THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL LVII. Copyright, 1897, by the AMERICAN ARCHITECT AND BUILDING NEWS COMPANY, Boston, Mass. No. 1131.

Entered at the Post-Office at Boston as second-class matter.

AUGUST 28, 1897.

CONTENTS.

SUMMARY: —
The Competition for the Pennsylvania Capitol. — Chicago's Danger in Event of a possible Heightening of the Lake Level. — A Curious Bridge Accident in France. — Possible Effect of the Sun in causing the Accident. — Fixing the Responsibility for the Charity Bazaar Accident. — Dry-rot and its Prevention. — Death of Wm. L. Picknell, Artist. — Death of M. Dainville, Architect. 69
THE TEXAS "MISSIONS." 71
MR. WATTS'S PICTURES AT THE NEW GALLERY. 71
THE NATIONAL ELECTRICAL CODE.— II 73
CLEVELAND ARCHITECTURAL CLUB OUTING TRIP TO DETROIT. . 74
ILLUSTRATIONS: —
Detail of Building for Claus Spreckels, Esq., Cor. Third and Market Sts., San Francisco, Cal.— Steel-frame Diagrams for the Same Building — Office-building for Claus Spreckels, Esq., Cor. Third and Market Sts., San Francisco, Cal. — Plans and Detail of the Same Building. — A Group of Spanish Mission Buildings in Texas.
Accessories of Landscape Architecture, No. LXII: Vasca dell' Isolotto, Boboli Garden, Florence, Italy.— A Group of Semi-Public Buildings.
Additional: A Chimneypiece in the House Reading-room: Library of Congress, Washington, D. C. — Garden Front of the Archbishop's Palace, New Orleans, La. — The Wettin Obelisk on the Schlossplatz, Dresden, Ger. 75
COMMUNICATIONS: —
A Correction: The A. I. A. Convention.— A Question of Commission. 76
NOTES AND CLIPPINGS 76

THE competition for the Pennsylvania Capitol is still undecided, through circumstances not unfamiliar in such cases. It appears that the programme, after reciting in much detail the accommodation required, provided that the building must not cost more than five hundred and fifty thousand dollars. It may be observed that this is a very small sum for such a purpose. The Rhode Island Capitol, which provides only very restricted accommodation, has been contracted for at a price of a million and a half, and it is difficult to see how the Legislature of the State of Pennsylvania could be made comfortable in a building costing little more than one-third that sum. However that may be, the competitors for the Harrisburg building seem to have found the conditions of the programme relating to accommodation and price incompatible, for, of the eight designs recommended by the expert jury to the Capitol Commission, not one can be carried out for the sum prescribed. As not only this sum, but many of the other conditions set forth in the programme, are fixed by statute, the Commissioners, who are, of course, strictly bound by the statute, are placed in a dilemma; for they are expected to get as good a plan as possible for the building, without allowing the cost to exceed the limit named. According to the Philadelphia newspapers, there is a possibility that they may try to escape by rejecting all the competitive designs, and holding a new competition, or selecting some architect of their own, and letting him try to design and carry out such a building as they want for the price set by the statute. The objection to this plan is that it may raise a controversy with the competitors whose designs have been selected by the experts. The printed programme unquestionably forms a valid contract between the State and all the competitors who have complied with its conditions. If one of its conditions is incompatible with the others, the question of which shall prevail is one to be decided by the courts, which are, in this country, the sole interpreters of contracts in regard to which the contracting parties differ; and the Commissioners, as the contracting party on behalf of the State, cannot arbitrarily impose upon the other party their view of the agreement. If, in the opinion of the courts, the architects were right in their idea of what conditions in the programme should prevail over others incompatible with them, they must receive the promised reward; and it is much better to have the legal interpretation of the contract made, if necessary, at once, than to commit the parties to the interminable vexation and delay which would be involved in a series of lawsuits between the State and the competing architects.

GREAT interest has been excited by two papers read before the recent Convention of the American Association for the Advancement of Science, both of which suggested the probability that the water of the Great Lakes, instead of flowing through the St. Lawrence River to the sea, might some time, by the choking of the Niagara River, be turned into the Mississippi, through a channel nearly coincident with that of the Chicago Drainage Canal. Although great topographical changes of this sort do not take place rapidly, the subject certainly has sufficient importance to make it worth while for the people of Chicago to watch the level of the lake waters and to keep a certain oversight on the Niagara River. The lake levels have not been taken by the public authority for about fifty years. Within that time, the Great Salt Lake is said to have increased in volume so much that houses which once stood at a little distance from the shore have had to be moved back, to keep them out of the water. Whether the Great Lakes have similarly risen is, perhaps, uncertain, but, in any case, it would not be amiss to take some simple precautions against such dangers as might possibly arise from a season of extraordinary rainfall, or from the choking of the Niagara River with ice.

A CURIOUS accident took place in France lately. On the third of July, an inundation of the River Adour carried away a stone railway bridge at Tarbes. It happens that General Marcille, of the engineer corps of the French army, has devised a form of steel bridge for military purposes, which can be transported in sections, and quickly erected in place; and the railway company applied to the military authorities for a bridge on this system, to serve temporarily, until the stone bridge could be rebuilt. Several of the Marcille bridges have already been successfully used, and sections are kept ready at the army stores, so that on the seventeenth of July, two weeks after the accident, the new bridge had the rails laid over it, and was ready for testing. The test was made by running a testing-train, consisting of two locomotives, with their tenders, and two loaded freight-cars, on the bridge. Hardly had the train advanced fairly upon the bridge, running very slowly, when the box-girder, of which the bridge substantially consisted, began to twist in the middle, and gave way, throwing the train into the river. Several men on the train were injured, but, fortunately, no one was killed.

THE cause of the accident is, so far, not clearly established. The bridge consisted of two plate girders, well supplied with stiffening pieces and connected by cross plates at top and bottom, with the rails laid on the top. Obviously, the bracing of the interior was imperfect, for, with perfect bracing, twisting could not have occurred; but the question how much bracing should have been put in to resist the twisting effect of the moving load, and the still more important question whether any twisting effect was produced by expansion or other means, sufficient to cause the fall of the bridge in conjunction with, or independently of, any twist due to the load, are still unanswered. The sun was shining on one side of the bridge, and there was probably some inequality of expansion; but this hardly seems sufficient to account for the failure; while the impact of the load, which was moving very slowly, at a less speed, in fact, than that of a man walking, seems quite insufficient to determine a sudden collapse of the sort. *Le Génie Civil* suggests that the expansion of one side of the girder may have caused the whole bridge, which had a span of about one hundred and forty feet, to bend horizontally, and that the application of the load at the middle of the bend, acting with a leverage equal to the amount of deviation of the bridge from a straight line, might have been sufficient to cause the twist. However this may be, it is certain that the affair will be thoroughly investigated, and the conditions affecting such bridges determined.

THE French Government having determined to hold to strict account those who caused the fatal conflagration of May 4, at the Charity Bazaar in Paris, arraigned Baron Mackau, who was one of the chief promoters of the bazaar, and not only gave the use of the ground on which the building was erected, but presented the inflammable scenery representing Old Paris, which proved, by its rapid combustion, to be one of the chief elements in causing loss of life in the fire. Besides Baron Mackau, two persons employed in operating the cinematograph, the careless management of which was the original cause of the fire, were arrested, and all three have been tried for "homicide," found guilty and punished, the Baron by fine, the others by fine and imprisonment. As Baron Mackau's own wife was burned to death in the bazaar, it seems particularly hard to drag him before the public as the guilty cause of the

misfortune with which his connection was so very remote; and one cannot but suspect that political manœuvring has a good deal to do with the matter. That he should have given the use of the land on which the building was erected certainly does not implicate him in the consequences of a fire in the building; and the only other charge against him appears to be that he presented the managers of the bazaar with an object of interest, in the shape of some scenery. It is quite possible that he may have been selected for pursuit on account of his active interest in the bazaar, but it does not appear that the managers of the bazaar contravened any laws that they were bound to know. It is easy to say that they might have been more cautious in the use of inflammable materials; but charitable ladies and gentlemen are not supposed to be judges of fire-risk. Moreover, all their operations, in building, furnishing and maintaining the bazaar, were placed, by a law universally understood, under the supervision of an officer expert in fire-risks, charged with the duty of protecting the public against dangers of this sort, and endowed with ample authority to regulate such operations at his discretion, and to prevent the use of buildings which, in his opinion, cannot safely be opened to the public. This officer is, of course, the Chief of the Paris Police. So far as we have seen, it has not been pretended that he did not know what was going on, that he was not aware of the dangerous character of the building and its fittings, that he did not have authority to have them made safe, or that he had not plenty of subordinates at his disposal for watching, warning or enforcing his orders. The only shadow of an excuse that we have ever heard made for his neglect to do his plain duty in regard to the bazaar was that he being a Radical, and the charitable people in charge of the bazaar being mostly Conservatives, he thought that, if he interfered with them, they would raise a cry of persecution, to gain political capital for their own party. How any party could lose political capital by having its representatives do their duty efficiently we cannot comprehend; but it is evident that this glaring disregard of duty, and its fatal consequences, have inflicted a serious blow upon the Radical administration, as well, perhaps, as on the Radical party in general, already somewhat discredited by recent events; and the history of Radical tactics does not make it very difficult to believe that an attempt is being made to distract public attention from the real cause of the calamity by a noisy attack upon a person whose rank and reputation give special interest to the proceedings against him.

A LETTER to the *Bautechnische Zeitschrift* gives a suggestion for preventing dry-rot which may be valuable. The writer of the letter is a druggist, who came into possession, some years ago, of a house which was seriously affected by dry-rot. His predecessor, notwithstanding careful treatment of all affected timber with corrosive sublimate, protosulphate of iron, alum solution, tar, charcoal-dust and so on, had been obliged to take up a portion of the first floor, and lay flag-stones in place of it, and even the door-posts were found to be so rotten that it was necessary to replace them with stone. The present occupant supposed that the evil was cured, but he had not been long in the house before he was obliged to take up the whole of the floor of one room, and one-third of that in another room, and replace them with stone. Seven years ago, he had occasion to study the properties of hydraulic lime, and, finding how strongly this substance absorbed moisture, it occurred to him to try its effect on his decaying floors. He, therefore, took up the stone flagging from the room in which it had been partially substituted for wood, strewed the space beneath with ground hydraulic lime, to a depth of several inches, and had a new wooden floor laid over it. This was seven years ago, and since then the floor has shown no sign of decay, and the peculiar smell of dry-rot, which was previously very strong in the room, has entirely disappeared. So far as he can understand, the lime acts by absorbing from the atmosphere the moisture which is favorable to the growth of the dry-rot fungus; but, however that may be, he thinks it may be depended upon as a cure. Perhaps some of the senior classmen in our architectural or engineering schools may like to take up the subject, and make, for their graduating thesis, an investigation, which the public urgently needs to have made, into the real conditions affecting the rotting of timbers. It is easy to assume, with the German druggist, that dampness is essential to the development of the dry-rot fungus; but, as many architects know, roof-timbers, placed in the dryest part of a building, are often found badly rotted. Twenty-five or thirty years ago, the roof of a large church in New York had to be rebuilt, on account of the rotting of the trusses. In this case, the decay was attributed to the enclosing of the foot of the trusses in an iron shoe, which prevented the air from circulating freely about them; but we have seen two timbers used to shore up a weak principal rafter, one being laid on the garret floor, and the other set up on it, very badly decayed, although they were exposed to free circulation of air, and the place was quite dry. In this case, the end of one timber rested against the side of the other, and it is a common belief among builders that this condition is very favorable to the rotting of both pieces. Like many other current notions in regard to dry-rot, this should be investigated, and a long series of tests of the effect of antiseptics should be made. Among the newer antiseptics, which have, so far as we know, never been applied to the cure of dry-rot, is formic aldehyde, or "formol," or "formalin," as the commercial solutions of it are called. It is quite possible that the vapor of this volatile substance may penetrate the pores of diseased wood better than a solution of corrosive sublimate or alum; and its antiseptic power is very great. A few drops of the commercial solution will keep a considerable quantity of flour paste for many months from moulding or turning sour, and it is rapidly coming into use as a convenient germicide.

THE death of William Lamb Picknell deprives American art of one of its most distinguished leaders. So rapid has been the development of the fine-arts among Americans that it is hard to realize that the "Route de Concarneau," which was exhibited for the first time in the Paris *Salon* of 1880, was received almost as a revelation of the capacities of American artists in the matter of landscape-painting. Of course, the people who were familiar with the work of our earlier landscape-painters, such as Kensett, McEntee, La Farge and Picknell's own teacher, Inness, knew how much poetry and artistic sensitiveness was in the American character; but the best friends of these artists could not deny the limitations of their technical skill, or the unevenness of their work, and Picknell was perhaps the first American landscape-painter to show, in addition to the American quickness of sympathy, the solid knowledge which no difficulties of rendering could discourage. This knowledge was certainly not gained without effort. After his early work in Italy, with Inness, he entered the School of Fine-Arts in Paris, becoming a member of the *atelier* of Gérome. Here he received the thorough drill in drawing, and in figure work, which is perhaps the landscape-painters most valuable acquirement; and, thus equipped, he set himself at his chosen work. For four years he painted in Brittany, and, throughout his life, he spent much of his time in France; but he found plenty of charm in American landscape also, and his pictures of sunny American hillsides, with their groups of white birches, show as much sentiment as those of the lonely Breton meadows. His work was appreciated as it deserved to be, both at home and abroad. The Philadelphia Museum of Fine-Arts, the Carnegie Gallery at Pittsburgh, the Boston Museum of Fine-Arts, and the Walker Art Gallery at Liverpool, possess landscapes by him, and he received many medals and other recompenses in England and France, as well as in this country.

THE death of M. Dainville, the architect of the beautiful apartment-house on the Avenue Montaigne, in Paris, which we described and illustrated some years ago, has called forth from the profession in France warm expressions of esteem. Although he was little known outside of his own country, M. Dainville's career was a most honorable one. In the School of Fine-Arts he won several medals, and, on leaving the School, he was employed by the Government, as "inspecteur" under Eugène Lacroix, architect of the Palace of the Elysée. Later, his skill as a draughtsman and designer led to his assignment, as temporary substitute for Ruprich-Robert, as instructor in Composition of Ornament in what is now the School of Decorative Art. Although the times were rather unfavorable for building, his reputation for skill and integrity soon brought him clients, and he gave up his public employment for a private practice which soon became extensive. Most of his work was upon private houses or apartment-houses, but he also built a church near Paris, and several public buildings. The Société Centrale des Architectes awarded him a silver medal in 1883 for works of private architecture, and, in 1895, its grand medal of honor; and he received a medal from the *Salon* in 1862.

THE TEXAS "MISSIONS."

THE ruined buildings, known as "Missions" in the State of Texas, have a history altogether distinct from that of the buildings to which we give that name on the Pacific coast. The Spanish colonization of the territory we now know as Texas began about the year 1680 and the conquest of the country is said to have been completed in 1691. The Mission System, as it was defined and illustrated in my account of the Pacific Coast Missions, was not resorted to in aid either of colonization or of the pacification of the natives in Texas. And the religious foundations planted in the territory by the Franciscans in the eighteenth century, for the most part previous to the development of the mission system farther west, were, although supported out of the treasury of New Spain, intended purely for the evangelization of the native races, without the promise of any present or future political advantage to the government. Neophytism seems not to have been practised in Texas, and the missions succeeded in getting less than five hundred Indians attached to them. Their herds of livestock were kept small by the oft-repeated raids of the wild tribes of the mountains and deserts, to whom the missionaries were unable to extend the gospel. And so far from the Texas missions being a source of revenue to the Spanish Government, they were the occasion of the expenditure of millions of dollars from the public funds. The proof is that in his official report to the King of Spain, in 1793, the Viceroy, the Count of Revillagigedo, did not regard the returns from the eight missions then in Texas a justification for this enormous outlay.

Hence, as factors in the colonization of Texas, the missions are scarcely to be taken into consideration. And of the five buildings which survive, in a more or less ruined condition, as relics of these missionary enterprises, only one is worthy of preservation as an historical monument, and that one because of events subsequent to its career as a mission. The others, though not wholly devoid of architectural interest, may properly be regarded as merely interesting ruins.

A number of efforts for the evangelization of the Indian tribes within the present boundaries of Texas had ended in failure, before Antonio Margil de Jesus, with nine other Franciscans, founded in 1716, four of the six missions attributable to him. These four were named San Antonio Velero, Nuestra Señora de la Concepcion, San Juan Capistrano, and San Francisco Espada. The first was the outgrowth of an attempt to plant a mission as early as 1703. on the bank of the Rio Grande. Thence it was transferred to San Ildefonso, then back to the Rio Grande. And now it was successfully established at the Presidio of San Antonio de Bejar, which with the villa of San Fernando formed one settlement. The second and third missions above named were established, respectively, two and six miles south of the first; and the fourth was established on the Medina River, but removed in 1730 to a point in the San Antonio Valley seven miles south of San Antonio.

In 1720, the Missions of San José Aguayo and Espiritu Santo were established, four and eighty miles south of San Antonio, respectively. In 1726, Margil died at the age of seventy. It was long afterwards that his mission schemes were completed by the establishment of the Missions of Nuestra Señora del Rosario (1754), and Nuestra Señora del Refugio (1791), respectively seventy-five and one hundred miles south of San Antonio.

Of these eight missions referred to by the Viceroy in his report, as an unprofitable investment of the public money, some suffered change of location and final abandonment, before the dawn of the American regime in Texas, leaving San Antonio, Concepcion, San José, San Francisco and San Juan for our special consideration.

The Mission of San Antonio Velero, when finally established under presidial protection, flourished. So did the presidial town. In 1732, a church was built by the wealthy Spanish families of the colony. To this building, in which the Mooresque style of architecture prevailed, modern, though not inharmonious additions were subsequently made, and the whole has become the Cathedral of San Fernando upon the advancement of San Antonio to the dignity of a See City.

In 1744, the corner-stone of a new building for the mission was laid. The main building was of the dimensions of 72 by 62 feet, including walls, of soft yellow stone, four feet thick. A slab in the walls of this building, bearing the date 1757, testifies to the length of time consumed in its construction. The mission was secularized by royal decree before the end of the last century, and the building was converted into a fort. This required no very radical changes, as barracks for soldiers and large stone enclosures for the protection of the Mission Indians from the attacks of Apaches, Comanches and Lipans, were essential to mission architecture in Texas.

The first soldiers to occupy the secularized mission buildings came from a famous fort, called the "Alamo," in the Province of Coahuila. They brought with them the name and bestowed it upon their new garrison. The main building was on March 6, 1836, the scene of one of the most heroic episodes in American history. The flag of Santa Anna was floating from the tower of the old church of San Fernando. Within the Alamo, one hundred and forty-five effective men, besides sick and wounded, under the indomitable Colonel Travis, chose to die, martyrs to the cause of Texan Independence, rather than surrender to the insatiable Mexican Dictator. "Remember the Alamo" was thenceforth the war-cry of the Texans as they continued their struggle for independence. The Alamo has been made the monument of Travis, David Crockett, James Bowie and the other brave defenders, being preserved by the State as a museum of historical relics.

With our American lack of appreciation for the beautiful names under which ecclesiastical edifices are dedicated, and our tendency to designate things numerically, the ruins of the other missions are pointed out to tourists as numbers one to four, in the order of their location from San Antonio. Thus the Concepcion is the "First Mission." The present building was begun in 1730 or 1731, the mission having been removed from its first location, though its distance from San Antonio was not altered. The "Second Mission," San José, four miles south of San Antonio, was one of the finest specimens of mission architecture on the continent. A famous Spanish architect, Huica by name, was sent from Madrid to superintend its construction, and the façade is his design. It is in the "Churrigueresque" style, that is it shows the elaboration of carved stone, practised by the Spanish architect Churriguera, late in the seventeenth century, and a popular treatment of Mexican churches after that date. This elaborately sculptured façade is one of the marks differentiating the style of this building from that of the mission buildings of the Pacific coast, though all the Texas missions are more distinctly Mooresque than those of California.

The "Third Mission" is San Juan, six miles south, and the "Fourth Mission" is San Francisco, seven miles south of San Antonio. These have fallen into a more advanced state of decay than the other two. But in their ruins they exhibit open-arched campaniles and some other features suggestive of some points in common with the Californian Mission buildings. Arthur Howard Noll.

MR. WATTS'S PICTURES AT THE NEW GALLERY.

AS our readers are aware, the Directors of the New Gallery have, in the early months of the last ten years, held exhibitions of peculiar interest on historical grounds. The first series was devoted to portraits and relics of the sovereigns of the various dynasties of England and of the most renowned statesmen, etc., of those times. These being exhausted, the leading Schools of Painting of various countries have been represented; beginning with the Early Italian painters, Cimabue, Giotto, etc., and followed by the Venetian and Spanish Schools.

The exhibition last winter was to have been devoted to examples of the French School, and connoisseurs, especially of Watteau, had been anticipating a rare treat in seeing many of his works which had not hitherto been shown to the public here or elsewhere. Besides this, the usual annual exhibition held at the Guildhall under the auspices of the Corporation of London was to have been on similar lines. However, both of these have been postponed indefinitely; in the case of the latter, because the Corporation loyally resolved to devote their galleries to works produced during the sixty years of Queen Victoria's reign, while at the New Gallery there was shown a magnificent collection of the works of Mr. Watts, the Academician — strangely enough, covering the same period — which gave unmixed pleasure to his many admirers. This, if we mistake not, is the third time that Mr. Watts has braved the tremendous test involved in submitting a number of his paintings to the London public, by filling a gallery in solitary state; and to those acquainted with his work it goes without saying that he issues from the ordeal triumphant. As the artist has munificently bequeathed the whole of his large private collection to the Nation, this is probably the last opportunity we shall have of seeing so large a number of his works together in one place, and arranged under the Master's own eye.

The works, of which there were 150, naturally form themselves into three groups, viz., portraits, allegories, landscapes. Of Mr. Watts's portraiture it has been truly said, as of Tintoretto's, that it is "so admirable that to be painted by him is to secure immortality." Of the allegories, Mr. Watts says, in the preface to the catalogue, that they are to be regarded as symbols, and that his object has been to suggest, in the language of art, modern thought on things ethical and spiritual. The thought pervading these "symbols" is religious, though not dogmatic; dealing with this life and the life to come. Needless to say, the critics are divided as to how far he has succeeded in making his canvas the full exponent of his thoughts, but he certainly answers to Ruskin's definition of the greatest artist, viz., "He who has embodied in the sum of his works the greatest number of the greatest ideas." For obvious reasons we can only mention a few of the portraits especially remarkable. Chronological arrangement has not been attempted so much as continuity of thought, though the first three numbers in the catalogue are probably the earliest works. Showing nothing of the "prentice hand," the "Wounded Heron" is so boldly treated that we should scarcely guess it to have been Mr. Watts's first Academy picture. It was exhibited in 1837, when the Royal Academy held its "shows" for the first time at the National Gallery, having removed thither from Somerset House, its first home. For these sixty years he has seldom failed to be represented, having exhibited in London alone, more than 270 pictures. To this period belongs the life-like "Portrait of the Artist's Father," painted in 1834, the style suggesting the influence of Lawrence. The eyes are particularly fine, as are those in his own unfinished "Portrait," a face revealing great poetic genius and reminding us of Keats somewhat. Both these portraits were produced in the same year, when

he was only seventeen years of age. The half-length, life-size "Portrait of Sir Wm. Bowman, M. D., F. R. S.," is a masterpiece, and well worth going a journey to see; the face has in it all that power and gentleness we associate with a good physician, while the marvellous expression in the eyes rivets the attention. Another superb portrait is that of "Mr. Russell Gurney, Q. C., late Recorder of London," a fine example of Mr. Watts's careful drawing and careful painting, both of the powerful and well-cut features and the least detail of the lace ruffles.

Distinguished by great naturalness of expression and dignified ease of manner is the three-quarter length, life-size portrait of "Miss Rachel Gurney," now Countess of Dudley — a brunette with black eyes and hair. She wears a black dress and a pearl necklet and earrings, the graceful figure being well set off by the old-gold tapestry against which she leans. Another portrait which it is an education to study is that of "Lady Katherine Thynne," lent by the Marquess of Bath, in which the gentle and refined face is portrayed with much sympathy: the technique is worthy of an old Venetian master. Lent by the Trustees of the late Sir Wm. Bowman, pending its transfer to the National Gallery, is Mr. Watts's own portrait, painted in 1864 — half-length, life-size. He wears a velvet coat and felt hat; the head is turned towards the spectator, and the hands folded — the face is thoughtful and earnest, and the beard painted as only Mr. Watts can paint human hair. We must pass the splendid full-length, life-size "First Lord Campbell, Lord Chancellor," in his robes and standing before the throne in the House of Lords, the mace lying on a table before him.

We must reluctantly leave these charming portraits, which are very numerous — for Mr. Watts has painted a considerable number of the most eminent men and women of his time. His rare skill and discernment are such that he invests his sitters with all the sentiment and beauty, all the manliness, all the intellectuality which, by the casual eye, has hitherto possibly been unobserved; in which he strongly resembles Vandyke, while in the vigorous expression of the penetrating eyes he recalls Holbein; indeed, a sentence affixed to a portrait at Windsor by Holbein may fitly be applied to any in this exhibition: "Give him but a voice and thou wouldst believe that thou sawest him in his own person."

The landscapes and subject-pictures next demand our attention, though, where each is a gem, selection is difficult; we may note a few, however. Truly sublime is "Mt. Ararat," taken at night and at a great elevation; the lofty peaks, rising one behind another in great purple masses, almost fill the canvas, 56″ x 28″. "The Carrara Mountains, from Pisa," 31″ x 48″, have a certain air of romance; pure white with pale blue streaks as a sort of veil over them — distance in this case, aided by the clear atmosphere, "lends enchantment to the view." "The Rain Cloud" (rain passing away) is grand in its simplicity. The height at which the light, white cloud floats above the charming English landscape may be imagined from the size of the canvas, 84″ x 46″; the sunny beauty of this picture makes it one to be lived with. The marine painting, "The Dove that returned in the Evening," though famous, cannot be passed by. We look over a broad expanse of waters rolling toward us in slow, foamless ridges, and passing unbroken out of sight. The effect of these long, simple lines is majestic and, we might say, awe-inspiring. Away on the distant horizon is the Ark, towards which, with wide, unflagging wings the dove, bearing the olive branch, is seen making her way. The blending of the various tones of color in sea and sky is exquisitely harmonious. How shall we adequately describe "Dawn"? Let the reader picture to himself the graceful figure of a woman standing on a rocky island peak, draped from head to foot in a garment, which at the hem is the deepest orange shading off to the palest yellow, and, with the surrounding clouds, forming a lovely and delicate combination of every imaginable tint of rose, blue and gray. Her right hand holds the drapery above her head, while the left falls at her side. On a rock behind the figure and nearer the spectator is an eagle prepared with outspread wings to meet the coming day. The canvas is 54″ x 22½″ and has a beautiful Italian frame of black and gold.

"Fata Morgana," 64″ x 47″, represents "Fortune" or "Opportunity" flying through the air midst thorny bushes, hotly pursued by a knight, who, in his futile attempts to catch the lock of hair blown behind her — by which alone she can be captured — grasps the crimson drapery with which she is partially robed. This picture is lent by the City of Leicester, to which it was given by the artist in recognition of the services rendered to tourists in Egypt by Mr. Cook, a native of that city.

Lovers of romance and poetry were irresistibly drawn to the magnificent picture "Paolo and Francesca," which is, without exception, the most fascinating, as it is the most pathetic, in the entire collection. Mr. Watts is almost the only painter who has adequately portrayed this moving episode in Dante's "Inferno." Francesca, married to the elder son to cement a peace between two Italian States, was thrown into the company of his handsome brother, and they fell in love, were discovered together by the husband and both killed by him, there and then. The penalty for sins such as theirs is to be driven by the whirling blast, without hope of rest. The story of "these souls sore spent and driven" has awakened the sympathy of the painter, as the following lines from Dean Plumtre's excellent translation (C. V.) show they did that of the poet — who, however, had known Francesca in her childhood in Florence and lived under the protection of her nephew during the closing years of his troubled life.

"Francesca," so I spake, "thy miseries
A pitying grief that makes me weep, inspire!"
And she to me, "A greater grief is none
Than to remember happier seasons past,
In anguish."

And while one spirit told the story, still
The other wept so sore, that, pitying, I
Fainted away as though my grief would kill,
And fell, as falls a dead man, heavily.

Remorseful and sorrowful and sad, they are yet together. Paolo embraces Francesca with his right arm, while her right hand is clasped in his left one. The bodies are those of the dead, in hue and appearance; the expression of the faces unutterably sad and touching. The long flowing draperies in which these two figures are enwrapped are being blown round and round like withered leaves; the background is reddish-brown and might suggest smoke. The size of this picture is 60″ x 57″ and the handsomely carved black and gold Italian frame is 18 inches wide.

But for becoming wearisome, the remarks on the "allegories" might well form a separate paper, since in this realm Mr. Watts is without a rival among Englishmen. This large collection of his works has been munificently bequeathed to the Nation. Three of these symbolical pictures are named, respectively, "Faith," "Hope," "Charity," of which the first two are treated in a rather novel manner. While "endeavoring to impress distinctly the direction of modern thought," Mr. Watts says, he has "carefully avoided reference to spiritual dogmas, the two exceptions being 'Faith' and 'The Spirit of Christianity,' dedicated to all the Churches."

This, we may mention, is a fine picture — 108″ x 60″ — of a woman of a highly-intellectual type, but loving withal, seated on clouds and clothed in a red mantle, within which she enfolds children of every race and creed while looking pleadingly to heaven. To return to "Faith," the artist's own description of it in his preface to the catalogue suggests to our mind "Intolerance" as a better name for this picture, the spirit that for centuries has used the sword to spread the *creeds* of many nations. He says: "Faith, wearied and saddened by the result of persecution, washes her blood-stained feet and recognizing the influence of love in the birds and flowers around her, feels that the sword is not the best argument, and takes it off." Mr. Swinburne, in his Sonnet to Mr. Watts, to be found at the close of this paper, in which he skilfully introduces the contents of the exhibition, says, "Faith, Hell's first-born" — surely the first time that Faith has been described as *born from beneath!* For the benefit of those who have not even seen the popular picture "Hope" reproduced in black-and-white, which, indeed, can show but half its beauty, we shall describe it: A female figure is depicted seated on a globe, representing the earth, surrounded by vapor. She is blindfold and is bending down to her primitive lyre, to hear what little melody she can extract from its one remaining string. Her attitude is exceedingly graceful; she wears a pale-blue robe, her feet, which are crossed, being bare. The picture is a masterpiece of genius, in the exquisite pose of the figure, and in the subdued and beautiful coloring — soft blues and grays. In studying these "allegories," or symbols, we must bear in mind that they are exponents of modern thought, as gauged by Mr Watts; otherwise we should call this picture, for instance, "Despair." Here we have no buoyant, *expectant* hope. She bends down towards the earth with her back to heaven, where *we* see the morning star shining; but as has been said, "the poor soul does not see it, for her eyes are bandaged, and by herself. With her immense modern knowledge she has seen so much that is fatal to heart and hope that she must deliberately bandage her eyes if she is to go on hoping at all."

"Charity" is on similar lines to "The Spirit of Christianity," but a much finer, indeed a sumptuous, picture. Venetian in its grandeur and its pathos. There is a world of sorrow traceable in this picture of him who "made the great refusal," "For he had great possessions." As he walks slowly away, the bowed head and drooping shoulders plainly tell us that beneath his splendid robes he carries a very sad heart. This was painted in 1894 and shows that the artist's pencil has by no means lost its cunning. Space will not allow us to do more than mention the mighty hunter "Esau," the exquisite "Psyche," "Daphne" and "Ariadne," or those more or less completed paintings of the "Rider on the White Horse," the "Pale" and the "Brown Horse," from Revelations VI, or the three large "Eves"; we shall, therefore, conclude with a few lines on the celebrated pictures dealing with death.

In "Paolo and Francesca" we saw how the artist depicts the dead; we have now before us four impersonations of Death itself, or rather *herself*, since Mr. Watts represents the dread visitant as a woman. The picture of "Love and Death," 99″ x 47″, was painted in 1887, but, of course, is not so well known on your side of the Atlantic as on ours. Across the sunny garden of a house covered with climbing roses the stately figure of Death, veiled from head to foot, has passed, and is approaching the doorway, in which stands Love, vainly essaying, with frantic cries and outstretched arms to "bar the presence which may never be barred." The tall majestic form of the Inevitable advances relentlessly, and in the struggle Love's beautiful pinions are crushed; but the bowed head and drooping shoulders indicate that not in wrath, or merely to cut short the thread of human life does Death come, but because the hour appointed for all the living has arrived. In the chill shadow, the roses droop and shed their petals on the path, where a long branch lies

withered. To show, however, Mr. Watts's belief in a life beyond the grave, the opalescent robes have a lustre at once lovely, hopeful and terrible. The idea of this picture is due to the circumstances under which Mr. Watts painted the portrait of a man dying by inches during the sittings, notwithstanding every effort on the part of his loving friends to save him.

"Death crowning Innocence" is a pitying angel fondly caressing an infant in her lap, and as she takes one of the tiny hands tenderly within her own, we can almost see the pallor creeping over the fingers. The face of Death is full of pathos and beauty, the eyes are closed, her head and shoulders crowned by a white veil, above a robe of pale, greenish gray, while the dark wings form a beautiful arch over her head against the deep blue sky.

Death, "The Messenger," announces repose after life's work to a worn-out man, around whom are scattered the now useless insignia of the various arts. The size is 108″ x 60″, and the coloring very fine.

"The Court of Death" represents men and women of all ranks and ages coming to the throne whereon sits the "Universal Queen," glad to lay down their honors and their burdens, and rest their weariness at her feet. This canvas, which is unfinished, is 156″ x 108″.

Of these pictures relating to death, Mr. Watts says, "The object has been to divest the inevitable of its terrors; the power has always been depicted as impersonal and rather as a friend than enemy."

On the 23d of February, the eightieth birthday of Mr. Watts, a congratulatory address, illuminated on vellum, was presented to him by the directors of the New Gallery; and also a bronze medal of himself, executed by Miss Elinor Hallé in commemoration of the current exhibition. The address, which bears amongst the numerous signatures the most distinguished names in the church, politics, the law, art, science and literature, has on its first page a sonnet by Algernon Swinburne, which being an epitome of the exhibition may be fittingly transcribed here:

"High thought and hallowed love, by faith made one,
Begat and have the sweet strong-hearted child
Art, nursed of Nature; earth and sea and sun
Saw Nature then more Godlike as she smiled.
Life smiled on death and death on life.
Between them shone, and soared above the soul
And left on Time's unclosed and starry scroll,
A sign that quickened death to deathless life:
Peace rose like Hope, a patient queen, and bade
Hell's first-born, Faith, abjure her creed and die.
And Love, by life and death made sad and glad,
Gave conscience ease and watched Good-will pass by.
All these make music now of one man's name,
Whose life and age are one with love and fame."

The address runs as follows: "We, who are among your many friends and admirers, desire to offer to you our sincere congratulations on the occasion of the eightieth anniversary of your birth and we would add the hope that many years of life and work may still be in store for the great painter and profound thinker, to whom we gratefully offer this tribute of esteem and affection."

NATIONAL ELECTRICAL CODE.[1] — II.

CLASS C. — INSIDE WORK.

[*All Systems and Voltages*]

GENERAL RULES — ALL SYSTEMS AND VOLTAGES.

14. **Wires** —

(*For special rules, see Nos.* 18, 24, 32, 38 *and* 39.)

a. Must not be of smaller size than No. 14, B. & S., except as allowed under Rules 24 *u* and 40 *t*.

b. Tie-wires must have an insulation equal to that of the conductors they confine.

c. Must be so spliced or joined as to be both mechanically and electrically secure without solder; they must then be soldered to insure preservation, and the joint covered with an insulation equal to that on the conductors.

Stranded wires must be soldered before being fastened under clamps or binding-screws, and, when they have a conductivity greater than No. 10, B. & S. copper-wire, they must be soldered into lugs.

All joints must be soldered, even if made with some form of patent splicing device. This ruling applies to joints and splices in all classes of wiring covered by these rules.

d. Must be separated from contact with walls, floors, timbers or partitions through which they may pass by non-combustible, non-absorptive insulating tubes, such as glass or porcelain.

Bushings must be long enough to bush the entire length of the hole in one continuous piece, or else the hole must first be bushed by a continuous waterproof tube, which may be a conductor, such as iron pipe; the tube then is to have a non-conducting bushing pushed in at each end so as to keep the wire absolutely out of contact with the conducting pipe.

e. Must be kept free from contact with gas, water or other metallic piping, or any other conductors or conducting material which they may cross, by some continuous and firmly fixed non-conductor, creating a separation of at least one inch. Deviations from this rule may sometimes be allowed by special permission.

f. Must be so placed in wet places that an air-space will be left between conductors and pipes in crossing, and the former must be run in such a way that they cannot come in contact with the pipe accidentally. Wires should be run over, rather than under, pipes upon which moisture is likely to gather, or which, by leaking, might cause trouble on a circuit.

15. **Underground Conductor** —

a. Must be protected, when brought into a building, against moisture and mechanical injury, and all combustible material must be kept removed from the immediate vicinity.

b. Must not be so arranged as to shunt the current through a building around any catch-box.

16. **Table of Carrying-capacity of Wires** —

Below is a table showing the allowable carrying-capacity of wires containing ninety-eight per cent pure copper, which must be followed in placing interior conductors:

TABLE A. Rubber-Covered Wires. See No. 40*a*. B. & S. G.	Ampères.	TABLE B. Weatherproof Wires. See No. 40*b*. Ampères.
18	3	5
16	6	8
14	12	16
12	17	23
10	24	32
8	33	46
6	46	65
5	54	77
4	65	92
3	76	110
2	90	131
1	107	156
0	127	185
00	150	220
000	177	262
0000	210	312
Circular Mills.		
200,000	200	300
300,000	270	400
400,000	330	500
500,000	390	590
600,000	450	680
700,000	500	760
800,000	550	840
900,000	600	920
1,000,000	650	1,000
1,100,000	690	1,080
1,200,000	730	1,150
1,300,000	770	1,220
1,400,000	810	1,290
1,500,000	850	1,360
1,600,000	890	1,430
1,700,000	930	1,490
1,800,000	970	1,550
1,900,000	1,010	1,610
2,000,000	1,050	1,670

The lower limit is specified for rubber-covered wires to prevent gradual deterioration of the high insulations by the heat of the wires, but not from fear of igniting the insulation. The question of drop is not taken into consideration in the above tables.

The carrying-capacity of sixteen and eighteen wire is given, but no smaller than fourteen is to be used, except as allowed under Rules 24 *u* and 40 *c*.

17. **Switches, Cut-outs, Circuit-breakers, Etc.** —

(*For construction rules, see Nos.* 43, 44, 45.)

a. Must, whenever called for, unless otherwise provided (for exceptions, see No. 8 *c* and No. 22 *c*), be so arranged that the cut-outs will protect, and the opening of the switch or circuit-breaker will disconnect, all of the wires; that is, in a two-wire system the two wires, and in a three-wire system the three wires, must be protected by the cut-out and disconnected by the operation of the switch or circuit-breaker.

b. Must not be placed in the immediate vicinity of easily ignitible stuff or where exposed to inflammable gases or dust, or to flyings of combustible material.

c. Must, when exposed to dampness, either be inclosed in a waterproof box or mounted on porcelain knobs.

CONSTANT-CURRENT SYSTEMS.

[*Principally Series Arc-Lighting.*]

18. **Wires** —

(*See also Nos.* 14, 15, 16.)

a. Must have an *approved* rubber insulating covering. (See No. 40 *a*.)

b. Must be arranged to enter and leave the building through an *approved* double-contact service switch (see No. 43), mounted in a non-combustible case, kept free from moisture, and easy of access to police or firemen. So-called "snap-switches" must not be used on high-potential circuits.

c. Must always be in plain sight, and never incased, except when *required* by the Inspection Department having jurisdiction.

d. Must be supported on glass or porcelain insulators, which separate the wire at least one inch from the surface wired over, and must be kept *rigidly* at least eight inches from each other, except within the structure of lamps, on hanger-boards, in cut-out boxes, or like places, where a less distance is necessary.

[1] Rules and requirements of the National Board of Fire Underwriters for the installation of wiring and apparatus for electric light, heat and power, as recommended by the Underwriters' National Electric Association. Continued from No. 1130, page 68.

c. Must, on side walls, be protected from mechanical injury by a substantial boxing, retaining an air-space of one inch around the conductors, closed at the top (the wires passing through bushed holes), and extending not less than seven feet from the floor. When crossing floor timbers in cellars or in rooms, where they might be exposed to injury, wires must be attached by their insulating supports to the under side of a wooden strip not less than one-half an inch in thickness.

19. Arc-Lamps —

(*For construction rules, see No.* 49.)

a. Must be carefully isolated from inflammable material.

b. Must be provided at all times with a glass globe surrounding the arc, securely fastened upon a closed base. No broken or cracked globes to be used.

c. Must be provided with a wire-netting (having a mesh not exceeding one and one-quarter inches) around the globe, and an *approved* spark-arrester (see No. 50), when readily-inflammable material is in the vicinity of the lamps, to prevent escape of sparks, melted copper or carbon. It is recommended that plain carbons, not copper-plated, be used for lamps in such places.

Arc-lamps, when used in places where they are exposed to flyings of easily-inflammable material, should have the carbons inclosed completely in a globe in such manner as to avoid the necessity for spark-arresters.

For the present, globes and spark-arresters will not be required on so-called "inverted arc" lamps, but this type of lamp must not be used where exposed to flyings of easily-inflammable materials.

d. Where hanger-boards (see No. 48) are not used, lamps must be hung from insulating supports other than their conductors.

20. Incandescent-Lamps in Series Circuits —

a. Must have the conductors installed as provided in Rule No. 18, and each lamp must be provided with an automatic cut-out.

b. Must have each lamp suspended from a hanger-board by means of rigid tube.

c. No electro-magnetic device for switches and no system of multiple-series or series-multiple lighting will be approved.

d. Under no circumstances can they be attached to gas-fixtures.

CONSTANT-POTENTIAL SYSTEMS. — GENERAL RULES — ALL VOLTAGES.

21. Automatic Cut-outs (*Fuses and Circuit-breakers.*)

(*See No.* 17, *and for construction, Nos.* 44 *and* 45.)

a. Must be placed on all service-wires, either overhead or underground, as near as possible to the point where they enter the building and inside the walls, and arranged to cut off the entire current from the building.

Where the switch required by rule No. 22 is inside the building, the cut-out required by this section must be placed so as to protect it.

b. Must be placed at every point where a change is made in the size of wire [unless the cut-out in the larger wire will protect the smaller. (See No. 16.)].

c. Must be in plain sight, or inclosed in an *approved* box (see No. 46), and readily accessible. They must not be placed in the canopies or shells of fixtures.

d. Must be so placed that no set of incandescent-lamps, whether grouped on one fixture or several fixtures or pendants, requiring a current of more than six ampères shall be dependent upon one cut-out. Special permission may be given in writing by the Inspection Department having jurisdiction for departure from this rule in case of large chandeliers.

e. Must be provided with fuses, the rated capacity of which does not exceed the allowable carrying-capacity of the wire, and, when circuit-breakers are used, they must not be set more than about thirty per cent above the allowable carrying-capacity of the wire, unless a fusible cut-out is also installed in the circuit (see No. 16).

22. Switches —

(*See No.* 17, *and for construction, No.* 43.)

a. Must be placed on all service-wires, either overhead or underground, in a readily accessible place, as near as possible to the point where the wires enter the building, and arranged to cut off the entire current.

b. Must always be placed in dry, accessible places, and be grouped as far as possible. Knife-switches must be so placed that gravity will tend to open rather than close the switch.

c. Must not be single-pole, except when the circuits which they control supply not more than six 16 candle-power lamps or their equivalent.

d. Where gangs of flush-switches are used, whether with conduit systems or not, the switches must be inclosed in boxes constructed of or lined with fire-resisting material. Where two or more switches are placed under one plate, the box must have a separate compartment for each switch. No push-buttons for bells, gas-lighting circuits or the like shall be placed in the same wall-plate with switches controlling electric light or power wiring.

23. Electric-heaters —

a. Must, if stationary, be placed in a safe situation, isolated from inflammable materials and be treated as sources of heat.

b. Must each have a cut-out and *indicating* switch (see No. 17 *a*).

c. Must have the attachments of feed-wires to the heaters in plain sight, easily accessible and protected from interference, accidental or otherwise.

d. The flexible conductors for portable apparatus, such as irons, etc., must have an *approved* insulating covering (see No. 40 *c*, 3).

e. Must each be provided with name-plate, giving the maker's name and the normal capacity in volts and ampères.

[To be continued.]

CLEVELAND ARCHITECTURAL CLUB OUTING TRIP TO DETROIT.

It was with a degree of timidity as to the success of the new venture, that the Executive Board of the Cleveland Architectural Club, early in July, formulated plans for its first outing trip. Would the boys go? was the query. Acting upon the principle that everything the Club had undertaken had been successful, an efficient committee consisting of Messrs. Shimmin and Fairfield was appointed to make the arrangements, and Detroit was chosen as the city to be visited.

Letters were dispatched for hotel rates, and to the Detroit Club for maps and a list of the buildings of interest. Soon came back word that the Detroit Club had taken the matter in charge, that routes were being mapped out, that guides would be furnished for wheelmen and for car parties, and that a launch ride on the river Saturday night, with dinner at one of the river club-houses, was being planned.

All C. A. C. members at once became enthusiastic about the trip, and began planning to go. Very satisfactory rates were made with the steamboat and hotel people, and a white duck cap with black band and visor, adorned with a red ribbon with "Cleveland Architectural Club" in black letters upon it, was chosen as a means of distinguishing the party; this feature proved to be a good one, for it served as a means of keeping the party together, and prevented any from being lost. Those red ribbons looked suspiciously Salvation-Army-like, but who cared?

It was a jolly party that gathered on board the "*City of Cleveland*," of the Detroit & Cleveland Steam Nav. Co., at the foot of Superior Street, Friday evening, July 30, *en route* for Detroit. We had been told that we would do well if we succeeded in getting a dozen to go, but when all were counted as the boat swung out into the noisome Cuyahoga, an even two dozen loyal C. A. C. men and their friends were found aboard. After a night of more or less sleep,— very much less for those who bunked four in a state-room and those who discussed the relative merits of Grover Cleveland and William McKinley — nearly all of the party were on deck to enjoy the beauties of the Detroit River, and the sunrise over the low, level, marshy Canadian shore.

Detroit is reached, and after a short wait comes President Emil Lorch, with Messrs. Schilling, Ropes and Mildner to most cordially welcome us. We are conducted up Wayne Street, to Jefferson Avenue, take a passing glance at the shoe manufactury of Governor Pingree, and wonder why Cleveland cannot have artistic manufacturing buildings too; up Jefferson to Woodward, to Cadillac Square, check our baggage at the "Russell-House," give the Majestic Building and City-hall passing attention, and on to breakfast in the café on the top floor of the Chamber of Commerce. Appetites? Yes. Ask the waiters! That breakfast lives in memory.

A climb of two flights of stairs and we are on the top of the building, gazing upon the panorama of Detroit. A snap-shot of the entire party in the entrance to the building, by one of the C. A. C. friends, and the day's sight-seeing is begun in earnest.

The offices of John Scott & Co., architects, are visited, where we are most courteously shown the working-drawings of the new $800,000 Wayne County building, and a perspective of it rendered by Gregg. Across the street, the Union Trust Building, by Donaldson & Meier, is visited and we inspect the marble lobby and safety-deposit vaults. A trip out Fort Street, past the new Post-office (government design) and Secretary-of-War Alger's residence, for a view of the Gothic church on Third Street, with the new Union Depot opposite, and back on Lafayette, past the Masonic Temple. Then to the site of the County Building, where the work of putting in the massive foundations is progressing under the direction of Supt. John Robert Dillon, a former secretary of the Chicago Architectural Club, and one of the most enthusiastic club-men in the country.

As we pass along the streets we are greeted with "Salvation Army," "White Caps," and "Cleveland Agricultural Club," from the newsboys. One of our handsome committee-men overhears this remark from a couple of pretty girls: "He doesn't look like a Salvation Army lad," and hastens to assure them that he is not.

After the County-building site, the new police headquarters is visited, and the entire party locked up (for a half an hour). Then on to the Medical and Veterinary Colleges, St. Mary's Hospital and Church and St. Claire Hotel. Hunger once more calls us to the Chamber of Commerce café, and here we meet Messrs. Kahn and Trowbridge as we partake of the palatable viands. We all know Mr. Kahn, of course, from his drawings, and we are indeed glad to meet the man. It is also a pleasure to make the acquaintance of Mr. Trowbridge, who is to become Professor-in-charge of the Department of Architecture at Cornell University.

In the afternoon, Woodward Avenue is the objective point, the wheelmen taking the lead, followed by the car party. Out through

Grand Circus Park and along the avenue, the many beautiful churches and residences are thoroughly enjoyed, the Children's Free Hospital on Brush Avenue visited, and then comes the real treat of the entire trip, the visit to the home of Mr. Freer, on Ferry Avenue, designed by Wilson Eyre, Jr., of Philadelphia, and executed in perfect accord with the exquisite originality of this man, one of America's artist architects. It is a piece of nature, as it were, made by man, a harmonious pile of stone, shingles and glass growing up most naturally from Mother Earth, and surrounded by carefully laid-out grounds.

Upon the cordial invitation of Mr. Freer, the entire party inspects the interior of the house, and there marvels at the detail of the woodwork, the decorations, the china, the paintings by Whistler, Church and Thayer, the Japanese screens painted during the fifteenth and sixteenth centuries, and the charming taste and personality of the owner. Reluctantly the party leaves this house; but time is fleeting.

The wheelmen leave the car party, and take a spin on Cass Avenue to see the new High School, to learn what *not* to do in designing school buildings, then out Trumbull Avenue to see Trinity (better known as Scripp's) Church, a beautiful piece of pure English Gothic, by Mason & Rice.

The car party walks down Woodard Avenue, views the Episcopal Chapel, by Henry P. Kirby, on Warren Avenue, and goes through the Congregational Church, designed by John Lyman Faxon, of Boston; then a run for the car, a quick trip down town, out Jefferson Avenue to Jos. Campau Avenue, and down to the river. Here our wheelmen await us and we all board the ferry-boat for Walkerville, Canada, to see the famous Walker offices, designed by Mason & Rice. Reproductions have made this building familiar to all architects, but it is a pleasure to see the actual building. Some of us sample "Canadian Club," some don't.

The cosy little Walkerville depot is admired, and the ferry-boat carries us back to Campau Avenue, and the United States.

'Tis all hurry, so back we go down Jefferson to Bates Street, to the Public Lighting-plant Landing, to wait for the launch. Pretty soon she comes alongside and we board her. Then we wait. The naphtha engine won't work. The crew do work; they work hard. We pity them. After a distressing hour for them, not for us, our Ex-President Hubbell exerts his hypnotic influence on the engine, and with a convulsive motion we are gliding down the river. Hunger again asserts itself, and soon we are at "Chappell's," a club-house on the Canadian side. A good old-fashioned spread. At its close the C. A. C. people can't hold in any longer and give vent to their yell —

"Draw! draw! draw!
Rub! rub! rub!
We're the Architectural Club."

Returning to the "Russell House" about midnight, all are most willing to go to bed and to sleep.

On Sunday the Museum of Art is visited, with many a regret that Cleveland has no similar institution; a pleasant hour spent at Water-Works Park admiring its beautiful entrance, its wonderful pumping-machinery, and its unique floral designs; and then a five-mile ride out to Grosse Point, on the trolley cars, where the many beautiful summer residences and their more beautiful grounds are much admired.

Returning to Belle Isle, lunch is partaken of at the Casino, and the afternoon spent enjoying Detroit's wonderful natural park, admiring its landscape-gardening and its well designed buildings.

The city is reached by ferry, and the trip brought to a close with dinner at the Michigan Club-rooms. Thanks for the most cordial welcome of the D. A. C. are extended by Ex-President Hubbell, with a reply by President Lorch.

A thoroughly tired, but a most happy, party of C. A. C. people boarded the "*City of Detroit*" for the return trip Sunday night, happy in the thought that they had been so handsomely entertained, and that they had been able to see and to study so much of the architecture of Detroit.

The arrangements by the Detroit Club were so complete, its cordiality was so happily and sincerely expressed by its committee of President Lorch, Secretary Blumberg and Messrs. Ropes, Mildner, Odell and Schilling, that the Cleveland Club will ever carry most pleasant memories of its first outing trip.

THE ILLUSTRATIONS

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

DETAIL OF BUILDING FOR CLAUS SPRECKELS, ESQ., COR. THIRD AND MARKET STS., SAN FRANCISCO, CAL. MESSRS. J. W. & M. REID, ARCHITECTS, SAN FRANCISCO, CAL.

[Issued with the International and Imperial Editions only.]

STEEL-FRAME DIAGRAMS FOR THE SAME BUILDING.

[Issued with the International and Imperial Editions only.]

OFFICE-BUILDING FOR CLAUS SPRECKELS, ESQ., COR. THIRD AND MARKET STS., SAN FRANCISCO, CAL. MESSRS. J. W. & M. REID, ARCHITECTS, SAN FRANCISCO, CAL.

PLANS AND DETAIL OF THE SAME BUILDING.

A GROUP OF SPANISH MISSION BUILDINGS IN TEXAS.

SEE article elsewhere in this issue.

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

ACCESSORIES OF LANDSCAPE ARCHITECTURE, NO. LXII: VASCA DELL' ISOLOTTO, BOBOLI GARDEN, FLORENCE, ITALY.

A GROUP OF SEMI-PUBLIC BUILDINGS.

[Additional Illustrations in the International Edition.]

A CHIMNEYPIECE IN THE HOUSE READING-ROOM: LIBRARY OF CONGRESS, WASHINGTON, D. C. ARCHITECTS, MESSRS. SMITHMEYER & PELZ; P. J. PELZ; E. P. CASEY.

[Gelatine Print.]

THE mosaic panel above the fireplace is the work of Mr. Frederick Dielman: the composition shows "Law," supported on the one hand by "Industry," "Peace" and "Truth," and on the other by "Fraud," "Discord" and "Violence."

GARDEN FRONT OF THE ARCHBISHOP'S PALACE, NEW ORLEANS, LA.

[Gelatine Print.]

THIS view shows a portion of the convent built for the Ursuline nuns in 1727–34. This portion still remains the archbishopric, while other portions of the establishment are used as a conventual school for Creole and Catholic American girls. The nuns moved to a new convent in 1824, some three miles distant.

THE WETTIN OBELISK ON THE SCHLOSSPLATZ, DRESDEN, GER. MESSRS. SCHILLING & GRÄBENER, ARCHITECTS, PROF. JOHANNES SCHILLING, SCULPTOR, DRESDEN, GER.

[Gelatine Print.]

WHEN in 1889, the eight-hundred years' reign of the princely house of Wettin, upon the throne of Saxony, was celebrated at Dresden, the capital of the kingdom, a number of temporary structures of perishable material (wood and stucco) were erected to serve as festive decorations in some of the most prominent localities of the city. Among these were two obelisks, the work of Messrs. Schilling & Gräbener, which met with such a degree of popular approbation that it was subsequently decided to execute, at least, one such obelisk in permanent materials, as a lasting remembrance of the occasion. This obelisk, of which our plate gives a good illustration, was completed in April, 1896. The base, which is about 5 feet high, is of red granite, the pedestal and shaft are of hammered copper, and the decorative parts, including the two seated female figures at the base, of cast bronze. The allegorical figures representing "Past" and "Present," were modelled by Prof. Johannes Schilling, the noted sculptor, while the ornamental work was modelled by Messrs. Koenig and Grundig, respectively. The decoration on the four sides represent the different styles of armor and weapons in use at four different periods of the reign of the Wettiners, viz., from 1189 to 1389, from 1389 to 1589, from 1589 to 1789, and the modern period from 1789 to 1889. The laurel branches covering the lower portion of the main shaft are of bronze and gilt. The thickness of the copper in the shaft is 2.6 millimetres, or $\frac{3}{32}$ inch. The total weight of the copper alone is 33,000 pounds. All the metal-work was done by the well-known firm of Howaldt, of Braunschweig, Germany. The total height of the monument is 61 feet, the dimensions of the base are 15 feet by 15 feet. The total cost was $27,000.

The building to the left in our plate is the Royal Castle, an old structure in the German Renaissance style, which has recently been remodelled. To the right is seen the palace of the Crown-Prince, with a façade in the familiar Rococo style used so much in Middle and South Germany during the early part of the eighteenth century.

A TUNNEL UNDER THE RIVER AT BUDA-PESTH. — The Hungarian Government has just completed the necessary arrangements for the construction, without delay, of a subway beneath the river at Buda-Pesth on the same principle as that of the new Blackwell tunnel under the Thames in London. There is to be a footpath for passengers and an electric road. The upperway will be reserved exclusively for vehicular traffic, and ventilation is to be provided by electricity. — *Exchange.*

COMMUNICATIONS

[*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.*]

A CORRECTION: THE A. I. A. CONVENTION.

PROVIDENCE, R. I., August 23, 1897.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — Will you kindly correct the evident typographical error in my circular of information as to the date of the Detroit Convention? The Convention is to be held Wednesday, Thursday and Friday, September 29, 30 and October 1.

Yours very truly,
ALFRED STONE, *Secretary A. I. A.*

A QUESTION OF COMMISSION.

ALTOONA, PA., August 17, 1897.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — Please give an opinion on this matter: The contract of an architect with a building-committee of a church contains the clause, "The parties of the second part shall pay to the party of the first part 5% of the cost of the building in the usual manner." Should the percentage be figured on seating, stained-glass windows, and extras? Yours truly, C. M. R.

[THE rule is that everything necessary to make the building ready for occupancy is to be included in the "cost of the building," on which the architect's commission is to be based. This would cover extras on the contract, seats (if the architect has anything to do with planning or arranging them), and ordinary stained-glass for the windows. Special stained windows, designed by the architect, and executed under his supervision, are generally charged for at a much higher rate of commission, 10 to 30 per cent. — EDS. AMERICAN ARCHITECT.]

NOTES & CLIPPINGS

THE SERPENT SYMBOL ON THIS CONTINENT. — The serpent symbol is prevalent all over this continent. It appears in effigies in Canada, Ohio, Illinois, Minnesota. There are many serpent myths among the Iroquois and Algonquins. These represent the serpent as coming out of the water and fascinating men and turning them into serpents, taking them below the water, thus reminding us of the temptation. The serpent also is a water-god who antagonizes the chief god and produces a great flood. The story of the flood is always associated with the serpent as the cause. The serpent, in fact, is the source of evil. In Nicaragua and Central America the serpent is, on the other hand, a source of good. He is in reality the symbol of the rain cloud, and the crops and the seasons are dependent upon his appearance. Instead of antagonizing the chief divinity, he seems to be sailing through the air bearing the chief divinity on his back. Sometimes there are vases held in the folds of the serpent that are emptying water or rain upon the fields. In Nicaragua the serpent appears in the architecture highly wrought and sculptured with great force. There are serpents guarding the balustrades to the pyramids and other serpents covered with feathers which form the piers by the sides of the doorways to the temples. The idea is that they are coming down from the clouds, along the fronts of the temple to the ground, symbolizing rain clouds. The sacred books of the Mayas have many serpents coiled up with coils on the oases and heaps of corn in the latter. Even the hieroglyphs of the Mayas have serpents upon them, the serpent forming one part of the glyph, suggesting that a phonetic alphabet grew out of the picturegraphs and the symbols. The serpent itself gives one of the elements. Among the Pueblos the serpent figured in a very interesting way. When the children were initiated and were to receive the breath of the divinity through the sacred plumes, they were prepared to enter the sacred city, which is under the water of the sacred lake. But the serpent must also be carried to the upper door of the place of worship where the children are and its mouth placed near the entrance. Water and seed were poured through the serpent effigy. The priests below caught the water in a sacred vessel and the seed in sacred baskets and presented them to the children, teaching them that both water and seed came from the serpent, which was the symbol of the rain cloud. — *The Rev. Stephen D. Peet, at the meeting of the American Association for the Advancement of Science.*

THE WHITE PINE MONOPOLY. — That was a sinister confession from a Michigan lumberman printed in Tuesday's *Evening News*, wherein he said his business was not expected to boom and wax fat until about next year, when Canada would have her export duty on saw-logs in operation. A few weeks ago, when Brother Burrows was standing by Johnny Blodgett through thick and thin in the Finance Committee and that good old lady, Senator Hoar, was filing off rusty remarks for the entertainment of the Senate while it waited, the charge was freely and frequently made that American white-pine owners counted on getting exactly what the lumberman quoted above confesses he hopes for. It was said over and over again by the American owners of Canadian stumpage that the $2 tariff would surely result in Canadian retaliation; that within a year they would have to face a $2 export duty on Canadian logs and a $4 duty on Canadian lumber, which would compel them to stop all operations in Canada. The owners of American pine affected to disbelieve that Canada would dare to take any such step, but it appears now that their disbelief was nothing but affectation, put on for the purpose of passing the bill. It is shown by the confession printed above that the few remaining owners of American pine had a deliberate purpose in framing the tariff bill in the way it was sure to meet Canadian retaliation, and that the end they sought was not only protection against Canadian lumber, but against Canadian logs. In short, they wanted and will probably get a monopoly of the white-pine business in this country during the life of the present lumber tariff. Of course, this will mean higher prices on pine, but the owners of Canadian stumpage can take hope from the very fact. As soon as the people begin to fully feel the weight of the monopoly, the movement which has already started to induce Congress to lower the lumber tariff will gather a headway that even the Burrowses of the Senate will not dare to face. — *Detroit Tribune (Rep.).*

FIRE-BOATS AS AUXILIARIES. — Milwaukee's use of its fire-boats for fighting fire at a distance from the river-front is attracting attention in other cities with navigable waters. Cleveland, Detroit, and Buffalo have adopted the system, and Boston is preparing to do something with it. In Milwaukee the idea was born of necessity, the first suggestion being for a pipe-line from the river to an isolated manufactory in a section where the water-mains had not penetrated. The pipe was laid and the first test with a fire-boat at the river end showed a complete success. Since then lines have been laid to cover a great part of the business district of the city. They extend in some instances even as far as 3,000 feet from the rivers on either side, and have been proved to be effective even with an elevation of 86 feet, and the consequent large back pressure. The Chief of the Fire Department says, that a fire-boat at the end of a pipe-line is worth from three to six engines, according to the length of the line. Therefore, by the extension of the lines at a comparatively small cost, the city has been saved the expense of several engines, to say nothing of the engine-houses and the keeping up of companies. The piping costs but little more than the same length of hose, and when laid is practically indestructible. In time, at least one-half of Milwaukee will be protected in this manner, a protection more efficient than that provided by fire-engines, and obtained, moreover, at a minimum of cost. — *N. Y. Evening Post.*

AN INGENIOUS LETTER-BOX. — A very clever mail-delivery box has been placed in a number of the larger buildings at Geneva, Switzerland, by an enterprising electrician. This mail-box has a compartment for each of the stories of the building, and when the letters are deposited on the ground-floor, the carrier delivers them as required. The deposit of a single letter makes an electric contact, which starts a bell going on the respective floor, which does not cease ringing until the letter is taken out. At the same time it opens the faucet of a tank on the roof of the house, which causes water to flow into the cylinder forming the counterweight of the mail-box elevator until the weight is heavier than the box, when the box ascends and the flow of water ceases simultaneously. As the box passes each story the mail intended for it — letters, papers and small packages — falls into boxes in the corridor on that floor. This is performed very reliably by a little spring at the bottom of each compartment in the elevator mailbox, which causes the bottom of the compartment to catch for a moment, and the release throws out even a single piece of paper thinner than a postal-card into the stationary box provided for its reception. When the box has passed the uppermost floor the cylinder filled with water strikes a bolt provided at the bottom, which allows the water to flow out, and by its own weight the box descends to its place on the ground-floor. Should by any mischance a single piece of paper have remained in the elevator, upon striking the bottom it will at once go through the same series of movements as before — *Philadelphia Record.*

A RAPHAEL STORY. — Raphael, the great Italian painter, whose celebrated Biblical pictures are worth fabulous sums of money, was not a rich man when young, and encountered some of the vicissitudes of life like many another genius, says *Harper's Round Table.* Once when travelling he put up at an inn and remained there, unable to get away through lack of funds to settle his bill. The landlord grew suspicious that such was the case, and his requests for a settlement grew more and more pressing. Finally young Raphael, in desperation, resorted to the following device: He carefully painted upon a table-top in his room a number of gold coins, and, placing the table in a certain light that gave a startling effect, he packed his few belongings and summoned his host. "There," he exclaimed, with a lordly wave of his hand towards the table, "is enough to settle my bill and more. Now kindly show the way to the door." The innkeeper, with many smiles and bows, ushered his guest out and then hastened back to gather up his gold. His rage and consternation when he discovered the fraud knew no bounds, until a wealthy English traveller, recognizing the value of the art put in the work, gladly paid him £50 for the table.

A PRUSSIAN RAILROAD BRIDGE. — The new railway connecting directly the great centres of the iron and steel industries, Remscheid and Solingen, in Rhenish, Prussia, is remarkable for the bridge which carries it across the valley of the Wupper at Müngsten, and which is the greatest railway bridge of the Continent. The height of the centre of the bridge over the surface of the river is over 350 feet, its length is 508 yards, and the breadth of its central span close upon 186 yards. The bridge, which reduces the railway distance between Remscheid and Solingen from 44 to 10 kilometres, is regarded as a triumph of German engineering in design and construction. The Emperor has bestowed upon it the name of Kaiser Wilhelm Bridge in memory of his grandfather, the great builder of the political bridge uniting North and South Germany. — *Berlin Correspondence London Times.*

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

Copyright, 1897, by the American Architect and Building News Co.

THE ARCHBISHOP'S PALACE, NEW ORLEANS, LA.

THE HELIOTYPE PRINTING CO., BOSTON.

Blätter für Architektur. Neumann & Co., Berlin.

The Wettin Obelisk in the Schlossplatz, Dresden, Saxony.
Johannes Schilling, sculptor. Schilling & Gräbner, architects.

Copyright, 1897, by the American Architect and Building News Co.

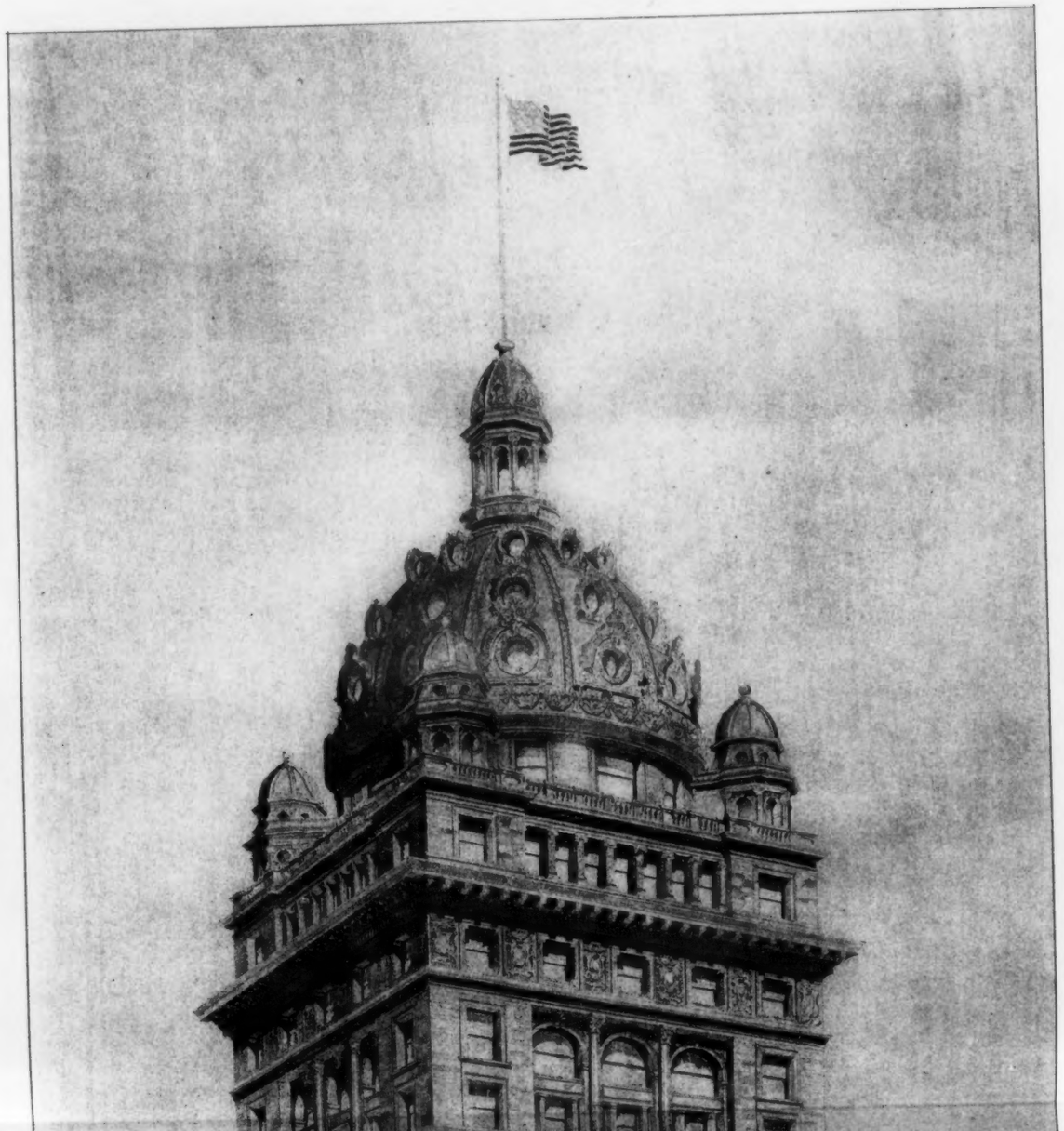
NEGATIVE BY H. H. SIDMAN, NEW YORK

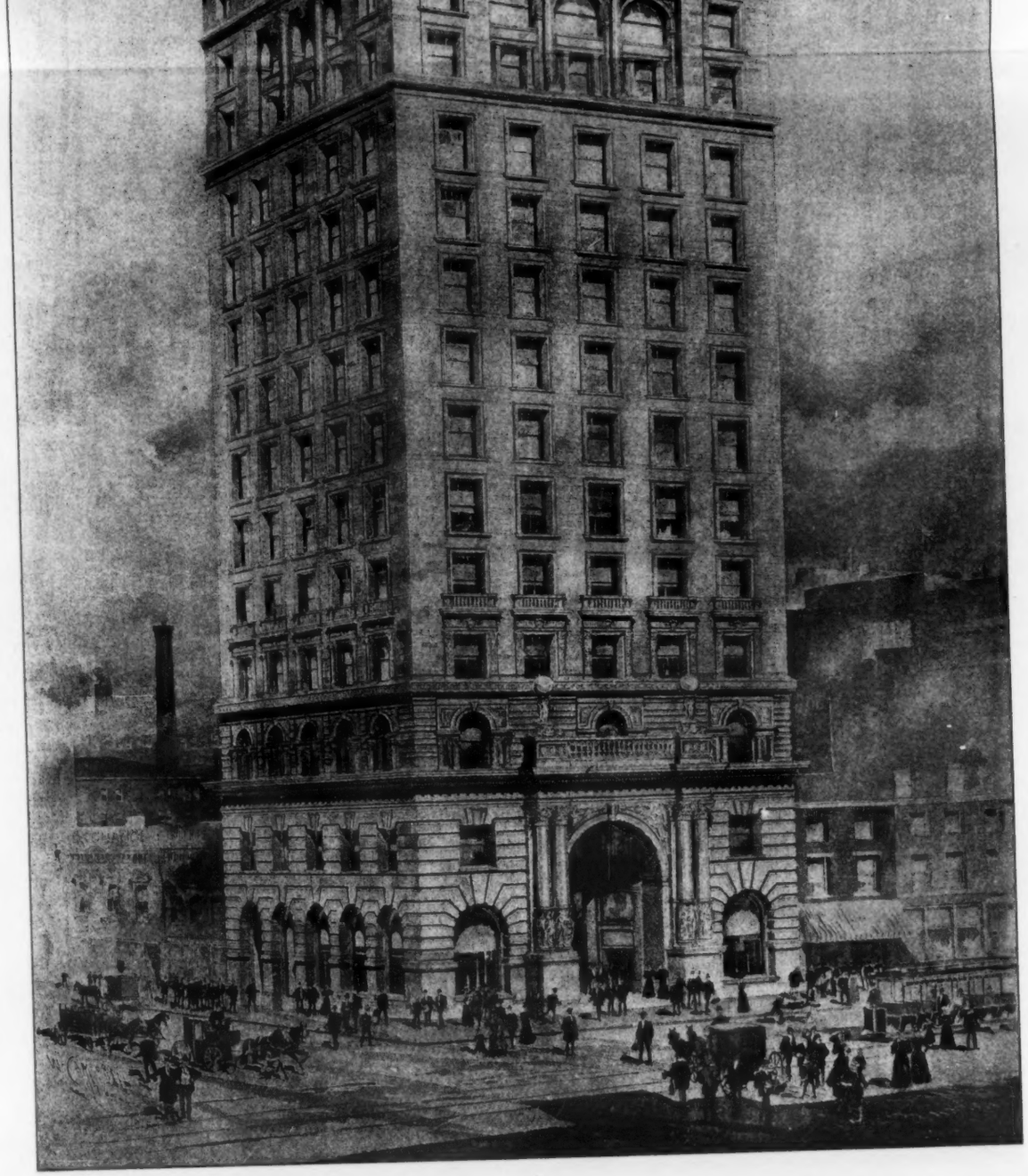
THE HELIOTYPE PRINTING CO., BOSTON

A CHIMNEY-PIECE IN THE HOUSE READING-ROOM: LIBRARY OF CONGRESS, WASHINGTON, D. C.

Architects: SMITHMEYER & PELZ. — P. J. PELZ. — E. P. CASEY.

COPYRIGHT 1897 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO.

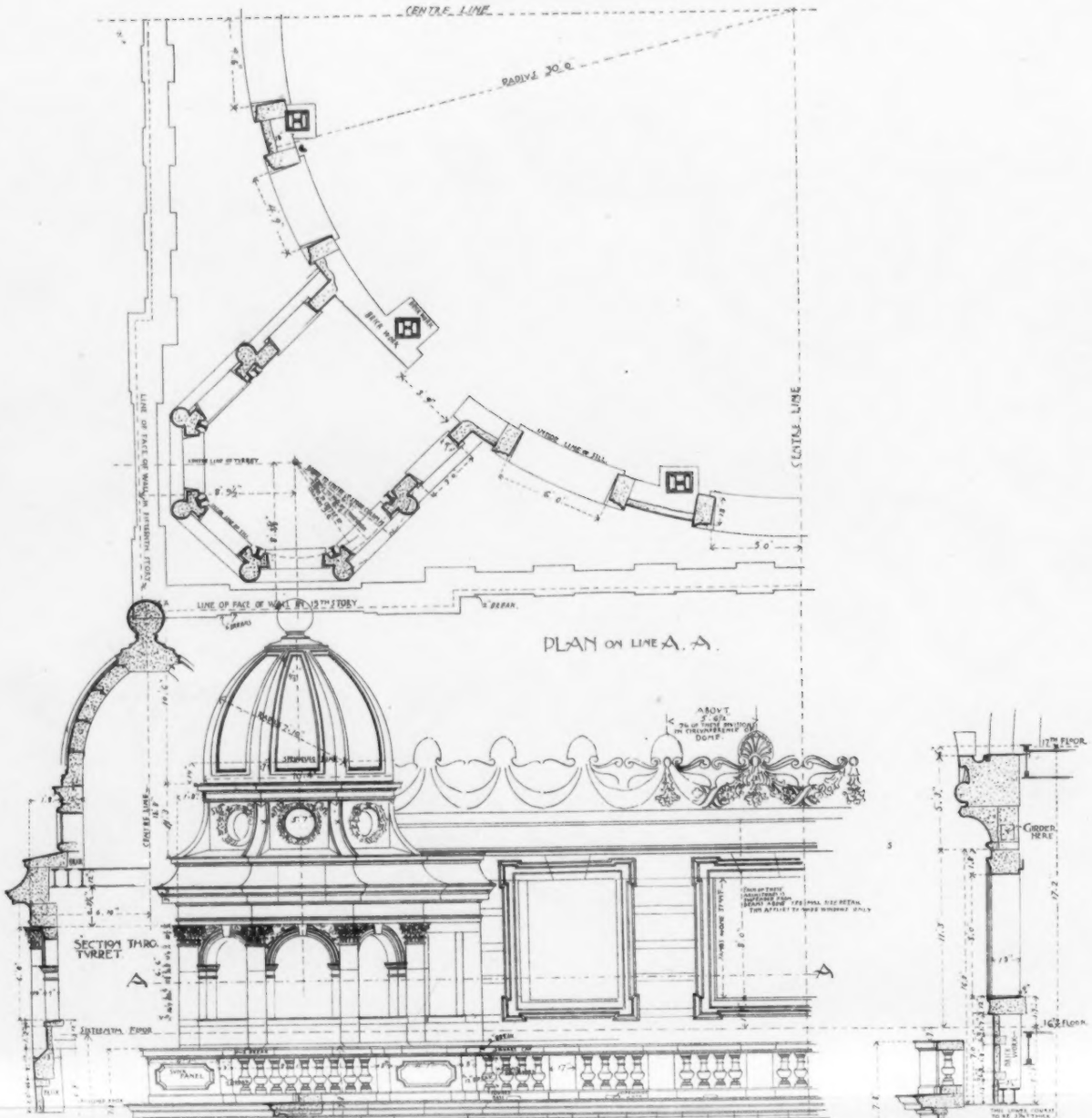


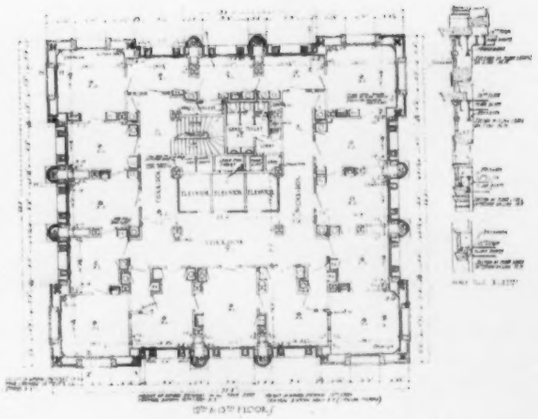


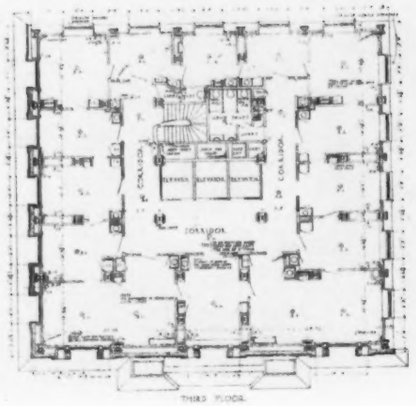
BUILDING CORNER THIRD AND MARKET STREETS, SAN FRANCISCO, CAL., FOR CLAUS SPRECKELS, ESQ.

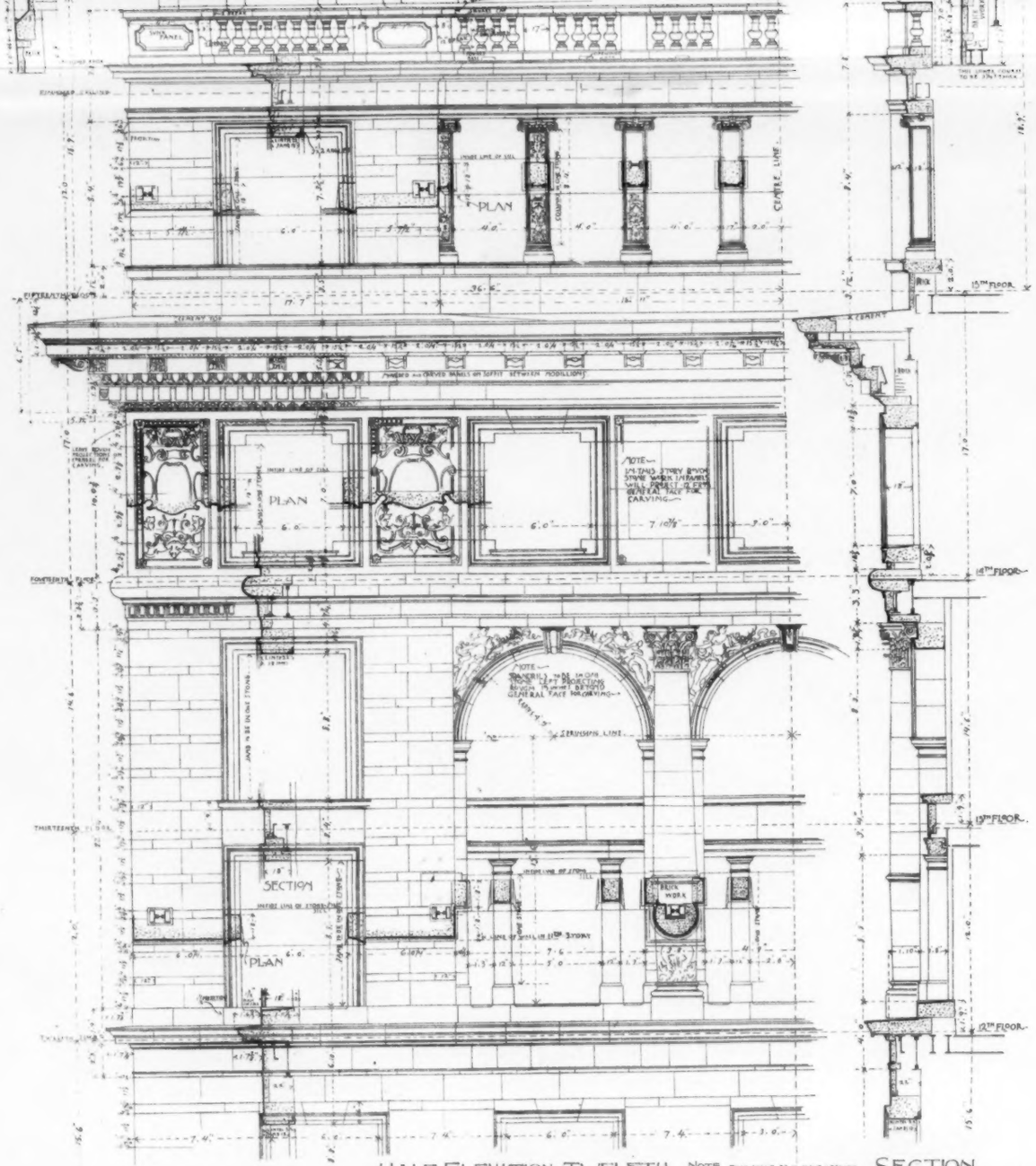
JAMES W. & MERRITT J. REID, ARCHITECTS.

COPYRIGHT 1897 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO.





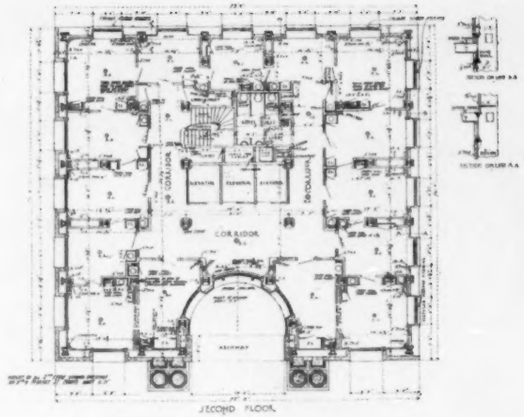


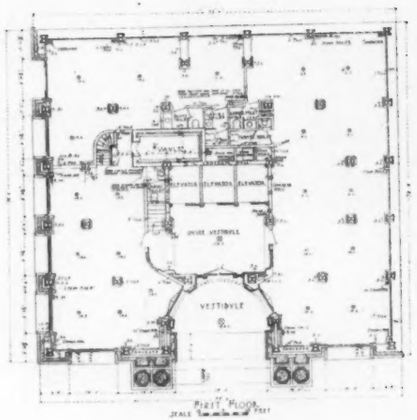


HALF ELEVATION · TWELFTH TO SEVENTEENTH STORIES · SCALE 0 1 2 3 4 5 FEET

NOTE THIS SCALE DRAWING APPLIES TO STONE WORK ONLY FOR BRICK WORK REFER TO FLOOR PLANS

SECTION

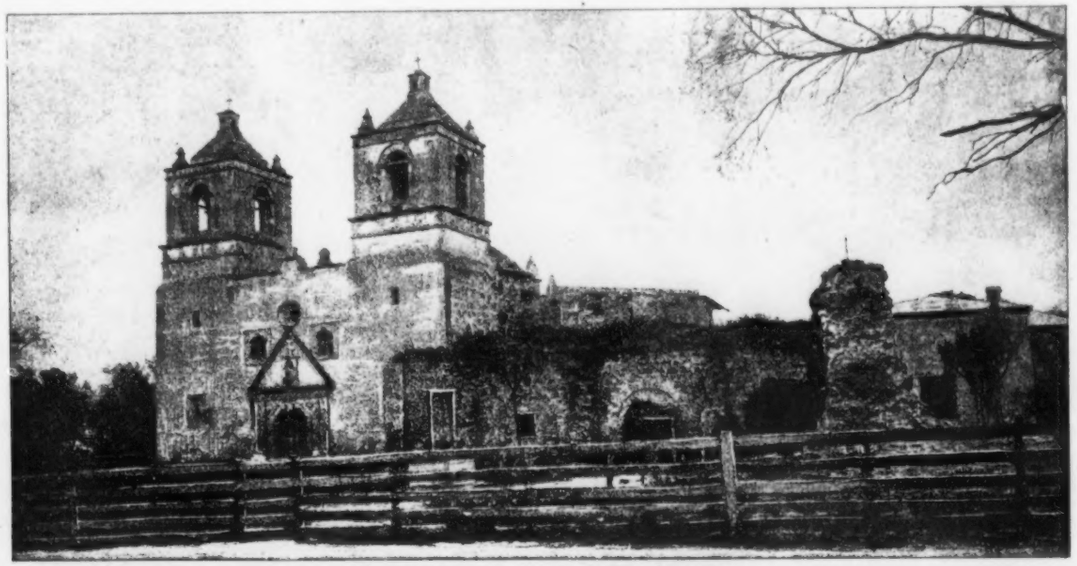




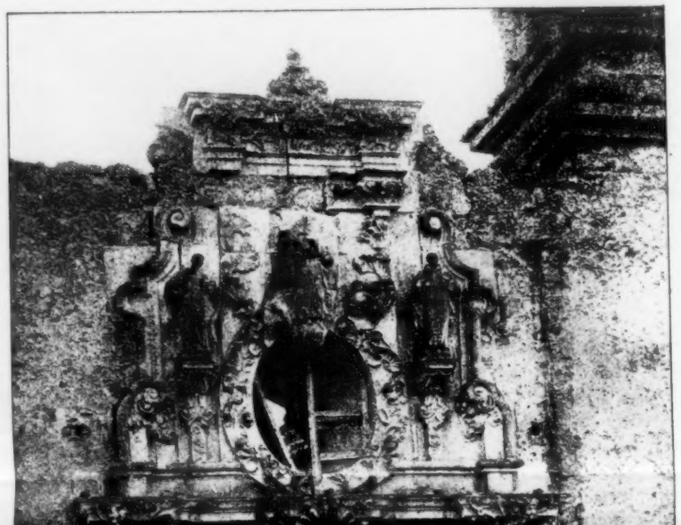
HELIOTYPE PRINTING CO. BOSTON

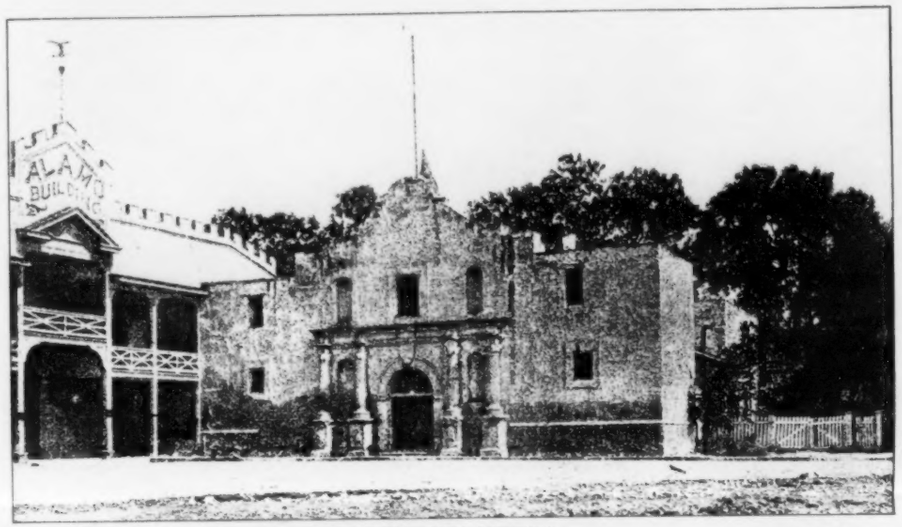
BUILDING CORNER THIRD AND MARKET STREETS, SAN FRANCISCO, CAL., FOR CLAUS SPRECKELS, ESQ.

COPYRIGHT 1897 BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO.

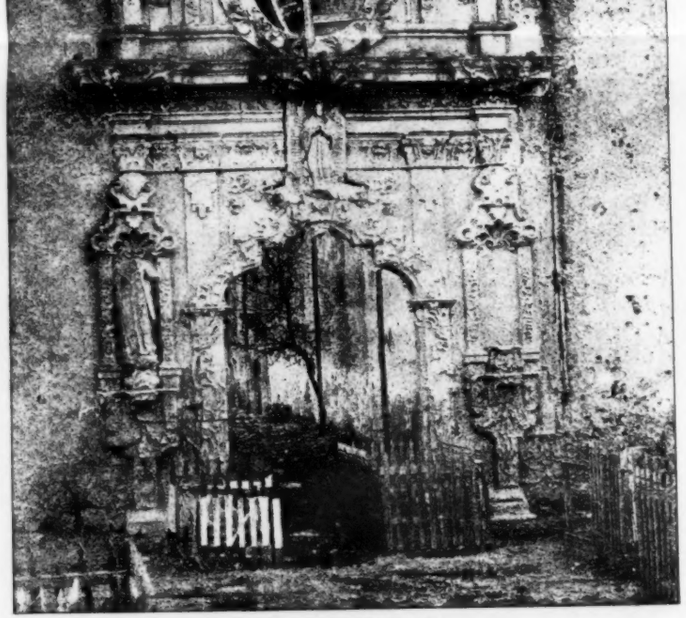


Mission Concepcion, near San Antonio.





Alamo, San Antonio.

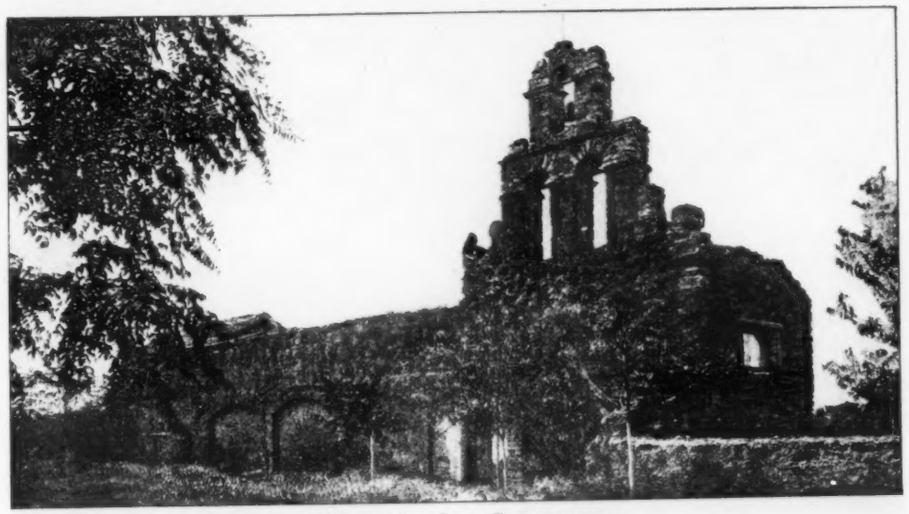


Entrance to San Jose

Alamo, San Antonio.

Mission San Jose, near San Antonio.

Mission de San Francisco de Espada.

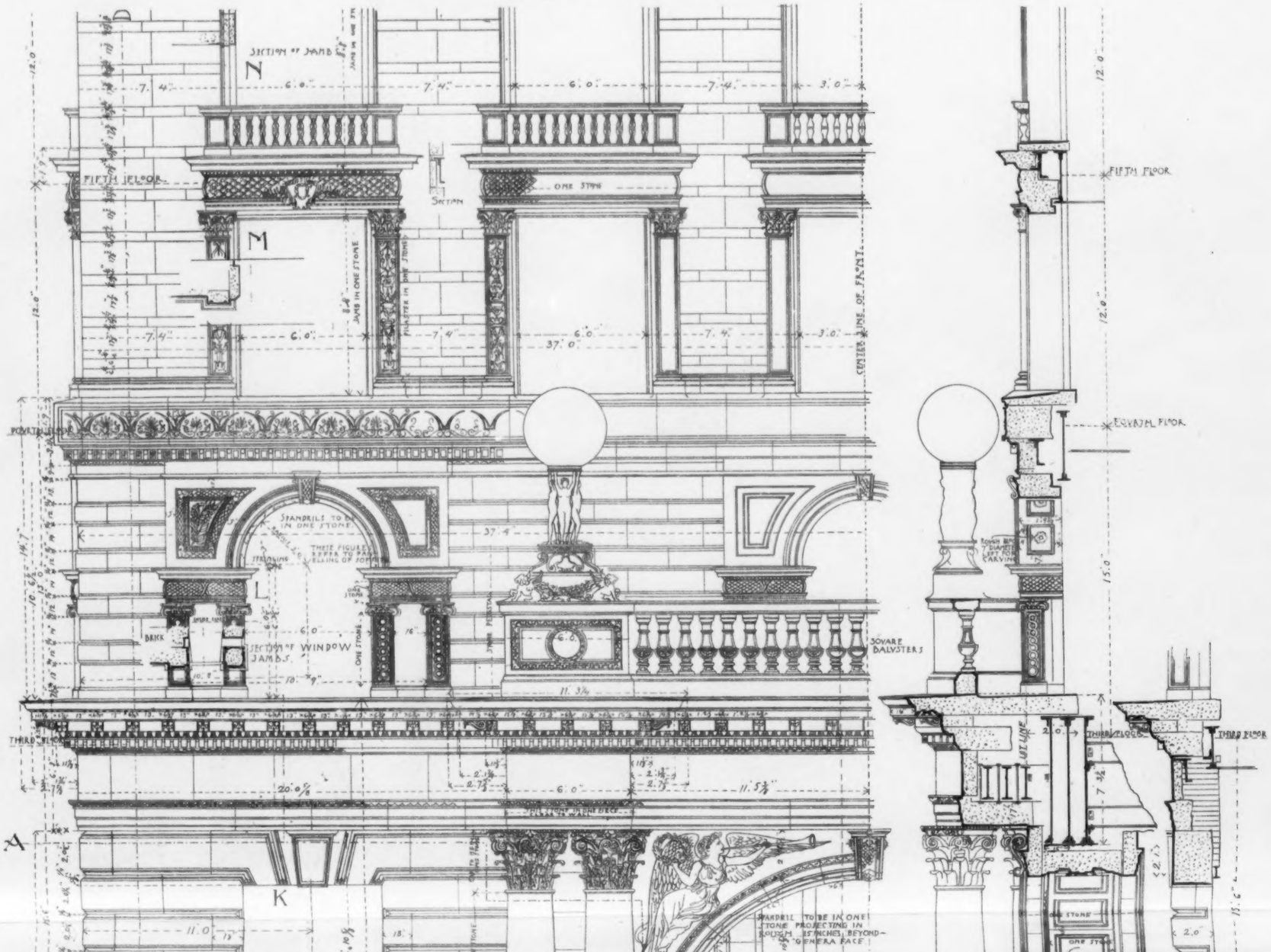


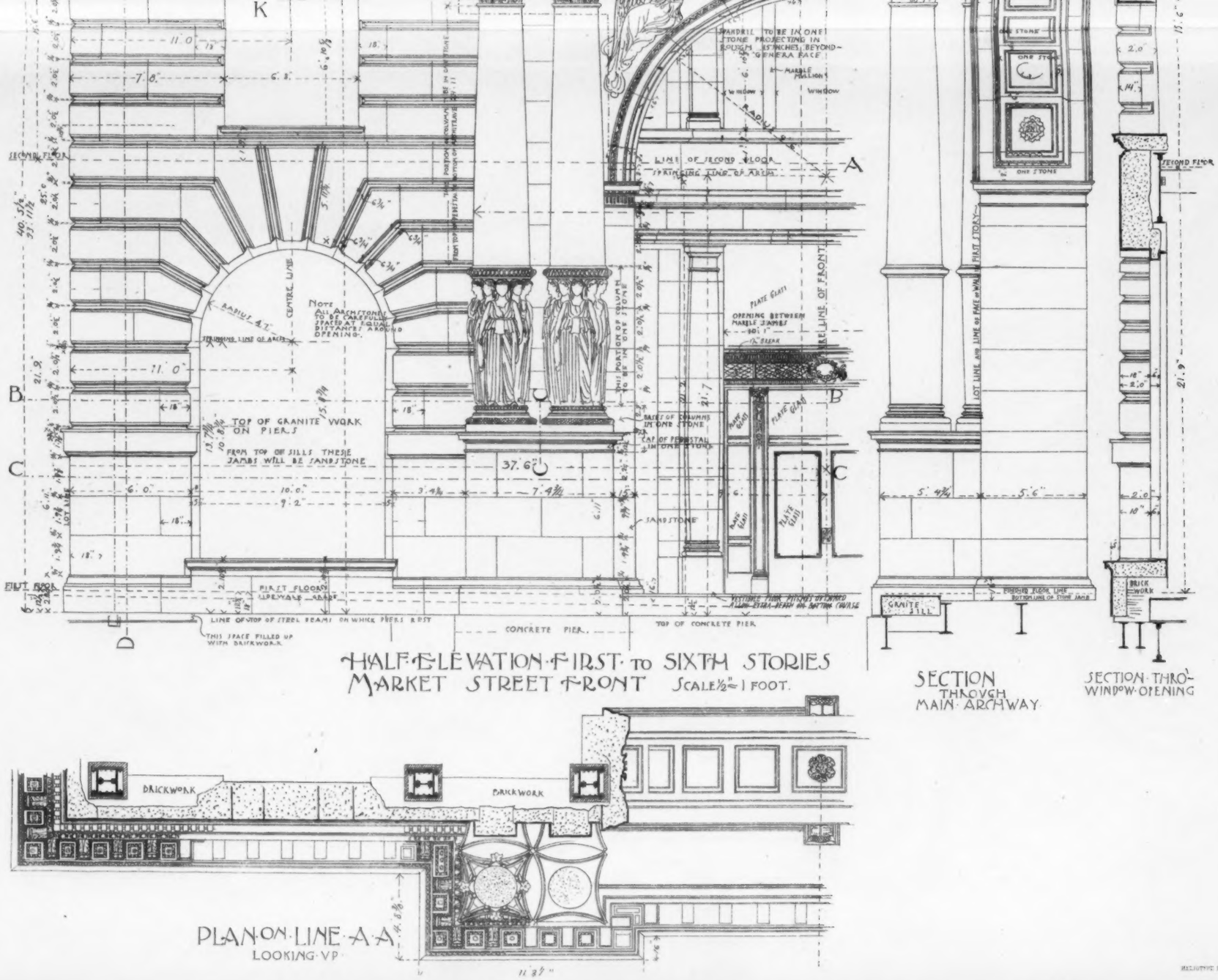
Mission San Juan Capistrano.

HELIOTYPE PRINTING CO. BOSTON

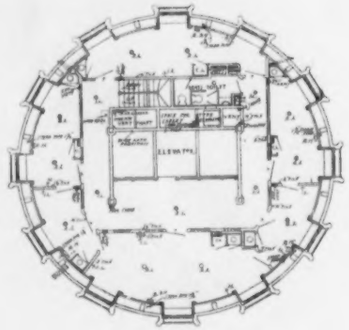
THE SPANISH MISSION BUILDINGS IN TEXAS.

COPYRIGHT BY THE AMERICAN ARCHITECT AND BUILDING NEWS CO.

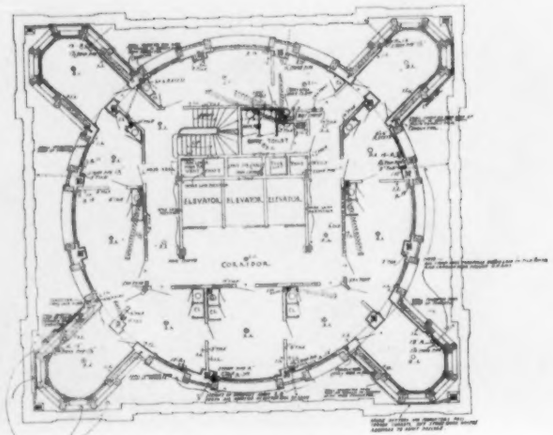




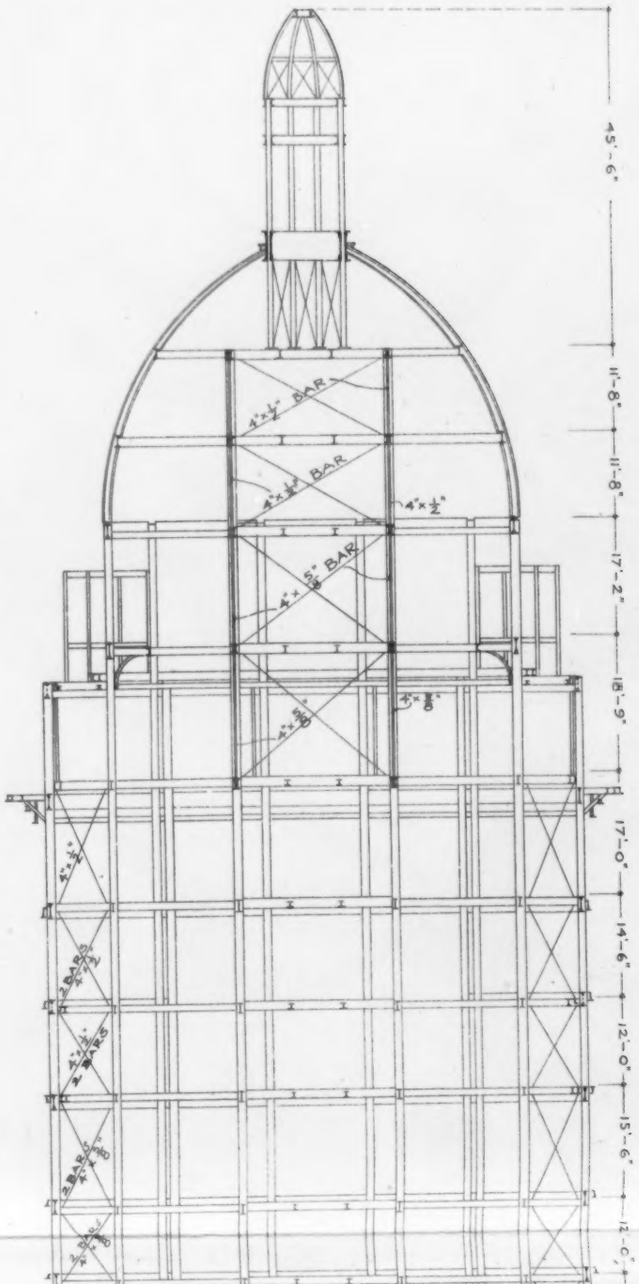
BUILDING CORNER THIRD AND MARKET STREETS, SAN FRANCISCO, CAL., FOR CLAUS SPRECKELS, ESQ.



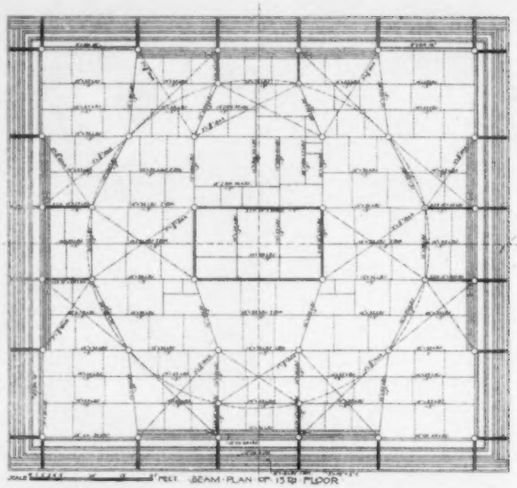
EIGHTEENTH FLOOR.



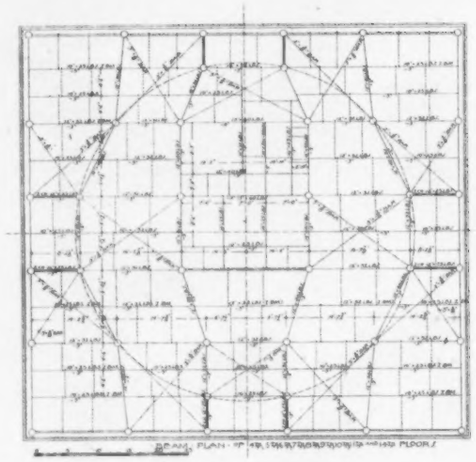
SIXTEENTH FLOOR.



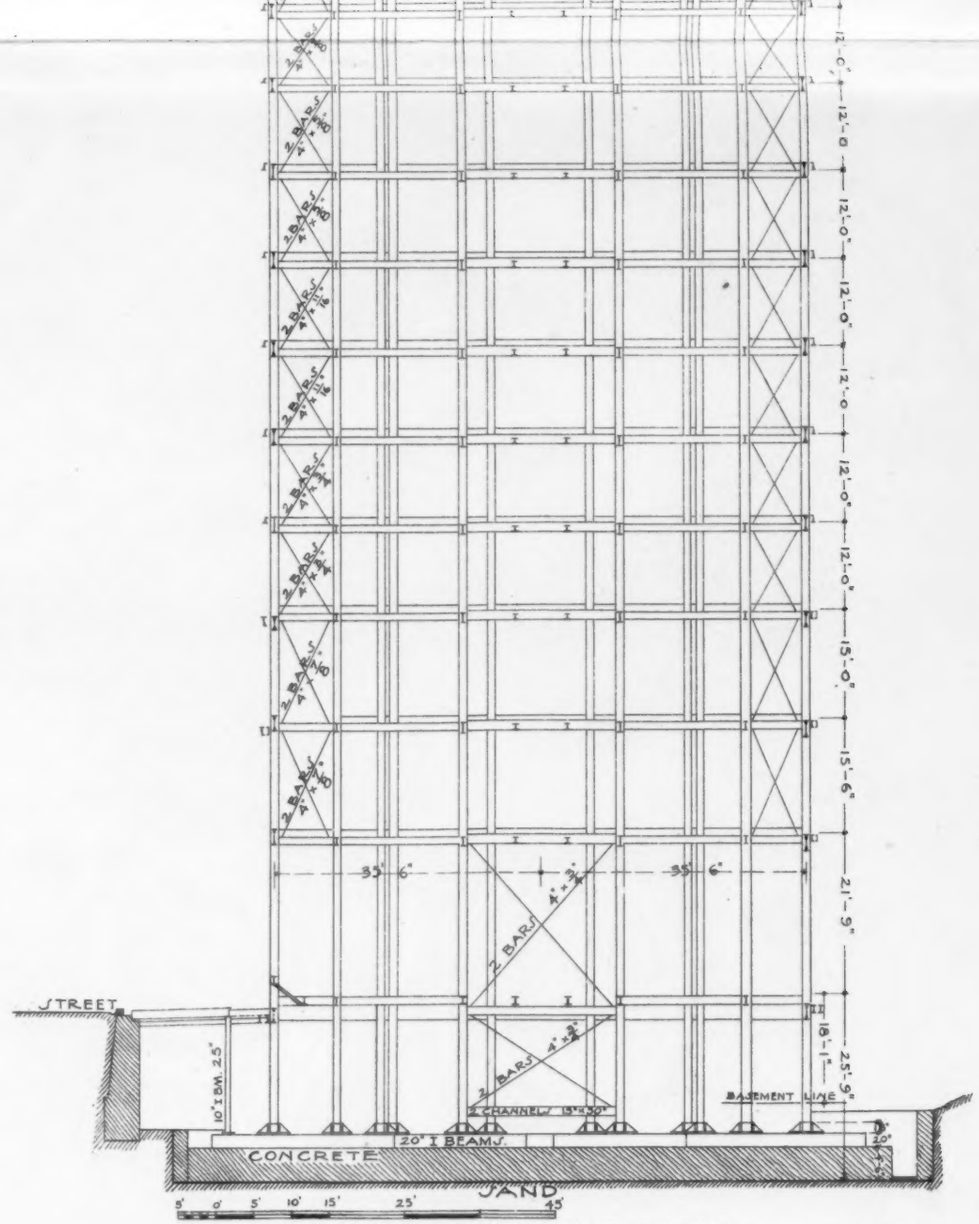
SIXTEENTH FLOOR



BEAM PLAN OF 15TH FLOOR



BEAM PLAN OF 14TH, 13TH, 12TH, 11TH, 10TH, 9TH, 8TH FLOORS



SECTION · THROUGH · CENTRE · LINE · OF · BUILDING · EAST · TO · WEST ·

MILLOTYPE PRINTING CO. BOSTON

BUILDING CORNER THIRD AND MARKET STREETS, SAN FRANCISCO, CAL., FOR CLAUS SPRECKELS, ESQ.

JAMES W. & MERRITT J. REID, ARCHITECTS.