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CONTENTS

SUMMARY:—

Death of George F. Shepley, Architect.—Lead and Zinc Paints.—The New Building of the New York Times.—Aerial Navigation and the Tariff.—The Settlement of the Matter of the Tiara of Saitapharnes.—International Postal Statistics.—An American Offer to build the Baltic-Black-Sea Canal.—A New Milk Test. 25

THE TAJ AND ITS DESIGNER. 27

ILLUSTRATIONS:—

St. Matthew's Roman Catholic Church, Brooklyn, N. Y.—Reredos for Christ Church, Rochester, N. Y.—Fourth National Bank Building, Atlanta, Ga.

Additional: Woodbridge Hall: Yale University, New Haven, Conn.—Byers Hall: Yale University, New Haven, Conn.—Back of Seat in the Loggia di Papa, Siena, Italy.—Donatello's Cantoria [Restored] in the Museo di Sta. Maria del Fiore, Florence, Italy.—Cercle Artistique, La Haye, Belgium: Two Plates. 32

NOTES AND CLIPPINGS. 32

MANY of our readers will hear with great regret of the death of Mr. George F. Shepley, at St. Moritz, in the Engadine. Mr. Shepley was born in St. Louis, in 1860, of a distinguished family, his father having been one of the most brilliant lawyers in the city. The younger Shepley received his professional education in Boston, graduating from the Massachusetts Institute of Technology in 1882. With his classmate, and future partner, Mr. Charles A. Coolidge, he entered, immediately after graduation, the office of the late H. H. Richardson. On the death of the latter Mr. Shepley and Mr. Coolidge, with Mr. Rutan, who had also been for many years connected with the same office, continued, in accordance with Mr. Richardson's formal wish, the business which he left unfinished, and soon acquired for themselves a high reputation, carrying out a large number of important works. Among these the best known are the Ames Building in Boston; the North Union Railway Station, in Boston, one of the most beautiful railroad buildings in existence; the South Terminal Station, the largest railway station in the world; the Hartford Station; the buildings of the Leland Stanford University, in California; the Art Institute and the Public Library, in Chicago; the Congregational House, in Boston; the Union Station, in Albany, and many private residences and mercantile buildings. Mr. Shepley, who married Mr. Richardson's daughter, was peculiarly identified with the work of that great artist, and the Galilee porch which was added to Trinity Church, in Boston, some years ago, is quite worthy of the building.

MR. SHEPLEY'S health had always been delicate and the labor and anxiety of professional life severely tried his constitution. For a time he found it necessary to spend a part of the winter months in the dry climate of Switzerland, usually in the Engadine; but this condition seemed to pass away, and he had been able for some years to endure the winters at home, until, in January last, the appearance of grave symptoms made it necessary for him to leave his work and seek again the mountain air of Switzerland, unfortunately without benefit. Mr. Shepley was always deeply interested in professional matters, and was prominent among the Directors of the American Institute of Architects, so that he was very well known in professional circles throughout the country, and was universally beloved for his quiet courtesy. His work reflected the refinement and delicacy of his character, and, although he had to struggle constantly against physical weakness, few architects have been able to impress themselves more thoroughly upon their buildings, and his early death is a loss to American art, as well as to the profession.

ARCHITECTS will be interested to learn something, outside of the circulars so liberally sent them by rival manufacturers, concerning the relative merits of white lead and zinc as pigments for painting in oil. It is hardly necessary to

say that white lead causes, in those who use it, serious poisoning, and many attempts have been made to substitute something else for it, particularly for inside work. It is only justice to say that these attempts have been, to a great extent, defeated, at least in this country, by the unconscionable adulteration of all white pigments. An architect who studies the effect of a material, branded, on the barrels containing it, as "Warranted Strictly Pure White Lead," which does not contain even a trace of white lead, and compares it with some "Warranted Pure Zinc White" which does not contain a trace of zinc, may be excused for failure to form a distinct idea of the relative merits of the two materials; and the common notion, or superstition, that real white lead and linseed oil enter into a mysterious but beneficent combination, has had much to do with influencing architects to prefer the use of lead. According to M. J. L. Bréton, of the French Academy of Sciences, the idea of chemical union between linseed oil and white lead is an erroneous one. Nothing but a mechanical mixture is, or can be, formed between the two substances, and he says that the mixture of oxide of zinc with linseed oil is more homogeneous than that formed with white lead. Zinc requires the addition of much more dryer to the oil, but this does not appear to injure its solidity; and it is curious that, contrary to the common notion, oxide of zinc has, weight for weight, nearly twice as much covering power as lead, when mixed with the same quantity of oil, and even volume for volume the covering power of zinc is about a third greater than that of lead. The oxide of zinc, however, when mixed with oil, gives a much less fluid paint than an equal volume of white lead; so that the apparent deficiency in covering power of zinc paint, which every architect has observed, does not come from any inherent quality of the material, but from the fact that the painters, in mixing zinc, thin it to the usual consistency of lead paint, thus forming a mixture which is nearly all oil. With care to use zinc paint much thicker than lead, and to put in plenty of dryer, it will, according to M. Bréton, cover as well as lead, and adhere even more strongly, besides resisting the action of sulphurous gases, which soon affect lead paint in interiors; and its advantage over lead in not being poisonous is so great that humanity suggests its use wherever practicable.

THE new Times building, in New York, offers some novel problems in construction. It is to be not only some twenty stories high above the street, but is to have three stories underground, the floor of the press-room being fifty-five feet below the curb. In addition to this, the city subway is to run through it, twenty-two feet below the curb; so that the press-room and composing-rooms will have a railroad above them. This feature is, however, regarded as advantageous, on account of the facilities which the subway will afford for distributing the various editions of the paper. Ventilation for the basement stories is to be secured by means of a shaft for supplying fresh air, while foul air is exhausted by a shaft, through the middle of which runs the main smoke-stack.

WE may be pardoned for recalling our prediction that the progress of the art of navigating the air would have serious significance, not only in connection with military matters, but as affecting international tariffs. Although M. Santos-Dumont and the managers of the Lebaudy air-ship sail about Paris almost daily, steering in any direction, at pleasure, and, in the case of the Lebaudy balloon without, apparently, concerning themselves about the force or direction of the wind, the military authorities of this country, which has the most, perhaps, to gain by the utilization of the new art, seem as indifferent as those of other nations to the impending transformation of offensive and defensive methods; but the octroi officials of Paris are said to be immersed in deep thought over the future. It will be a long time yet before barrels of lime, or bags of potatoes, or loads of hay, are carried through the air across the Parisian barriers; but the collectors of the octroi do not propose to be taken by surprise when the time arrives. Meanwhile, it is unnecessary to point out, as we have so often pointed out before, that a machine which, like the Lebaudy air-ship, can take four men; or a quarter of a ton of

high explosives; or fifteen million dollars' worth of diamonds; or a proportionate value in laces, or silks, or other highly-protected, but light fabrics, and sail with them in any direction, even against a strong wind, at the rate of twenty miles an hour, landing, and returning to its starting-place, is an engine with which custom-house officers and military men will soon have to reckon seriously.

THE last act of the comedy of the tiara of Saitapharnes seems to have been played. M. Clermont-Ganneau, the expert appointed by the authorities of the Louvre to examine it, and to make inquiry into its authenticity, has reported his conclusions at great length, summing them up in the simple words, "The golden tiara of the Louvre is a forgery; it was executed under the direction of a certain X . . . , by a modern artist; that artist is M. Rochumowski." The Rochumowski mentioned is a goldsmith from Odessa. According to his story, a certain M. X . . . , whose real name will be guessed by many of our readers, although the official report conceals it, came to him, not long ago, with four bits of gold, in miserable condition, and told him that he wished them to be used as suggestions for the construction of a tiara, in antique style, which was to be presented, as a gift of honor, to a distinguished professor of archaeology in the University of Kharkov, on the occasion of his jubilee. Rochumowski, in accordance with these directions, and under the guidance of M. X . . . , made the tiara, in three pieces, which, after many alterations, were approved and soldered together. The tiara was duly delivered to M. X . . . in finished condition, together with the fragments which he had brought as a model, a single one of these fragments, only, having been incorporated in the new work. M. X . . . then disappeared with his tiara, but circumstances seem to have interfered with presenting it to the worthy professor at Kharkov, for it next turned up, in a dirty and battered condition, as a genuine antique, dug from a grave in ancient Scythia. It is unnecessary to repeat the account of its rejection by the authorities of various museums, its final purchase by the Louvre, for the sum of forty thousand dollars, and the controversies which have been going on over it ever since; but the story of the inquiry into the truth of Rochumowski's testimony is interesting. On being promised, as he requested, payment of his expenses in coming to Paris to prove the falsity of the tiara, he sent photographs of the tiara, taken while it was still in his hands, together with tracings of the drawings which he had used for making the decorations, transferring them to the gold by following the outlines with a small punch. The tracings were applied to the ornamented bands of the tiara by M. Clermont-Ganneau, and found to "fit like a glove"; and the marks of the punch were still to be seen. Rochumowski also said, without seeing the tiara, that the band of one of a figure of Achilles, in one of the groups, would be found in much higher relief than the rest of the figure; and that, in the left thigh of a figure of Antilochus, was a small fissure in the metal. Both these places were examined, and Rochumowski's description found to be correct. Besides these, and other proofs, he showed the tool with which he made the beading around the bands of decoration. This made five beads at a time, and the work was found to correspond with the tool.

IT is impossible to resist the evidence of these indications, and we can only wonder at the grossness of the forgery, and the ease with which it was imposed upon the learned world. On being asked where he got the designs for his "Scythian warriors" and other personages, Rochumowski, who is not an educated man, and had only a vague recollection of books, gave a description which enabled the experts to fix upon a work on the "Antiquities of Southern Russia," by Tolstoi and Kondakoff, and a popular Atlas of the World by Weisser. The tracings which Rochumowski made from the Atlas were numbered to correspond with the plates, so that they were easily compared with the original book, and the very distortions of Weisser's rude drawings were found to be reproduced on the tiara. Even worse than this, one of the Weisser plates used by the goldsmith to copy his Scythian war-scenes from represented Giulio Romano's fresco of the victory of Constantine over Maxentius. Another curious circumstance about the affair is that Rochumowski says that the fragments shown him by M. X . . . as models were not only very clumsily executed, but were in parts unfinished. It is

conceivable that fragments of genuine antique work might be coarsely executed, but it is difficult to believe that even a Scythian king would have been buried with a crown composed of incomplete fragments; and, although, as Rochumowski says, the bits of gold showed great damage from age, it is not unreasonable to suppose that the ingenious M. X . . . might have played his first little deception, for practice, on Rochumowski himself, exhibiting, as M. Planat suggests, as antique fragments, bits of work which other goldsmiths had made for him on trial, and which, proving unsatisfactory, he had transformed into antiquities by familiar means.

THE statistics recently published by the international Postal Bureau at Berne are curious. As might be expected, the United States leads all other countries in number of post-offices, possessing seventy-eight thousand. Germany comes next, with forty-six thousand, while Great Britain has only twenty-two thousand. It is, however, to be remembered that, in Europe, rural free delivery is almost universal, so that the multiplication of small post-offices is unnecessary. A greater number of officials is, however, required; so that Germany, with less than three-fifths as many post-offices as the United States, employs more men to carry them on, the number being two hundred and thirty-three thousand for Germany, to two hundred and twenty-seven thousand for the United States. France is, in comparison with Germany, poorly supplied with post-offices, having only eleven thousand, employing seventy-seven thousand officials, while even British India has fourteen thousand post-offices. Russia, where only one person in four can read or write, has, naturally, little use for post-offices, and only sixty-two hundred are found in the country; while resolute little Japan, the intellectual wonder of the age, has forty-five hundred. Austria and Italy have about the same number, conditions being, apparently, nearly alike in the two countries.

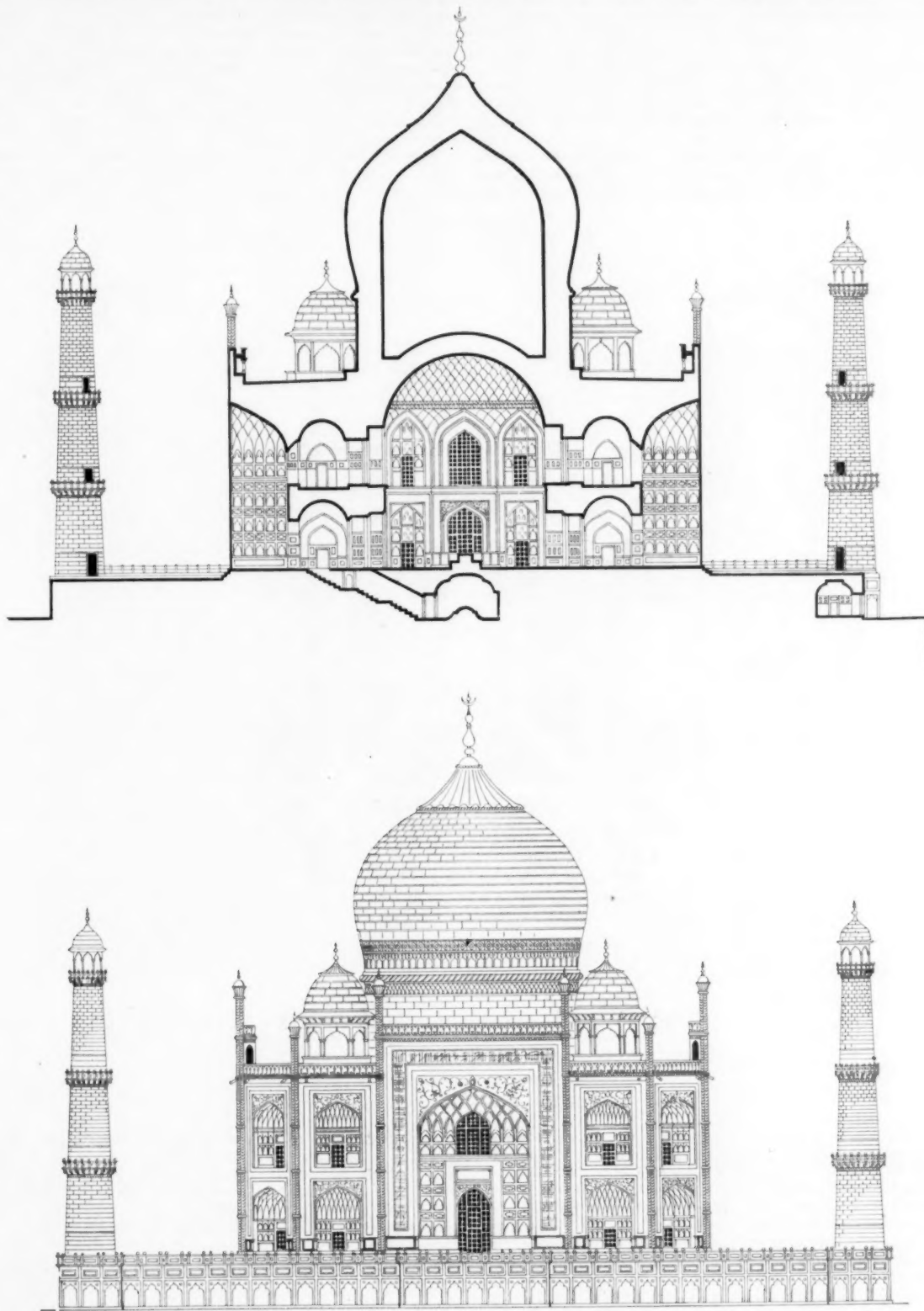
IT is reported in the foreign papers that "an American syndicate" has made a proposition to the Russian Government to build the proposed ship-canal from the Baltic to the Black Sea, a distance of more than a thousand miles, and to have it completed in five years, for the sum of one hundred and sixty million dollars. This is less than one-third of the cost originally estimated, and it seems not improbable that the proposition will be accepted. The canal, according to the route now determined upon, will start from Riga, on the Baltic, and follow the course of the river Dwina to the city of Dinaburg; thence it is cut for about a hundred miles in a straight line to the Beresina River, which it follows to its confluence with the Dnieper, continuing down the Dnieper to its outlet in the Black Sea, near Odessa. It thus follows, for more than nine-tenths of the way, existing water-courses, some of which are already navigable; but it will be necessary to deepen all of them materially, in order to accommodate the war-ships which the Russian Government wishes to send through the canal.

WE heard once of an architect who, after being questioned by his client on a great variety of artistic and scientific matters, was requested to compose a prescription for a sick horse; and it may be assumed that architects, like lawyers, find use, sooner or later, for all the knowledge that they can acquire, in any department of learning. It will, therefore, perhaps do them no harm to remember a new test for milk, which has recently been devised by Dr. Parmentier, a Parisian hospital physician, and has been applied with great success for detecting fraud in milk supplied to the various hospitals and day-nurseries of the city. This test, which is easily applied, consists simply in freezing the milk, and noting the temperature at which congelation takes place. Pure milk freezes at a temperature varying from -55° to -57° Centigrade. If it is found to freeze at a higher temperature, water has been added to it. If it remains liquid at a temperature below -57° , this indicates that the milk is sour, or that some preservative substance, like boric acid, has been added to it. Dr. Parmentier, in applying this test, has made what he calls "distressing discoveries" in regard to the milk supplied to the sick people and babies in public institutions. Dilution with from five to ten per cent of water, is, he says "habitual," and the adulteration very often reaches much larger proportions. In his opinion, this form of fraud plays a great part in the production of infantile enteritis, and constitutes a virtual poisoning.

THE TAJ AND ITS DESIGNERS.¹

ALL who have seen the great masterpiece of Indian architecture, the Taj at Agra, or know it by illustration and description, are familiar with the legends which ascribe its conception to the genius of some obscure Italian architect, and its exquisite inlaid decoration to Austin de Bordeaux, a French adventurer, who was

self to believe that the crowning glory of one of the most brilliant epochs of Indian art owed its inspiration to Western minds. Nevertheless, it must be confessed that the credence generally given to this vague romance does more credit to our imagination than to our historical sense, or artistic judgment. Indian art is still very little understood by Europeans. We feel and admire the decorative element in it, but deny to it higher imaginative qualities. The Indian



The Taj Mahal, Agra, India.

employed for some years at the court of Shah Jehan. The readiness with which the tradition has been accepted as history by European writers is comprehensible, for every European who gazes at the ethereal beauty of the Taj must feel some pride if he can bring him-

self to believe that the crowning glory of one of the most brilliant epochs of Indian art owed its inspiration to Western minds. Nevertheless, it must be confessed that the credence generally given to this vague romance does more credit to our imagination than to our historical sense, or artistic judgment. Indian art is still very little understood by Europeans. We feel and admire the decorative element in it, but deny to it higher imaginative qualities. The Indian

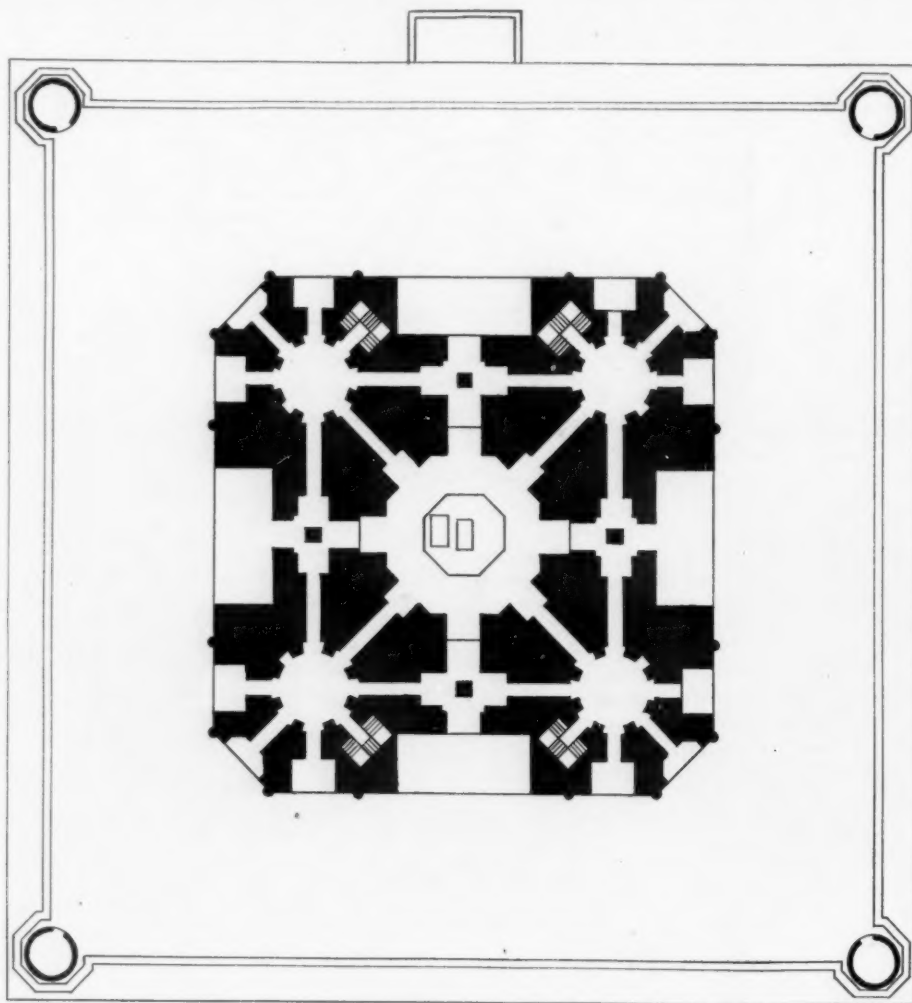
¹ We have added to Mr. E. B. Havell's interesting paper, published in the *Nineteenth Century* for June, illustrations drawn from divers sources, which, we believe, will enhance its value. — EDS.

from this point it becomes much more abstract and abstruse than our own. And no one will ever get farther in his understanding and appreciation of Indian art without forsaking that stolid attitude of ignorant condescension with which the ordinary European, and more especially the Anglo-Saxon, treats everything Oriental which he does not understand. If, throwing aside preconceived notions and insular prejudices, we approach Indian art with the same spirit as animated the European pioneers of Sanscrit research, we shall like them find ourselves revelling in new fields of wonder and beauty, the fairyland of Eastern romance and poetry. We shall then see how ridiculous we, and the educated Indians who follow our example, make ourselves by importing European pictures and sculpture in the belief that we are thereby throwing a flood of Western light upon the darkness of the East. The spirituality of Indian art permeates the whole of it, but it shines brightest at the point where we cease to see and understand it.

If India has not produced a Phidias or a Raphael, it has created the most imaginative architecture in the world. Such painting and sculpture as there have been in Indian art are nearly always strictly

So far all accounts agree. But as to the name of the architect selected we have, on the one hand, the unanimous statement of contemporary Indian writers, and on the other a story related by a Spanish priest, Father Manrique, who visited Agra ten years after the Taj was begun. The former agree that the design was made by Ustad Isa, a celebrated architect who, according to one account (preserved in the Imperial Library, Calcutta), came from Shiraz, and according to others, from *Rum*, which may mean either Constantinople or some part of Asiatic Turkey. The style of the Taj points to the probability that his native place was Shiraz, though it is quite possible that he may have been employed by the Sultan of Turkey at Constantinople. Father Manrique in his description of the Taj, then under construction, relates the following story, told to him by Father Da Castro of Lahore, who was the executor of the obscure Italian who thus claimed to have designed the Taj:—

The architect was a Venetian, named Geronimo Verroneo, who came to India with the ships of the Portuguese, and who died at Lahore a little before my arrival. Of him a report was current that



RIVER JUMMA

Plan of the Taj Mahal, Agra, India.

subordinated to the architectural idea; they never detached themselves or degenerated into drawing-room accessories, as we now understand the "fine-arts." Everything connected with the history of the Taj is important to the student of Indian art, for the Taj is the consummation of a great artistic development, the traditions of which remain alive even at the present day. The truth or otherwise of the legends I have referred to is of cardinal importance, for if it be accepted that an Italian or French artist designed the masterpiece of the Mogol epoch, there would be much force in the theory that the Indian requires the aid of a higher Western intelligence to perfect his artistic ideas. Let us then consider carefully the historical and artistic grounds on which these traditions rest. The circumstances which led to the building of the Taj are well known and need not be given in detail. The death in childbed of Mumtaz Mahal, "the Crown of the Palace," Shah Jehan's favorite wife in A. D. 1629; the distracted grief of the Emperor, and his resolve to build her a monument which should be one of the wonders of the world. He sent for all the best architects of his empire, in consultation with whom he inspected and rejected many hundreds of designs. At last one design was accepted, a model of it was made in wood, and from this model the Taj was built.

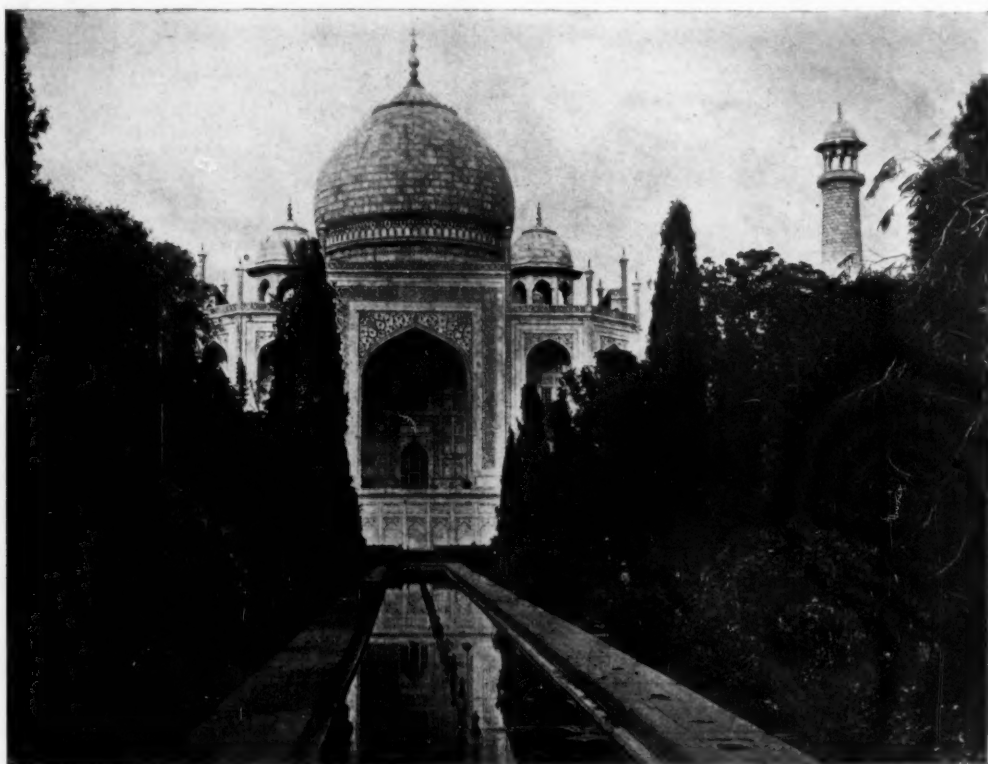
the Padsha, having sent for him and made known to him the desire he felt to build there [at Agra] a sumptuous and grandiose monument to his defunct consort, the architect Verroneo obeyed, and in a few days produced various models of very fine architecture, showing all the skill of his art; also that, having contented his Majesty in this, he dissatisfied him, according to his barbarous and arrogant pride, by the modesty of his estimates; further that, growing angry, he ordered him to spend three krors,¹ and to let him know when they were spent.

Now in estimating the comparative historical value of these two versions it must be allowed that the absence of any mention of Verroneo in the contemporary Indian accounts does not necessarily discredit his story, for it is well known that Mohammedan writers often omitted from their works any facts which might bring honor to their religious opponents. On the other hand, Verroneo's story contains so many of the wildest improbabilities that it is extraordinary that Anglo-Indian writers should have accepted it with so little hesitation. In the first place it is necessary to consider that in the

¹A kror is 100 lacs of rupees, so that the appropriation about equalled \$14,400,000.—Eds.

type of adventurers "who came with the ships of the Portuguese" to India in the seventeenth century and entered the service of the Great Mogol, one would not expect to find the transcendent artistic genius such as the designer of the Taj possessed. Bernier, the French physician, who resided several years at the Mogol court during the reign of Aurungzebe, incidentally throws a sidelight on their character in his description of the famous Peacock Throne, a part of which was designed by a Frenchman (supposed to be Austin de Bordeaux) who, "having circumvented many Princes of Europe with his false gems, which he knew to make admirably well, fled to the Mogol court where he made his fortune." Verroneo seems to have been less successful in the latter respect, but he certainly contrived to emulate Austin in making for himself a fictitious fame, which has lasted to the present day. At the time when the Taj was built the position of the Franks, as Europeans were called, was by no means what it was in the days of Akbar and Jehangir, the two preceding emperors. They were mostly employed in the artillery or in the arsenals, and Bernier tells us that in his time they were admitted with difficulty into the service; and that, whereas formerly, when the Mogols were little skilled in the management of artillery, they received as much as two hundred rupees a month and upwards, their pay was now limited to thirty-two rupees. The Jesuits, who

whose lifelong devotion to his wife was the strongest trait in his character, had chosen one of these hated unbelievers to be the chief designer of her monument. As a matter of fact Father Manrique's account is entirely uncorroborated by any other contemporary European writer. Neither Tavernier, who saw the commencement and completion of the Taj, nor Bernier, make any mention of Verroneo, or suggest that the building was in any way the work of a European. Bernier, in his description of it, expressly implies that he looked upon the Taj as a purely Indian conception, for he naïvely confesses that though he thought "that the extraordinary fabric could not be sufficiently admired," he would not have ventured to express his opinion if it had not been shared in by his companion (Tavernier), for he feared that his taste might have been corrupted by his long residence in the Indies, and it was quite a relief to his mind to hear Tavernier say that he had seen nothing in Europe so bold and majestic. Thévenot, who saw the Taj in 1666, affirms that this superb monument is sufficient to show that the Indians are not ignorant of architecture; and though the style may appear curious to Europeans, it is in good taste, and though it is different from Greek or other ancient art, one can only say that it is very fine. The absence of any reference to Verroneo in the accounts of these three minute and impartial chroniclers of the Mogol times is very strong evidence



The Taj Mahal, Agra, India.

had enjoyed great favor under his father and grandfather, were bitterly persecuted by Shah Jehan. He deprived them of their pension, destroyed the church at Lahore and the greater part of that of Agra, demolishing a steeple which contained a clock heard in every part of the city. Only a short time before her death Mumtaz Mahal, who was a relentless enemy of the Christians, had instigated Shah Jehan to attack the Portuguese settlement at Hooghly. After a desperate resistance the Portuguese were overwhelmed. Two thousand, including women and children, took refuge on a warship and perished with the crew, as the captain blew up the vessel rather than surrender. Five hundred prisoners, among them some Jesuit priests, were sent to Agra. With threats of torture the Empress endeavored to persuade the priests to renounce their religion. On their refusal they were thrown into prison, but after some months they were released and deported to the main Portuguese settlement at Goa. Their books, pictures and images were destroyed by orders of Mumtaz Mahal. Her hatred for the Christians is perpetuated on her tomb in the mausoleum itself, which bears the significant inscription, "Defend us from the tribe of unbelievers!" From Bernier we learn that no Christian was allowed inside the mausoleum, lest its sanctity be profaned.

In the face of these facts it would require the very strongest corroboration of Verroneo's story to make it credible that Shah Jehan,

that his story was partly or wholly a fabrication; otherwise it is impossible to believe that they would not have known and mentioned the fact that the chief architect was a European. Verroneo's finishing touch regarding the spending of "three krors" is in itself suspicious. If he really had been in such a position his fame would have been known far and wide among his fellow-Europeans, for it was only the highest nobles of the Court who were entrusted with the expenditure for the Great Mogol buildings. The *Badshah Nama* mentions the names of the two nobles who actually superintended the Taj, Makramat Khan and Mir Abdul Karim.

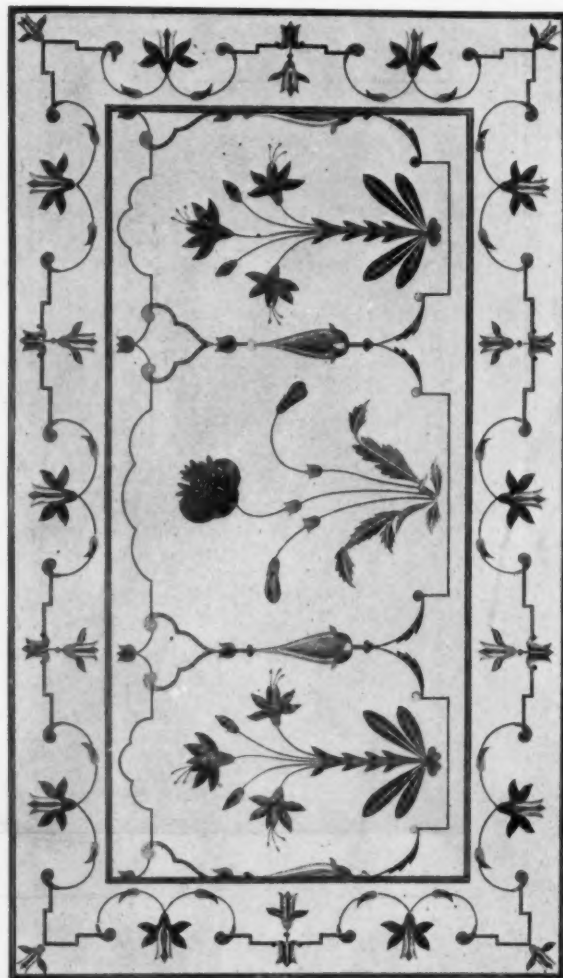
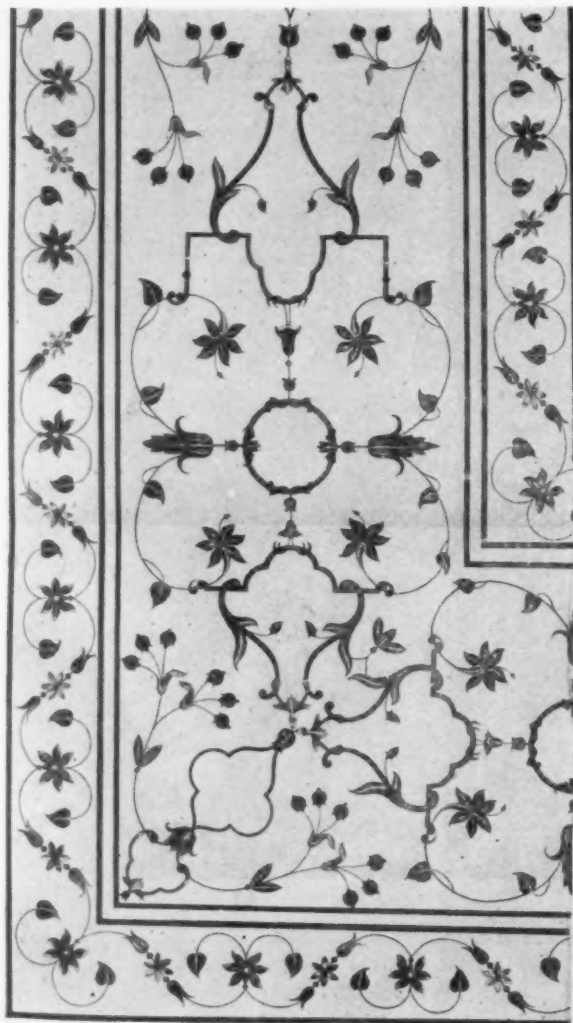
Father Manrique and the three writers I have mentioned are the only Europeans who have recorded contemporary knowledge of important facts connected with the Taj. It is unnecessary to refer to later accounts, borrowed more or less from them. While history affords practically no evidence in support of Verroneo's claim to immortal distinction, the Taj itself is the most convincing proof of the impudence of the assumption. The plan follows closely that of Humayni's Tomb, built by Akbar nearly a century earlier. Neither in general conception nor in the smallest detail does it suggest the style of the Italian Renaissance, which a Venetian architect of the seventeenth century would certainly have followed. If Verroneo's design had been executed we should doubtless have had some kind of Orientalized version of the church of Santa Maria della

Salute of Venice instead of the Taj. It is inconceivable that Shah Jehan, a man of cultivated artistic taste, surrounded as he was by all the most accomplished architects of the East, would have engaged a European to design a building in a purely Eastern style.

The Indian records relating to the Taj are unusually precise and detailed in the information they give with regard to the architects and workmen. The artistic history of the period, and the style and workmanship of the Taj, all testify in a remarkable way to their accuracy and the falseness of the theory that Europeans directed the design of the building. The places given in the Calcutta Imperial Library manuscript as the native towns of the principal architects and decorators, namely, Shiraz, Baghdad and Samarkand, indicate precisely that part of Asia which was the cradle of the art represented by the Taj. The mention of Samarkand is especially interesting, for it is known that Tamerlane, after his invasion of India in A. D. 1398, carried off all the masons who had built the famous mosque at Ferozabad (since destroyed), in order that they might build another like it at Samarkand. Most probably they were the descendants of these masons who came back to India to build the Taj.

good deal of plausibility in the theory, though most authorities have been puzzled by the manifest inconsistencies which tell against it. The technical similarity of the inlay of the Taj to the *pietra dura* of the Medicean Chapel at Florence was noticed by Bernier, though he does not suggest any connection between the two. At the back of the throne chamber in the Dewan-i-am at Delhi there is a large piece of very realistic *pietra dura* work, undoubtedly Florentine in style. But, except for the silly chatter of native guides, who used to point out the panel of Orpheus as the portrait of Austin himself, there is not a vestige of historical evidence to connect him with it. Fergusson has shown that this panel (lately brought back from South Kensington and restored to its place by Lord Curzon) is a traditional Italian rendering of the classical story which can be traced back as far as to the catacombs at Rome. Sir George Birdwood, however, in his "*Industrial Arts of India*," accepts the theory that Austin was responsible for the Taj decorations, as well as for the *pietra dura* work at Delhi, though in a latter article in the *Journal of Indian Art* he says that "it is quite impossible that the men who devised such artistic monstrosities [the Delhi panels] could have been the same as those whose hands traced in variegated *pietra dura* the exquisite arabesques of the Taj."

Whoever the designer may have been, it is certain that the Delhi



Inlaid Decorations from the Interior of the Taj Mahal.

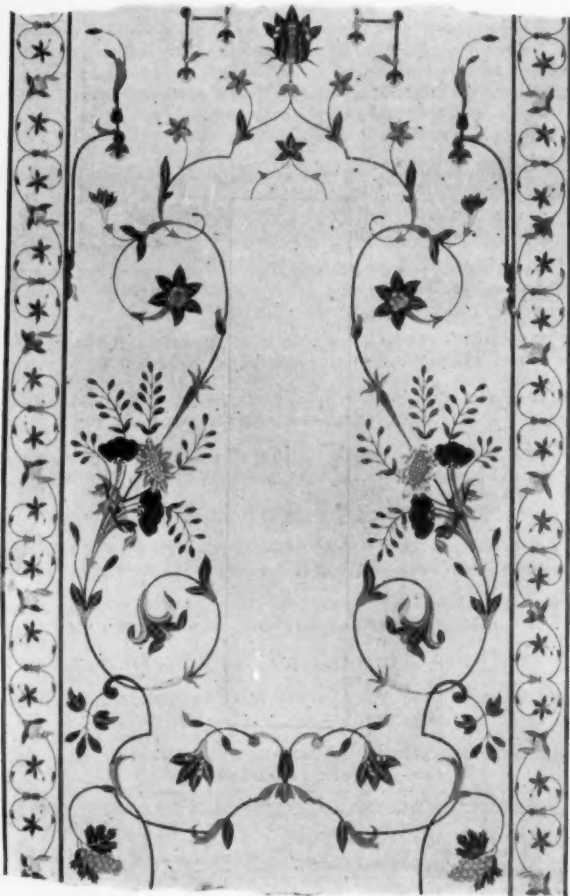
[Before discussing Verroneo's story, it will be interesting to analyze it in order to separate the truth which may be in it from the falsehood. It is highly probable that Verroneo was one of the many architects who submitted designs for the Taj. They were doubtless in the style of the Renaissance, which was then the architectural style of Italy. Shah Jehan examined them with curiosity and expressed some qualified praise, which Verroneo mistook for approval. The anger of the Padsha on hearing of the estimates and his order "to spend three krors" clearly points to the indirect Oriental method of rejecting a proposal, and it is quite certain that Verroneo heard nothing more of his commission from Shah Jehan. He returned to Lahore and poured the garbled account of his doings into the too credulous ears of Father Da Castro, who retailed it as history to his fellow priest.

Father Manrique is also responsible for the statement that Augustin, or Austin de Bordeaux, was employed in the "internal decorations" of the Taj. Hitherto every European writer has taken this to mean that Austin superintended the magnificent inlaid work technically known as *pietra dura*, which is the most striking feature in the decoration of the building, external and internal. There is a

pietra dura was directed by some fourth-rate European artist. They are just as ill-adapted and out of harmony with the place they occupy, as the Taj decorations are marvellously contrived to beautify it. It is impossible to explain away the inconsistency of attributing the authorship of the magnificent Taj decorations, which are, as Sir George Birdwood says, "strictly Indian of the Mogol period," and the commonplace Florentine work at Delhi to one and the same person. This statement of Father Manrique can be explained in another and much more satisfactory way. We know from Tavernier that Austin was a silversmith, for he mentions that Shah Jehan had intended to employ him in covering with silver the vault of a great gallery in the palace of Agra. The French jeweller mentioned by Bernier in connection with the Peacock Throne is generally supposed to be Austin. Now the Taj originally possessed two silver doors, said to have cost 127,000 rupees, which were taken away and melted down when the Jâts sacked Agra. Before the existing marble screen was erected, the sarcophagus of the Empress was surrounded by a fence of solid gold, studded with gems. Surely the obvious and most satisfactory explanation of Austin's connection with the "internal decorations" of the Taj is that he was occupied with gold

and silver work. Such work would be part of the internal decoration, and yet it would have been executed outside, so that the sanctity of the tomb would not have been profaned by an unbeliever. Why should we make a French jeweller, goldsmith and silversmith responsible for Italian and Indian *pietra dura* work, when there were both jewellers' work and gold and silver work on which he might have been employed?

In my opinion the Delhi *pietra dura* has been wrongly attributed to Shah Jehan's reign. It has all the appearance of eighteenth-century work, and, so far as I am aware, there is no evidence worth considering to show that it existed previous to the reign of Aurungzebe. It could not have been executed in the latter reign, because the naturalistic representation of birds and animals was a violation of Mussulman law, and would not have been permitted by that bigoted monarch. If the date ascribed to it is correct, it is more than astonishing that Aurungzebe, who mutilated all such representations at Fatepur Sikri, should have spared them at the back of his own throne in the Delhi palace, for an old drawing, still in existence, shows that most of the inlay was in a good state of preservation down to 1837. It would certainly coincide with all the probabilities of the case to attribute it to one of the later Mogol emperors, or the early part of the eighteenth century.



work would naturally take the place of the other, because it would be superfluous and inartistic to decorate marble or stone with an overlay of the same material. Again, when the Arabian art of the orthodox Sunni school came into close connection with the unorthodox Shia, or naturalistic school of Persia, we should certainly expect to find representations of natural forms taking the place of geometric patterns. These are exactly the conditions which prevailed in India in the century which preceded the building of the Taj. Even long before that time, in the oldest Saracenic mausoleum in India, the tomb of Altamsh, which belongs to the thirteenth century, the red sandstone of the walls is inlaid with geometric tiles of white marble. In the buildings of Fatepur Sikri (date about 1571 A. D.) we find frequent examples of overlay and not a few of inlay. A little later, in the gateway of Akbar's tomb at Sikandra, inlay work is extensively used, though as yet still confined to geometric patterns. But twenty years afterwards, in the tomb of the Persian adventurer, Itmad-ud-daulah, the grandfather of Mumtaz Mahal, at Agra, the style is so far technically perfected that the inlay work not only includes elaborate scrolls of conventional Arabian design, but the familiar motifs of Persian painted decoration, such as rosewater vessels, the cypress, the tree of life, and various other flower forms. The date of this building is about A. D. 1622.

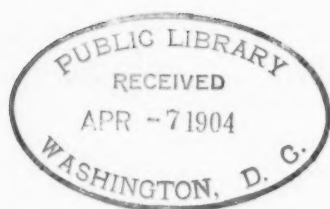
The similar progression from geometric to naturalistic forms may be traced in Italian mosaic. But the synchronous development of two similar schools in Italy and in India is nothing more than one

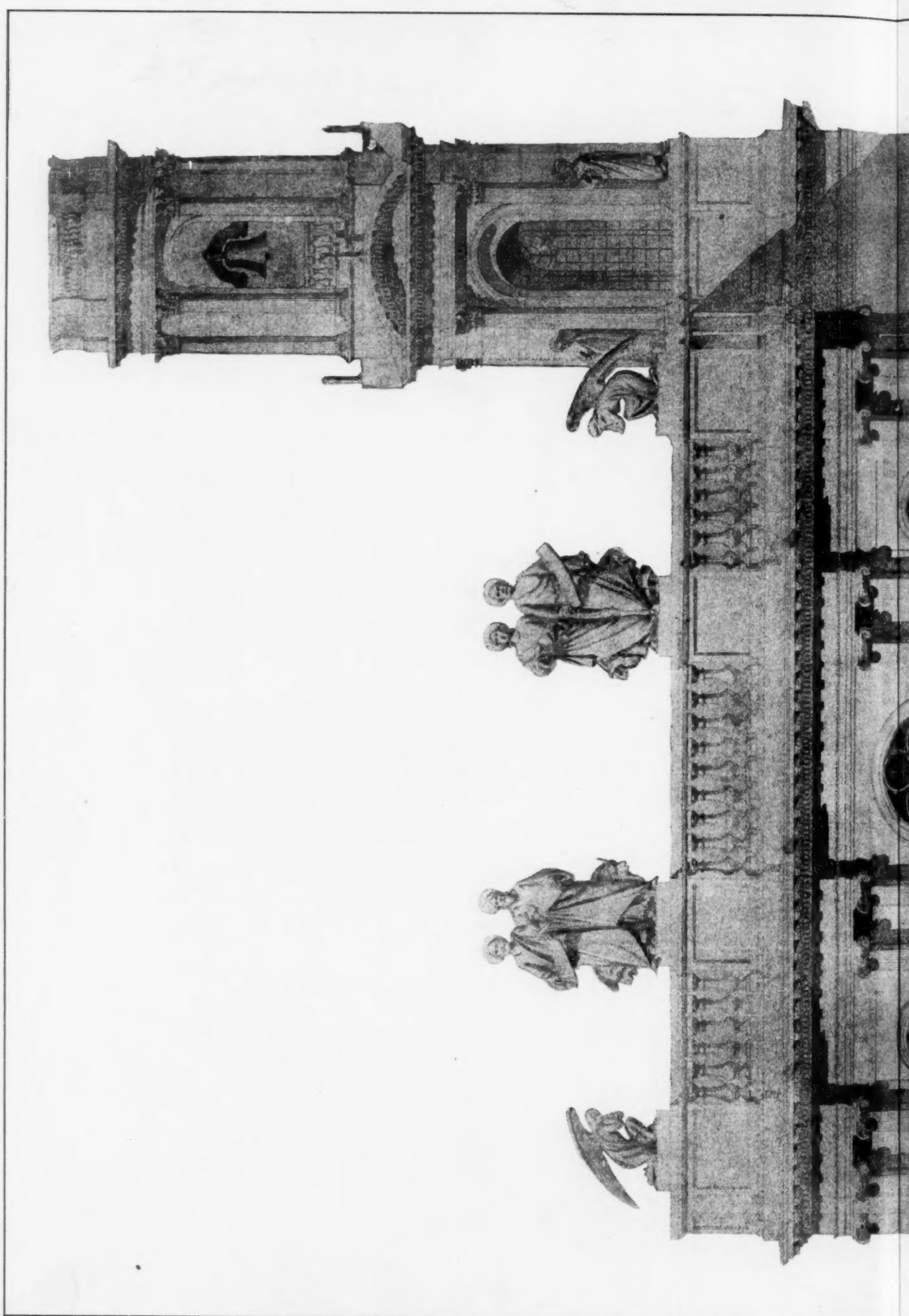


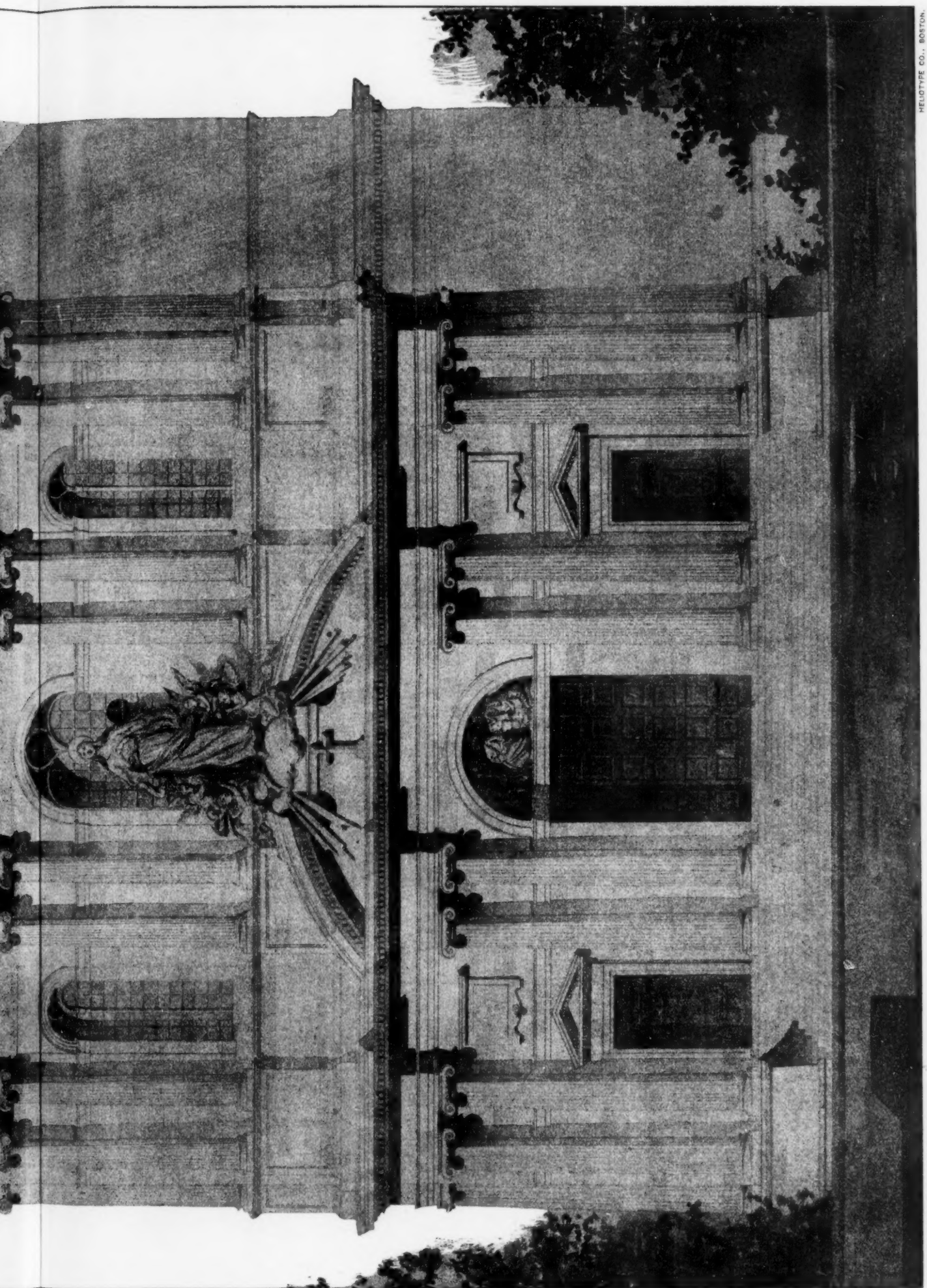
Inlaid Decorations from the Interior of the Taj Mahal.

If we dismiss from our minds all these obscure and inconsistent legends about Austin de Bordeaux, it will be quite easy to see that the inlaid work of the Taj was the natural consummation of a great artistic movement purely Oriental in character, initiated by Akbar, the progression of which can be traced in existing Mogol buildings. Arabian workmen first introduced mosaicwork into India. The kind of mosaic generally practised by the Arabs was tessellated work, technically known as *Alexandrinum opus*, which consisted of thin pieces of marble, colored stones, glass, or enamelled tiles cut into geometric patterns, and closely fitted so as to cover the surface of a wall or floor. The technical difference between this and *pietra dura*, or true mosaic, is the difference between overlay and inlay. The Arab buildings were generally of brick, and the original intention of the mosaic was to give a surface of more precious material to a building of brick or common stone. The preference of the Arabs for geometric patterns is explained by two reasons. First, the Arabs belonged to the Sunni, or orthodox sect of Mussulmans, observing the strict letter of the law which forbade the representation of "the likeness of anything which is in heaven above, or in the earth beneath." Secondly, the geometric design lent itself admirably to the character of the materials employed, and to the speedy and effective covering of a surface by this process. Now when the Arabs, or those who had learned from them, began to work on buildings constructed chiefly of marble or fine stone, the inlaid

of those coincidences which often lead historians to wrong conclusions. The later Italian inlayers imitated the work of Italian fresco and oil painters. The Indian inlayers likewise imitated the work of the Persian artist who founded the Indian school of painting of the Mogol period. The step from the Itmad-ud-daulah to the Taj is simply the change from a conventional school of Persian painting to a more developed and more realistic one. This is only what we might expect if we remember Shah Jehan's resolve that the Taj should surpass every other building in the world. That there was a strong naturalistic tendency in the Indian painting of the Mogol period is known to all who have studied this interesting phase of Mogol art. It is very clearly shown in a series of exquisite miniature paintings of Jehangir's time, now in the Government Art Gallery, Calcutta, which I fortunately rescued from the unappreciative hands of a Mohammedan bookseller a few years ago. They include portraits of the nobles of Jehangir's court and some studies of Indian birds, drawn and painted with a fidelity and delicacy which would do credit to a Japanese master. On one of them, sealed and signed by Jehangir himself, there is a note, written by the Emperor, to the effect that it was painted by Ustad Mansur, "the most celebrated painter of this time," in the nineteenth year of his reign (A. D. 1624, six years before the Taj was begun). The borders of three of these paintings are ornamented with floral designs which, making allowance for the different technical treatment required by a different



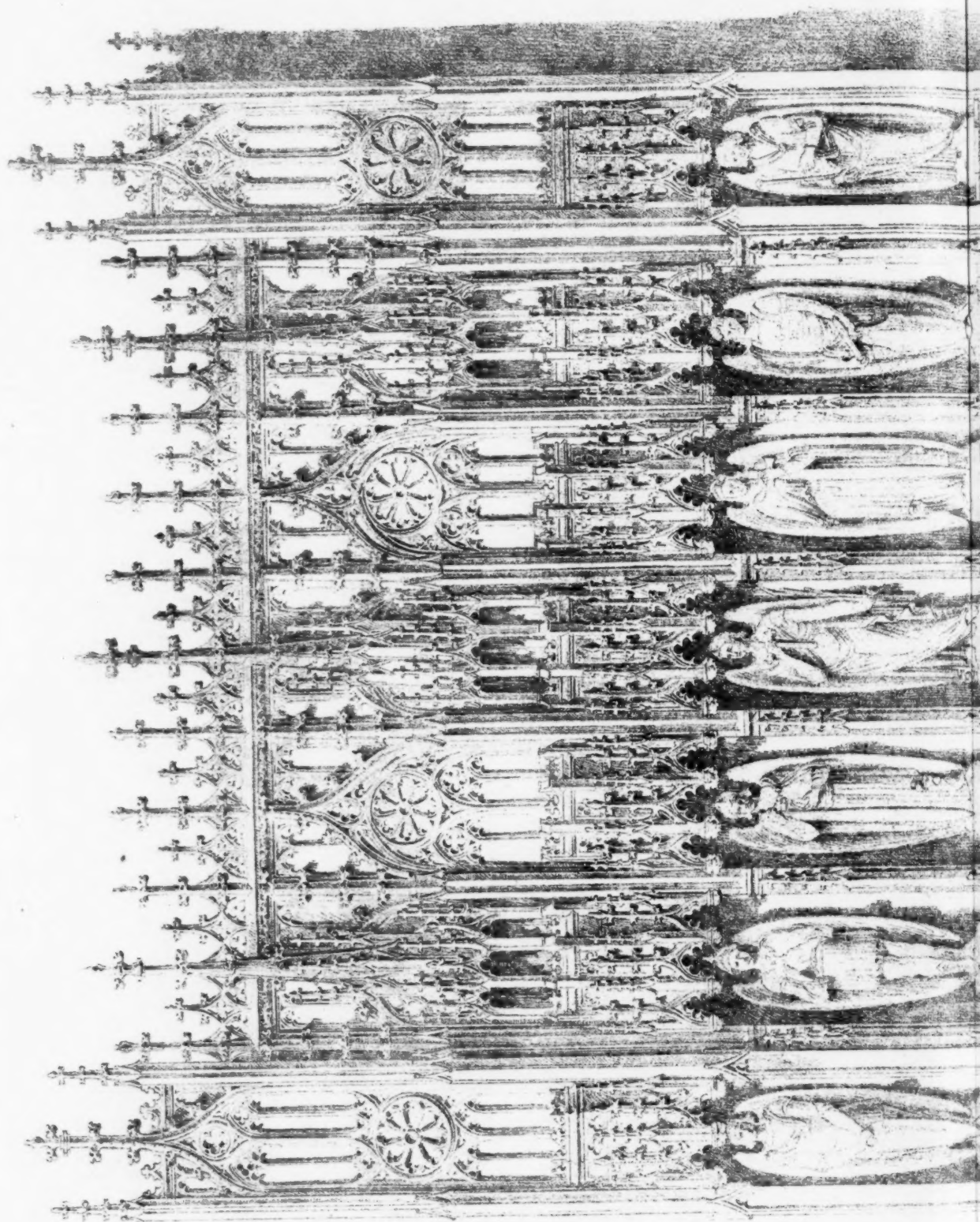


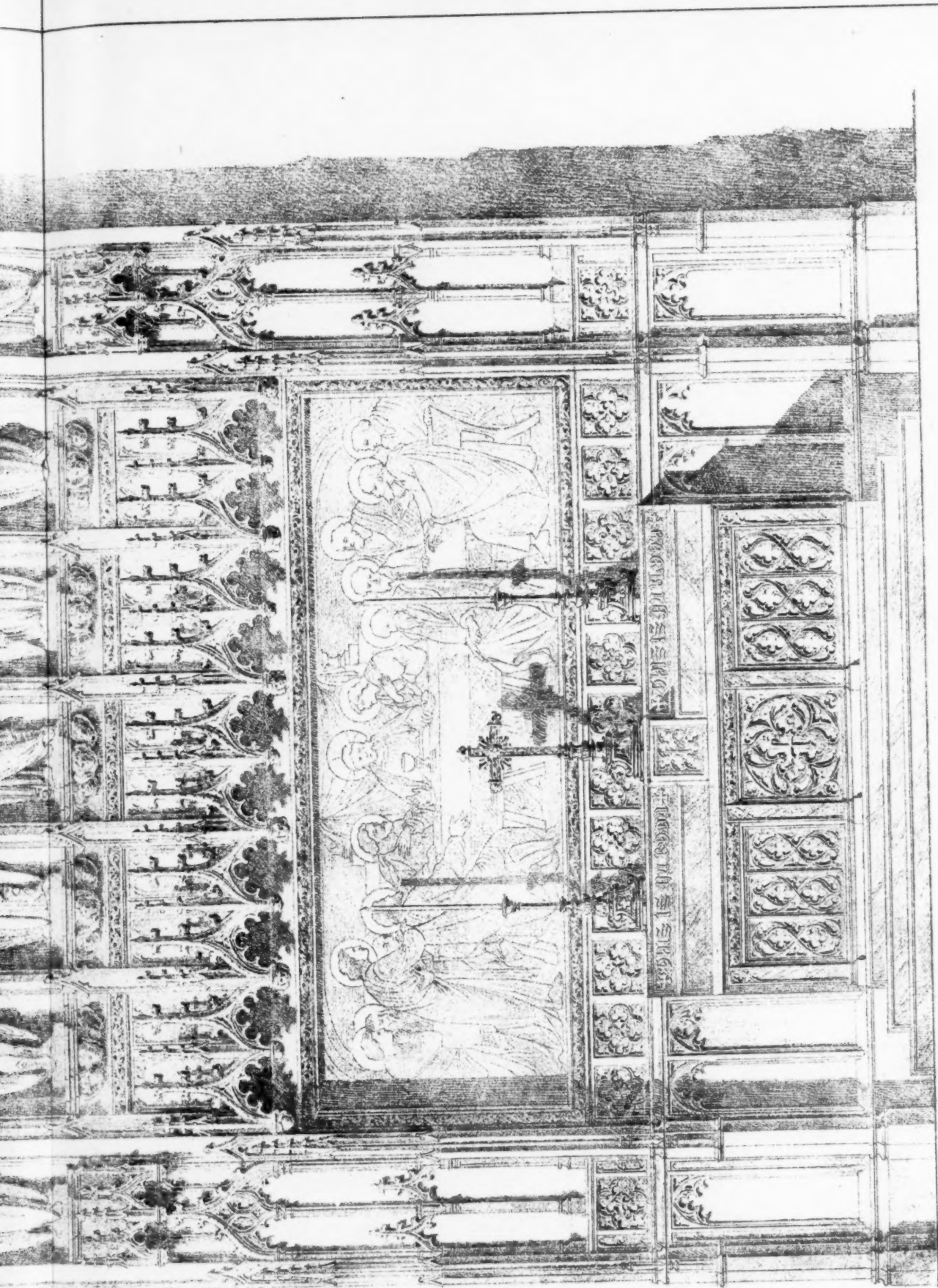


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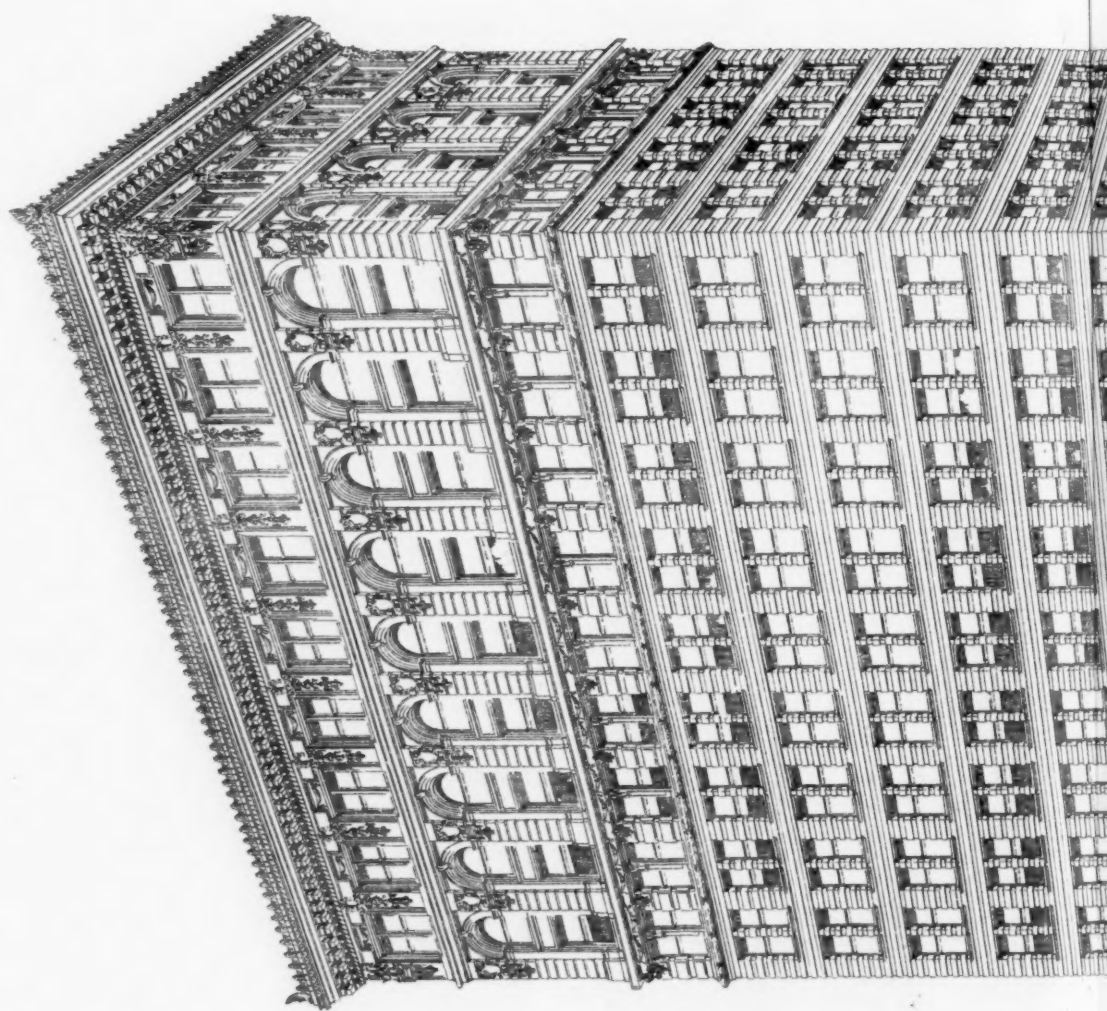


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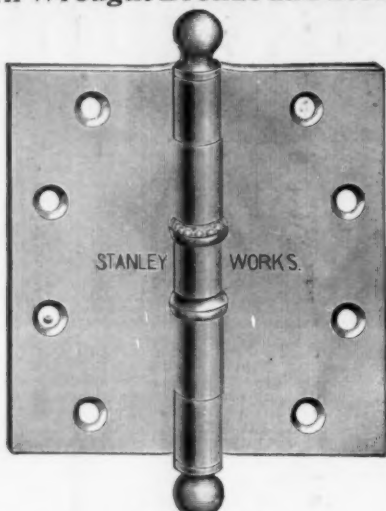
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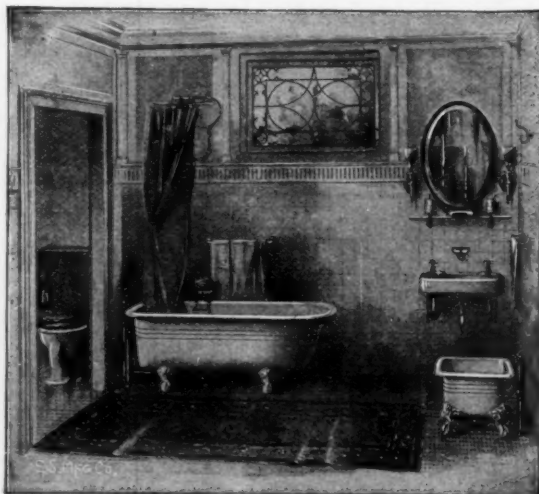
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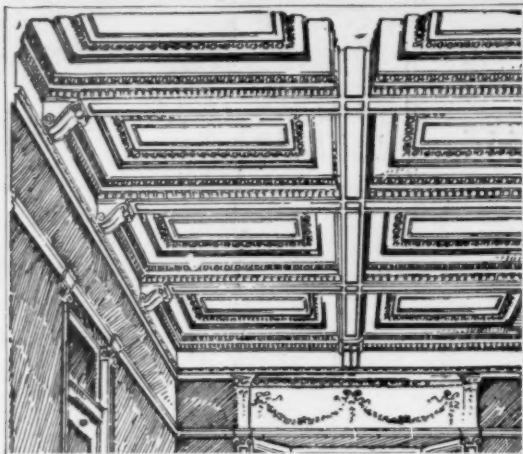
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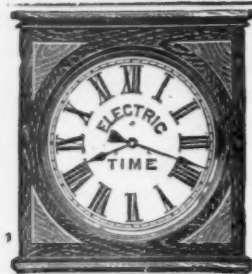
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Obligation of Principal Contractor to Sub-Contractor.

A principal contractor is under obligation to treat upon an equal basis all estimates which he "receives" prior to putting in his own bid. Estimates must be considered as "received" when they come into a principal contractor's possession, either by his direct solicitation or by being accepted by him. The opening of a bid, knowing it to be such, constitutes receipt of the same.

A principal contractor is under no obligation to use a bid which he has not solicited, accepted, or received, but if he does not wish to use the estimate of a sub-bidder he should decline it, if proffered personally, or should return it unopened if sent to him by mail or otherwise. The retention of a bid should be construed as a receipt of the same.

A principal contractor, when making up his estimate, is not entitled to receive bids from sub-contractors if he is at the same time making himself their competitor by figuring their portion of the contemplated work. It is legitimate for a principal contractor to figure all portions of work, depending upon no one for what are usually known as sub-estimates, but it is not legitimate for him to receive bids from others for sub-work if he is himself figuring those portions independently.

ARTICLE II.

Award of Sub-Contracts.

The principal contractor having been awarded a general contract should immediately award the sub-contracts to the lowest bidder in each branch.

ARTICLE III.

Penalty for not Awarding Contract to Lowest Sub-Bidder.

A principal contractor failing to award a sub-contract to the lowest sub-bidder to whom he is under obligation as previously provided should be liable to pay damages to the said lowest bidder, in amount not less than ten per cent of the amount of the estimate.

Payment of such damages will not relieve the principal contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE V.

Payments to Sub-Contractors.

Unless the contracts made with sub-contractors otherwise provide, payments during the progress of the work should be made by the principal contractor to the sub-contractors upon the same basis of payment, in relation to amount of work performed, as is prescribed in the contract made by the principal contractor with the owner.

Final payment to a sub-contractor should be considered as due at the expiration of thirty days after the completion of his work and its approval by the architect or owner, unless otherwise provided by the sub-contract or agreement.

ARTICLE VII.

Obligation of Sub-Contractor to Principal Contractor.

Should a sub-contractor refuse to contract at the amount of the estimate he has given to a principal contractor who has used the said estimate in good faith, he then should be liable to the said principal contractor for damages in amount not less than the difference between the amount of the estimate which was submitted by him and the amount at which the principal contractor may be obliged to contract the work.

Payment of such damages will not relieve the sub-contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE X.

Bids to Architects or Owners.

When bids for separate departments of work on a building are solicited by the architect or the owner, they should be submitted with the understanding that they are direct estimates, for which direct contracts are to be made by the owner with the lowest bidder, and no other disposition of such bids should be permitted without consent of the bidder submitting the same.

Sub-bids should be given only to the principal contractors who are estimating the work in question, and should not be left with architects or owners for the inspection and information of principal contractors. Sub-contractors must understand that bids thus left with architects or owners are in great danger of losing their confidential character, and that if they so leave them they cannot claim protection or redress under the first article of this Code.

SUGGESTIONS.

Members of this Association having sub-contracts to let, or material to buy, should, as far as may be consistent with business principles, deal only with members of the Association, or at all events give their fellow-members an opportunity to compete, and then give them the preference, other things being equal.

All bidders should take cognizance of the danger they may be subjected to through the practice, so prevalent in some architects' offices, of making change in plans or specifications, or in both, during the progress of estimating. Correction of this pernicious practice can only be obtained through refusal by contractors to estimate under such conditions.

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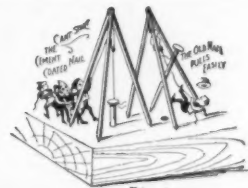
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Carpenters' Hall, Philadelphia, Pa.	" 1770
Independence Hall, Philadelphia, Pa.	" 1729
Faneuil Hall, Boston, Mass.	" 1741
and others.	

CHURCHES

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

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date 1636
Royall Mansion, Dedham, Mass.	" 1737
Philipse Manor House, Yonkers, N. Y.	" 1745
Tudor Place, Georgetown, D. C.	" 179-
Mappa House, Trenton, N. Y.	" 1809
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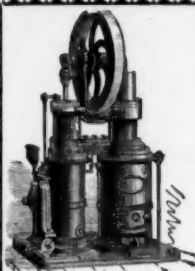
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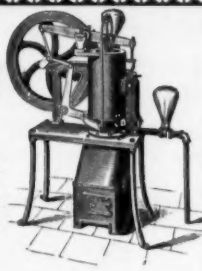
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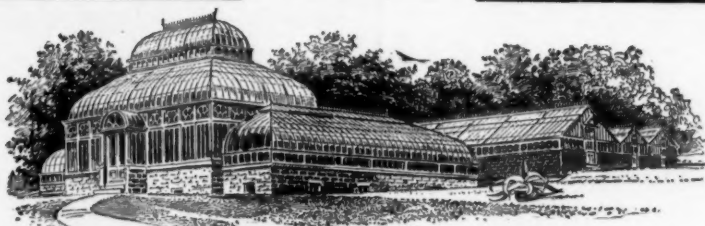
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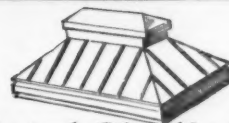
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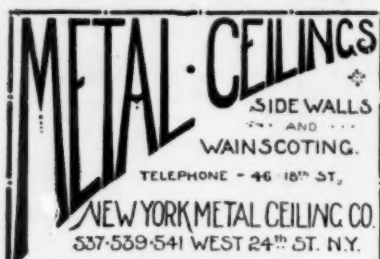
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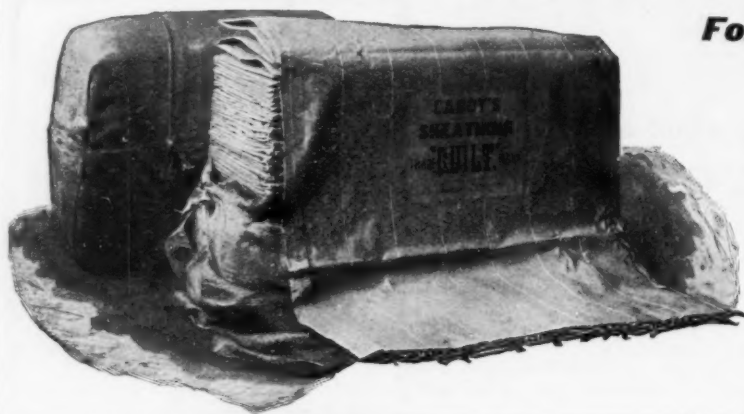
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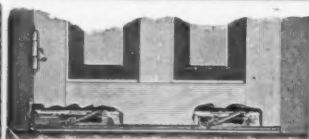
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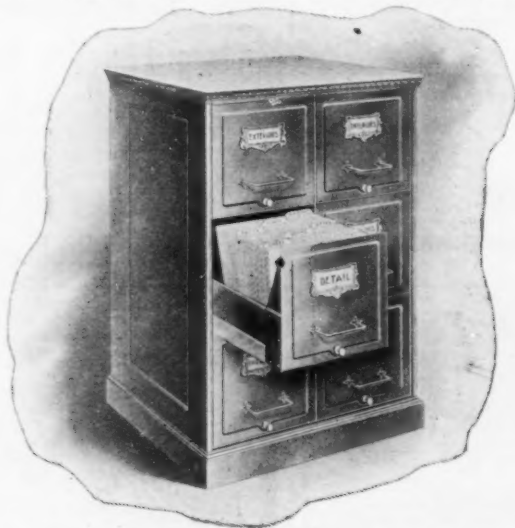
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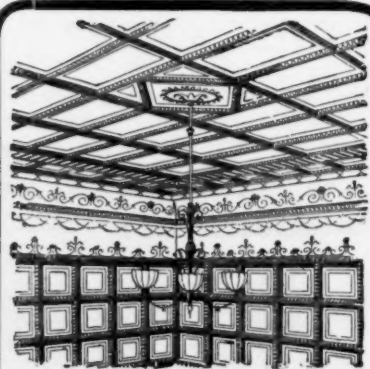


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THE KEASBEY & MATTISON CO., the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford & Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf and Jesse W. Starr, to restrain the defendants from making and selling magnesia covering for boilers and steam pipes containing more than 50 per cent of magnesia, and especially coverings containing 85 per cent magnesia.

The Bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereof to be made perpetual, and also demands an accounting and damages.

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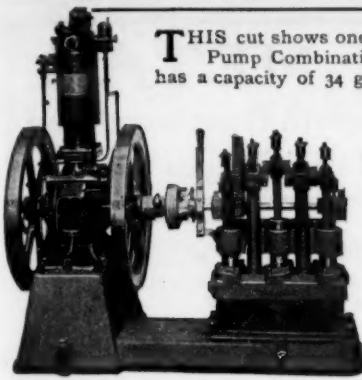
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(Advance Rumors Continued.)

tract of eight acres on the north side of the Burlington railroad, just inside of the west boundary of the village. The plant will be quite an extensive one, and will involve an expenditure of \$50,000 at the outset. Plans for the building are being completed by Architects Pond & Pond, and construction will be commenced immediately.

Colbert, Ga.—J. Fletcher Colbert, R. M. Gauldin, William Thompson, J. J. Wagoner, Dr. Little and Miss Jane Everhart will organize a \$50,000 company to build a cotton-mill here. They are now arranging the final details.

Columbus, Ga.—It is understood here that E. N. Clemence, treasurer of the Eagle & Phoenix Mills, will retire and organize a company to build a \$300,000 mill here, to make colored goods.

Corpus Christi, Tex.—The Baptists will spend \$100,000 in erecting a new college.

Council Bluffs, Ia.—Herman & Brown secured the contract for the new building for the Christian Home, at \$20,000.

Dedham, Mass.—The Norfolk County Commissioners have awarded the contract for the construction on the Fisher Ames lot of a building for registries of deeds and probate, and for the probate court, to McNeill Bros., 196 Freshport St., Dorchester, for \$256,506. The building will be of buff limestone, with granite base and trimmings and in accordance with the plans of Peabody & Stearns, Boston architects.

Denver, Col.—The Littleton and Longmont creamery companies, which have been united under one big corporation, of which the Beatrice Creamery Co., of Lincoln, Neb., forms a leading branch, has purchased the old Latelam property, comprising four lots at 18th and Wynkoop Sts., and will at once begin the erection of a five-story and basement factory with a minimum capacity of between 4,000,000 and 5,000,000 pounds of creamery butter annually. The structure will be 100' x 125', and the largest creamery plant in the world.

Des Moines, Ia.—Plans are being made for a warehouse for J. K. and W. H. Gilcrest to be erected at the corner of E. 3d and Court Ave. This building, it is estimated, will cost \$30,000. It will be four stories in height, 44' x 132' in size, and will be built of brick.

Plans for James Patrick's two-story and basement brick barn on E. Grand Ave., between 5th and 6th Sts., are completed and the bids will be taken in a few days. The cost is estimated at \$20,000.

The new Iowa Methodist Hospital will be four stories high and will cost \$50,000.

Dorchester, Mass.—A group of three dwelling-houses will be built for W. A. Davidson in Brenton St., at a cost of \$12,600 above the land. Each house will have a frontage of 28 feet.

Duluth, Minn.—It is stated that C. C. Cokefair has had plans prepared for an elaborate residence to be erected on E. Superior St. It will be of Kettle River sandstone and pressed brick, with tile roof, white enamel and mahogany finish. Cost, \$25,000. Albertson & Schnell, of New York, architects.

Fargo, N. D.—Stewart Wilson secured the contract for the erection of a wholesale implement building for the Robb-Lawrence Co., at \$37,000. Will be four-story and basement, 100' x 140'.

Fond du Lac, Wis.—The M. D. Wells Co., of Chicago, proposes to establish a large shoe factory here. Local citizens will erect a factory for their use, to cost \$75,000.

Fort William, Ont.—A \$40,000 city-hall will be erected.

Hutchinson, Minn.—E. S. Stebbins' designs for the Carnegie Library at this place have been accepted and the excavation will be begun soon. The building will be 40' x 55', sixteen-foot story and ten-foot basement. Roman gray pressed brick and Kettle River sandstone will be used in the construction. The library will cost \$10,000.

Kansas City, Mo.—Preliminary work has been begun on the million-dollar soap plant of the Procter & Gamble Co., of Cincinnati. The plant will be located at 18th St. and Kansas Ave., this city. The main building will be 400 feet long and 100 feet wide. It will consist of four stories and a basement.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

The other building will be 430 feet long, 75 feet wide and three stories high.

Kittery, Me.—From the fund left some thirty or forty years ago by Robert W. Traip, the trustees are about to erect a building to be called the Robert W. Traip Academy. This fund was originally \$25,000, but is now \$70,000. The plans are from the office of Edward I. Wilson, of Boston. The building will be built of brick with granite trimmings and a slate roof.

Los Angeles, Cal.—The vestrymen of Christ Episcopal Church have decided upon the handsome structure designed by Theodore Eisen as the model for their new \$75,000 church.

Members of the Woman's Club met recently to consider the question of erecting a new club-house on the lot recently donated by C. W. Harvey. It was decided to incorporate for this purpose with a capitalization of \$20,000 shares to be sold at \$20 each to members of the club only. There already has been subscribed \$600 by outside parties.

Marshalltown, Ia.—A \$50,000 office-block will be built on the Tremont Hotel site.

Melrose, Mass.—The Boston Rubber Shoe Co. is planning to erect an up-to-date plant at its factory here, including the modern feature of a steam turbine using highly superheated steam.

Memphis, Tenn.—The State of Tennessee is soon to be the owner of a splendid educational institution for boys, to be located in this city, and to cost nearly half a million dollars. The school is to be erected and maintained out of the bequests of the late W. A. Goodwyn, the well-known cotton merchant, who lived in Nashville from 1880 until his death October, 1898. Plans for school-buildings and auditorium and library are being prepared, and when the institution is completed in every detail it will be one of the finest in the country of its kind.

Plans have been given to Architect G. M. Shaw by the Board of Underwriters' Association for the erection of a new two-story brick and stone building, to be used by the salvage corps of the association. According to the present arrangements the new building will be a two-story brick and stone structure located on Monroe St., between 3d and De Soto, about three doors from the site of the telephone building. The total cost of the new structure is estimated by the architects to be about \$12,000.

Milwaukee, Wis.—Architect Fred Graff is receiving bids on a solid brick flat building for H. O. Parks on Wells St., near 11th St. The building will have brick foundation, stone trimmings, composition roof, steam heat, gas and electric light, and will be 50' x 64' in dimensions. The cost is estimated at \$20,000.

Ferry & Clas are preparing plans for an additional building for the Industrial School for Girls. The structure will be 107 feet long by 81 feet deep, with three stories and a high basement. It will be of solid brick, with Bedford stone trimmings, and will cost about \$46,000.

Plans have been submitted for the new Summerfield Methodist Church which will be erected this summer at a cost of \$50,000.

Stumpf & Langhoff will erect a four-story brick addition, 25' x 120', to their building at National Ave. and Grove St. Cost, \$25,000. Charles Lesser, architect.

Minneapolis, Minn.—The general contract to erect the Deering Building, at 520 to 528 2d Ave. S., was let to C. F. Haglin. It will be 82' x 103', four stories and basement. Cost, \$47,000.

The plans of Harry W. Jones have been accepted for the new Cream of Wheat building to be erected on 1st Ave. N. and 5th St. It will be of cream pressed brick and terra-cotta, 66' x 165', six stories and basement. Cost of building, \$75,000.

Rees & Colburn are at work on plans for a building at 7th Ave. S. and Washington for the J. I. Case Threshing Machine Co. It will be 115' x 132', six stories and high basement, pressed brick and terra-cotta, of heavy mill construction, pitch and gravel roof, and steam heating. Cost, \$140,000.

Mitchell, S. D.—The contract for the erection of the city-hall has been let to F. Bjordstrop. The building will cost over \$40,000.

Nashua, N. H.—The Secretary of the Treasury has

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

invited the following architects to submit competitive plans for the new public building here, which is to cost approximately \$70,000: C. H. Alden, Jr., F. Manton Wakefield and W. D. Austin, Boston; Dean & Woodbury and Hiland A. Holt, Nashua; W. M. Butterfield, Manchester, and J. C. Stevens, Portland, Me.

Nashville, Tenn.—The N. Y. Life Insurance Co. will erect an office-building here to cost \$700,000.

New Britain, Conn.—The North & Judd Manufacturing Co., maker of saddlery hardware, has begun the erection of an annealing kiln, which will be of brick, 70' x 160'. The company has also begun the erection of an additional factory, six stories high, which will have a capacity for the employment of several hundred hands.

The new edifice for the Swedish Society will cost \$70,000.

New Haven, Conn.—The A. F. Holaday Co. will erect a new structure on Oxford St. The building will be 50' x 100', three stories high.

The American Buckle & Cartridge Co. is about to erect a one-story brick addition, which will be used for japanning and annealing purposes.

The report of Prof. Russell H. Chittenden, of the Sheffield Scientific School, announces that the biological laboratory, which stands next to the site of the new Kirtland hall on Hillhouse Ave., will be torn down as soon as friends of the school can be prevailed upon to give funds for a much-needed biological laboratory.

A new corporation, to be known as the National Steel Foundry, has been organized in this city for the purpose of engaging in the steel business. The company has bought a large tract of land adjoining the National Wire Mills and will erect a big plant for the manufacture of steel fittings.

This city has decided upon a site for a permanent edifice. Ground has been broken at the corner of Livingston and Edward Sts. It will be of brick, with Longmeadow stone trimming and slate roofing. It will be of one-story, and will cover a plot of land of 54' x 116'. The estimated cost of the church will be about \$50,000.

Newport, R. I.—Julius Cahn and William B. Cross have purchased 15,000 square feet of land on Broadway, upon which a theatre of the same design as the Empire Theatre in New York will be built. The cost of the land and theatre will be \$150,000. The new house will have a seating capacity of 1,000 and 24 boxes.

Louis S. Brugnolere, a young millionaire Harvard student, is negotiating for the purchase of seven acres for a site for a new villa near Ocean Ave. He hopes to have a new summer residence completed by next June, when he will graduate.

New York, N. Y.—Borough President Cantor has sent to the Board of Estimate and Apportionment a request for an appropriation for a new flower market building on the site of the old Clinton Market, at West, Washington, Canal and Spring Sts., to cost about \$375,000. The proposed structure will have more than 100 baths. It will be two stories high, with many ornamental features.

A ten-story fireproof apartment-house, with banking offices on the lower floors, is to be built at a cost of \$500,000 for the Fifth Avenue Estates, of which Warren M. Van Norden is president, at the corner of 5th Ave. and 60th St. It will have facades of marble, terra-cotta and brick. Plans for the building have been filed with the Building Bureau by H. J. Hardenbergh as architect.

It is quite certain now that in a short time Mayor Low will ask the Board of Estimate and Apportionment to grant the sum of \$500,000 for the purchase of a site and the erection of suitable building for a sanitarium for cases of incipient tuberculosis. It is proposed to purchase a site of some 500 acres of land, probably in Orange County or Rockland



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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

County, on the highlands back of the Hudson River. When the work begins foundations for a plant of great proportions will be laid, and the number of buildings erected at first will be added to from time to time by means of additional appropriations.

The Board of Health has let the contract for the building of the new scarlet-fever pavilion on the grounds of the Willard Parker Hospital, foot of E. 16th St., to John R. Sheehan & Co., 160 Fifth Ave. The contract price is \$377,000.

The lowest bidder for the proposed new Harlem Hospital on Lenox Ave., between 136th and 137th Sts., was James C. McFerran, at \$367,385. Horgan & Slatery are the architects for the building. The plans provide for an administration building five stories high and two wings four stories high. A feature of the plans is two roof-gardens on the wings of the building.

Old Town, Me.—It is expected that the Carnegie Library will begin to take shape very soon. As soon as one or two more plans, which are expected, arrive and are examined, a decision will be made and contracts awarded.

Omaha, Neb.—Report states that Mr. Chambers will erect a dancing academy at 25th and Farnam Sts., from plans by Architect Burdick. It will be two-story and basement, 60' x 75', of brick and artificial stone. Cost, \$30,000.

Orono, Me.—The committee in charge of the erection of the new engineering building at the University of Maine has awarded the contract to L. Bradstreet of Hallowell, Me., for \$29,000.

Paonia, Col.—The contract for the new two-story school-house was let to J. N. Jeffers, of Delta. The school will cost about \$13,000.

Peoria, Ill.—The Royal Neighbors of America, in convention assembled, have appropriated \$50,000 for an office-building which will be erected here.

Philadelphia, Pa.—J. S. Cornell & Son will begin work at once on a two-story bank building, 24' x 167', at 511 Chestnut St., for E. B. Smith & Co. The cost is estimated at \$25,000. The same contractors are to make minor alterations to cost \$600 to Children's Ward in the Polyclinic Hospital.

Pittsburgh, Pa.—A deal has been concluded for the purchase of the Gilbert Rafferty property, at Maryland and 5th Aves., by the Pittsburgh Smoke

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Consumer Co., the consideration being \$160,000. The purchasers are said to have in view the erection of a large factory and office building.

The Marietta Chair Co. has had plans prepared by Architect F. C. Sauer for a warehouse to cover the entire lot at 1217-19 Liberty Ave. The building will be eight stories high, of slow-burning construction and especially designed for heavy weights. It will cost close to \$100,000 and bids on its erection will be received at once.

Hartle Bros. will build a large warehouse in 2d Ave., just above Wood St., and running through to 1st Ave. Architect Charles Bickel has let the contract to William B. Bennett. The lot measures 48' x 169', and the building will be an eight-story, slow-burning structure. It is to be completed by March 1. This is the third large warehouse that Hartle Bros. have built within two years near this corner, and a fourth is now in contemplation.

Architect Edward Stotz is preparing plans for a six-story brick warehouse at 7th Ave. and Cherry Alley for W. J. Gilmore & Co., to cost \$50,000.

Pittsfield, Mass.—The Eaton-Hurhut Co. has petitioned the city authorities for permission to erect a three-story factory building at its plant. The building is to be of wood and of heavy mill construction, and will cost about \$20,000.

Pittsfield, Me.—The new public library building, ground for which will soon be broken, was designed by A. R. Ross, of New York. It will be located at Main and Railroad Sts., will be of buff brick, with granite foundation and base trimmings, and terra-cotta frieze. Cost, \$15,000.

Ponca City, O. T.—The school-building destroyed by fire last autumn at Oto will soon be rebuilt. The government has appropriated the sum of \$30,000 for the purpose, \$26,500 of which is to be devoted to the building proper.

Portland, Me.—It is stated that the lot bounded by Congress, Pearl, Market and Federal Sts., can be bought by the county as a site for a court-house for about \$150,000 and there is a strong effort being made to get the county commissioners to decide to take this lot for the purpose. Its advantages are many and it is almost universally the first choice of all the citizens and of those from other places in the county who have given the matter any attention.

Pueblo, Col.—P. Oppenheim has bought of the First National Bank in this city a piece of ground on 4th St. He will erect a popular price theatre at a cost of \$50,000. The house will be ready for occupancy September 1.

Sacramento, Cal.—The Westminster Presbyterian Church trustees have awarded a contract to a local firm to construct a new church of stone and brick at 13th and K Sts. The building will cost in the neighborhood of \$22,000.

San Diego, Cal.—A portion of the twelve cottages to be erected by Homer H. Peie will be built on Golden Hill. The contract will probably be awarded as soon as Mr. Peters returns from Chicago. The other part of the Peters' cottages will be built on his recently acquired property on Florence Heights.

Savannah, Ga.—It is reported that the Germania Bank will erect a new \$200,000 building.

A committee of the City Council have approved the plans of H. W. Witcover for a new city-hall which is to take the place of the present 162-year-old city exchange. The building will be six stories high, on the site of the present exchange and will cost \$150,000.

Sykesville, Md.—A contract for the erection of the new building for epileptic patients at the State Hospital for the Insane, located here, has been awarded to J. H. Fowble. His bid was \$25,500. Owens & Sisco, architects.

PROPOSALS.

HOSPITAL.

[At Muscatine, Ia.]
H. Heinemann, chairman, will receive bids until August 1 for the erection of a three-story hospital building for the Orphans' Home for the German Lutheran Society. H. W. Zeldner, architect, of Muscatine. Cost, \$25,000. 1439

HEATING AND PLUMBING.

[At Redfield, S. D.]
Sealed bids will be received at the Northern Hospital at Redfield, S. D., until August 4, 1903, for the labor and material for heating and also for the plumbing in the Custodial Building at the Northern Hospital at Redfield, S. D. Bids will be received separately for the heating and for the plumbing. Bids should be addressed to the State Board of Charities and Corrections, Redfield, S. D., care of Northern Hospital. Plans may be seen on file at the Northern Hospital, Redfield, S. D.; W. R. Parsons & Son Co., architects, Des Moines, Ia., and also at Builders' Exchange, St. Paul, Minn. W. E. TIPTON, Secretary State Board of Charities and Corrections. 1439

PROPOSALS.

ADMINISTRATION BUILDING.

[At Fort Preble, Me.]
Office Constructing Quartermaster, U. S. A., 185 Middle St., Portland, Me. Sealed proposals will be received at this office until August 4, 1903, for the construction of one administration building at Fort Preble, Portland Harbor, Me. Information, specifications and blanks furnished on application. CAPTAIN A. W. YATES, Quartermaster, U. S. A. 1439

BUILDINGS.

[At Fort Yellowstone, Wyo.]
Office of Chief Q. M., St. Paul, Minn. Sealed proposals will be received at this office until August 4, 1903, for the construction of one wagon shed, one coal shed and one oil house at Fort Yellowstone, Wyo. Plans and specifications may be seen and blank proposals with full instructions had upon application here. GEO. E. POND, C. Q. M. 1439

BANK BUILDING.

[At Rockwell City, Ia.]
Sealed proposals will be received by the Board of Directors of the Rockwell City Savings Bank, of Rockwell City, Ia., to be sent to E. C. Stevenson, of Rockwell City, Ia., until August 1, 1903, for the erection and completion of a bank building in accordance with the plans and specifications which will be on file at the office of E. C. Stevenson, of Rockwell City, Ia., and the office of Murphy & Ralston, architects, of Waterloo, Ia. E. C. STEVENSON, W. S. DUBOIS, A. F. DEAN, Committee. 1439

REMODELLING JAIL.

[At Camden, N. J.]
Sealed proposals for remodeling the temporary jail and office buildings on Federal St., Camden, N. J., will be received until the 12th day of August, 1903. Plans and specifications can be seen at the County Collector's office between 9 A. M. and 3 P. M. Bids to be endorsed proposals for remodeling jail, and to be addressed to William Anderson, Chairman of Court-house Committee. WILLIAM ANDERSON, Chairman of Court-house Committee. 1440

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 14th, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 5th day of August, 1903, and then opened for new vaults (except vault doors), Cash-room, Office of the U. S. Treasurer, and work incidental thereto, in the U. S. Treasury Department Building, Washington, D. C., in accordance with drawings and specification, copies of which may be had on application at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1440

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 16, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 19th day of August, 1903, and then opened for the low pressure steam heating apparatus, complete in place for the U. S. Court-house, Post-office and Custom-house at Newport, Vermont, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Newport, Vermont, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1440

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 16, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 26th day of August, 1903, and then opened, for the construction (including plumbing, heating apparatus, electric wiring, conduits and freight lift) of the extension of the U. S. Post-office at Bridgeport, Connecticut, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian at Bridgeport, Connecticut, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1440

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 20, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 26th day of August, 1903, and then opened, for the construction (except heating apparatus, electric wiring and conduit) of the extension of the U. S. Custom-house and Post-office at Nashville, Tennessee, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian at Nashville, Tennessee, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1441

DORMITORY, WATER AND SEWER SYSTEMS.

[At Tulalip School, Wash.]
Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until August 27, 1903, for furnishing the necessary materials and labor required to construct dormitory and water and sewer systems at Tulalip School, Wash., in strict accordance with the plans, specifications and instructions to bidders. For further information apply to C. M. Buchanan, superintendent, Tulalip, Wash. W. A. JONES, Commissioner. 1441

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PROPOSALS.

BUILDING.

[At Kingston, N. Y.] Sealed proposals are invited and will be received by the Building Committee of the Industrial Home at a meeting of the committee to be held at the Industrial Home, in the City of Kingston, N. Y., on August 10, 1903, for the construction of a building on the lot owned by the Industrial Home, situated on Highland Ave. and Chester St., Kingston, N. Y., according to plans and specifications made by Pickering & Walker, architects, 1133 Broadway, New York. The plans and specifications may be seen on application to F. J. R. Clarke, at the National Ulster County Bank, Kingston, N. Y. Proposals are to be sent to Miss M. L. Forsyth, president of the Industrial Home, at the residence of Augustus H. Bruyn, in said city. By order of the Building Committee. 1440

HOTEL.

[At Monessen, Pa.] Bids for a \$30,000 brick and stone hotel building for J. H. Thresher will be received until August 25. J. A. Lohmen, architect. 1441

NAVAL SUPPLIES.

[At Portsmouth, N. H.; Boston, Mass.; New York; League Island, Pa.; Washington, D. C., and Norfolk, Va.] Proposals will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until August 25, 1903, to furnish at the navy yards, etc., Portsmouth, N. H.; Boston, Mass.; New York; League Island, Pa.; Washington, D. C., and Norfolk, Va., a quantity of machine tools, steam kettles, chemicals, overcoat cloth, woollen socks, motors, windlass and locomotive crane. H. T. B. HARRIS, Paym. Gen., U. S. N. 1441

CHURCH.

[At Elizabeth City, N. C.] Sealed bids for contract to build a brick church in Elizabeth City, N. C., will be received until August 1, 1903. Plans and specifications can be seen at office of M. N. Sawyer, corner Road and Cypress Sts. Order of Building Committee. GEO. W. BROTHERS, Sec'y. 1439

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 11, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 4th day of August, 1903, and then opened, for the mechanical heating and ventilating apparatus, etc., for the National Bureau of Standards, Washington, D. C., in accordance with the drawings and specification, copies of which may be obtained at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1439

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 11, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 17th day of August, 1903, and then opened, for the construction (except heating apparatus, electric conduits and wiring) of the U. S. Post-office and Post-office at Greenville, Tennessee, in accordance with the drawings and specification, copies of which may be had at this office, or at the office of the Postmaster at Greenville, Tennessee, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1439

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 11, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 18th day of August, 1903, and then opened, for the construction, including plumbing, heating apparatus, electric wiring and conduits, of the U. S. Post-office at Northampton, Massachusetts, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Northampton, Massachusetts, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1439

PROPOSALS.

BUILDINGS.

[At Fort Wadsworth, N. Y.] Fort Wadsworth, N. Y. Sealed proposals for building ward wing on hospital and erection of building in rear for kitchen, etc., will be received until August 7, 1903. Information furnished on application. LIEUT. GEO. L. HICKS, JR., Q. M. 1439

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 7, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 10th day of August, 1903, and then opened, for the low pressure steam heating apparatus, complete in place, for the extension to the U. S. Court-house, Post-office, etc., at Fort Smith, Ark., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Fort Smith, Arkansas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1439

MASONIC TEMPLE.

[At Waco, Tex.] Sealed bids will be received by Grand Lodge Committee for building a Masonic Temple in Waco, Tex., bids to be filed with John Watson, grand secretary at Waco, until July 31, 1903, at which time and place the committee will open same. The plans and specifications can be seen at the offices of J. E. Flanders, architect, Dallas; John Watson, Waco; John L. Terrell, Terrell; William James, Fort Worth; Ingham S. Roberts, Houston; Nat. M. Washer, San Antonio; O. K. Harry Steel Works, St. Louis, Mo. W. M. Fly, Grand Master, Gonzales, Tex. JOHN L. TERRELL, Secretary of Committee, Terrell, Tex. 1439

PROPOSALS.

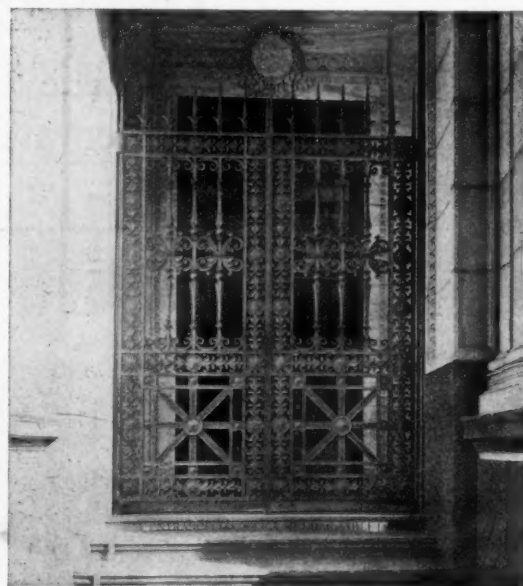
BUILDING.

[At Little Rock, Ark.] Bids are wanted by the Board of Public Works until August 12 for the construction of a building for the State Capitol. 1440

BUILDINGS.

[At Hot Springs, S. D.] Sealed proposals addressed to Moses Harris, General Treasurer National Home for D. V. S., in care of Thomas R. Kimball, architect, 503 McCague Building, Omaha, Neb., will be received at the above address, until 12 o'clock M., August 4, 1903, and then opened, for furnishing materials, labor, etc., for the construction of the main group of buildings at the Battle Mountain Sanitarium, at Hot Springs, S. D. Plans may be seen, and copies of instructions and specifications together with blank proposals had upon application to the architect, Thomas R. Kimball, 503 McCague Building, Omaha, Neb.; to the Builders' and Traders' Exchange, 138 Washington St., Chicago, Ill.; to John F. Daggett, Secretary, Denver Building Contractors' Council, 203 Times Building, Denver, Col.; to the Builders' Exchange, St. Paul, Minn.; to E. S. Kelley, Ban er, Hot Springs, S. D.; and to the office of the National Home for D. V. S., 346 Broadway, New York, N. Y. Address all inquiries regarding drawings and specifications to the architect as above. 1440

The date for the opening of proposals for the construction of the Battle Mountain Sanitarium, at Hot Springs, S. D., as heretofore advertised, is hereby changed from July 28, 1903, to August 4, 1903, at same time and place. MOSES HARRIS, General Treasurer, N. H. D. V. S. 1440



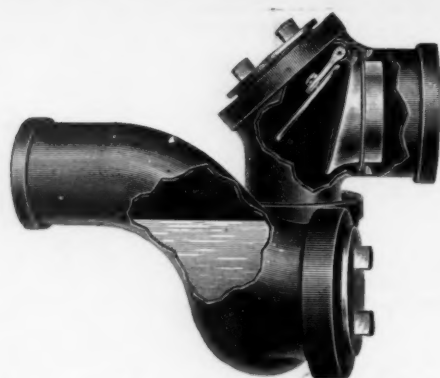
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SECTION 1. No Member should enter into
 partnership, in any form or degree, with any
 builder, contractor, or manufacturer.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 16. A Member should so conduct his
 practice as to forward the cause of profes-
 sional education and render all possible help
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