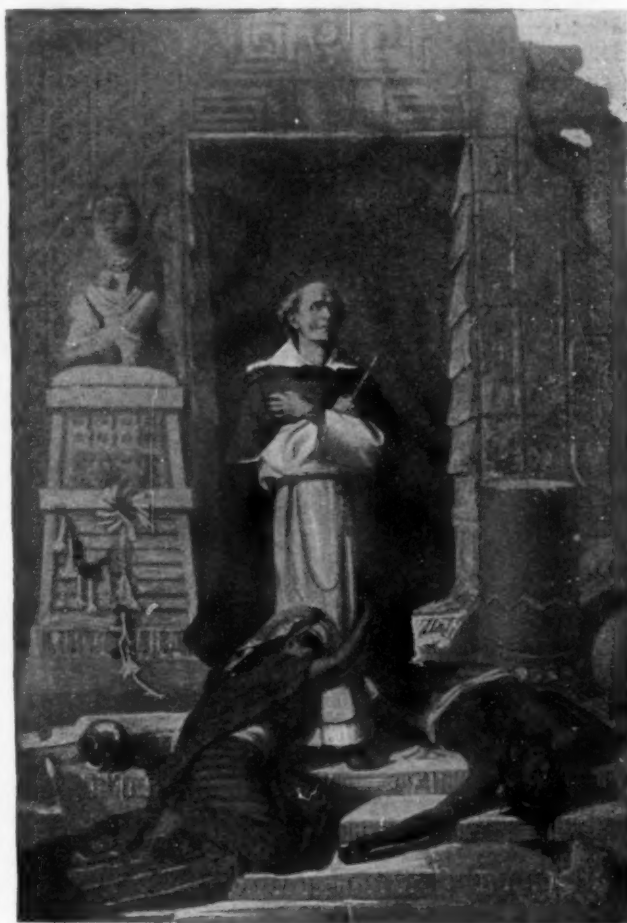
WHILE the unexpected discovery of a Titian in the decaying church of an obscure Indian pueblo of Mexico is attracting the attention of the art-loving world, some information regarding the progress of indigenous art in Mexico will not come amiss, and is likely to occasion as much surprise as did the news of the Titian discovery.

The existence of a National Academy of Fine Arts in the capital of Mexico naturally suggests that Mexican art has not only an existence but a history. It likewise suggests that its history may be best reviewed from the standpoint of the Academy. But one does not pursue one's investigations of the subject very far before encountering the statement, so often made as to become a sort of proverb, that "Mexican art received its death-blow when the Academy of Fine Arts was established." The walls of the Academy seem at first to furnish abundant verification of this statement. Closer study, however, reveals the facts that the causes of the decadence of the Mexican art which flourished in the latter part of the sixteenth and early part of the succeeding century, are not to be sought in the foundation of the Academy something over a hundred years ago; that Mexican art was dead when the Academy was founded, and that the failure of the Academy to restore it to life was principally due to the political convulsions prevailing in the country for nearly the entire century in which the Academy has had its existence.

The history of the Academy is easily related. In 1779 the principal

engraver of the mint in the city of Mexico, with the permission of the Emperor Carlos III, opened a school of engraving. So much interest was manifested therein that the director of the mint proposed to the Spanish Viceroy of Mexico that a school be established for instruction in painting, sculpture and architecture, and in 1781, with viceregal approval, classes in these arts were organized. At the same time plans for the founding of a school of art upon a larger scale, were submitted to the Emperor. Among the many benefactions bestowed upon Mexico by Carlos III, "one of the greatest and wisest of the monarchs of Spain," and which the Mexicans acknowledge with gratitude, was the San Carlos Academy of Fine Arts of New Spain (*La Academia de las Nobles Artes de San Carlos de la Nueva España*), founded by royal order dated on Christmas day, 1783. Two years later the formal opening of the Academy took place upon the arrival from Spain of its two professors, Aguirre, a painter, and Velasquez, a painter and architect.

In 1791 the Academy removed from the mint where there had been scanty room for its classes, into the building it occupies, previously



Las Casas defending the Indians. By Parra.

a hospital. Carlos IV upon his accession to the Spanish throne continued the interest his predecessor had manifested in the Mexican Academy, and sent thither a collection of casts from the antique, valued at \$40,000, and two new instructors, the painter Rafael Jimeno, and the sculptor and architect, Manuel Tolsa.

But the clouds of war shortly afterwards appeared upon the horizon. During the long struggle which ended in 1821 in the independence of Mexico, the Academy exhausted its endowment and was forced to close its doors. It was upon a small appropriation derived from the municipal treasury that it opened again in 1824 and continued open until 1843. In that year it was authorized by the national government to receive the proceeds of an annual lottery (always a fruitful source of revenue in Mexico) for the purpose of purchasing, enlarging and otherwise improving the building previously rented for academical purposes. But the war with the United States delayed the completion of these arrangements until 1847. The next two decades were filled with civil wars, which brought further disasters to the Academy and it was not until 1868, after the restoration of the Republic upon the fall of the Maximilian Empire, that the government was in a position to become the useful patron of this wisely conceived institution. By an annual subsidy of \$35,000, the Academy was placed in easy circumstances. It was furthermore enriched by the government with some of the art treasures looted from the churches and monasteries of the capital in the execution of the infamous decree issued by Juarez in 1859, nationalizing church

¹ Choisy, "L'art de bâtir chez les Byzantins."

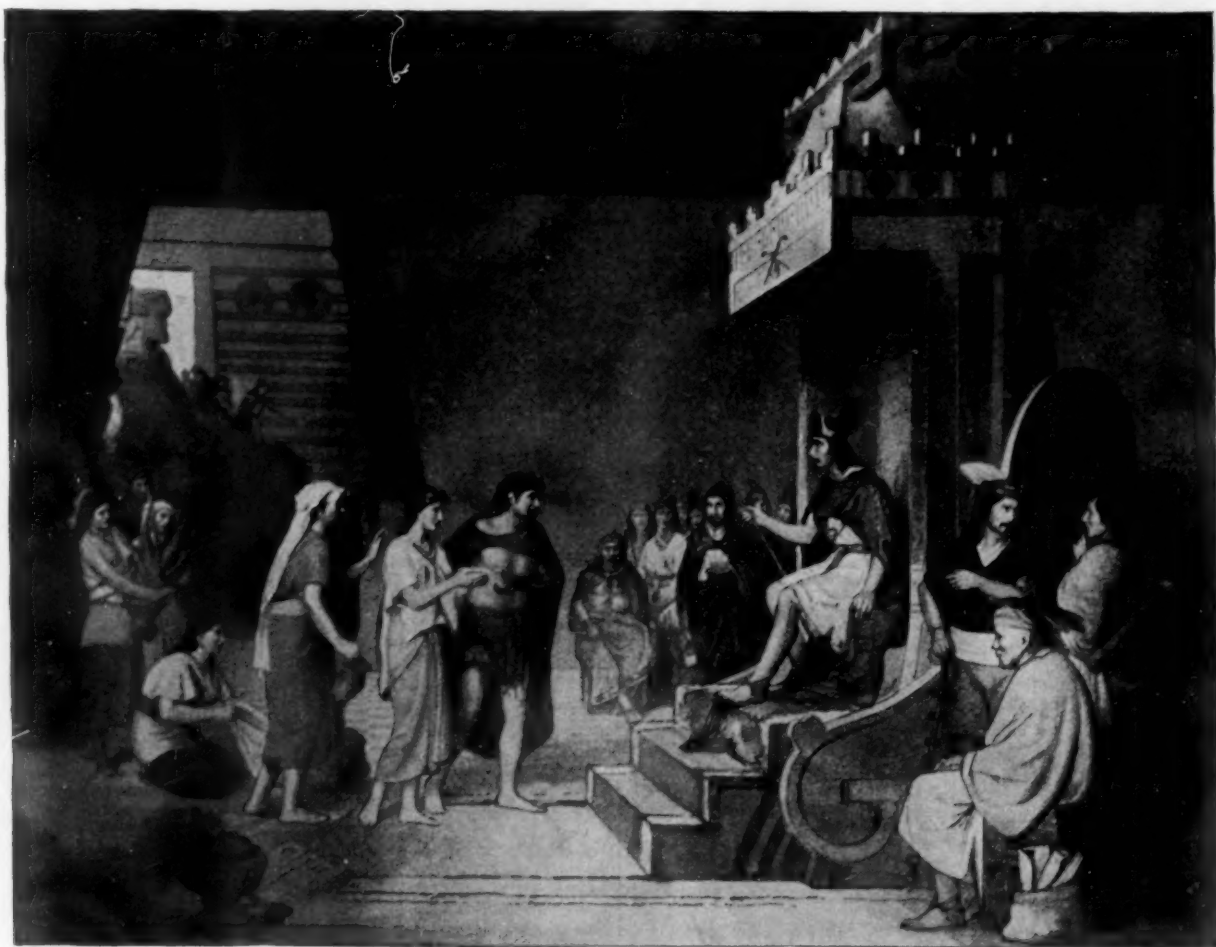
property. The name of the institution was officially changed to the National School of Fine Arts (*Escuela Nacional de Bellas Artes*), but it is still popularly known as the San Carlos Academy.

In the first and second rooms of the Academy, are exhibited many examples of Mexican art in the sixteenth and seventeenth centuries, and these are pointed out as illustrating the high estate whence Mexican art fell upon the founding of the Academy. We have seen, in the history of the Academy, that it is even now too early to look for the results of that institution, and the merest glance at the pictures in the first and second rooms suffices to show that art began to decline as soon as it was transplanted to Mexico, and was practically extinct half a century before the Academy began its precarious existence.

In reviewing the earliest art history of Mexico we may find reason enough for its decline and final extinction in the removal of the peculiar circumstances which gave it prosperity at first. The earliest missionaries to New Spain cultivated the arts among the Indians. Among the schools established by the Franciscans in the city of Mexico before the year 1540 was a school for the musical education of the Indians at Tlatelolco and one for teaching drawing. Later in

by the national government—always munificent with what it comes by dishonestly—upon the Academy and may be seen in the first room. They display breadth, vigor, refinement of sentiment, fondness for rich details,—the glitter of plate and delicate textile fabrics. Echave was the best of this earliest group of painters and was an exquisite colorist. Of the earlier painters of the seventeenth century (Herrera, Andreas Lopez, Aguilera, three by the name of Rodriguez, and four of the name of Juarez) Louis Juarez possessed some of the spirit of the earlier school; and there was also a younger Echave who inherited some of the talents of his father and perhaps his mother.

Later in the seventeenth century a new influence had its rise under Cabrera and Ibarra. Cabrera was the better of the two. He was a Zapoteca Indian, born in Oaxaca, and the school was largely composed of natives. The best of his pupils was Vallejo. Juan Correa was one of the most industrious of this school if we may judge by the number of his works now extant. Like their predecessors the artists of this school confined themselves almost exclusively to religious subjects and found the church their most generous patron. Some of them lived on into the eighteenth century, but when they died,



The Discovery of Pulque. By Obregon.

the same century there came from Spain, four artists—fresh from the influences of Spagnoletto, and the Caracci, their contemporaries—trained in the Renaissance period nearly at its best. They were Sebastian Arteaga (architect as well as painter), Alonzo Vasquez, Baltazar Echave and a woman known as La Sumaya, said to have been the wife and teacher of Echave.

There was plenty for these to do. Magnificent churches were being built in all the cities of New Spain and these painters were employed to paint religious pictures for them. Up to the time of the confiscation of church property under the so-called "Reform," many of the works of these apostles of art in New Spain were to be found in the churches and monasteries of the capital and other large cities. Some of them may still be seen in the cathedrals of the capital and Puebla. Some of them were doubtless destroyed in the ruthless pillage that went on in obedience to the decree of "nationalization"—for soldiers are not usually discriminating art critics, and the Mexican soldiers are less than usually so. But some of them were bestowed

Mexican art died. There was but one artist belonging distinctly to the eighteenth century to demand our attention, and he was removed by two hundred miles and more from the art influences of the capital. The life of Francisco Eduardo Tresguerras was spent in his native town, Celaya, and one must look there for the evidences of his genius. From his devotion to the three arts, architecture, painting and sculpture, he is known as the "Michael Angelo of Mexico." He was more of an architect than a painter, and one of his churches, Our Lady of Carmen, in Celaya, is quite famous throughout the country. It contains some of his frescos and a painting of the patroness of the church. Some of his paintings are in the hands of private parties. He died in 1833.

The second room at the Academy illustrates the decline of art in the seventeenth century, and prepares the visitor for its total suspension in the eighteenth. In the third room are exhibited pictures by European artists, the plunder from the churches and monasteries. There are examples of Murillo, Rubens, Leonardo (the Spanish

Leonardo, not da Vinci), Van Dyke, Ribera (Spagnoletto), Andreas Vaccara, Carreño, Guido, Coghetti, Zurbaran, perhaps Teniers the elder, Rembrandt and Ingres.

It is in the fourth and fifth rooms of the Academy that the visitor must look to see the actual result of the institution which has been charged with the death of Mexican art. It must be admitted that the fourth room contains little that is promising. The most notable of the paintings displayed there is the "St. Charles Borromeo," which won for its painter, Salome Pina, the pension of \$600 a year for six years, to enable him to pursue his studies in Rome—the highest of the prizes given for meritorious work at the biennial exhibitions. The display in the fourth room is not disappointing, simply because the visitor has no right to expect more than is to be seen there, after having reviewed the difficulties under which the Academy has finally won its firm establishment. The fifth room, however, may well occasion some surprise to the visitor. It gives undoubted evidence of a Renaissance in Mexico. The Mexican artist of to-day has started to beat out a new path for himself. He finds his principal motive in the traditions of his race, for among the artists of the present day in Mexico there are some in whom the Indian blood is pure, while it predominates in all of them. Such a painting as "The Game of Pelota" may be purely of archaeological interest, and wholly lacking in artistic merit (it certainly is faulty as to its perspective); such paintings as "The Discovery of Pulque," "The Gladiatorial Combat of the Aztecs" and "Montezuma on his Way to meet Cortés" may commit their respective painters to errors in history, and theories of the existence of an Aztec Empire and an exaggerated state of civilization which must be sooner or later exploded, but they show that Mexican art is likely to develop upon lines peculiarly its own; that the picturesque element of the remote past in Mexico is appreciated, and furnishes an abundance of themes for the artist, as well as the *savant*, the historian, the poet and the novelist. Better pictures there are in the fifth room of the Academy than these archaeological paintings; indeed, the fourth room exhibits some work in which more artistic skill is displayed. Carasco's "Job," Luis Monroy's "Caridad Romano," Pelegrin Clave's "Juana la Loca," Obregon's "Giotto" and Parra's "Galileo" are paintings that would command attention in any gallery; but the others seem more properly to denote the trend of Mexican art, to indicate most clearly what its future is to be.

The most notable specimen of Mexican art deserves mention by itself. It is the large canvas, by Felix Parra, of "Las Casas defending the Indians," an attempt to picture the noble character of Bartolomeo de las Casas, Bishop of Chiapas in the sixteenth century, who spent the best years of his long life in trying to relieve the Indians of the New World from the burdens of an oppressive slavery laid upon them by the Spanish conquerors. The noble subject is grandly, yet simply treated, the coloring strong, yet subdued, and the picture is deserving of attention among the great pictures of the world. It was exhibited at the Exposition in New Orleans in 1885, and attracted much attention, though few who saw it knew the history of Las Casas. It is especially entitled to consideration as illustrative of the indigenous art of Mexico, for it was painted before Parra had seen any land but his own. Happily, one does not have to know this in order to appreciate his work, and it is not here mentioned by way of apology for any lack of excellence in it. It is not too much to say that the painting would be creditable to any artist now living. It gained for Parra the Roman prize, and he has since been abroad pursuing his studies.

Sculpture has scarcely any history in Mexico, though the capital and many of the provincial towns possess works of unquestioned merit. The seventeenth century produced an Indian sculptor, Patiño Instolinque by name, and José Villegas Cora, a Pueblano, whose work is best displayed in the Cathedral and other churches of his native city. Tolsa's great work is the magnificent Carlos IV equestrian statue. But the masterpiece of sculpture in Mexico is the noble tomb of Juarez in the Panteon de San Fernando. It is the work of Indians, the brothers Islas.¹

Since Mexico ceased to build churches, the field for original designs in architecture has been extremely limited. In the handsomest buildings now existing in the capital, Tolsa's work is seen. In other cities of the Republic, local sculptors, local architects and local painters are displayed through their works. Isolation has, of course, placed many limitations upon the work of such. Yet it is surprising to find some of them exhibiting positive merit. Gabriel Barranco, of Orizaba, admirably illustrates this. "This man's work is not an echo, but a continued embodiment of the art-feeling of Italy and Germany (even more than of Spain) of three centuries ago, and under conditions of isolation identical with those under which lived and worked a very large number of the minor artists of that time."

There is an Academy of Fine Arts in Puebla, but it has not thus far exerted any marked influence upon Mexican art. The *Escuela de Artes* of Guadalajara is a manual training-school, and, though sometimes mentioned as indicating a widespread interest in art, is not properly entitled to mention here. Similar institutions exist at the capital, in Puebla and in other large cities of the Republic.

Art has received little patronage in Mexico of late years outside of the Academy. The church has been oppressed and robbed, and, if now in the possession of wealth, is cautious about displaying it.

Furthermore, the modern artist, influenced, no doubt, by the prevailing religious indifference of Mexico, does not do much in religious work. The government has been involved in wars and debts ever since the national existence of Mexico began, in 1821. It has, nevertheless, been reasonably liberal in its purchases of the portraits of national celebrities and of historical paintings. The Academy has encouraged its members by purchasing the works which now adorn its walls. There are no private galleries in Mexico. The country has been so demoralized by revolutions that the people have had neither opportunity nor inclination to possess themselves of works of art. Now that political affairs give promise of greater stability, and as the pride manifested in the work already accomplished by the members of the Academy becomes more widespread, some of the wealth of Mexico will be devoted to the encouragement of native talent. If this be so, we shall see something within a few years that will strengthen our faith in the promises now made by the indigenous art of Mexico.

ARTHUR HOWARD NOLL.



IN spite of the malicious and mendacious remarks of the New York papers to the contrary, the World's Fair committees are working most harmoniously and successfully, accomplishing all that could be expected in so vast an undertaking, and so short a space of time. It is hardly just to look for results yet (except it might be among people so famed for push and energy as the New Yorkers), and that the different departments have already gotten their work well systematized is a proof that much is being accomplished. The general outlines are now ready, and only await the final ratification by the National Commissioners.

The site is still the all-important topic of general interest. Lovers of peace and quiet in the city insist that by locating the Fair in the heart of the town on the Lake Front, a grand fiasco will be provided for. This "Lake Front" is the name given to the narrow strip of land which for about a dozen blocks in the heart of the city runs between Michigan Avenue and the Lake, the Lake side being fringed by a dozen or so railroad tracks. There have been numerous plans suggested for utilizing it, but all of them necessitate the sinking of the tracks, and an immense amount of piling and filling in the Lake. Moreover, the title is extremely uncertain, the United States Government, the city government and the railroads each claiming portions of it.

Those who are opposed to this site assert that to begin with there is not enough space for the purpose, California alone wanting eleven acres. They maintain it is absurd to talk of utilizing the inner harbor, first, because the expense of driving piles would be so immense; secondly, with piles driven into it for so many years, the harbor would be most probably ruined by the sand which would lodge around them; and thirdly, that the draining of this immense institution directly into the Lake would be a serious source of sanitary danger. Finally, those not favoring this site claim that having the Fair in the heart of the city would so crowd the streets that business would be practically at a standstill, and ease and comfort would be a thing unknown on the down-town thoroughfares during the six months of the Exposition.

These arguments are all as nought to the people who believe in using this same Lake Front for a site. They assert there is more space on the present land than has ever been used by any world's exposition heretofore, and if certain States want all "out-doors" for their exhibit, let the agricultural part be separated, and put out on the limitless prairies, west of the city. They maintain that, financially, the Fair will be a total failure if removed from the heart of the city, because of the inconvenience of reaching it; that by its being held down town people will be enabled to drop in for an hour at a time, and instead of crowding the streets it will have an exactly opposite effect; so many more people would visit the Fair, that just so many would be removed from the streets. In fact, there are such a number of ways of looking at the same object, that one begins to wonder whether there is such a thing as mental strabismus.

The site most in favor at present is Jackson Park. It is at the south of the city on the Lake Shore, and could be reached by half-a-dozen railways, as well as by Lake, which, in the summer, would make a most agreeable variety in the mode of travel. The Park is only about twenty minutes' distance by rail from the heart of the city, and is most pleasantly situated on the shore of Lake Michigan, and contains acres enough to enable the entire exhibition to be in one place, and not scattered around generally, so that the

¹ See *American Architect*, April 9, 1887, No. 589.

thing one most wanted to see would be in the "other place." Being on the Lake, the site would be much more desirable than any of the limitless tracts on the West Side of the city in point of temperature, as the thermometer on the shore is usually eight or ten degrees lower in summer than on the West Side. So, unless Chicagoans want to sully the fair fame of their city as a "summer resort," it would be unwise to choose the hottest place within its limits for a summer show.

The wildest schemes for attractions within the grounds are being constantly advocated by patriotic citizens, not numbered among the committees. Hanging gardens that would force those of ancient Babylon from their former exalted place in history, have been boldly claimed to be a desirable feature, and, in fact, should many of these schemes be worked out, magic carpets, Aladdin lamps and most of the shining lamps of the Arabian Nights, would have no more effect on us who might have the good fortune to view the Fair, than a small tallow dip would have on a person who has spent his entire evenings under a thirty-two candle incandescent burner.

One of the plans which seems to be formed less of "such stuff that dreams are made of," is that for erecting a mammoth tower. Papers of incorporation have already been taken out under the title of "Columbian Tower Company," and the idea is to erect the work in the midst of the city proper, outside of the Fair grounds, and having no connection with its management, being an entirely private enterprise backed by capital from the East. Over two millions will probably be expended. Plans have been prepared by Washington architects, one of whom was connected with the designing of the main exhibition building at Philadelphia in 1876. The idea is to build a tower which shall throw that of M. Eiffel in the shade, and when one thinks how persistently the summit of that one must have basked in the sunlight, the undertaking seems rather a large one.

Rumor has it that the tower will be fifteen hundred feet high, with a diameter at the base of four hundred and eighty feet, being of steel lattice-work. How mortifying it must be to those builders of old, who gathered around the famous Babel, if they can look down on such achievements, and accomplished, too, without the aid of Volupuekt. However, from the information given to the public, the drawings have evidently not been very carefully studied in connection with any exact location, since in the portion of the city mentioned there is no block large enough for this construction.

The main entrance will be eighty feet wide. The four main entrance pavilion's porticos will lead through large lobbies to a dome or cupola in the centre of the tower, two hundred and thirty-seven feet in diameter by two hundred feet in height. This dome will be used for a music hall, which will be the largest in the world, having a floor space with galleries and lobbies for over thirty thousand people. There will also be in this gigantic structure, room for the largest hotel in the world, a hotel with over five thousand rooms. It is also planned to obtain space to offer to the Public Library and other public institutions. The scheme is to have eight elevators for the first hundred feet, four to two hundred feet, four to four hundred, and two to the top of the building. With the present atmosphere of our city what will expected to be seen from the dizzy height of the summit, remains to be explained. Of course, one could look over into the smoke-free fields of Michigan, Wisconsin and Indiana, perhaps, and as for the matter at the base, it may be interesting to view the wrong side of a smoke-cloud.

The globe at the top will be thirty-eight feet in diameter and lighted by sixteen electric lights which can be seen at a distance of over fifty miles. The outside balconies are to be lighted with electric lights with colored globes. It is said over fifteen hundred will be used.

The originators expect the tower will pay for itself in the first three months of the Fair, and after the close of the exhibition it is expected that a fair return will be made in rents, fees, etc.

All these castles in the air are offset by a scheme for doing equally wonderful things below the surface of the earth.

Here comes a man from Colorado and declares that the one and only thing that will make the Fair a success is to have a mine seven hundred feet in circumference excavated under the city, five hundred feet below the surface. As no external decoration is necessary all will be lavished on the interior, and the marble halls that people occasionally dream of are going to be as an humble cot compared to this. Lined with marble and iron will be the corridors, though what will be their use has not yet been stated.

At least, the visitors to our city in 1893, who arrive via the Wisconsin Central Railway, will receive a good first impression of the place in the fine new station of that road. The building has been under contemplation for several years and is now nearing completion. It is built of a very dark shade of pressed brick, the distinguishing feature of the exterior being a fine tower modelled on Giotto's Campanile. A somewhat curious minor feature of the exterior is the small mediæval turrets with their oylets, not entirely in keeping with the style of the tower or with the fine large round-arch openings for the windows, and the entrances for the drive-ways of wagons, carriages, omnibuses, etc.

The passenger-shed contains six tracks, giving a width to that part of the building which makes the centred arch of the opening particularly impressive. The roof is glass and iron, the construction of the iron being as light as possible, giving the full extent of glass to the given space.

Though the papers take a most optimistic view of the relation between the different parties of the recent carpenter's strike, it is quite evident that the trouble is by no means settled. The old bosses still refuse to hire Union men and as the outstanding jobs are being finished up, these men find themselves out of work. They consequently devote a good deal of their time in threatening acts of violence to the non-Union carpenters employed, attempting to intimidate them, and in prosecuting the bosses under the alien contract law, for bringing in men from Canada.



THE PARLIAMENT BUILDINGS COMPETITION.—THE TORONTO BOARD OF TRADE BUILDING.—THE STRIKES IN THE BUILDING TRADES.

IN writing of the doings of American architects who have been fortunate enough to secure commissions for buildings in Canada, and in describing these buildings, I have sometimes been accused of spitefulness towards them, because they are Americans and I am an inhabitant of Canada, and, perhaps, on this account it may be difficult for readers of these letters to judge fairly of what I write, or to interpret correctly the spirit in which I write. I do not deny for a moment that I am filled with a strong animosity to those public boards and private individuals who deliberately pass over Canadian architects and give their best works to Americans, but if the Americans who get the works are in the honorable practice of their profession, and are "architects," in reality, it's not *their* fault so much, and they are rather to be condoled with, because they have not been able to see that there is anything contrary to professional ethics in stepping over the border. Fortunately, I have not to condole with very many of them, but, at the present time, are we not all jealous of the honor of the profession and letting alone nationality, every one ought to be free to expose fraud and incapacity when it acts to the injury of the profession at large, without immediately being charged with the petty jealousy of a narrow mind.

The Province of Ontario is about to experience the excitement of an election for its Parliament, and the liberal Government does not vacate the chair with the cleanest of hands; whether it will succeed in washing its hands sufficiently clean as it stumps the country seeking re-election, so that it will be allowed another term of service, is neither here nor there to architects outside the Province, but to those in it, it is a matter of some import. The profession has had a good deal to do lately with this outgoing Government, and looks to the result of the elections with considerable interest. In the first place, that which has brought it into immediate connection with the Government has, of course, been the Ontario Architects' Act, of which an epitome was given last month, and possibly the profession would not be sorry to see the Liberals take up the reins again, because, although they have not much to thank the Government for as regards their bill, yet the Government has found out that the architects are capable of exerting themselves with results, that, to say the least, are not soothing to its pillow, and will require some conciliation. Whereas if the other party, the Conservatives, are returned to power, they know they will have little to expect from the leader, who in the past session, opposed their Act of Registration from the start. It is over the Parliament Buildings "job" that the profession has made itself felt. One of the Toronto dailies has been publishing the whole case of the transactions—which have been mentioned before in these letters—which no one attempts to disprove, and which the electioneering agents of the Government only attempt to combat by direct denial. The Government has issued a pamphlet for the guidance of its stump orators, in which it states that Mr. Waite, of Buffalo, "secured the appointment (as architect) after a fair competition, expert judges deciding that his plans were the best." The fact is, Mr. Waite was called in as an "expert adviser," that he condemned all the designs sent in, and being entrusted with the two best designs in order to report upon them, he kept them for eight or nine months before handing in his report upon them. No one has ever seen that report, and it is believed that there never was one, for this much is certain, that while the competing firms were waiting to hear the result of the expert's examination in favor of one of them, they discovered that the Government had decided not to use either of the designs, but had given the commission to Mr. Waite.

Of the two designs, working-drawings were prepared, that tenders might be obtained upon both of them. One came out at \$542,000, the other at \$612,000. Thereupon the Government obtained a grant of \$750,000 which was to be final. Now that Mr. Waite's designs are being carried out, it has been found that the \$750,000 have been swallowed up by the masonry and brickwork alone. It is estimated that to complete it will cost at least \$2,000,000, and the Premier of the Provincial Government, now stepping down, says himself,

"he does not know what it will ultimately cost." The Toronto *World* has published a sheet giving illustrations of the designs of Messrs. Darling & Curry, and of Mr. Waite, and there are hardly two opinions as to which is the most beautiful and suitable building, the one to cost not more than \$750,000, the other to cost certainly not less than \$2,000,000. Were they both estimated to cost the same sum, the Buffalo architect's design cannot but be looked upon as wanting in dignity and as weak in conception, by the least instructed of the public; but in addition to that comes the fact that his design is costing three times the amount of the other. Then, again, it must not be forgotten that this is not Mr. Waite's original accepted design, but a second one—the first, after its execution had begun, proving altogether unsuitable—he was allowed to re-design the main front.

The other painful matter, in which men practising as architects have failed to uphold the dignity of the profession or preserve it from suspicion, is the Toronto Board of Trade Building. But, while mentioning these facts, let it be observed, for the satisfaction of architects practising on this continent of America, that the "architects" of the Board of Trade Building are not Americans nor Canadians, although practising in the States. The history of the competition, and the strange report of the expert appointed to decide upon the merits of the designs, which proved that the Board of Trade had, contrary to their stipulations, opened the envelopes and discovered the authors of the designs, has already been given. The clauses of conditions contained a regulation that would save them from the employment of incompetent men, but they never seem to have made any inquiries as to the ability of the men to whom they entrusted the work. Now, however, the mystery surrounding the actions of the Board and the secrecy of their deliberations concerning which I gave quotations two months ago from the *Mail*, is all accounted for—the building has been examined and proved to be absolutely insecure. The absolute ignorance displayed in the simplest parts of construction is astonishing; weight of superstructure seems never to have been calculated, the terrific cracks, the downfall of part of the work and the iron props with which attempts have been made to bolster up the building, prove a very lamentable fact. The architects dismissed the contractor, and possibly some blame rests upon him, but now the Board of Trade have taken the work out of the hands of their architects and secured the services of some one else to repair the damage done, and complete the building.

I do not know upon whose authority the papers give the information, but they state that the Board must spend \$50,000 to make good the harm done. The total cost of the building was estimated at about \$250,000, and it was to have been ready for occupation by the autumn.

The architects of the Province of Quebec have appointed a committee to draft by-laws and draw up a constitution with the object of forming a Quebec Association. It really looks this time as if they meant business, although the half-dozen attempts that have been made to bring the members of the profession together in Montreal during the last twenty years, all failed.

The letter from their secretary that appeared after my mention of their "racial" dislikes, goes to show that there was no such thing, but, I see by the names of the committee that some of those gentlemen who formerly acknowledged the possession of such feelings, have been converted. The profession in other places wishes them every success, and that they may be able to obtain more satisfactory legislation than has yet been obtained in Ontario.

The strike in the principal building trades which has been in progress for the last two months in Toronto has just been brought to a close, with practically a victory for the workmen. The stone-cutters, who asked for an increase of 7 cents an hour, have compromised at 5 cents, making their wages now 43 cents an hour; and the bricklayers, who were getting 33½ cents an hour, and demanded 36 cents, have agreed to a five years' contract: 35 cents an hour for the first year, and 36 cents for the remaining four years. Whether the master-builders have been wise in coming to this settlement is a question. I believe it is the greatest mistake. The result is due to the efforts of the President of the Board of Trade, who has succeeded where the Mayor of the city failed even to get a hearing. It was the prevailing idea that the stone-masons must give in very soon for want of funds. However, they held out just long enough, and have been rewarded. A large number of men in these trades have left the city, so there will be no difficulty for those who remain to get work. The amusing thing about these strikes is the utter indifference of the public generally and those individuals who are having buildings erected for them. They quietly sit by and take no interest in the proceedings, while the men refuse to work and the masters refuse to increase their pay, and then, when both masters and men are tired of the ridiculous position in which they have been standing, they (the public) submit without a word, like the most docile of sheep, to be fleeced by the men, with the approval of the masters. When will the public learn that it is for them to say to the men: "We are paying you fair wages, and we will not add a cent." Now the public lets the Union tyrannize over the masters without an attempt to back them up, and the strike being settled, the proprietors are content to go their ways in peace, and hardly comprehend that they have been, in reality, far more fooled than the masters. Our master-builders had better change their name if this kind of thing is to go on. The men are the masters, and they know it; but their day of reckoning is not far off. They

have had almost enough rope, and the result is inevitable, although it is delayed. Let them strike, let them ask a dollar an hour, or five, for that matter—anything to rouse the lamb-like public! Where is the spirit of the proprietors who now submit so innocently to be sat upon?

Comparing the standard of wages in the various States, 36 cents for a bricklayer is not high, but where wages are higher it is because expenses are higher: house-rent, food, clothing—all are dearer. This fact, however, the wire-pullers of the Unions say nothing about. They exhibit a table of wages in various parts of the States where living is dearest, and say to the men: "See, you poor devils, what wages are paid in the States, while you've been content with about two-thirds of these amounts." So the men are fooled by the Unions, the masters are fooled by the men, the public are fooled by all three, and seem to enjoy it hugely.

Judging from the contents of this letter, one would say it is an era of fooling. First of all, some architects get fooled, through, however, no fault of their own; then the Ontario Government, by the Premier's "pet architect." The Board of Trade get fooled by their own precious astuteness in their choice of a professional adviser; the public get fooled by the strikers, and last, but not least, just as I am about to close this for the post, I find the architects of Ontario, who were fooled over their Act of Registration, are fooled again by the return to power of the government that was (had their wishes been carried out) to have stepped down.



RAINS AND FLOODS.—THE PROSPECTS OF COLONIAL ARCHITECTURE.—THE SEAL OF THE ROYAL VICTORIAN INSTITUTE OF ARCHITECTS.—A HUGE GRAVING-DOCK.

SYDNEY, N. S. W.

AFTER almost nine months of persistent and tremendously heavy rains, and the concomitant mental and commercial depression, we are enjoying pleasant sunshine once again, and welcoming the return of a more prosperous time. The rains, however, have wrought serious damage. At Bourke, a town of considerable size on the extreme northwestern boundary of New South Wales, where the flood-waters caused the River Darling to rise nearly fifty feet above the summer level, it was found necessary to erect a gigantic dam to keep the water back, but it proved of little use. The river rose rapidly inch by inch, until in a few days a wall of water ten feet high encircled the doomed town; for despite the heroic efforts made to prevent it, the flood, after a little while, obtained the mastery. Finding a weak spot in the embankment, it soon made a passage for itself, and, gaining headway, swept over ill-fated Bourke and the surrounding plains, till it formed a shallow inland sea. No lives were lost, fortunately, as the inhabitants had time to save themselves, but the town is ruined; so that, ill as this wind has been for some, it may still blow a few good commissions across the architect's path. This is, perhaps, a very natural and, therefore, very selfish way of looking at a national disaster.

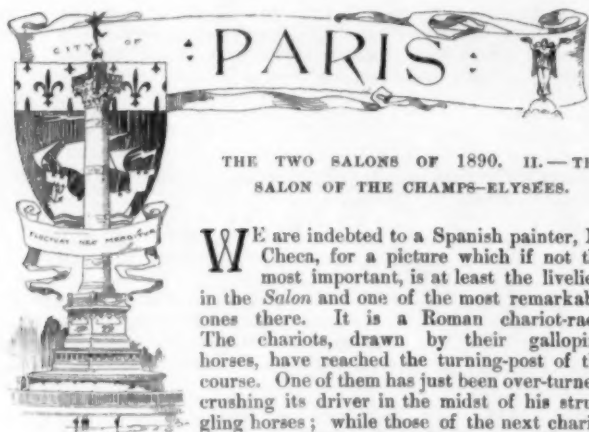
The good time we have waited so long for, and whose coming has been so long delayed, would seem to have arrived at last. Private work seems to have received a fresh, strong impetus; there are competitions advertised for two large arcades, which are to cost £120,000 between them, and there is building everywhere. We have also seen the inglorious death of that effete institution, the Colonial Architects' Department, and in future all important public buildings will be thrown open to competition. In Victoria, too, and the neighboring colonies, the architectural prospect is brightening.

The Royal Victorian Institute of Architects, by the way, is very much exercised over the subject of its official seal. It appears that the Council, without authority, communicated with Mr. Allan Wyon, F. S. A., of London, asking him to forward designs for a medal and seal. The designs were duly submitted and approved of by the gentlemen of the Council, who, without consulting the members of the Institute, gave instructions to Mr. Wyon to proceed with the work at once. It subsequently transpired that these precious dies will cost about £100. But the worst of it is that the design approved of is described as showing "an ancient Doric temple, with the Royal Arms in the tympanum." As one of the Fellows somewhat timidly remarked, a critical person might look upon a mediæval coat-of-arms in a Doric pediment as an anachronism. The members present, however, seemed to speak with more certainty as regards the cost, which they all condemned as excessive, and they thought the amount could be better expended in purchasing books for their library. The result of it all is that the President of the Royal Institute of British Architects is to be written to, and asked to inspect—and, I presume, amend—the design before the work is begun.

The Bioela graving-dock, which is the largest in Australia, and probably one of the largest in the world, has lately been informally opened, and everything is said to work admirably. As compared with the new dock lately opened at Halifax, the following table will show that the Sydney example has the advantage in nearly every particular:

	Sydney.	Halifax.
Total length.....	632 ft.	601 ft.
Width at top.....	108 "	102 "
" " bottom.....	44 "	70 "
Depth of water over sill.....	32 "	30 "
Width of entrance.....	84 "	89 "

Mr. Robert Louis Stevenson has just paid us a short visit, and is now returning to Samoa, where he is about to build himself a house, and where he intends to permanently reside. Samoa, according to the clever author of "*Dr. Jekyll and Mr. Hyde*," is an earthly paradise.



THE TWO SALONS OF 1890. II.—THE
SALON OF THE CHAMPS-ÉLYSÉES.

WE are indebted to a Spanish painter, M. Checa, for a picture which if not the most important, is at least the liveliest in the *Salon* and one of the most remarkable ones there. It is a Roman chariot-race. The chariots, drawn by their galloping horses, have reached the turning-post of the course. One of them has just been over-turned, crushing its driver in the midst of his struggling horses; while those of the next chariot rear and plunge under the violent efforts of their master. The driver of the third chariot endeavors to profit by the disorder, and lashes his horses to pass by into the first place: the beasts are foaming, and he himself, leaning forward, excites them still more with his cries. This tumultuous scene, which has for a background the brightly-lighted tiers of seats of the amphitheatre, with a triumphal arch half defined through the haze reddened by the setting sun, is rendered with astonishing fire. There are few works of such vivid interest, notwithstanding that it represents one of those antique subjects which have been so long out of fashion. Another classic theme, of a kind which few French artists now undertake, furnishes M. Auguste Glaize the inspiration for a picture of Saint Agnes in a house of pleasure; a cold and disagreeable piece of work. Stopping only before the principal things in the *Salon*, we notice first the mistake made by M. Benjamin Constant, who in a black and dismal picture, entitled the "*Moonlight Sonata*," represents Beethoven at the piano, playing in the dark. This mistake is not atoned for by another picture of a naked woman, called "*Victrix*," for whose sake the artist has renounced the warm and luminous colors of his ordinary palette.

Monsieur Bisson carries off this year a triumph of curiosity with one of those medical subjects which have been so fashionable of late years. The title is "*After the Operation*." The picture was ordered by M. Osiris, for the Hospital Necker; M. Osiris figures in it himself, as the subject of the operation, stretched on a bed, in a pose which suggests a model rather than an invalid. At the head of the bed Dr. Dotain examines a vial; around are grouped several celebrated physicians, among whom are Drs. Guyon and Segond. What is wanting to this picture, which is painted with much talent, is emotion; it is decorative surgery. But we must hasten, and pass more rapidly than they deserve the canvases of M. Detaille, which may be reproached with being rather too large in scale; of M. Rochegrosse, whose talent, so brilliant at its first appearance, is losing itself in minute and painful detail; of M. Aubert, whose "*Last Moments of Saint Claude*" is one of the most beautiful religious pictures we have had for a long time. We must not forget the distressingly perfect pictures of dead nature, by M. Desgoffes, or the broadly-treated subjects of MM. Bergeret and Fouace, the last a master of this style; and we arrive at last at the landscapes, which are of an incontestable superiority. Here we have difficulty in choosing; everywhere is the same devotion to true nature, rendered as she is, without attempt at prearranged effects; the decorative landscape of Jules Dupré, and even of François, has given place to the landscapes of another kind, of Pelouse, Pointelin, Tanzi, Harpignies, Guillemet, Joubert, Gabriel, Gagliardini, Fath, Defaux, Yon, Berton, Décanis, Darien, etc. It would be necessary to name nearly all of them; but, at all events, the names we give are to be remembered.

But I had nearly forgotten the one, who, in the studios, has given his name to the *Salon* of the Champs-Élysées, Bouguereau. This distinguished artist has sent two pictures: in one we see "*The Holy*

Women at the Tomb," a picture always equally careful in execution, correct, smooth, with porcelain-like reflections;—in the other, two little beggars seem to be emerging from a perfumed bath. Their smooth and transparent skin, their pink and polished nails, show that, notwithstanding the rags which cover them, they are accustomed to the most aristocratic cleanliness.

And now, a few words about the architecture, which ought, in this journal, to occupy the most important place. But if it is difficult to give at such a distance, an idea of the pictures in our *Salon*, the difficulty is still greater, perhaps, for the architecture, without entering into long and tedious explanations. As is the case every year, architecture at the *Salon* can be divided into two classes: that of practical constructions, and that of historical and archaeological studies and restorations. I will not speak of the too-numerous school *projets*, which interest particularly the pupils of the Ecole des Beaux-Arts, and serve mainly to gain for their authors free admission tickets to the *Salon*.

Among the studies of restorations, two are particularly remarkable. The first is by M. Redon, who has studied, like a patient and conscientious artist, the temples of Baalbek and Heliopolis. On nine immense stretchers he shows us the actual state, and the restorations; and, as always, we ask ourselves what is the use of these learned works, which demand from an artist of such power, time which might, perhaps, be better employed in more living studies of modern architecture. But there is a revolution to be made in the organization of our school at Rome, which lives only in the antique, and by the antique, and seems to be unwilling to leave its dear ruins.

The second restoration is more curious. It is that of the Kmer monuments of Bapuon, in Angkor-Thom, Siamese Cambodia. M. Fournereau gives us a little rest from the architecture of columns and pediments, by showing us the treasures of this Oriental style, which is quite as monumental, and in which the richness of the details, of an amazing fertility of fancy, makes of each part of the structures a work of art, curiously sculptured.

Among the more practical, if not so brilliant, restorations we noticed that of M. Esquié, for the church of Venerque (Haute-Garonne), executed with a very delicate artistic sentiment. The architecture is all in brick, of a Spanish-Roman style, with much character. M. Charles Suisse has made an interesting restoration of the fifteenth-century spire of the Cathedral of Dijon; and we will mention further the restoration of the Château de Lestang (Indre-et-Loire), which M. Lafargue presents, with his talent as a skilful water-colorist.

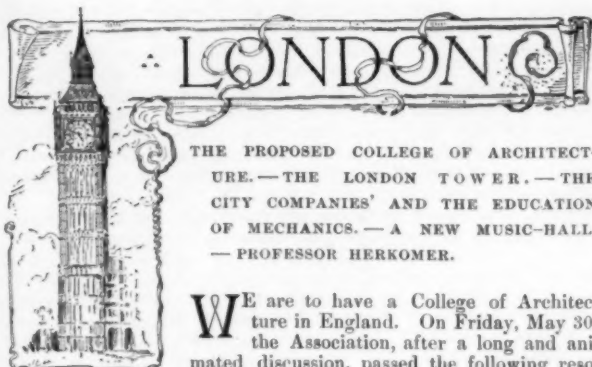
The beautiful monastic church of Fontevrault, which forms a part of the abbey of the same name, has been the object of a very careful study of restoration by M. Ridet, who has joined to his formal architectural drawings some pretty water-color sketches. Finally, belonging to an order of ideas less monumental, but very curious, we remark the restoration, by M. Hardion, of the pavements and paintings in the oratory of Pierre d'Amboise, at Dissais (Vienne). The paintings, particularly, are of an exactness of execution in the primitive style which is pushed to miniature. When we speak of painting let us not forget the studies of mediæval mural painting in France, by MM. Lafilée and Gelis-Didot, reproducing frescos of the twelfth, thirteenth, fourteenth, fifteenth and sixteenth centuries, taken from the Cathedral of Reims, the churches of St. Savin, and Vic, the Cathedral of Le Puy, the temple of St. John at Poitiers, and the abbey of Roc-Amadour.

After we have assured M. Deverin that his restoration of the charming church of St. Jouin at Marnes (Deux-Sèvres), makes us wish for the preservation of this little architectural jewel in its actual condition; after we have mentioned, in passing, the curious antique fancy which M. Mayeux entitles "*The Artemis of Ephesus*"; the *mairie* at Suresnes, by M. Bréasson; the humorous compositions of M. Robert de Massy, and two theatres, inspired by Garnier's Opéra, by MM. Dupuis and Guissant, we shall have nearly finished with the architecture, about which the public cares so little. All the world, however, might interest itself in the beautiful model, at one-tenth the full size, of a monument to the glory of the Republic. It is a charming bit of decorative architecture, composed by M. Bréasson. The general form is that of a great truncated pyramid, mounted on an immense pedestal, flanked by four groups of sculpture at the angles, representing "*Equality before the Law, Universal Suffrage, Education for All, and Liberty of Conscience*." Another large composition presents also some interest. It is the design for the monument commemorative of 1789, which M. Louis Boileau studied for erection on the site of the Tuileries. It consists of a colossal portico, carried around three sides of a quadrilateral, with a grandiose dome in the centre of the longest side, carried by columns. It is a gigantic idea, which would have had the bad effect of crushing the neighboring constructions of the Louvre, and the elegant little triumphal arch of the Carrousel.

I have not left myself space enough to pass in review, even hastily, the section of sculpture; but it is necessary to speak of four unrivalled artists, who have sent works which are thoroughly remarkable: MM. Falguière, Chapu, Gérôme and Barrias. "*The Woman with the Peacock*," by M. Falguière, is a masterpiece. We have rarely seen a nude figure more noble and distinguished, more beautiful or more delicate in action. M. Gérôme, more successful this year as a sculptor than as a painter, exhibits a statue entitled "*Tanagra*." It is a naked woman, seated in an antique attitude, the bust upright, the knees close together, and the legs slightly bent; it

has in its hand one of those little antique Tanagra figurines. The flesh portions are of an extraordinary softness, giving a strong impression of marble very faintly tinted. As for M. Chapu, he attracts attention by his magnificent monument to the writer Flaubert. A draped figure, recalling by its grace and sentiment the "Youth" of the Regnault monument, and the "Thought," by the same sculptor, is shown in high relief, leaning against a rock, on which is sculptured the medallion portrait of Flaubert. It is admirable. Another statue by the same artist, a dancing girl, is a graceful bit, destined to adorn the private house of one of our barons of finance.

Finally M. Barrias shows a delicious Oriental figure, seated on the ground, picking petals from a flower. This work, treated in wax, is to be cast in bronze, and is destined for the tomb of Guillaumot, the delicate and sentimental painter of Oriental scenes. It is delicate and sentimental, as suits its object.



THE PROPOSED COLLEGE OF ARCHITECTURE.—THE LONDON TOWER.—THE CITY COMPANIES' AND THE EDUCATION OF MECHANICS.—A NEW MUSIC-HALL.—PROFESSOR HERKOMER.

WE are to have a College of Architecture in England. On Friday, May 30, the Association, after a long and animated discussion, passed the following resolutions:

1. That some more methodical system of study is essential in the Architectural Association, and that the need of such a system is emphasized by the recent publication of the Institute programme of progressive examinations.
2. That the mutual system, which was adopted by the Association at a time when the number of members was small, now presents great disadvantages and difficulties.
3. That it is advisable to adopt the Institute programme as the basis (but not the limit) of any systematic course of instruction established by the Association.
4. That a combination of lectures and classes is preferable to teaching in classes, or by lectures taken singly; and also that, as a general rule, instruction in any one subject is likely to be better imparted by a single teacher, but that, for advanced students, the system of visitors is in some cases preferable.
5. That, in formulating any curriculum of study, the work should, as far as possible, be so arranged as not to necessitate, generally speaking, more than twelve hours of evening work in each week.
6. That it is particularly desirable that an architectural studio be established by the Association.
7. That it is desirable that a course of day instruction be established on the same basis as the evening instruction.
8. That it shall be made possible for members to obtain books from the library during the day-time.
9. That, inasmuch as it would not be possible to carry out the proposed curriculum, relying only on voluntary helpers, it is desirable that additional paid teachers be appointed.
10. That this meeting approves the scale of fees mentioned in the report, subject to such modification as may be found necessary.
11. That it has become absolutely necessary that a paid assistant secretary be employed.
12. That this meeting considers that the annual subscription for town members should be raised to one guinea, and that for country members should remain as at present.
13. That this meeting approves the suggestion of the Committee that a Guarantee Fund and an Endowment Fund be established.
14. That the best thanks of the Association be expressed to those gentlemen who so kindly, considerately and ably assisted the Special Committee in the preparation of their report.
15. That the resolutions which have been passed be referred to the General Committee, with instructions to take the necessary steps to carry the same into effect.

This is, as you see, a thorough and complete endorsement of the Education Report of the Association's Education Enquiry Committee, of which I gave an outline last month, and it is difficult to overrate the importance of this action of the Association; and, if the scheme is worked out in a thorough, business-like way, and with reasonable fees, the simultaneous education of a large number of enthusiastic young students in the centre of a town of the extent and of the capabilities of London must produce better architects than men whose only source of information is a master or principal often nearly as ignorant as themselves. I cannot help thinking that English architecture, as a whole, will be very greatly benefited by a change in the education of its devotees, and, as the change now seems practically assured, it will be interesting to watch the effect of its influence in different directions.

The Strand Improvement Bill, promoted by the London County

Council, came before the Parliamentary Committee several times in May. The chief fight has been on the question of "betterment," which I explained to you in a previous letter, and the opponents of the principle seem to have had the best of it. The Strand District Board of Works, for instance, denied altogether that the bill was being promoted for the special benefit of the Strand, but argued, on the contrary, that the London County Council were animated by a desire to widen one of the main thoroughfares of London, for the benefit of London as a whole. In addition to this, owners and occupiers in the greater proportion of the area scheduled in the bill as "bettered" strenuously denied that their positions would be improved in any way by the improvements contemplated by the Council. The Committee has reserved its decision.

I took an opportunity last week of visiting the designs of the English Eiffel Tower, which have been on view at the Polytechnic. They mostly resemble to a greater or less degree M. Eiffel's creation in Paris, and some are masterpieces of ugliness. One gentleman has evolved something very like a huge screw, while others have produced monstrosities of a wondrously complicated nature. Three or four utilized the lower portion of their tower for more or less elaborate buildings of the "Winter Garden" nature, while another conceived the project of building a tower over 1,200 feet high in stone. The exhibition, as a whole, is about the strongest proof of the absurdity of the idea that could well have been brought forward, and it is really to be hoped that the protest of the educated portion of the community will have some influence with those who are promoting the affair.

I am very sorry to have to record the death of one of the most promising of our architectural students, Walter Medlycott Duke. He was an exceedingly clever young fellow, bright, brilliant and original to a degree, and would have inevitably made his mark on the profession had he been spared.

The Association celebrated the end of session this year by a very successful ladies night concert, given by the Architectural Association Lyric Club at the Conduit Street rooms. The Institute lent their rooms, and there was a good attendance of students and their friends. The New Association Committee was elected at the last meeting, and Mr. Leonard Stokes was again elected President, and Messrs. Baggallay and Cresswell, Vice-Presidents. Mr. Waterhouse, R. A., will probably be re-elected President of the Institute for the third time. I think such a lengthy occupation of the presidential chair is quite unknown in the annals of the Institute, but the fact is a striking example of the esteem and respect with which Mr. Waterhouse is regarded by his brother professionals.

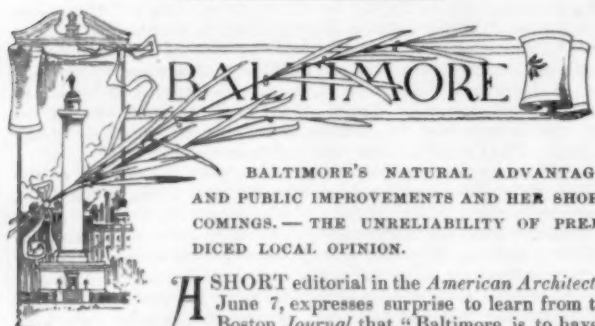
The Armourers' and Braziers' Company is following the excellent example, set by many of the other city companies, of encouraging the education of mechanics following those particular trades which the various companies represent. For instance, the Plumbers' Company has instituted a regular examination in two or three different grades for plumbers; the Carpenters', Bricklayers' and other companies hold annual exhibitions of work, for which prizes are given, and a good competition usually results. Other companies, such as the Painters', have founded scholarships for the study of the higher branches of their particular arts, and, altogether, these movements on the part of these rich, powerful bodies bid fair to develop into highly valuable and useful educational work. The exhibition that the Armourer's Company have just held consisted largely of examples of metal-work, some being exhibits of old work from South Kensington, and some work of metal-workers submitted in competition for prizes. Altogether, there were some hundred and forty exhibits. Another exhibition of a different character is a collection of sketches from Egypt and the East by Mr. Ernest George, in water-color, at the Fine Art Society's galleries in Bond Street. The collection is not a large one, but very effective, the Eastern sky giving Mr. George an opportunity of indulging in brilliant coloring, which he has not been slow to take advantage of.

A new music-hall has been recently erected in the Strand, on the site of the old "Tivoli" Restaurant. The architect has just failed to make a successful design of his subject. It is undoubtedly original, but betrays a somewhat incomplete appreciation of the laws which govern architectural design. The interior is treated in an Indian manner, and decorated in a sort of pinkish red and gold. It is more of an oblong shape on plan than the usual horse-shoe arrangement, and is noteworthy for a particularly pleasant arrangement for lighting, whereby the usual sunlight is replaced by a number of electric-lights depending in an irregular manner from a sort of glazed ceiling-light, behind which lights are also burning, the general effect of the whole being very pretty.

Professor Herkomer has been admitted into the sacred ranks of the Royal Academicians. This honor is bestowed on a very worthy recipient. The Professor's capabilities and versatility as an artist are well-known, and his art-school at Bushey is another mark of his great energy. It is, however, a matter of some little regret that the Professor has not yet succeeded in imbuing his students with that intense enthusiasm for art which is his own marked characteristic. Of course, it may be that no brilliant genius has yet come under his genial care, but the fact remains that very little first-class work has been produced by those who have received their education in the Professor's studio or school.

Mr. Banister Fletcher, the well-known writer on architectural law, has been elected Professor of Architecture at King's College, in the place of Professor Kerr, resigned.

The Royal Academy opened its doors at the beginning of May, but I have not yet had time to examine the drawings in very great detail. I hope to be able to give an account of the principal works exhibited, next month.



BALTIMORE'S NATURAL ADVANTAGES
AND PUBLIC IMPROVEMENTS AND HER SHORT-
COMINGS. — THE UNRELIABILITY OF PREJUDICED
LOCAL OPINION.

A SHORT editorial in the *American Architect* of June 7, expresses surprise to learn from the *Boston Journal* that "Baltimore is to have a Jewish synagogue which will be the only specimen of Byzantine architecture in the United States"; and, in further comment on this statement, goes on to say "... so much harm is done to the development of architectural knowledge and taste by the ridiculous ignorance of the people who write about architecture in the daily papers, that it is doing the public a service to hold up to derision the worst of these blind leaders of the blind." In this action we would cordially co-operate, if thereby the desired object, accurate description and intelligent criticism, might be obtained. The truth or error of the special statement referred to above is not the question of most importance; it was probably not obtained from the architect's office, though it may have been taken directly from a Baltimore newspaper. Can we hope, however, that mankind will ever come to believe that truth is stronger, as well as stranger, than fiction, and that, acting on this conviction, the press, the municipal official, the popular public speaker or writer, will ever learn to adopt reasonable accuracy and judicious reserve in their enthusiastic descriptions of local advantages and improvements, instead of the absolutely false statements and perfectly worthless eulogies and comparisons that now so widely obtain, ridiculous to the more intelligent and better-informed citizen, but misleading to the ignorant, and the greatest obstacle to any benefit that may accrue from the force of public opinion in regard to the real improvements and adornments of a city.

There is, undoubtedly, a degree of truth in the assertion that the architect himself is the best public teacher, and that the only textbook he needs is his executed work, but, like all such broad assertions, this only covers a small portion of the ground, leaving a much larger field open to other educational influences, inasmuch as those who have sufficient information, natural intelligence or intuitive good taste to appreciate the difference between a good and a bad thing when they only see it, are few in number compared to the mass of those totally ignorant. It may be accorded also that, up to a certain point, massive and simple grandeur will often appeal alike to the educated and the ignorant, but even this is not invariably so, and, when we approach the question of detail, the appreciation of simplicity, elegance, refinement and appropriateness, over excessive and commonplace elaboration, seems, with rare exceptions, to be in the direct ratio of knowledge and cultivation. These must be supplied to the people through some pervading source, wide-extending as the public press, and as the universal tendency seems to be to regard such high authorities as the daily papers and civil officials of any grade, as also infallible guides and critics in all matters—even of art—it is evident how potent, for good or evil, their influence may be as popular educators. Nowhere is this evil of journalism, speechifying and interviewing about matters of city improvements, architecture, and superior advantages in general, more flagrant than in Baltimore, giving rise to a dangerous degree of self-complacency and local pride and prejudice, often totally unwarranted by facts and arising largely from a plain misstatement of them—a harsh expression perhaps, but, unfortunately, a true one. For no intelligent citizen will deny that the state of public opinion which is continually led to assert that Baltimore's natural advantages, public improvements, liberal and judicious expenditure of money, and general attractions from nearly all points, have always been and always will be somewhat better than those of its neighbors, is not the most healthy condition in any community for maintaining the high rank claimed—in the great pressure and struggle for precedence in the nineteenth century.

Let it be admitted also that, in the long run, the decree of public opinion, after all, is the one nearest to the truth as to what is really good or bad. Such public opinion, however, must not be merely local, naturally influenced by contracted interests and prejudices, and generally the result of only limited experience and knowledge. We award the greatest deference to the opinion of the intelligent, well-informed, reading, thinking, travelled and unbiased public, as perhaps the very soundest authority on all such matters.

And now, turning to facts, what does such an authority as that say about Baltimore among other cities? First, we must note that the various features of a city can readily be divided under three simple heads, by way of easy comparison with other cities sufficiently similar in age, size, location, etc., namely, the few things in which it

notably excels others—the few in which it is decidedly inferior—and the very large majority in which it is not in any way remarkable, hence the field for the use of superlatives of either praise or blame is limited, and it is undoubtedly wise and wholesome to urge the people again to dwell on this, though it has been repeatedly done before.

Baltimore possesses a temperate and fairly healthful and agreeable climate; a charming location, near its great bay and upon its many hills; a site that offered possibilities for phenomenal artistic development in architecture (neglected, with few exceptions); it is one of the most economical places in the country for gastronomic and other material comforts and luxuries of life; its people generally show the evidences of a long-time culture and refinement, and are much given to social pleasures and hospitality. Under the influence of its libraries, its great University and Hospital, and other institutions, it has become a centre for literary, scientific and charity work, and it has one private art-gallery of exceptionally rare value and interest. Its streets are broad, generally clean, and well adapted to its system of surface-drainage (in spite of very much bad and very little good paving). One or two localities are impressively handsome in their surroundings, notably Mt. Vernon Place. What remains of its domestic architecture of fifty years ago or more is full of merit and interest, and the Washington Monument is one of the finest designs of the kind in modern times, in any land. The Druid Hill Park has great natural beauty (inferior in its artificial adornment and keeping), and the surrounding suburbs are extremely attractive by Nature (but only beginning to be properly developed in the last few years).

All these points of excellence are undeniable, but, unless one persists in looking only through rose-colored glasses, these other things

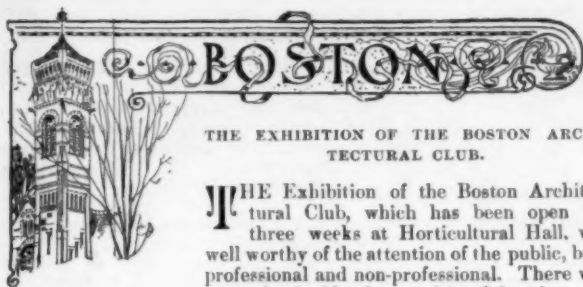


will be plainly visible to unblinded eyes. A bird's-eye view will show that in a city whose corporate limits are, approximately, six miles square, as here shown, more or less, a circular area of about half a mile radius, with the corner of Baltimore and Charles Streets as a centre, and a segment in a north-westerly direction, as indicated by the dotted lines, contains the limits within which it is to be found all that can claim any

architectural merit, perhaps with a very few isolated exceptions.

Beyond these limits we find an area of many miles of wide, badly-paved and badly-kept streets and suburban lands, built up of cheap and poorly constructed houses of a monotonous type, totally devoid of interest. There is a conspicuous lack of any systematic or concentrated scheme of public improvement in any one direction, and a consequent absence of imposing monumental effects. Both the number and importance of new buildings of architectural merit, public or private, are less than in any other cities of the same grade. Such public structures as railroad stations, hotels (with one exception) and theatres (with one exception) are below the average standard for a city of this rank, while it does not possess either an art gallery or a music hall worthy of the name. Gladly would Baltimore's truthful admirers deny these facts if it were possible.

Now in spite of all these things scarcely a day passes that the public are not treated through the daily papers, as it were officially and *ex cathedra*, in the way of local items, editorials, reports of speeches and the like, with the most dogmatic assertions to prove that this is the garden spot among American cities for the best enjoyment of all the pleasures of life. The noble streets and avenues are referred to; the park is the most beautiful in the world; the Academy of Music, with a large theatre, with some good points of arrangement, which was coincidentally first opened at the same time as the Paris Grand Opera House, is favorably compared with that gorgeous monument; and the newly laid-out Mt. Royal Avenue, a wide street through the best section of the town about a mile long—as yet unpaved—starting from no point in particular, and ending at the park entrance by the side of a huge livery stable, with no other buildings upon it but a partially finished church and one or two groups of very insignificant houses, has frequently been spoken of lately, by a very high official indeed, as "one of the handsomest Boulevards in the world." Such comment as this is almost too absurd to be criticised, and yet against just this we must protest, for Baltimore, or for any community, as most harmful to the right public spirit that results in real improvements. It is a midsummer's day, and midsummer is perhaps an easy time for broad generalizations. Theories, the statistician will tell us, can only be built on facts, but after we have gotten one set of facts, we can only stop to look them over broadly and theorize a little before we go on further upon the line of progress, lest we take a wrong direction or bury ourselves in a rut so deep that we cannot see over its edges. We are on the borders of July and with the summer solstice the "Fall of Pompeii" has come unto us. Vesuvius is in our midst, and if, perchance, on some fine night its floods of burning lava should burst the legitimate bounds of its board-fence, and bury the whole of old Baltimore for centuries beneath its ashes, in spite of all the faults we can find we would mark the spot with the epitaph found upon the grave of the old lady in a New England church-yard, "She was so pleasant."



THE EXHIBITION OF THE BOSTON ARCHITECTURAL CLUB.

THE Exhibition of the Boston Architectural Club, which has been open for three weeks at Horticultural Hall, was well worthy of the attention of the public, both professional and non-professional. There was not only double the number of drawings exhibited in any previous exhibition of architectural work in America, but they were of an unusually high standard of excellence. The Club undertook a very considerable task, and carried it out successfully, in spite of the fact that the average daily attendance of 200 persons was less than hoped for, and very much less than the exhibit of drawings deserved.

Apart from the decorative designs from the Museum of Fine Arts, there were some 1,200 drawings received, of which over 400 were rejected, leaving an exceptionally good selection to be hung on the walls. Naturally, there will be objections raised by the unfortunate rejected contributors, but in relation to this there is a word to be said. The wall-space to be covered was about 5,000 square feet. Many of the rejected drawings were tolerably good in design, but would, if hung, have occupied more space than they deserved. A large drawing requires more than ordinary merit, either in design or rendering, to justify its superficial area when hanging-space is limited; and, in hanging drawings, the larger ones usually have pre-emptive rights for central positions, merely because they cannot be made to occupy any other space agreeably. For this reason, and for this reason only, the drawing of the Court-house and of the *Prix de Reconnaissance*, by M. Eustache, were placed on the end wall upon the platform, in a position that would usually be the place of honor. The hall was arranged with a central aisle and four alcoves on each side. The first alcoves right and left contained water-colors. On the right, in order, were the alcoves for foreign sketches in pencil and for wash-drawings; for the school-work of the Ecole des Beaux-Arts, the School of Mines of Columbia College, and the Architectural Department of the Massachusetts Institute of Technology; and the alcove for decorative work, largely occupied by designs from the Class in Decoration of the Boston Museum of Fine Arts. On the left, the second alcove contained pen-and-ink renderings, the third English drawings, supplemented by some American pen-and-inks, and the fourth photographs. The central aisle had water-colors at one end, and pen-and-inks at the other.

There were one or two general facts to be noticed: that the exhibition was, perhaps, somewhat too much confined to contributions of local men; that a very large percentage of the exhibitors were the younger men of the architectural profession; that the water-colors were of great excellence; that the pen-and-ink work had materially improved within the last three or four years; that the school-work compared very favorably with what of the Ecole des Beaux-Arts work was present, and that the decorative work had a great deal of merit; and that the Philadelphia exhibitors sent some of the best drawings on the walls.

It was a disappointment that search disclosed but one drawing of Messrs. McKim, Mead & White, and none from Messrs. Babb, Cook & Willard, Carrère & Hastings, R. M. Hunt or George B. Post, nor any designs from John La Farge. The West was not adequately represented, though what drawings were sent were of the best of the Western work.

The Rotch travelling-students' drawings were capital renderings of a very difficult and uninteresting problem. Upon entering the hall, Mr. Newton's water-color sketch of an imaginary hotel compelled attention by its size and color. It was a capital piece of design, strongly rendered. Opposite was Mr. Schweinfurth's design for a similar subject, equally well done.

In the first alcove at the right, Mr. Fernald's water-colors of interiors, by Mr. Arthur Little, were wonderfully well done, delightful in color, unusually rich in tones, and with a fidelity of detail that touched the happy medium between hard realism and uncertain suggestion. The gradations of shadow in the white finish, the delicacy of the tints in the papers, and the quality of the stuffs were of a character usually little understood by an architectural draughtsman. Mr. Rotch's Moorish sketches failed to give the delicacy of the Granada and Seville work, as all broad sketches of such work must fail of necessity. Mr. E. C. Cabot was represented by a charming bit of Venetian color. Messrs. Sturgis & Cabot had a perspective of a very comfortable, quiet, stone country-house, and Mr. Walker was represented by water-colors of the interior of one of the special libraries in Messrs. McKim, Mead & White's Boston Public Library Building, an interior of the great central hall of Mr. Clough's Court-house, and the design for a church at Springfield, which received the silver medal at the Cincinnati Exhibition; Mr. Schweinfurth by a large drawing of the tower of St. Mark's. In the opposite alcove, the place of honor was filled by Mr. Waterhouse's design for the Liberal Club, and two drawings by Mr. Nattress of the exterior and

interior of Brompton Oratory. These drawings were as carefully rendered as are most English water-colors, but less painfully minute than are many. Mr. Nattress's best work, however, is his drawing of an oriel window, a very beautiful piece of color and rendering.

McKay & Smith had a large drawing of a church at Newton. On the same wall was a charming sketch of the Alhambra by Mr. Newton, and a bird's-eye view of a proposed suburban colony of houses at Longwood by Mr. Warren, very well rendered. Opposite was a very refined design for the Boatmen's Savings Bank Building, St. Louis, by Eames & Young, and the Hotel Ludlow, by Walker & Best. Near at hand were water-colors of the Abbott House, Cambridge, by Messrs. Longfellow, Alden & Harlow, and of the Harriswood Crescent by J. Williams Beal, rendered by Eldon Deane, and an interior of the large hall of the Millard Hotel, Omaha, by Walker & Best.

At either side of the centre aisle were water-colors of entrances to houses in Troy by H. Langford Warren, which were in many ways remarkable pieces of work; the use of brick and marble, the sense of delicate proportion, and the value of contrasting color being marked in both, and the rendering, so difficult to make agreeable where there is a large mass of brickwork, was wonderful in its expression of values, tones and material. One of these was by Mr. Warren himself, and one by his brother, the artist, Mr. Harold B. Warren. Altogether, they were very unusual both in design and rendering.

Further down the aisle, on the right, was Mr. Langerfeldt's drawing of Chamberlin & Austin's Cambridge High-school, a building of great scale and restraint, in which the repeated arch motive, flanked by masses of building, was very well handled. Opposite was Mr. Deane's water-color of Andrews & Jaques' competitive drawing for the Chamber of Commerce, a design of much dignity, excepting at the top of the tower, and one of the best of Mr. Deane's colored drawings. The other large water-colors in the aisle were designs for small town libraries in brick and in stone by Cabot, Everett & Mead, rendered with much *chic* by Mr. Mead; a design for the Kansas City Boston Building by J. W. Beal, rendered by Mr. Bosworth, which certainly bears no comparison to the very successful building erected by Winslow & Wetherell; a very attractive water-color of the Willard School, Quincy, by Sturgis & Cabot; and an extraordinary imaginary Italian town by Mr. Schweinfurth. Of the large pen-and-inks further down the aisle, the Stone Gap Hotel, by Messrs. Winslow & Wetherell, and the design for State Library and Office-building, by H. S. McKay, and a Château, by Mr. Schweinfurth, were the most noticeable.

In the alcove for drawings in slight washes, by far the most interesting were the two designs of Messrs. Cope & Stewardson of Philadelphia, for a building for the Pennsylvania Company for Insurances. One of these was in brick, the other in marble with a Corinthian portico. These were designs of the very highest rank, such designs as would compare favorably with work of the best period of the Renaissance, full of refinement, delicacy and proportion, and only open to the objection that they were out of scale with their surroundings, and were conceived in a style and magnitude that would best fit isolated monumental buildings. Of the two, the design in brick was the more frank and direct and with less affectation of Classicism. If this is the sort of rendering of Classic motives that architecture in America is to have in the future, there is every reason for congratulation. The rendering by Mr. Truscott was not a whit less distinguished than the designs. Next in importance and in a totally different key, but of exceptional merit were the designs by Gilbert & Taylor of St. Paul. These were of the picturesque type handled in the best manner, and were for the Bear's Head Inn at White Bear Lake, the Town and Country Club near St. Paul, and for a cottage at White Bear Lake. They were delightfully drawn by Mr. Gilbert in his suggestive style of rendering. Two drawings of Mr. Andrews, one in sepia of a church and a free soft-pencil drawing of a house at Brookline, were noticeable.

A number of Mr. Emerson's well-known sketches for country-houses and a frame of Mr. Peabody's pencil-sketches of several houses and of Divinity Hall, built by Peabody & Stearns, showed plainly that the younger men were not to have it all their own way, for both had the individual charm which has not been repeated though often imitated. There were also some ingenious and delightful interiors freely rendered in sepia by Wilson Eyre, Jr., and some excellent measured drawings of old houses at Bayeux and Lisieux by A. S. F. Kirby, and a church by Cram & Wentworth. The foreign sketches were of great merit and several new names appear in the list of the contributors of this work who show that by their touch and sense of color they are not at all behind their predecessors in the same field. The names only of those who were well represented can be given, these were Messrs. Eyre, Cope, Day, Stewardson, and Miss Millicent Drake of Philadelphia; Brunner, Howard Randall, Meeker of New York; J. G. Green of Brooklyn; Eames of St. Louis; Trowbridge, Burdette of Buffalo; Gilbert of St. Paul and Pond of Chicago; Blackall, Newton, Mead, H. Bacon, Jr., Schweinfurth, Denman Ross, Linden Smith, Ross Turner, Chamberlin, Dwight Blaney, J. A. Van Straaten, Jr., Arthur Rotch, E. C. Cabot, Eldon Deane, Walker of Boston. Of these, the water-colors of J. Linden Smith and the sketches in Holland of J. A. Van Straaten, Jr., were to be especially remarked. The alcove devoted to school-work had *rendus* by students of the Ecole des Beaux-Arts; of the School of Mines, Columbia College, and of the Massachusetts Institute of Technology.

Amongst these H. C. Ripley's hotel and T. R. Kimball's drawing was especially noticeable. All school-work is necessarily mannered and preferably so, but there were one or two innovations evident, one that the Institute work is growing in the importance of the problems given, and that designing and perspective is required.

The last alcove on the right glowed with the designs in color of the Class in Decoration of the Museum of Fine Arts. There were designs for all imaginable fabrics, for architectural interiors, ceilings, mantels, etc., wall-papers and stuffs, rendered in water-colors with in many cases, much skill both in design and color. Of these the most noticeable were by Misses Brown, E. Child, K. Child, Inman, Sheldon, Morse, Gray and Temple, and by Messrs. Cabot and H. C. Sears.

Upon the platform, the Rotch Scholarship drawings, several *rendus* of H. Bacon, Jr., and Mr. Schweinfurth's design for the Grant Mausoleum were worthy of notice; little else at this end of the hall.

In the photograph alcove, Messrs. Sturgis & Cabot had a number of attractive interiors, bromide prints colored, and Cabot, Everett & Mead a large sun-print of Hastings Hall. There were also a number of photographs of work in England by Mr. T. W. Cutler of London, sumptuous but commonplace; some interiors by Mr. Martin Aiken of Cincinnati, and exteriors by James T. Kelley of Boston and C. O. Arey of Cleveland.

The pen-and-ink alcove contained sketches of country-houses, among which were several by Appleton & Stephenson, Peabody & Stearns, Glenn Brown, James Brown Lord, Clarence Luce, Rossiter & Wright, Chamberlin & Whidden, Mason & Rice of Detroit, Stevens & Cobb of Portland; an attractive set of outline interiors by Charles T. Mott, and the design for St. Mark's School by H. F. Bigelow. But by far the most interesting set of pen-and-ink drawings were those of large business buildings, in most cases rendered by Mr. Gregg with the restraint, contrast and force of his usual rendering. These buildings are instructive, for by necessity they are forced to be without plagiarism and by economy to be the simplest solution of a business problem of investment. They are unique, and are almost the only type of modern architecture that depends upon proportion and skill for their effect, and they are certainly the most encouraging outcome of the present architecture of America. Very few of them but what have dignity of mass, simplicity of treatment and an attempt at least at good proportions and a general sobriety and restraint of effect that is most commendable. It is noticeable that those whose enrichment is confined to the top and bottom of the building alone, are the best, that wherever extravagance of fancy has shown itself the result has been pitiable. The simplest of these designs are by Winslow & Wetherell, Peabody & Stearns, C. H. Blackall, Shepley, Rutan & Coolidge, Andrews, Jaques & Rantoul, Longfellow, Alden & Harlow, Green & Wicks, Carey & Trowbridge, Walker & Best, Hartwell & Richardson.

The English alcove is interesting especially from the exhibition of the drawings of Herbert Railton, which for depth of tone, touch, and sense of color far surpassed the gray sketchy and broken drawings of Raffles Davison that cover the opposite wall. When will Mr. Davison learn that he cannot draw the human form and that his claims to attention are in his judicious choice of architectural subjects and a certain medium facility in rendering detail. Mr. Pennell's work, shown also in this alcove, lacks value and is painfully sketchy in places, but compared to Mr. Davison's it is masterly.

Certainly Mr. Pennell would acknowledge, himself, that he had erred when he stated in his book on rendering that he knew no architectural draughtsmen who could do artistic work, for the walls of two of these alcoves had work superior in artistic quality, apart from their architectural truth, to what was shown of Mr. Pennell's own work. To be just, however, it should be acknowledged that it is far from being his best work. English architecture was also represented by designs of Basil Champneys, and by several drawings by Bidlake of Leonard Stokes' work, quiet and with a good deal of charm, and by two of Mr. Ernest George's inimitable drawings. There were some attractive designs of decorative work by Prentice Treadwell, the Tiffany Glass Company, Louis Haberstroh and Edwin Ford, and Mr. Ford's large window at the end of the Hall was very rich in tone and vigorous in drawing.



[Contributors are requested to send with their drawings full and adequate descriptions of the buildings, including a statement of cost.]

THE HARLEM CLUB HOUSE, CORNER OF 125TH STREET AND LENOX AVENUE, NEW YORK, N. Y. MESSRS. LAMB & RICH ARCHITECTS, NEW YORK, N. Y.

[Gelatin Print issued only with the International and Imperial Editions.]

CENTRAL SAVINGS BANK, CANTON, OHIO. MR. GUY TILDEN, ARCHITECT, CANTON, OHIO.

STUDY FOR A CHURCH. MR. W. W. POLK, ARCHITECT, KANSAS CITY, MO.

ODD FELLOWS BUILDING, FORT WAYNE, IND. MR. F. B. KENDRICK, ARCHITECT, FORT WAYNE, IND.

THIS building, which is now being erected on Calhoun Street, will cost something over \$35,000 and is to be completed in December. It is of buff sandstone, except the corner column, which will be polished Georgia mottled marble. The ground-floor will be occupied by stores, the second and third floors for club-rooms and the upper floor by the Odd Fellows. The building is about eighty feet high and the ground plan sixty by seventy.

SKETCHES BY A ROTCH TRAVELLING-SCHOLAR. MR. E. A. JOSSELYN.

SKETCHES OF WROUGHT-IRON WORK. MR. T. F. LAIST.

[Additional Illustrations in the International Edition.]

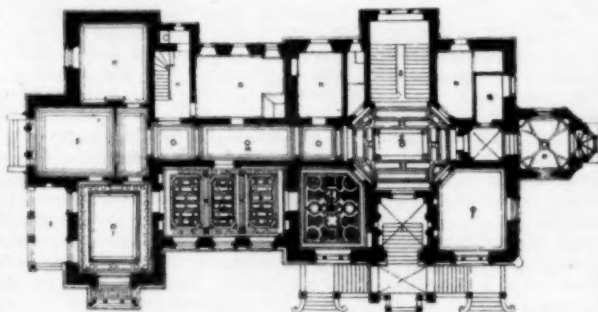
HOUSES IN BUDA-PESTH, AUSTRIA. HERR FR. LASZLO, ARCHITECT.

[Gelatin Print.]

VILLA IN WIESBADEN, GERMANY. HERR A. SCHELENBURG, ARCHITECT.

[Gelatin Print.]

HOUSE OF HERR EDUARD PURICELLI, LIESER, ON THE MOSELLE, GERMANY. HERR H. TH. SCHMIDT, ARCHITECT, FRANKFORT ON THE MAIN, GERMANY.



1. Vestibule. 2. Hall. 3. Main Staircase. 4. Reception Room. 5. Gentlemen's Room. 6. State Dining-room. 7. Family Dining-room. 8. Veranda. 9. Billiard-room. 10. Guest-room. 11. Back Staircase. 12. Kitchen. 13. Cook's Room. 14. Back Hall. 15. Servant's Hall. 16. Sacristy. 17. Private Chapel.

NEW SCOTLAND YARD: THE CHIEF OFFICE OF THE METROPOLITAN POLICE, THAMES EMBANKMENT, LONDON, ENG. MR. R. NORMAN SHAW, R. A., ARCHITECT.

NEW PULPIT, ST. MICHAEL'S CHURCH, BOURNEMOUTH, ENG. MR. REGINALD G. PINDER, F. R. I. B. A., ARCHITECT, BOURNEMOUTH, ENG.

The design is Early English. The body of the pulpit is octagon in plan, entered by a short flight of six steps from the north transept. It stands on a circular, central base-shaft and a base arcade. On five faces of the octagon are panels (designed by Mr. J. W. Warren, artist, of Bournemouth), sculptured in the following subjects: Centre panel, "St. Michael" (adapted from the picture by Raphael in the Louvre, Paris). Legend, *Michael Princeps vester*. 1. "Jacob's Dream." Legend, *Domus Dei et porta celi* (Genesis xxviii, 17). 2. "Lot's Escape." Legend, *Salva animam tuam* (Genesis xix, 17). 3. "Apostles sent to Preach." Legend, *Loquimini omnia verba vita hujus* (Acts v, 20). 4. "John and the Angel." Legend, *Adora Deum* (Rev. xxii, 9). A carved cornice runs round the top of the pulpit, and a book-desk forms a canopy over the central figure. The pulpit stands in the same position as the old one, close to the east respond of the north arcade of the nave. The hand-rail to steps is of brass and wrought-iron, the steps themselves of polished Hopton wood stone. The interior of the pulpit has an oak floor, linings and inner capping. The cornice, book-desk, canopy and body of pulpit are in alabaster, and the small shafts in arcade of green Yealmonston marble. The central base-shaft is in red Osgill, and the base arcade in bird's-eye dark Ashburton (dark gray). The work has been executed by Messrs. A. W. Blackley & Son, of Torquay, and has cost nearly 300*l*.

SYSTON CHURCH, NEAR BRISTOL, ENG. MESSRS. CHRISTOPHER & WHITE, ARCHITECTS, LONDON, ENG.

We give a perspective view, showing the restoration of Syston Church, near Bristol. The church is a very small one, but of considerable interest, containing, as it does, a lead font of the Norman period, enriched with figures and ornaments under arches, and two chained Books of Common Prayer of the seventeenth century. The church consists of an Early English chancel, Norman nave, with later insertions, the tower being built in the fifteenth century into the Norman nave. The roofs of the nave and chancel were of comparatively recent date (about 150 years old), without any detail

whatever, and were plastered at the level of the collars; but a small portion of the original roof remains on the south side of the tower, which gave a clue to the character of the old work, which appears to have been an open barrel with tie-beams. The whole of the roofs have been reconstructed, except the old portion above referred to, which remains intact. In the restoration of the chancel a barrel-roof has been put, but in the nave, owing to the great weight of the stone slates, which have been re-used, an open-truss roof has been constructed, raising the tie-beams as collars, with curved braces under. The chancel contained four square pews, and there were three fire-places, but these have been removed and the chancel rearranged with oak choir-benches, and the old late seventeenth-century pulpit has been repaired and refixed, and a portion of the nave pews have also been rearranged. The gallery at the west end has been removed, and the tower arch opened out. The windows in the tower and the parapets were inserted about seventy years ago, and were of the Gothic of that period.

The parish being a very poor one, the restoration of the belfry windows and new top to the tower, as shown in the drawing, has had to be postponed for the present, as the expenditure on the more necessary portions of the work was as much as could be undertaken with the funds available. The earth of the churchyard on the north side was up to the level of the window-sills. This has been removed, and the old stone paving relaid round outside the walls of the church, and a gutter formed. The inner porch-door on the south side has a good bit of Norman work, and there is a similar doorway on the north side of rather earlier date and finer workmanship, but merely moulded, whereas that on the south side is enriched, and has a carved tympanum. The north doorway had been partly filled-in and converted into a window. As the insertion of the window inside the doorway is most apparent, but not unsightly, it has been left.

The restoration works, beyond what has been previously mentioned, include repaving, general repairs, new heating apparatus, strengthening bell carriages, and new lead roof to tower, etc.

HOUSE, EAST LYSS, HANTS, ENG. MESSRS. CHRISTOPHER & WHITE, ARCHITECTS, LONDON, ENG.

We give an illustration of a house recently erected at East Lyss, Hants, for Mr. Robert Barnes, M.D. It is built of red brick, with gauged-brick dressings, and roofed-in with hand-made local tiles. The sitting-room chimney-pieces were all specially designed by the architects, and were made by Mr. James Forsyth, sculptor. The sitting-rooms are all approached through the inner hall, a room twenty feet square, from which starts the principal staircase to the first floor, the staircase being of dark oak.



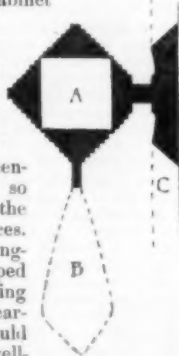
[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

FLAT KEY LOCKS.

BELFAST, IRE., May 2, 1890.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—There are two articles made in the United States and are in ambush to me, but I know they exist, as I at one time saw them. The one is a "cabinet or safe-drawer lock," and the other is a "safe or strong-room door crank handle." Please how could I find out what firm makes a cabinet or safe-deposit box-lock, containing either six pin tumblers or six levers in one lock, or a lock to contain from eight levers or pin tumblers each, up. How much per copy is *American Architect*, an old copy containing an article on this lock subject preferred, or who in England sell the journal, so that I could obtain, now and again, a copy of it. I hear of Sargent & Greenleaf's locks: have they a firm in Boston, if so kindly send this to them, perhaps they make the above locks, for their catalogue of sizes and prices. This crank handle is on most of American strong-room doors. A is solid, square, cone-shaped stepped turnings all over square. B is the hanging tail where you grip to turn. I forget its appearance. C is the portion next to the door. I would remit for a drawing for my recognition, it is well-known in America for the above purpose. I want no other design. I would pay for an engraving from you. Yours truly, JAMES MAGUIRE.



One-fourth actual size. These turnings on square A are round step by step. This is a side-view of the handle.

[THE Sargent & Greenleaf Company, or the Yale & Towne Company, make locks with six or more pins or tumblers. The sketch of handle does not give any clue, as a handle of any shape may be used with a given lock. Address for catalogues, Yale & Towne Manufacturing Company, 62 Rende Street, New York, or the Sargent &

Greenleaf Company, 101 Maiden Lane, New York. Blackall's "Builders' Hardware," (price \$5.00, published by Ticknor & Co.,) treats very fully of locks. Copies of the *American Architect* can be had by sending directly to Ticknor & Company, 211 Tremont Street, Boston.—EDS. AMERICAN ARCHITECT.]

NOTES & CLIPPINGS

THE PORCELAIN TOWER AT NANKIN.—In 1430 A. D., after nineteen years of ceaseless labor and an expenditure of about \$4,000,000, the Chinese government finished the wonderful porcelain tower at Nankin, which stood for nearly four and a quarter centuries, until 1856, the most marvellous building ever erected by human hands. It was of octagonal form, 200 feet in height, with nine stories, each having a cornice and gallery without. The name of Porcelain tower was applied to this unique structure on account of the fact that the whole of the outside work was covered with porcelain slabs of various sizes and colors, but principally of red, white, yellow and green. At every one of its nine stories the projecting roof of the gallery was covered with green tiles, each corner being provided with a bell varying in weight from 300 to 1,000 pounds. There were 152 bells in all, each so nicely balanced as to rock back and forth as they were swayed by the breezes, giving out a continuous strain of beautiful but weird music. Ranged in rows between the bells were 128 brass, bronze and silver lamps, which were lighted every night in the year. The apex of the tower, starting from its base at the 250-foot level and extending upwards for a height of ten feet, was a monster gilded pineapple, surmounted by a copper ball about two feet in diameter. A spiral stairway of over 300 steps led from the base to the summit. The building was constructed as a gift to an empress, and was always kept in repair by the government. Lightning struck it in 1801 and tore down the three top stories. The injury was repaired as soon as possible. It would probably be standing to this day had not the Taiping rebels imagined its lights and bells disastrous to their cause.—*Commercial Advertiser*.

THE CATHEDRAL OF CARTHAGE.—On May 22 the solemn consecration of the new basilica of Carthage—the only Cathedral church in Africa—was celebrated by Cardinal Lavigerie in the presence of forty archbishops and prelates of high rank. At a later hour in the afternoon His Eminence inaugurated the opening session of the Council of Bishops, the first of the kind which has taken place there since the year A. D. 252, by St. Cyprian. The cathedral is perched on the summit of the Byrsa Hill amidst the ruins of the old acropolis, and on the very site of that famous heathen temple of Æsculapius, in which, at the close of the last Punic War, B. C. 146, the Carthaginian commander took refuge with his wife, children and some Roman deserters, determined to defend themselves to the last and to perish among the ruins. Hasdrubal's heart, however, failed him; and while his family and his followers met bravely the doom from which he so meanly shrank, he surrendered himself to the Roman conquerors who, after causing him to march in chains in the triumphal procession of the victorious general through the streets of the Eternal City, subsequently tortured him to death. The cathedral presents a very striking appearance with its dazzling white towers and minarets. Its architecture is a mixture of the Roman and the Byzantine, and it is built of a brilliant white chalky-looking stone, which has been quarried in the island of Malta. Within it is divided into nave, transepts and gallery, and the roof is supported upon 142 columns of white Carrara marble. The woodwork is of pitch pine and the walls are decorated with exquisite colored Tunisian faience. The ceiling has been painted by native artists with a profusion of arabesques, but in accordance with the prescriptions contained in the Koran, they have carefully avoided all designs representing either human beings or animals. The cathedral dominates the entire surrounding country, standing on the top of the steep hill up the slope of which a body of some 8,000 pilgrims from all parts of the world wended their dusty way on the day of the consecration. They were followed at 10 o'clock by the 4th Regiment of Zouaves, which, preceded by its band, served as escorts to the marvellously chiselled gold and jewelled casket that contained the relics of St. Louis, the Crusader King of France. The latter perished some half dozen centuries ago, almost on the very spot where the cathedral, erected in his honor and bearing his name, now stands. The relics were placed on the high altar at the foot of the steps leading up to which is a marble slab concealing the entrance to the tomb in which Cardinal Lavigerie desires to be interred. The inscription on the stone is in Latin, and reads as follows:

Here rests in peace,
In the hope of infinite mercy,
He who was
Charles Martial Allemand Lavigerie,
Cardinal priest of the Holy Roman Church,
Archbishop of Carthage and Algiers,
Primate of Africa,
And who now is but dust.

Pray for him.

The spectacle inside the cathedral during the ceremony of consecration was most picturesque. The foreign consular corps at Tunis and the officers of the French garrison, in their gold-laced uniforms, the gorgeous vestments of the prelates, the flowing robes of the native dignitaries who had assembled to witness the inauguration of the "new mosque to the Prophet Jesus," and white cowls and red fezzes of the monks of St. Charles—an order founded by the Cardinal for missionary work in Africa—all contributed to render the spectacle one never to be forgotten. Equally memorable was the sermon preached from the altar steps by the venerable Cardinal, which was brought to a close with the following words, delivered in tones of impassioned eloquence: "And now, bells of our cathedral, announce the birth of a new

Carthage. Ring forth from to-day nothing but resurrection and life. Speak to these people who environ you nothing but of peace, concord and brotherly love. And declare to the world that if the priests of pagan Rome were brought here in times of old to curse, the priests of Christian Rome have come only to bless Carthage and poor Africa." — *N. Y. Tribune.*

DISCOVERY OF AN ETRUSCAN CITY.—The *Perseveranza* of Milan reports the accidental discovery of the remains of an Etruscan city near Marzabotto, in the district Vergato, province of Bologna. According to the statement of Professor Brizio, the city was divided, first, into four quarters, by two main streets 15 metres broad, which followed the cardinal points of the compass, intersecting in the middle. Two other streets of the same width, running from east to west, divided these four quarters into eight equal parts, and these again were crossed by parallel streets 5 metres wide. The house blocks thus formed are, with one exception each 165 metres long and 35-40 metres broad—one block only is as much as 68 metres broad. The main streets have two sidewalks, each 5 metres wide, between which lies the carriage-road, of the same width. The gutters, which run along the walks on the side next the houses, with a regular incline, measure 80 centimetres in diameter. The Etruscan houses which have been excavated already are arranged like the Roman, and are surrounded by shops. One of them, with a frontage of 35 metres, possesses a spacious vestibule, 5 by 7 metres, paved with mosaics. Though this, one passes into an atrium 26 by 10 metres, which is also paved with mosaics, and shows an impluvium. From the atrium open the sleeping-rooms, which measure 6.80 square metres, and a larger room, entirely open on one side, which was probably the *tablinum*, or room of the master of the house. The extreme regularity which characterizes the arrangement of this city leads to the conclusion that it did not grow gradually but was built as a colony, with a definite plan and at one time. According to the objects discovered, especially the painted vases, and also the contents of the graves which have been opened, the construction of this Etruscan Pompeii would date from the second half of the fifth century (?) B. C.—*Berliner Philologische Wochenschrift.*

RUSSIAN ARCHITECTURE.—Notice the peculiarities of the architecture, the most salient feature of which, aside from gilded domes, is its bigness. Indeed, the houses could not be bigger had they been designed by an American pork millionaire. For example, I saw one whole street, every house of which occupied an entire block, while a little further on the Admiralty building, extending half a mile in length, recalled the boldness of the architects of Nineveh. It is, however, a successful experiment, and the grace of its symmetry and proportion relieves it of all awkwardness. In style the Classic Renaissance is everywhere steadily adhered to, although its purity is occasionally impaired by the introduction of Gothic vegetable forms in decoration; but the true splendor and magnificence of Russian architecture must be sought for in the interiors. This I discovered a little later while dining with a young officer of the Imperial Guard, whose dining-room may be taken as a convenient standard. One end of this apartment was occupied entirely by a porphyry fish-pond, the contents having been brought from the Volga. While eating our soup we pointed out the most desirable fish, and this was immediately caught by a tall "mujik," and in a few minutes lay smoking on the table. This luxury was not peculiar to my particular Slavic Lucullus, as every one who has visited Russia well knows, but I must confess my occidental imagination received a slight shock as, glancing up from the mosaic floor, my eyes encountered the legendary history of the family in sculptured bas-relief worthy of Thorwaldsen, extending the entire length of the room, and punctuated by pilasters of malachite 20 feet high, the capitals of gold supporting a ceiling by Makowski, while the ribs enclosing the frescos and forming a groin were also of the precious metal. The rest of the appointments were as costly and magnificent in their way, but these would come under the head of decorative art rather than architecture. All this splendor seems less pretentious and more natural when one bears in mind the average wealth of a Russian noble, 50,000 acres of cultivated land not being considered particularly opulent; indeed my genial host, after the requisite amount of hesitation exacted by modesty and good taste, informed me that he possessed 250,000 acres. And yet private expenditure is as nothing compared to ecclesiastical, as in the case of the old Church of Kazan, where are jasper columns and an altar of solid silver, weighing seven tons.—*Boston Herald.*

ALGERIAN MOSQUES.—Of the more than one hundred mosques which formerly existed in the city of Algiers, only five now remain. The most interesting of these are Djama el-Kebir, the grand mosque, in Rue de la Marine, Djama el-Djedid, or the Fisher Place mosque, also in the Rue de la Marine, and the enchanting little mosque of Djama Sidi Rhaman, overlooking the garden of Marengo, and taking its name from the marabout, or Mahometan priest of most venerated memory, Sidi Abd-el-Rhaman, who died in 1471 and is interred here within an inner sacred chapel or khoubas, surrounded by several pachas and deys. Two distinct and zealous sects, the Maleki rite and the Hanefi rite, worship respectively at the Grand mosque and the Fisher Place mosque; while at the Sidi mosque all are on common ground; it is the shrine of the more aristocratic Moslems; and on certain days of the week it is thronged with men and women, the latter, from an old and lax custom, predominating. Indeed, it is at this little mosque, if reverence is assumed and discretion exercised, that one will secure more glimpses of Arab women of the finer type than offered by all other possible opportunities in Algiers. The Grand mosque dates from the eleventh century. From the Rue de la Marine it presents a façade of splendid white marble columns. These support an arcade, in the centre of which is a tremendous fountain. Before all mosques stands the fountain, for all Moslems perform extraordinary ablutions before entering for worship. The interior, as with all mosques, is extremely plain. Stately, monumental pillars, supporting the universal Moresque arch, provide numerous series of arcades. A few inexpensive lamps are sup-

ported from the roof. The pulpit is plain, and the gallery attached to it is of the severest pattern. A little niche, without ornamentation, is set into the wall, called the mihrab, which is found in all mosques, and indicates the east, the direction of the sacred Mecca. Mattings are hung about all columns and the side walls, lest they suffer defilement at the touch of sacrilegious Christian. The one sumptuous thing to be seen is in carpeting. The floor is completely covered with the richest of old Moorish carpets. For no Moslem, and no Christian unless he have no sense of regard for cherished religious custom and tradition, will ever enter one of these edifices without first removing his sandals or shoes. The windows are invariably small, set high in the walls, colored, and the effect of the dim, subdued light and the peculiar eastern incense, is exceedingly impressive. Under the same roof is the highest Algerian court of the Algerian Mussulmans, the superior tribunal of the muphti, to which appeals are frequently taken from the lower court of the *cadi*; for it has been the wise policy of the French provincial rule in Algeria, to foster and preserve all Mohammedan customs, religion and institutions, not positively inimical to French civil law.—*Commercial Advertiser.*

TRADE SURVEYS

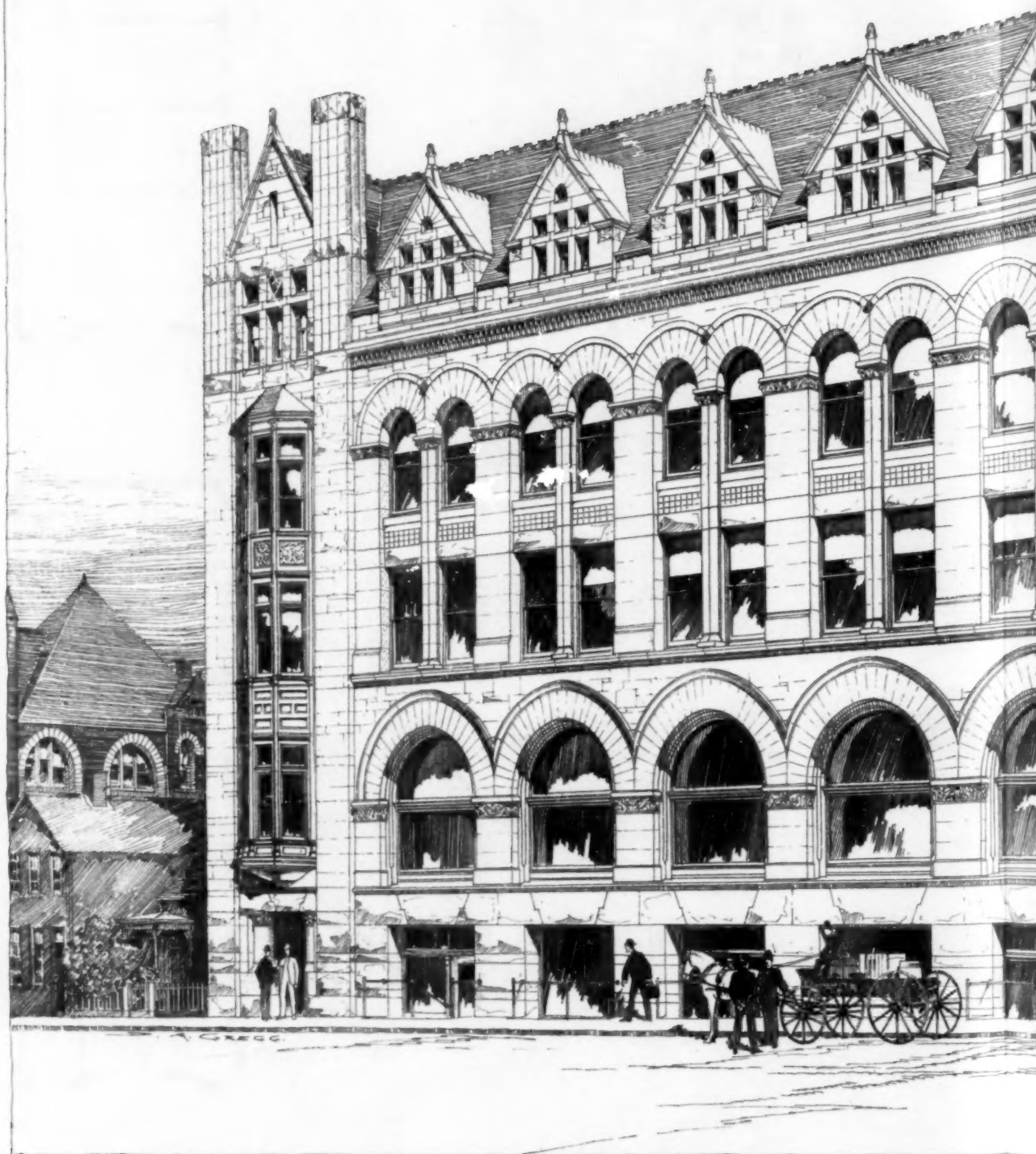
So far as reliable advices have been received during the past thirty days from leading architects, builders and contractors in the largest cities of the country, it appears that lost time is being made up, that confidence is generally restored, and that preparations are now in a forward state for very active building operations during the remainder of the year. An enormous amount of building will be done. The manufacturers of building material are under contract to supply as much material as they will be able to turn out until the close of the year. The brick-makers in all sections, but particularly in the far West and South, have contracts either already in hand, or assured, which enable them to keep their full capacity engaged. The lumber manufacturers feel confident that their entire product will be promptly marketed, and at slightly higher prices than prevailed a year ago. About the only difference in the lumber trade to-day, as compared to this time a year ago, is that sellers now have the advantage of a somewhat better demand, and prices are, therefore, more regular. A year ago, a large amount of lumber was being sold very close to cost price; but now comparatively little is sold on such terms. The demand for all kinds of hardwood, especially Southern, has greatly increased, and the saw-mills in the interior of the South have their fullest output for some time to come, already under contract. The hardwoods of the North are also in better demand. In fact, as several architects have stated, there is a general increase in the demand for hardwoods for interior finish and general use. The white-pine manufacturers are having a better year than they expected. The manufacturers of spruce are selling their product at higher prices than last year; hemlock is also bringing more. Walnut sells well for export; poplar rules strong in all markets, and the demand is heavy. Quartered-oak sells as fast as it can be delivered. The entire lumber market is in good shape. The latest statement with reference to the iron industry is that the weekly output of crude-iron, amounting to 180,000 tons, is all going into consumption, and that a large number of large and well equipped new furnaces will be put in operation before the close of the year. Between forty and fifty new blast-furnaces have been projected within a few months. A vast amount of mineral property in the South is being picked up by American, as well as foreign capitalists. If one-fourth of the new enterprises now talked of are pushed to completion, the lumber manufacturing and iron and steel-making capacity of the country will be increased to an extraordinary degree within the coming twelve months. The outlay now being made in reproductive channels is greater than at any previous time. That these investments are wise and safe is for no one at present to doubt. The agricultural and manufacturing interests maintain an even balance. The decentralization of industries now in progress, is the strongest assurance that the existing prosperity and activity will continue.

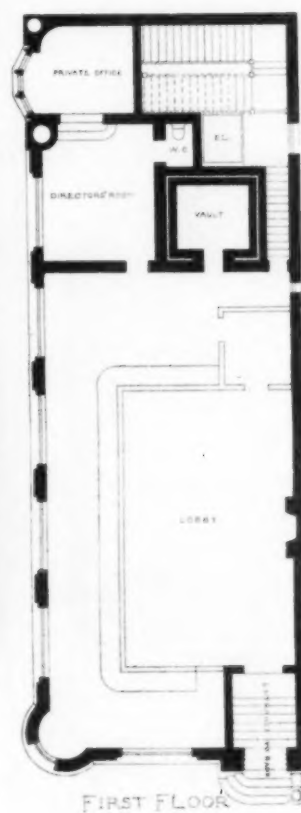
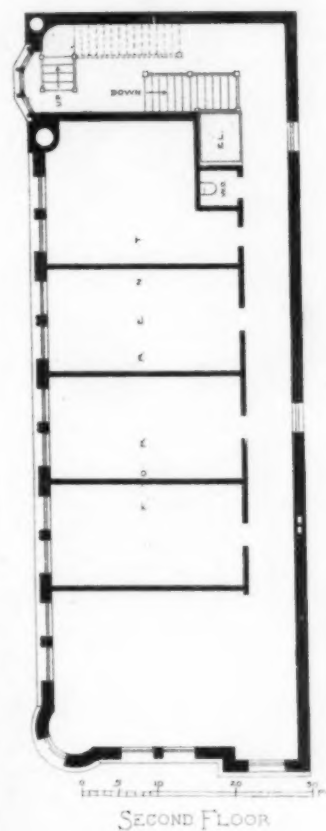
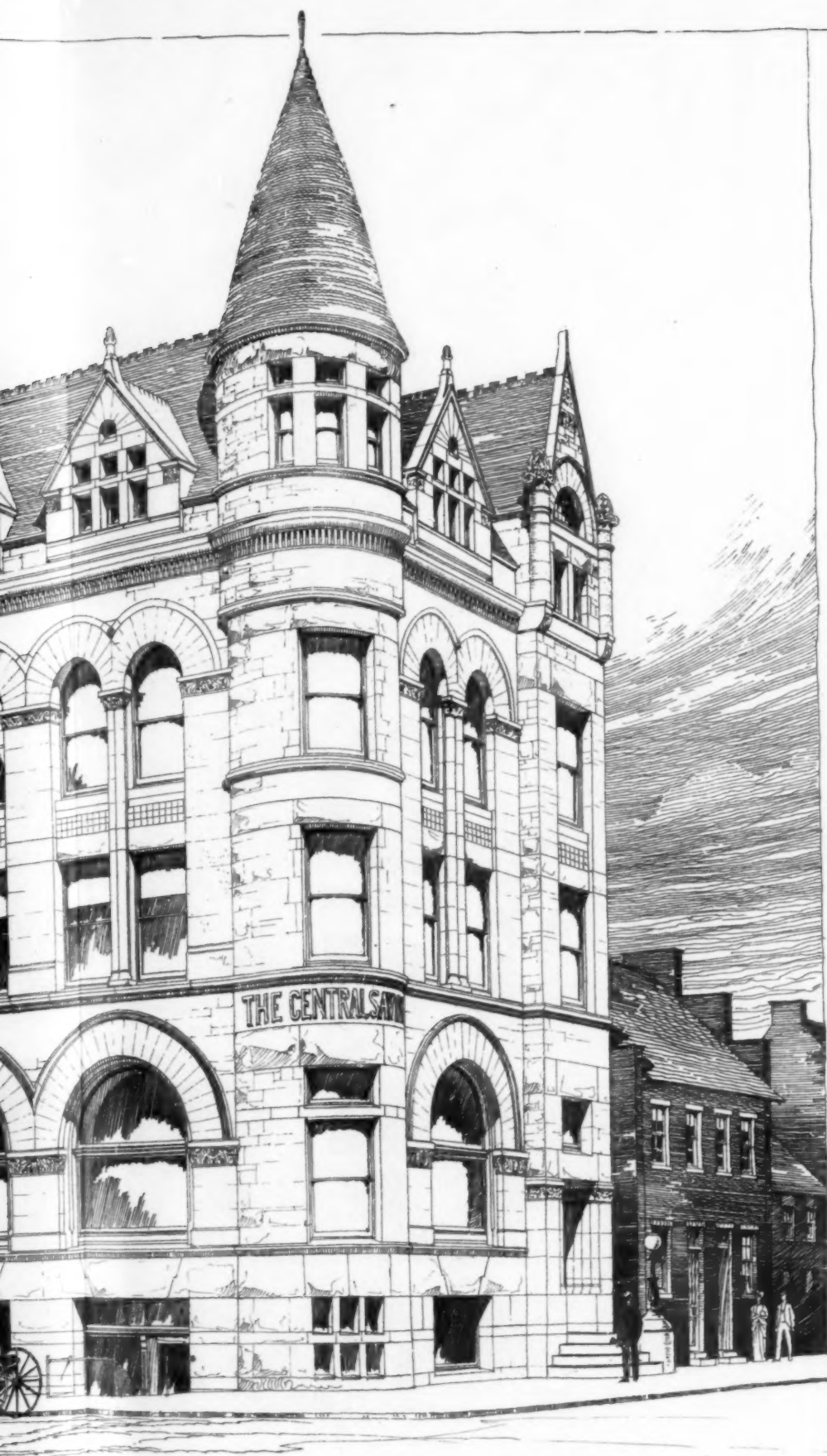
If the Northwest was exclusively a wheat-growing region, if the South produced only cotton, serious evils might well be anticipated; but with manufactures of a hundred kinds springing up and flourishing in these agricultural regions, creating little markets within sight of farms and plantations, there is no reasonable cause for apprehension that production and consumption will become unbalanced. Investments of foreign capital continue of large proportions. It is estimated that British capitalists now control not less than 21,000,000 acres of valuable and carefully-selected lands in this country. Estimates of the amount of foreign capital invested in manufacturing plants in the United States vary widely, and at present no approximately correct figures can be given. The tendency to invest in American properties seems to be on the increase. The valuable lands of the Southern States are rapidly passing out of the hands of their original holders into the possession of second, third or fourth parties. The real magnitude of the field for profit-making in the South is only beginning to be appreciated. Within the past three months, several railroad-building schemes have been formulated, contemplating the construction of lines of road between Chicago and South Atlantic and Gulf coasts; the lands through which these lines are to pass will rapidly increase in value. The railroad companies of the country are doing from 10 to 15 per cent more business than last year. The output of the small shops is safely estimated to be 10 to 20 per cent in excess of last year. Coal production will show an increase of 10 per cent, and the coke production will be much greater. So far, the Pennsylvania coke production alone shows a gain of 456,683 tons, as compared to the corresponding time last year. The production of soft coal shows a heavy increase, the figures for the Allegheny Mountain region of Pennsylvania showing, so far this year, an excess of 1,230,000 tons over last year to the same date. This rate of increase is not maintained in all sections of the West, but there has been a decided gain. A veritable building boom has set in at Chicago, due mainly to the projected Columbian Exposition. In Minneapolis, Duluth and other cities of the far Northwest and in Denver and several other Western cities, the activity which set in early in the spring has been rapidly increasing; nor is it altogether speculative. The investments made are not merely those brought about by loans of Eastern capital, but are the result of the accumulations of the people themselves. The building and loan associations are everywhere prospering. Latest published reports show a steady gain in membership, in the Western States especially. Labor organizations are also steadily gaining in strength.

S. J. PARKHILL & CO., Printers, Boston.

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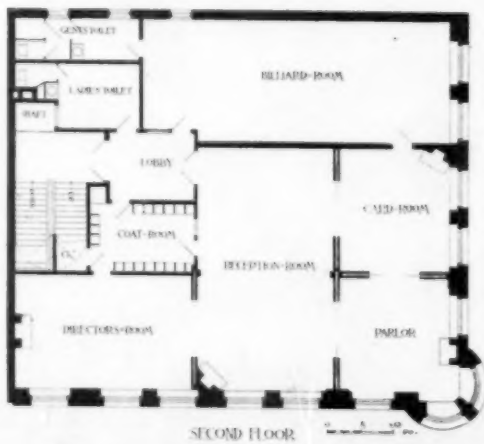
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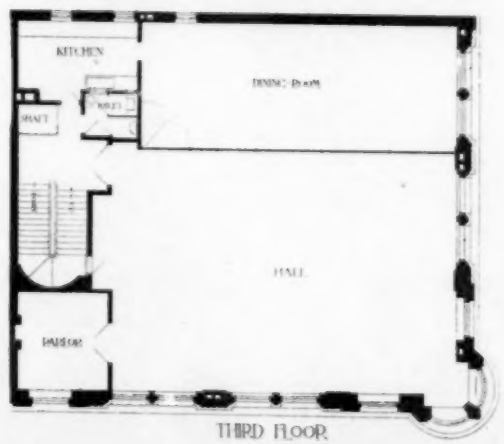


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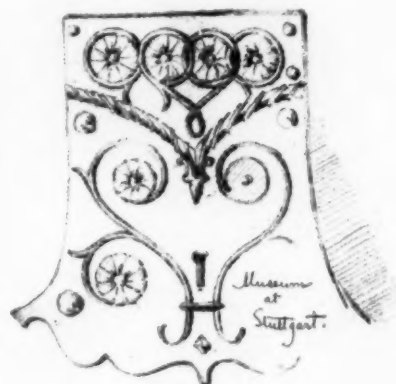
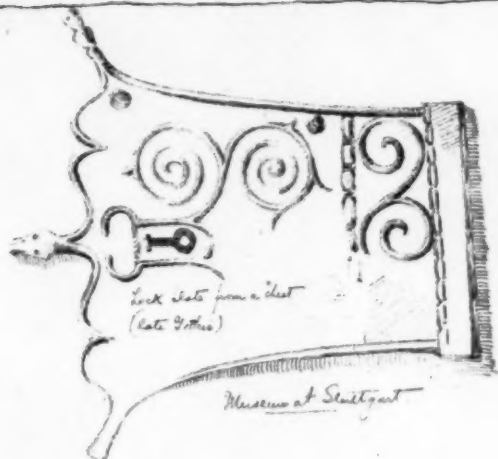
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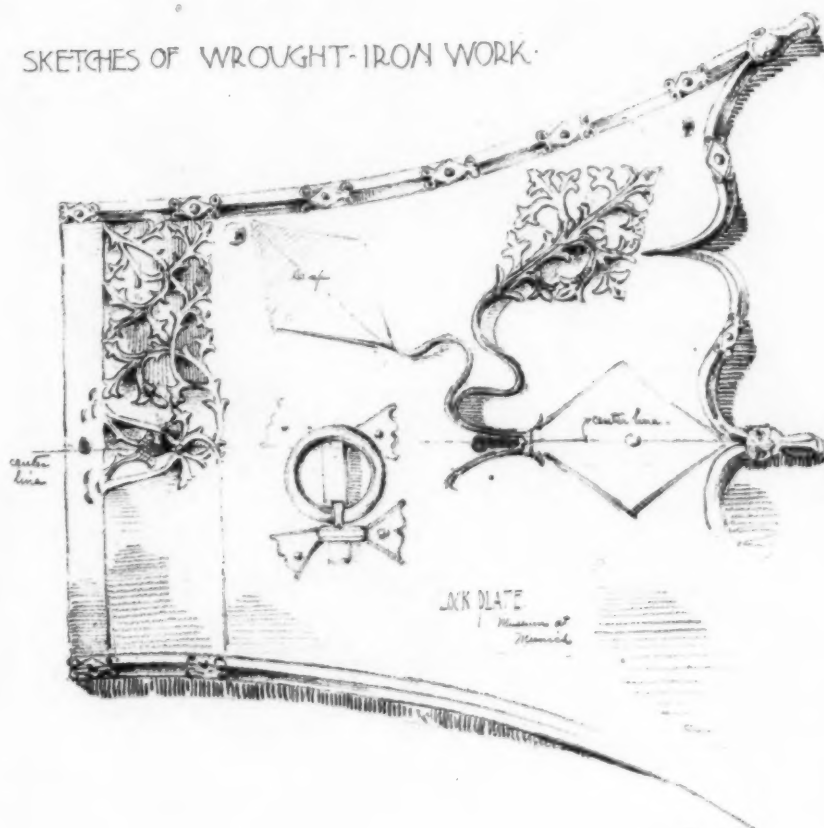
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THIRD FLOOR

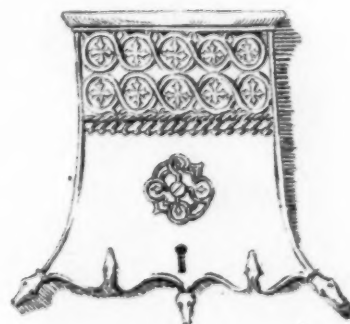
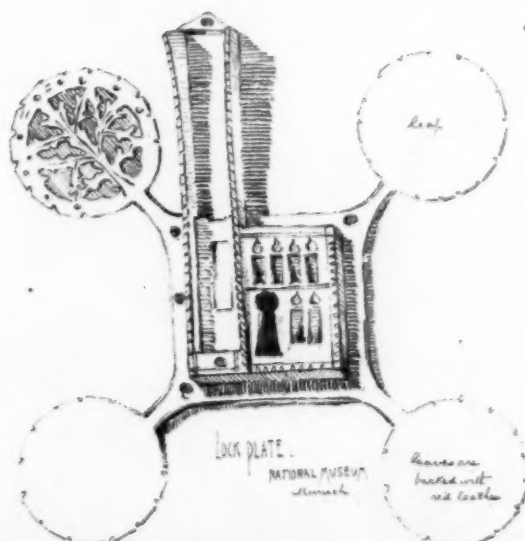


SKETCHES OF WROUGHT-IRON WORK.

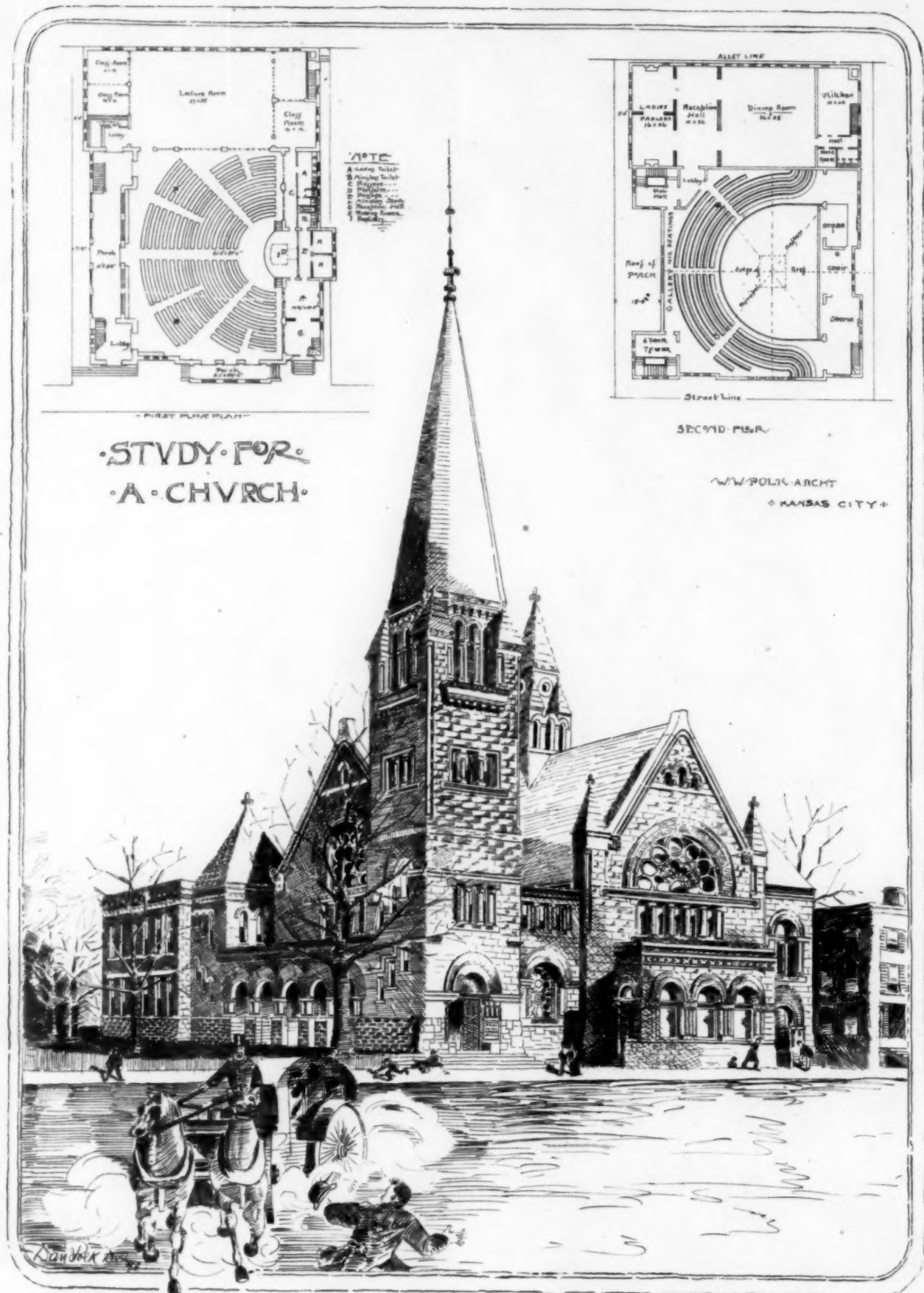


Thos. F. Laist

[AMERICAN ARCHITECT TRAVELLING SCHOLAR.]



WROUGHT IRON LOCKPLATE
Museum at Stuttgart.



Edgar A. Fosbury



Louvre
 (10) Jan. 14. '88.
 Red marble top - Galerie d'Apollon.



Cardie brackets

Fontaine de la

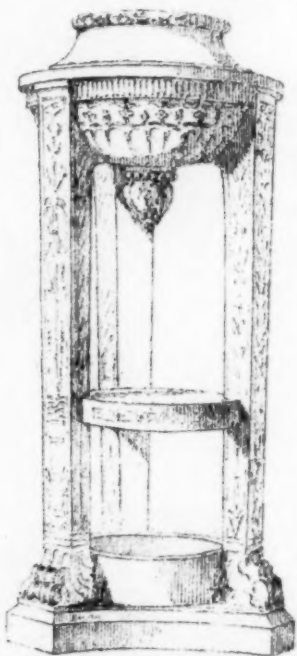


Half circle
 of four arms.

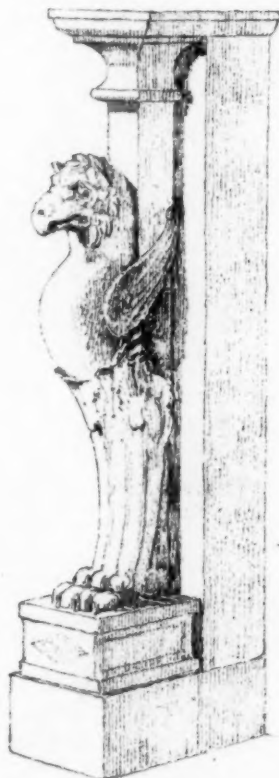
SKETCHES BY A ROTCH TRAVELLING-SCHOLAR.

Roman Tripod.

White marble.



(6)
 Louvre. Oct 26. '87.



Louvre (5)
 Oct 10. '87